

## SCIENTIFIC REPORT OF EFSA

# The 2010 European Union Report on Pesticide Residues in Food<sup>1</sup>

## European Food Safety Authority<sup>2, 3</sup>

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### ABSTRACT

This report presents the results of the control of pesticide residues in food commodities sampled during the calendar year 2010 in the 27 EU Member States and two EFTA countries (Iceland and Norway). The report also comprises the outcome of the consumer risk assessment of pesticide residues. EFSA presents for the first time the results of a pilot cumulative risk assessment (CRA) to multiple chemical residues. Finally, the report provides some recommendations aimed at the improvement of the future monitoring programmes and the enforcement of the European pesticide residue legislation. In total, more than 77,000 samples of approximately 500 different types of food (raw or processed) were analysed for pesticide residues by national competent authorities. Considering the results concerning both the national and the EU-coordinated programmes, the total number of analytical determinations reported among all the countries amounted to more than 14 million. The results of the EU-coordinated programme for 2010 showed that 1.6% of total samples analysed exceeded the European legal limits (MRLs). EFSA concluded that the long-term exposure of consumers did not raise health concerns. In assessing the short-term exposure, the pesticide monitoring results revealed that a risk could not be excluded for 79 samples concerning 30 different pesticides if the pertinent food was consumed in high amounts. The results of the CRA are considered indicative as the work on establishing which groups of pesticides are expected to share the same toxicological effects is not yet complete and the final methodological approach needs to be further elaborated. The outcome of the pilot CRA demonstrated that the exposure calculations are affected by significant uncertainties, mainly related to the analytical results reported as “non-detected”. The methodology used in this pilot exercise will be further revised to reduce the uncertainties of the exposure assessment.

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### KEY WORDS

Pesticide residues, food control, monitoring, Maximum Residue Levels, consumer risk assessment, Regulation (EC) No 396/2005.

<sup>1</sup> On request from EFSA, Question No EFSA-Q-2010-00163, approved on 28 February 2013.

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## SUMMARY

This report presents the results of the control of pesticide residues in food commodities sampled during the calendar year 2010 in the 27 EU Member States and two EFTA countries (Iceland and Norway) in order to ensure compliance of food with the European standards with regard to the permissible maximum legal limits for pesticide residues. In addition, the report presents the outcome of the consumer risk assessment of pesticide residues.

In each European reporting country, two control programmes are in place: a national control/monitoring programme (designed individually by each country) and a European coordinated multiannual control programme, which gives clear guidance on which specific control activities should be performed by the Member States.

### FOOD COMPLIANCE WITH MAXIMUM RESIDUE LEVES (MRLs)

The food commodities to be analysed in the framework of the 2010 **EU-coordinated control programme** were apples, head cabbage, leek, lettuce, milk, peaches, pears, rye or oats, strawberries, swine meat and tomatoes. This programme defined 157 pesticides to be analysed in food of plant origin (38 of them to be analysed on a voluntary basis) and 34 pesticides in food of animal origin (six of them to be analysed on a voluntary basis), for a total of 178 distinct pesticides. A total number of 12,168 samples were analysed in 2010.

The analysis of the results of the 2010 EU-coordinated programme shows that 197 (1.6%) of the 12,168 samples exceeded the MRL, while 5,802 (47.7%) of the samples had measurable residues above the reporting level but below or at the MRL. 6,169 of the samples (50.7%) were free from measurable pesticide residues.

According to the results of the last four EU-coordinated programmes (2007 to 2010), the percentage of samples exceeding the MRLs was rather stable, with only small variations; the % of samples exceeding the legal limits in this reference period ranged from 1.2% to 2.3%.

In 2010, the MRL exceedance rates among the reporting countries ranged from 0.0% to 4.9% of the samples analysed. The highest percentage of samples exceeding the MRL was identified for oats (5.3%), followed by lettuce (3.4%), strawberries (2.8%), peaches (1.8%), apples (1.3%), pears (1.3%), tomatoes (1.2%), leek (1.0%), head cabbage (0.9%) and rye (0.2%). MRL exceedances were not reported for milk and swine meat samples. Peaches had the highest percentage of samples with measurable pesticide residues above the LOQ (73%), followed by 68% of the apple samples and 68% of the strawberries. Comparing the results of the 2007 and 2010 EU-coordinated control programmes (where the same commodities of plant origin – except pears – were tested), it was noted that the only commodity for which the percentage of samples without detectable residues increased was strawberries (from 31.1% in 2007 to 32.1% in 2010); the highest decrease in the percentage of detectable residues was observed for oats (79.7% in 2007 to 45.5% in 2010). The percentage of samples exceeding the MRLs has increased from 2007 to 2010 for the following crops: leek, lettuce, oats, and tomatoes.

The total number of samples taken in the context of the **2010 national programmes** was 77,075. Compared with the previous year, this is an increase of 13.4%. In 2010, the majority of the samples taken were classified as surveillance samples (72,813 samples, 94.5% of the total number of samples). The total number of enforcement samples taken by all reporting countries was 4,262 (5.5% of the total number of samples). The number of pesticides analysed for in 2010 was 982 (excluding metabolites). In 2010, 529 different food commodities (including processed and unprocessed food samples) were surveyed. The majority of total samples taken in 2010 were produced in one of the reporting countries (73%), while 23% of the samples originated from third countries.

In total, residues of 328 distinct pesticides were found in measurable quantities in vegetables, 301 in fruit and nuts, while in cereals residues of 88 different pesticides were observed (surveillance samples only).

97.2% of the analysed surveillance samples were below or at the legal MRLs. In 2.8% of the samples, the legal limits were exceeded for one or more pesticides. MRLs were more often exceeded for samples from third countries (7.9% of the surveillance samples) than for samples from the EU and EFTA countries (1.5% of the surveillance samples). In terms of commodity groups, most of the MRL exceedances (11.1%) were found in unprocessed surveillance samples of legume vegetables (e.g. beans with pods), spices (8.5%) and nuts (8.3%). High MRL exceedance rates were also observed in table and wine grapes, and leafy vegetables (e.g. lettuce) and fresh herbs.

With regard to multiple residues in the same sample, residues of two or more pesticides were found in 19,382 samples, corresponding to 26.6% of the surveillance samples analysed. Important commodities for human consumption with high frequencies of multiple residues were liver (95.7% of 23 liver samples), citrus fruits (62.8% of 4,363 citrus fruit samples) and strawberries (60.5% of 2,479 strawberries samples).

The majority of food of **animal origin** was free of detectable residues (87.3% of samples were reported below the quantification limits). In total, 43 different pesticides were found in animal products; the most frequently found pesticides were DDT and HCH, which were detected in 13.4% and 11.6% of the samples analysed for these pesticides, respectively. These substances are considered as persistent organic pollutants which have a tendency to bio accumulate in fat matrices. In the EU the use of these pesticides is banned.

In 2010, a total of 1,828 surveillance samples of **baby food** were reported by 28 countries. Residues above the reporting level were found in 154 samples (8.4%), while the MRL was exceeded in 36 samples (2.0%).

3,571 samples of **organic origin** were taken in 2010 by a total of 28 countries, which corresponds to 4.9% of all surveillance samples taken overall in the reporting countries. For fruit and nuts, a lower rate of MRL exceedances (0.9%) was found in comparison to conventionally grown fruit and nuts (2.9%). For vegetables, the exceedance rates of the surveillance samples were 1.0% and 3.8% respectively for organic and conventionally grown products. Overall, the MRL exceedance rate for organic food was 0.8%. In total, 131 different pesticides were found in organic products in measurable concentrations; of those, 26 pesticides were found in at least five samples. It is noted that 25 out of these 26 substances are not allowed in organic farming.

## DIETRAY EXPOSURE ASSESSMENT

The results of the EU-coordinated monitoring programme were used also to assess the **consumer dietary exposure** to pesticide residues.

The **acute (short-term) consumer exposure** assessment was performed for the 134 pesticides covered by the EU-coordinated monitoring programme that were considered relevant for acute risk assessment. The assessment focussed on the 12 target food commodities of the 2010 monitoring programme. For 20 of these pesticides no residues were detected in quantifiable concentrations in any of the samples taken, i.e.: aldrin and dieldrin, benfuracarb, bromuconazole, cadusafos, carbosulfan, chlordane, chlorbenzilate, dinocap, fipronil, fosthiazate, metconazole, methoxychlor, parathion, phenthoate, phoxim, prothioconazole, pyrazophos, resmethrin, tecnazene and triticonazole. Thus, for these substances the dietary exposure resulting from the food commodities covered by the EU-coordinated monitoring programme was negligible.

Considering the remaining pesticides covered by the EU-coordinated programme, a potential acute risk could not be excluded for 79 samples (out of the 18,243 samples considered) concerning 30 different pesticides. However, for two pesticides included in the EU-coordinated programme the

residue definition contains two or more compounds with different toxicological properties. Thus, for these substances two scenarios were calculated, an optimistic scenario, assuming the residue concentrations measured refer to the less toxic substance and a pessimistic scenario, which is considered as the less likely, using the ARfD for the more toxic substance. Under the pessimistic scenario, the number of samples which exceeded the respective toxicological reference value increased from 79 to 200. The commodities for which no risk was identified were milk, oats, rye and swine meat. The commodities with the most frequent exceedance of the ARfD were apples, lettuce and tomatoes (23, 22 and 21 samples, respectively) in the optimistic scenario; also in the pessimistic scenario these commodities exceeded most frequently the toxicological threshold (45, 87 and 29 samples, respectively). Of the samples posing a potential acute consumer risk none concerned organically produced food.

The **long-term (chronic) exposure assessment** was performed for 171 of the 178 substances covered by the EU-coordinated monitoring programme and for which toxicological reference values were available, and it was based on the residue findings for the 28 most prominent food commodities in the human diet. For none of the pesticides included in the 2010 EU-coordinated control programme the exposure exceeded the toxicologically acceptable limits. Based on the current scientific knowledge, it is therefore concluded that the food commodities covered by the EU monitoring programme did not pose a long-term consumer health risk.

For the first time in the context of preparing this report, EFSA performed an indicative **cumulative risk assessment** taking into account the results of the 2010 monitoring programme with the purpose of exploring possible deficiencies in the monitoring data (e.g. if the level of detail of the data reported was sufficient) and other limitations, which may impede the practical implementation of the cumulative risk assessment methodologies currently under development. Since the work on the establishment of common assessment groups (i.e. pesticides which are expected to share the same toxicological effects) and the assessment methodology is not yet completed the calculations are based on simplistic assumptions which are likely to overestimate the exposure significantly. Noting that the purpose of the exercise is to test the suitability of the monitoring data for this type of assessment, the results of the exposure assessments should be regarded as indicative only.

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## LEGAL BASIS

According to the EU legislation in place in 2010, EU Member States and two EFTA countries (Iceland and Norway) had to carry out national control programmes on pesticide residues in food commodities and to report the results to the European Commission and EFSA.

General legal provisions for food inspections and monitoring were established by Regulation (EC) No 882/2004<sup>4</sup> on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare.

The legal basis for the preparation of this Annual Report on the pesticide residues is laid down in Regulation (EC) No 396/2005<sup>5</sup> on Maximum Residues Levels (MRLs) for pesticide residues. This regulation requires Member States to establish national control programmes, to carry out regular official controls on pesticide residues in food commodities in order to check compliance with the MRLs for pesticide residues and to assess the consumer's exposure. According to Article 31 of Regulation (EC) No 396/2005 Member States have to submit the results of official controls and other relevant information to the European Commission, to EFSA and to other Member States. On the basis of these results an Annual Report on pesticide residues shall be prepared each year. With Article 32 of this regulation the responsibility for preparing the Annual Report on pesticide residues is assigned to EFSA. The MRL regulation also contains general provisions regarding the content of the Annual Report.

In addition to the general provisions on national monitoring programmes as defined in Article 30 of the pesticide MRL Regulation, the Commission has set up a specific EU-coordinated monitoring programme. Starting from the calendar year 2009, the participation of the EU Member States in the EU-coordinated control programme has become mandatory. The details of the coordinated multiannual Community control programme for 2010 have been established in Commission Regulation (EC) No 901/2009<sup>6</sup>.

According to Decision of the EEA Joint Committee No 127/2009<sup>7</sup> the EFTA countries Iceland and Norway were requested to participate in the EU-coordinated control programme. Thus, the provision of Regulation (EC) No 901/2009 is applicable also in those EFTA countries.

The results of the analysis of food samples taken in 2010 under the national and coordinated Community control programmes had to be submitted to the European Commission and to EFSA by the end of August 2011. All 27 EU Member States and two EFTA States submitted validated results of the 2010 monitoring programmes to EFSA between 5<sup>th</sup> July and 2<sup>nd</sup> December 2011.

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<sup>4</sup> Regulation (EC) No 882/2004 of the European Parliament and of the Council of 29 April 2004 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules. OJ L 165, 30.4.2004, p. 1-141.

<sup>5</sup> Regulation (EC) No 396/2005 of the European Parliament and of the Council of 23 February 2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin and amending Council Directive 91/414/EEC. OJ L 70, 16.3.2005, p 1-16.

<sup>6</sup> Commission Regulation (EC) No 901/2009 of 28 September 2009 concerning a coordinated multiannual Community control programme for 2010, 2011 and 2012 to ensure compliance with maximum levels of and to assess the consumer exposure to pesticide residues in and on food of plant and animal origin (Text with EEA relevance). OJ L 256, 29.9.2009, p. 14-22.

<sup>7</sup> Decision of the EEA Joint Committee No 127/2009 of 4 December 2009 amending Annex II (Technical regulations, standards, testing and certification) to the EEA Agreement. Official Journal L 62, 11.3.2010, p. 14–15.

## TERMS OF REFERENCE

In accordance with Article 32 of Regulation (EC) No 396/2005, EFSA shall submit the Annual Report on pesticide residues concerning the control activities carried out in 2010 to the Commission.

The Annual Report shall at least include the following information:

- an analysis of the results of the controls on pesticide residues provided by EU Member States and two EFTA States;
- a statement of the possible reasons why the MRLs were exceeded, together with any appropriate observations regarding risk management options;
- an analysis of chronic and acute risks to the health of consumers from pesticide residues;
- an assessment of consumer exposure to pesticide residues based on the information provided under the first bullet point and any other relevant information available, including reports submitted under Directive 96/23/EC<sup>8</sup>.

In addition, the report may include an opinion on the pesticides that should be included in future programmes.

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<sup>8</sup> Council Directive 96/23/EC of 29 April 1996 on measures to monitor certain substances and residues thereof in live animals and animal products and repealing Directives 85/358/EEC and 86/469/EEC and Decisions 89/187/EEC and 91/664/EEC. OJ L 125, 23.5.1996, p. 10–32.



## ASSESSMENT

### 1. Introduction

The report presents the results of the control programmes on pesticide residues in food commodities sampled during the calendar year 2010 in the 27 EU Member States and the two EFTA countries (Norway and Iceland).

The objective of this report is to give an overview of the official control activities performed by EU Member States and EFTA countries (in the following referred to as EU or reporting countries) in order to ensure compliance of food with the standards defined by Regulation (EC) No 396/2005, to summarise the results provided by the reporting countries, to identify critical areas of concern regarding sample compliance with Maximum Residue Levels (MRLs), to assess the actual consumer exposure to pesticide residues and to perform an analysis of the chronic and acute risks to consumer health. Furthermore, this report provides some recommendations for future monitoring plans and activities related to the enforcement of the pesticide legislation.

2010 was the second year in which the fully harmonised pesticide MRL legislation was in place in Europe. Regulation (EC) No 396/2005 lays down MRLs for all active substances used in plant protection products that have the potential to enter the food chain. The same legal limits are applicable in the EFTA countries; however, these limits normally enter into force later than in the EU Member States.

In 2009 a new format for submitting the results of monitoring activities, was implemented (EFSA, 2010). In contrast to previous years, Member States now provide all relevant details related to the samples analysed, whereas in previous years aggregated results were submitted. In total, 42 fields are defined to characterise an analysed sample and its analytical results, 22 of the fields are mandatory (EFSA 2012a). The detailed information available to EFSA allows the performance of a more detailed analysis of the results, including a more accurate assessment of the consumer exposure.

Due to the changed legal situation and the introduction of the new reporting format, the results of monitoring reports 2009 and 2010 are not directly comparable with the results reported in previous reports. It is also important to highlight that the comparability of results reported by individual reporting countries is also limited due to differences in the scope of the national control programmes, proficiencies of analytical laboratories providing results, the data validation and recoding<sup>9</sup>.

**Chapter 2** of the report describes the design of the monitoring programmes in place in Europe. In particular, the **EU-coordinated multiannual control programme** and the **national control programmes** are explained.

The results of the **EU-coordinated multiannual control programme**, as established in Commission Regulation (EC) No 901/2009, are reported in **chapter 3** of this report.

Key figures and results of the **national control programmes** (focussing mainly on the surveillance samples) are summarised in **chapter 4**.

In the last section of the report (**chapter 5**), EFSA assessed the **dietary exposure** of European consumers, mainly based on the results of the EU-coordinated multiannual Community control programme.

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<sup>9</sup> More detailed information on the results of control activities in the individual reporting countries is available from the respective national authorities. The list of web addresses where the results of monitoring plans have been published is reported in Appendix I. It should be noted that upon submission of the data, EFSA validated the data and recoded the names of the food and the pesticide names reported by the participating countries to make them comparable. In case of data inconsistencies, the reporting countries were asked for corrections. Therefore, small differences in the data published separately by the national authorities or in the “national summary reports” of Appendix II respectively and the data reported in the present report may occur.

Readers not familiar with terms and concepts frequently used in the present report (e.g. MRL and sampling strategy) are invited to read the **Glossary** at the end of the report.

## 2. Design and background of the control programmes

To fulfil the requirements of Regulation (EC) No 882/2004 and Regulation (EC) No 396/2005, EU Member States perform official controls to ensure the compliance of feed and food samples with regard to the pesticide MRL legislation.

Typically, in each European reporting country, two control programmes are in place: a national control/monitoring programme (designed individually by each country) and a European coordinated multiannual control programme, which gives clear guidance on which specific control activities should be performed by the Member States<sup>10</sup>.

### 2.1. EU-coordinated programme (EUCP)

The **EU-coordinated programme** aims to provide statistically representative data regarding pesticide residues in food available to European consumers. The lots sampled should be chosen without any particular suspicion towards a specific producer and/or consignment. Thus, the results obtained in the coordinated programme are considered as an indicator for the MRL compliance rate in food of plant and animal origin placed on the European common market and they allow an estimation of the actual consumer exposure.

The establishment of a coordinated community programme was initiated in 1996. Since then, the number of participating reporting countries has increased; in 1996, 15 EU Member States and one EFTA State (Norway) reported their control results, whereas in 2010 the number of participating countries was 29: 27 EU Member States and two EFTA countries (Norway and Iceland) who have signed the Agreement on the European Economic Area (EEA agreement). Over time, the programme was also extended with regard to the number of samples, the food commodities and the pesticides to be analysed each monitoring year.

The coordinated control programme for 2010 is laid down in Commission Regulation (EC) No 901/2009.

#### 2.1.1. Food commodities analysed

The major components of the European diet (food of plant origin) are represented by approx. 30 food products. Monitoring the pesticide residues in these commodities should provide a representative basis for the estimation of the exposure to pesticide residues in food of European consumers. In view of the resources available at national level, participating countries focus on the sampling and analysis of approx. ten products each year, which are tested in a three-year cycle, in total covering the major food items. Food commodities<sup>11</sup> to be analysed in 2010, 2011 and 2012 in the framework of the EU-coordinated programme are listed in Table 2-1. For the second time food of animal origin (milk, swine meat) was included into the coordinated control programme in 2010.

<sup>10</sup> See "Control programmes" and "Sampling strategy" in the Glossary.

<sup>11</sup> See "Food commodities" in the Glossary.

**Table 2-1:** EUCP – Food commodities to be monitored in the calendar years 2010, 2011 and 2012.

2010	2011	2012
Apples	Beans without pods <sup>(a)</sup>	Aubergines
Head cabbage	Carrots	Bananas
Leek	Cucumbers	Butter
Lettuce	Poultry meat	Cauliflower
Milk	Liver <sup>(d)</sup>	Eggs
Peaches <sup>(c)</sup>	Oranges or Mandarins	Orange juice <sup>(b)</sup>
Pears <sup>(e)</sup>	Pears	Peas without pods <sup>(a)</sup>
Rye or oats	Rice	Peppers (sweet)
Strawberries	Potatoes	Table grapes
Swine meat	Spinach <sup>(a)</sup>	Wheat
Tomatoes		

(a): Fresh or frozen

(b): For orange juice, reporting countries were requested to specify the source (concentrate or fresh fruits)

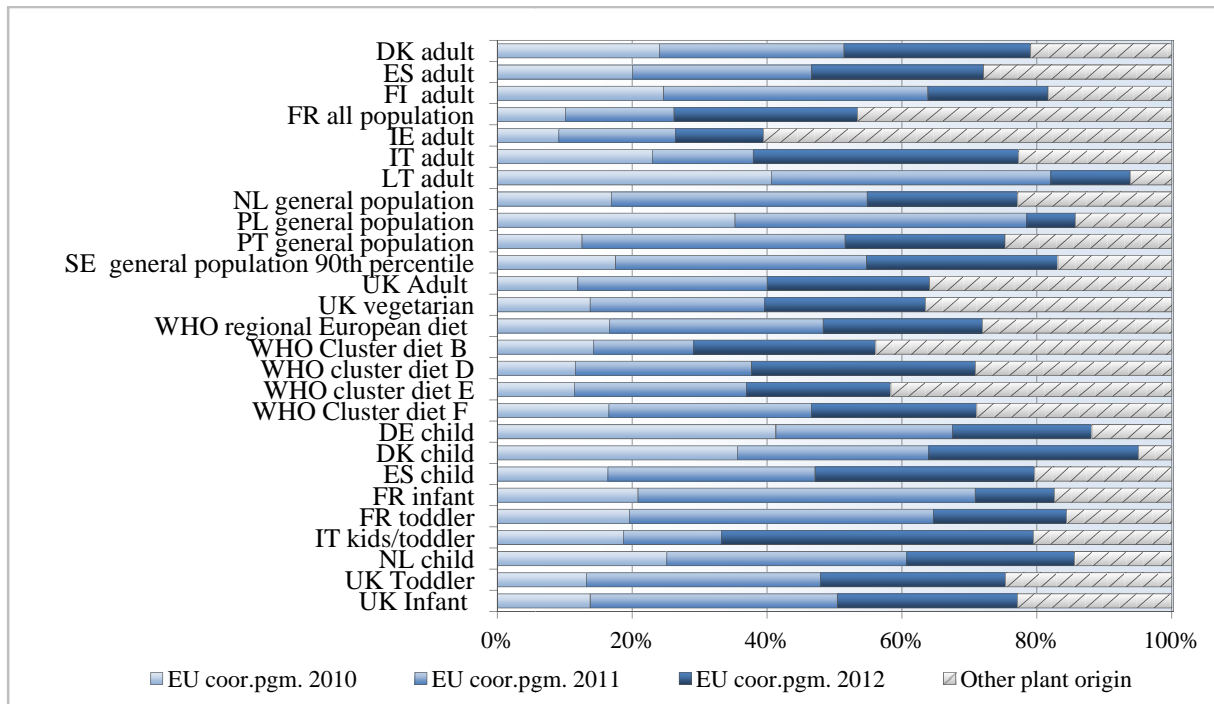
(c): Peaches including nectarines and similar hybrids

(d): Bovine and other ruminants, swine and poultry

(e): In 2010 pears had to be analysed for amitraz only

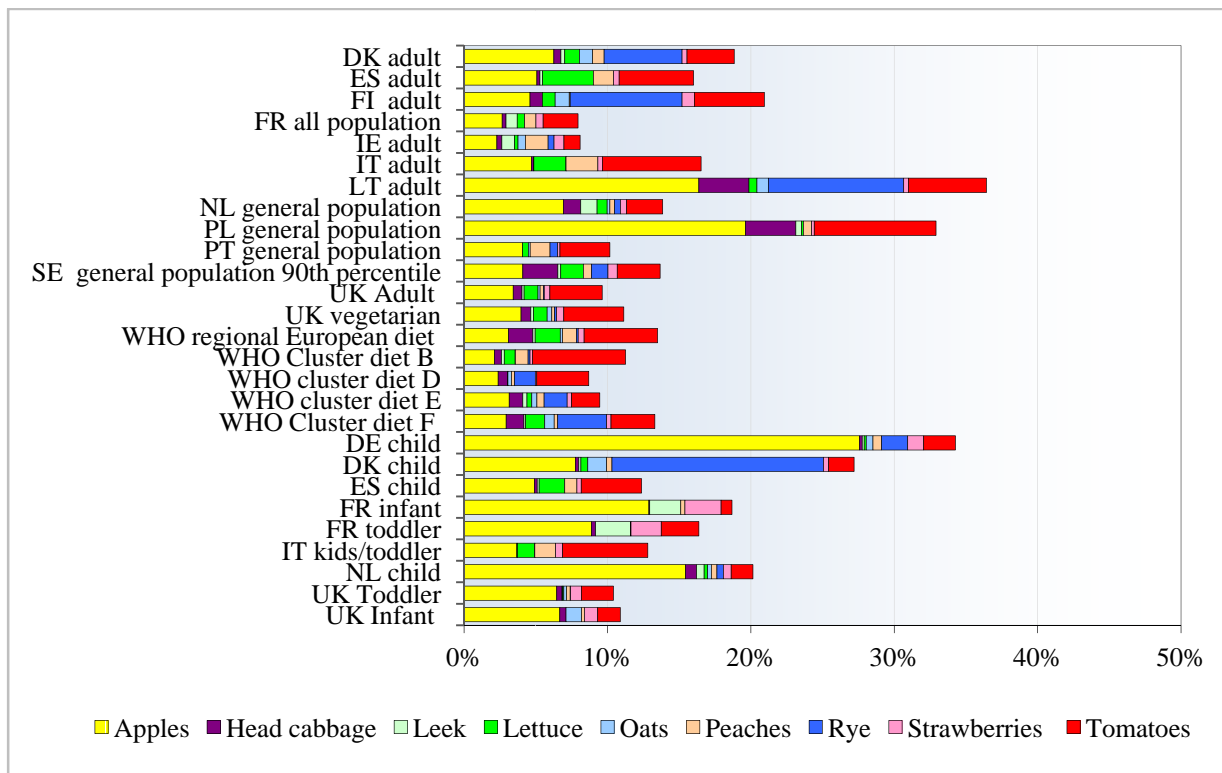
Figure 2-1 shows the contribution of food commodities included in the EU-coordinated residue control programme for 2010, 2011 and 2012 to the total food consumption<sup>12</sup>. The food consumption data were retrieved from national food consumption surveys either for the whole population, adults, children or selected consumer groups (e.g. vegetarians) or other sources of information suitable to conclude on the food habits of the European population such as food balance sheets (e.g. WHO diets). The data regarding the national food consumption were submitted to EFSA in the framework of the development of the EFSA PRIMo (Pesticide Residue Intake Model) and details on the diet in each Member State can be found in the EFSA report on temporary MRLs (EFSA, 2007). It should be noted that not all participating countries had submitted food consumption data to EFSA at that time and therefore some countries are not represented in the graph.

<sup>12</sup> The total food consumption for the different diets is expressed as unprocessed food and contains only food of plant origin with the exemption of sugar beet. Food of animal origin was not included in the calculation of the total consumption, because the level of details reported are not comparable.



**Figure 2-1:** EUCP – Contribution of the commodities covered by the EU-coordinated control programmes to the total food intake (excluding orange juice, animal products and sugar beets).

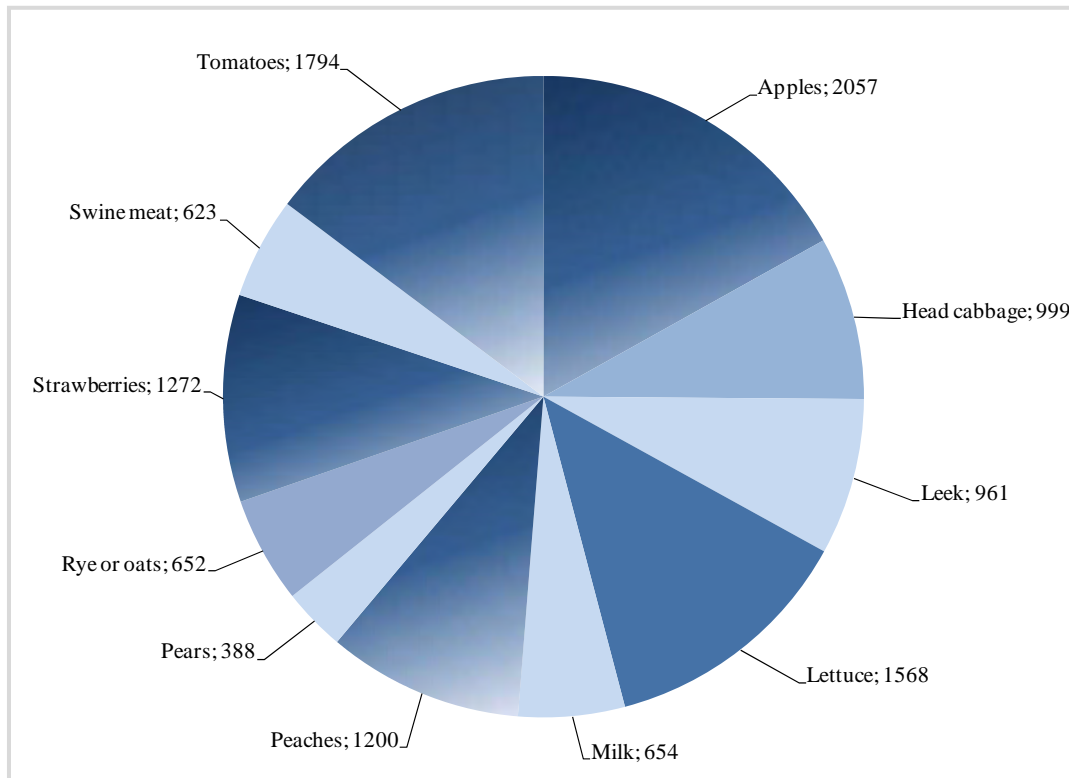
Figure 2-2 shows the individual contributions of the food items included in the 2010 programme for the above mentioned European diets.



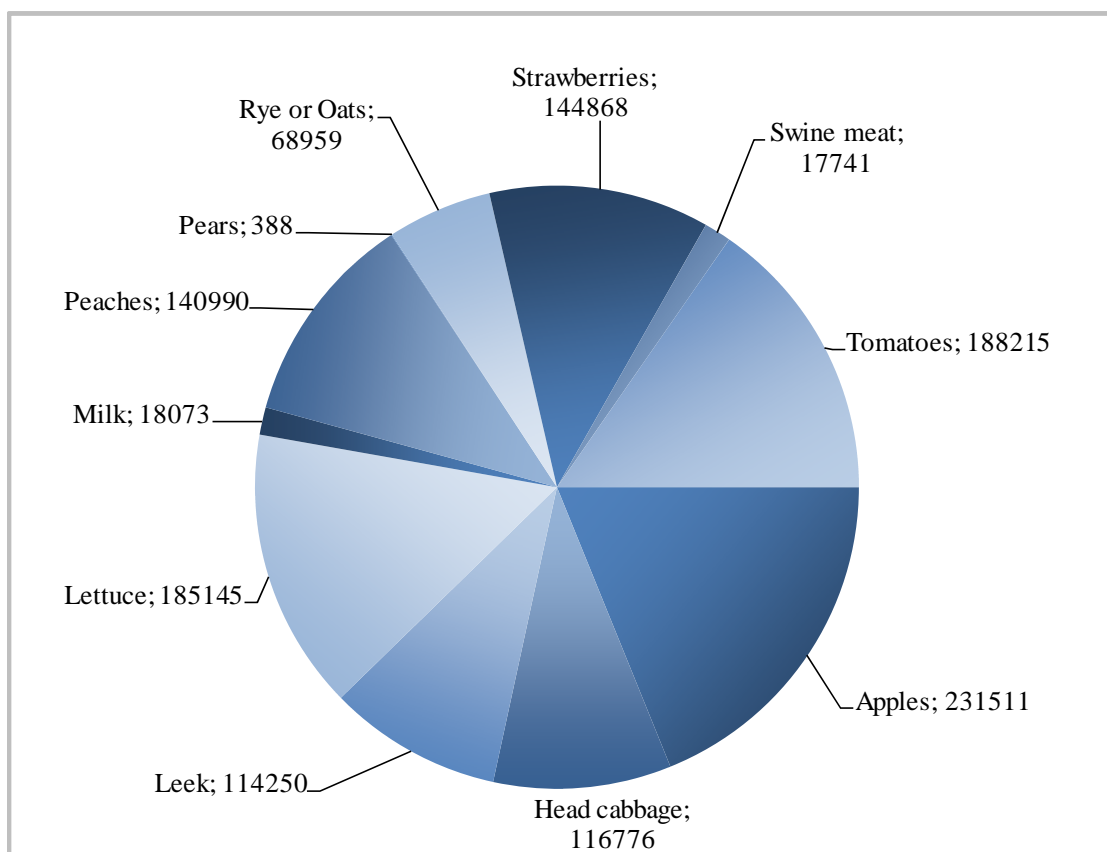
**Figure 2-2:** EUCP – Contribution of the commodities covered by the EU-coordinated control programme 2010 to the total food intake (excluding orange juice, products of animal origin and sugar beets).

From this analysis it can be seen that the crops (apples, head cabbage, leek, lettuce, milk, peaches, pears, rye, oats, strawberries, swine meat, tomatoes) selected for the 2010 control programme represented 8% to 36% of the total dietary daily intake of products of plant origin, whereas the total contribution of the crops to be monitored in the three years cycle ranges from 39% to 95%. These data demonstrate that the food items selected are representative of the total food consumption of European consumers and can therefore be used for the assessment of dietary exposure to pesticide residues via food.

Figure 2-3 and Figure 2-4 show the total number of samples taken and the total number of determinations carried out for each food commodity in the framework of the 2010 EU-coordinated programme, respectively.



**Figure 2-3:** Number of samples taken (total of 12,168) for each food commodity included in the 2010 EUCP.



**Figure 2-4:** Number of single analytical determinations carried out (total of 1,226,916) for each food commodity included in the 2010 EUCP.

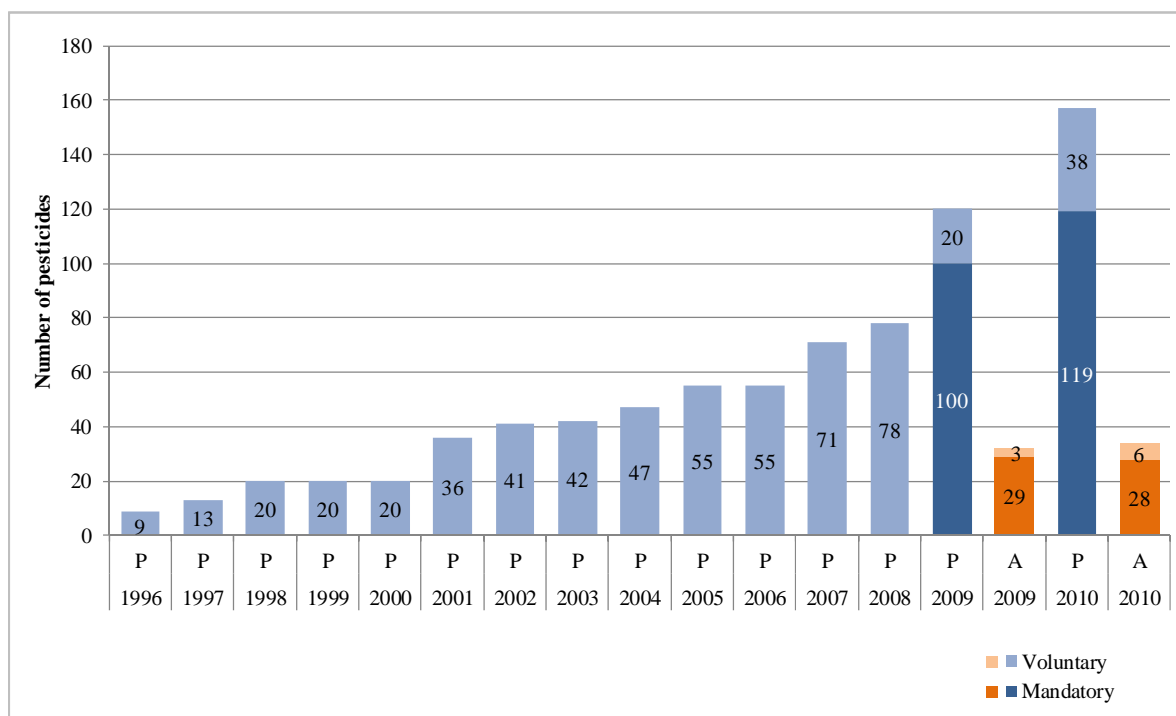
### 2.1.2. Pesticides analysed

Table 2-2 lists the pesticides and their relevant metabolites<sup>13</sup> which - according to the 2010 EU-coordinated programme - had to be analysed in food of plant origin (157 pesticides, 38 of them analysed on a voluntary basis) and in food of animal origin (in total 34 pesticides, six of them analysed on a voluntary basis), in total 178 different pesticides. Since the start of the coordinated control programme in 1996, where only nine pesticides were included in the programme (Figure 2-5), the pesticide list has been extended substantially. Between 1996 and 2008, the EU monitoring programmes were established in Commission Recommendations and were therefore not legally binding. Consequently, the analysis of the pesticides listed in these years was considered as voluntary. Starting from the monitoring year 2009, the Member States participation in the EU-coordinated programme became compulsory. For certain pesticides, however the analysis had to be carried out on a voluntary basis.

It should be noted that for all pesticides analysed in 2010 fully harmonised EU MRLs were in place on 1 January 2010. For two pesticides (cadusafos and dichlofluanid) the default MRL of 0.01 mg/kg, as laid down in Article 18(1) (b) of Regulation (EC) No 396/2005, was applicable<sup>14</sup>.

<sup>13</sup> See "Residue definition" in the Glossary.

<sup>14</sup> The EFTA countries (Iceland and Norway) also have the legal limits applicable in the European Union implemented in their national legislation. Compared to the Member States, however, the date of entry into force of the EU MRLs is delayed.



**Figure 2-5:** EUCP – Number of pesticides (residue definitions) included in the coordinated control programmes 1996-2010 (P = pesticides to be analysed in products of Plant origin, A = pesticides to analysed in products of Animal origin).

**Table 2-2:** EUCP – List of pesticides included in the 2010 EU-coordinated programme.

Pesticide	Residue definition according to Regulation (EC) No 396/2005 on EU MRLs <sup>(a)</sup>	Type of food <sup>(b)</sup>	Voluntary analysis in 2010 <sup>(c)</sup>
2,4-D	Sum of 2,4-D and its esters expressed as 2,4-D	P	X
Abamectin	Sum of avermectin B1a, avermectin B1b and delta-8,9 isomer of avermectin B1a	P	
Acephate		P	
Acetamiprid		P	
Acrinathrin		P	X
Aldicarb	Sum of aldicarb, its sulfoxide and its sulfone, expressed as aldicarb	P	
Amitraz	Amitraz including the metabolites containing the 2,4-dimethylaniline moiety expressed as amitraz	P	Mandatory only in pears
Amitrole		P	X
Azinphos-ethyl		A	X
Azinphos-methyl		P	
Azoxystrobin		P	
Benfuracarb		P	X
Bifenthrin		P, A	
Bitertanol		P	
Boscalid		P	
Bromide ion		P	Mandatory in lettuce and tomatoes



Pesticide	Residue definition according to Regulation (EC) No 396/2005 on EU MRLs <sup>(a)</sup>	Type of food <sup>(b)</sup>	Voluntary analysis in 2010 <sup>(c)</sup>
Bromopropylate		P	
Bromuconazole	Sum of diastereoisomers	P	X
Bupirimate		P	
Buprofezin		P	
Cadusafos		P	X
Camphechlor	Sum of parlar No 26, 50 and 62 <sup>(d)</sup>	A	X
Captan <sup>(e)</sup>		P	
Carbaryl		P	
Carbendazim and Benomyl	Sum of benomyl and carbendazim expressed as carbendazim	P	
Carbofuran	Sum of carbofuran and 3-hydroxycarbofuran expressed as carbofuran	P	
Carbosulfan		P	X
Chlordane	Sum of cis- and trans-isomers and oxychlordane expressed as chlordane	A	
Chlorfenapyr		P	
Chlorfenvinphos		P	
Chlormequat		P	Mandatory in rye and oats
Chlorobenzilate		A	X
Chlorothalonil		P	
Chlorpropham <sup>(f)</sup>	Chlorpropham and 3-chloroaniline expressed as chlorpropham	P	
Chlorpyrifos		P, A	
Chlorpyrifos-methyl		P, A	
Clofentezin <sup>(g)</sup>	Sum of all compounds containing the 2-chlorbenzoyl-moiety expressed as clofentezin <sup>(g)</sup>	P	
Clothianidin		P	
Cyfluthrin	Cyfluthrin incl. other mixtures of constituent isomers (sum of isomers)	P, A	
Cypermethrin	Cypermethrin incl. other mixtures of constituent isomers (sum of isomers)	P, A	
Cyproconazole		P	X
Cyprodinil		P	
DDT	Sum of p,p'-DDT, o,p'-DDT, p-p'-DDE and p,p'-DDD (TDE) expressed as DDT	A	
Deltamethrin	Cis-deltamethrin	P, A	
Diazinon		P, A	
Dichlofluanid		P	
Dichlorvos		P	
Dicloran		P	
Dicofol	Sum of p,p' and o,p' isomers	P	
Dieldrin	aldrin and dieldrin combined expressed as dieldrin	A	

Pesticide	Residue definition according to Regulation (EC) No 396/2005 on EU MRLs <sup>(a)</sup>	Type of food <sup>(b)</sup>	Voluntary analysis in 2010 <sup>(c)</sup>
Difenoconazole		P	
Dimethoate	Sum of dimethoate and omethoate expressed as dimethoate <sup>(i)</sup>	P	
Dimethomorph		P	
Dinocap	Sum of dinocap isomers and their corresponding phenols expressed as dinocap	P	X
Diphenylamine		P	
Dithiocarbamates	Dithiocarbamates expressed as CS <sub>2</sub> , including maneb, mancozeb, metiram, propineb, thiram and ziram	P	
Endosulfan	Sum of alpha- and beta-isomers and endosulfan-sulphate expressed as endosulfan	P, A	
Endrin		A	
Epoxiconazole		P	
Ethephon		P	X
Ethion		P	
Etofenprox		P	X
Ethoprophos		P	X
Fenamiphos	Sum of fenamiphos and its sulfoxide and sulfone expressed as fenamiphos	P	X
Fenarimol		P	
Fenazaquin		P	
Fenbuconazole		P	X
Fenbutatin oxide		P	X
Fenhexamid		P	
Fenitrothion		P	
Fenoxycarb		P	
Fenpropathrin		P	X
Fenpropimorph		P	
Fenthion	Sum of fenthion and its oxygen analogue, their sulfoxides and sulfone expressed as parent	P, A	
Fenvalerate and Esfenvalerate	Sum of RS/SR and RR/SS isomers	P, A	
Fipronil	Sum of fipronil and sulfone metabolite (MB46136) expressed as fipronil	P	
Fluazifop	Fluazifop-P-butyl (fluazifop acid (free and conjugate))	P	X
Fludioxonil		P	
Flufenoxuron		P	
Fluquinconazole		P	X
Flusilazole		P	
Flutriafol		P	X
Folpet <sup>(e)</sup>		P	
Formetanate	Sum of formetanate and its salts expressed as formetanate (hydrochloride)	P	

Pesticide	Residue definition according to Regulation (EC) No 396/2005 on EU MRLs <sup>(a)</sup>	Type of food <sup>(b)</sup>	Voluntary analysis in 2010 <sup>(c)</sup>
Fosthiazate		P	X
Glyphosate		P	Mandatory in rye and oats
Haloxypop including Haloxypop-R	Haloxypop-R methyl ester, haloxypop-R and conjugates of haloxypop-R expressed as haloxypop-R	P	X
Heptachlor	Sum of heptachlor and heptachlor epoxide expressed as heptachlor	A	
Hexachlorbenzene		A	
Hexachlorocyclohexane (HCH), Alpha-isomer		A	
Hexachlorocyclohexane (HCH), Beta-isomer		A	
Hexaconazole		P	
Hexythiazox		P	
Imazalil		P	
Imidacloprid		P	
Indoxacarb	Indoxacarb as sum of the isomers S and R	P	
Iprodione		P	
Iprovalicarb		P	
Kresoxim-methyl		P	
Lambda-Cyhalothrin	Lambda-cyhalothrin, incl. other mixtures of constituent isomers (sum of isomers)	P	
Lindane	Gamma-isomer of hexachlorocyclohexane (HCH)	A	
Linuron		P	
Lufenuron		P	
Malathion	Sum of malathion and malaoxon expressed as malathion	P	
Mepanipyrim	Mepanipyrim and its metabolite (2-anilino-4-(2-hydroxypropyl)-6-methylpyrimidine) expressed as mepanipyrim	P	
Mepiquat		P	Mandatory in rye and oats
Metalaxyl and Metalaxyl-M	Metalaxyl incl. mixtures of constituent isomers incl. Metalaxyl-M (sum of isomers)	P	
Metconazole		P	X
Methamidophos		P	
Methidathion		P, A	
Methiocarb	Sum of methiocarb and methiocarb sulfoxide and sulfone, expressed as methiocarb	P	
Methomyl and Thiodicarb	Sum of methomyl and thiodicarb expressed as methomyl	P	
Methoxychlor <sup>(i)</sup>		A	
Methoxyfenozide		P	
Monocrotophos		P	

Pesticide	Residue definition according to Regulation (EC) No 396/2005 on EU MRLs <sup>(a)</sup>	Type of food <sup>(b)</sup>	Voluntary analysis in 2010 <sup>(c)</sup>
Myclobutanil		P	
Oxadixyl		P	
Oxamyl		P	
Oxydemeton-methyl	Sum of oxydemeton-methyl and demeton-S-methylsulfone expressed as oxydemeton-methyl	P	
Paclobutrazole		P	X
Parathion		P, A	
Parathion-methyl	Sum of parathion-methyl and paraoxon-methyl expressed as parathion-methyl	P, A	
Pencycuron		P	
Penconazole		P	
Pendimethalin		P	
Permethrin	Sum of isomers	A	
Phentoate		P	X
Phosalone		P	
Phosmet	Phosmet and phosmet oxon expressed as phosmet	P	
Phoxim		P	X
Pirimicarb	Sum of pirimicarb and desmethylpirimicarb expressed as pirimicarb	P	
Pirimiphos-methyl		P, A	
Prochloraz	Sum of prochloraz and its metabolites containing the 2,4,6-trichlorophenol moiety expressed as prochloraz	P	
Procymidone		P	
Profenofos		P, A	
Propamocarb	Sum of propamocarb and its salt expressed as propamocarb	P	X
Propargite		P	
Propiconazole		P	
Propyzamide		P	
Prothioconazole	Prothioconazole (prothioconazole-desthio)	P	X
Pyraclostrobin		P	
Pyrazophos		A	
Pyrethrins		P	X
Pyridaben		P	
Pyrimethanil		P	
Pyriproxyfen		P	
Quinoxifen		P	
Quintozene	Sum of quintozene and pentachloro-aniline expressed as quintozene	A	X
Resmethrin	Resmethrin including other mixtures of constituent isomers (sum of isomers)	A	X
Spinosad	Sum of spinosyn A and spinosyn D, expressed as spinosad	P	
Spiroxamine		P	

Pesticide	Residue definition according to Regulation (EC) No 396/2005 on EU MRLs <sup>(a)</sup>	Type of food <sup>(b)</sup>	Voluntary analysis in 2010 <sup>(c)</sup>
Taufluvalinate		P	
Tebuconazole		P	
Tebufenozide		P	
Tebufenpyrad		P	
Tecnazene		A	X
Teflubenzuron		P	
Tefluthrin		P	X
Tetraconazole		P	
Tetradifon		P	
Thiabendazole		P	
Thiacloprid		P	
Thiamethoxam	Sum of thiamethoxam and clothianidin expressed as thiamethoxam	P	
Thiophanate-methyl		P	
Tolcloflos-methyl		P	
Tolyfluanid	Sum of tolyfluanid and dimethylaminosulfotoluidide expressed as tolyfluanid	P	
Triadimefon and Triadimenol	Sum of triadimefon and triadimenol	P	
Triazophos		P, A	
Trichlorfon		P	X
Trifloxystrobin		P	
Triflumuron		P	X
Trifluralin		P	
Triticonazole		P	X
Vinclozolin	Sum of vinclozolin and all metabolites cont. the 3,5-dichloraniline moiety, expressed as vinclozolin	P	
Zoxamide		P	X

(a): Unless specifically indicated in the table, the residue definition comprises the parent compound only.

(b): P = plant products, A = animal products

(c): X = To be analysed on a voluntarily basis

(d): Sum of the three indicator compounds parlar No 26, 50 and 62, where:

Parlar No 26 = 2-endo,3-exo,5-endo,6-exo,8,8,10,10-octachlorobornane

Parlar No 50 = 2-endo,3-exo,5-endo,6-exo,8,8,9,10,10-nonachlorobornane

Parlar No 62 = 2,2,5,5,8,9,9,10,10,-nonachlorobornane

(e): For some commodities covered by the EU-coordinated monitoring programme the residue definition is sum of captan and folpet (i.e. apples, strawberries and tomatoes).

(f): Chlorpropham: residue definition for plant products with exemption of potatoes (chlorpropham only).

(g): Clofentezine: residue definition only for cereals; otherwise, parent compound only.

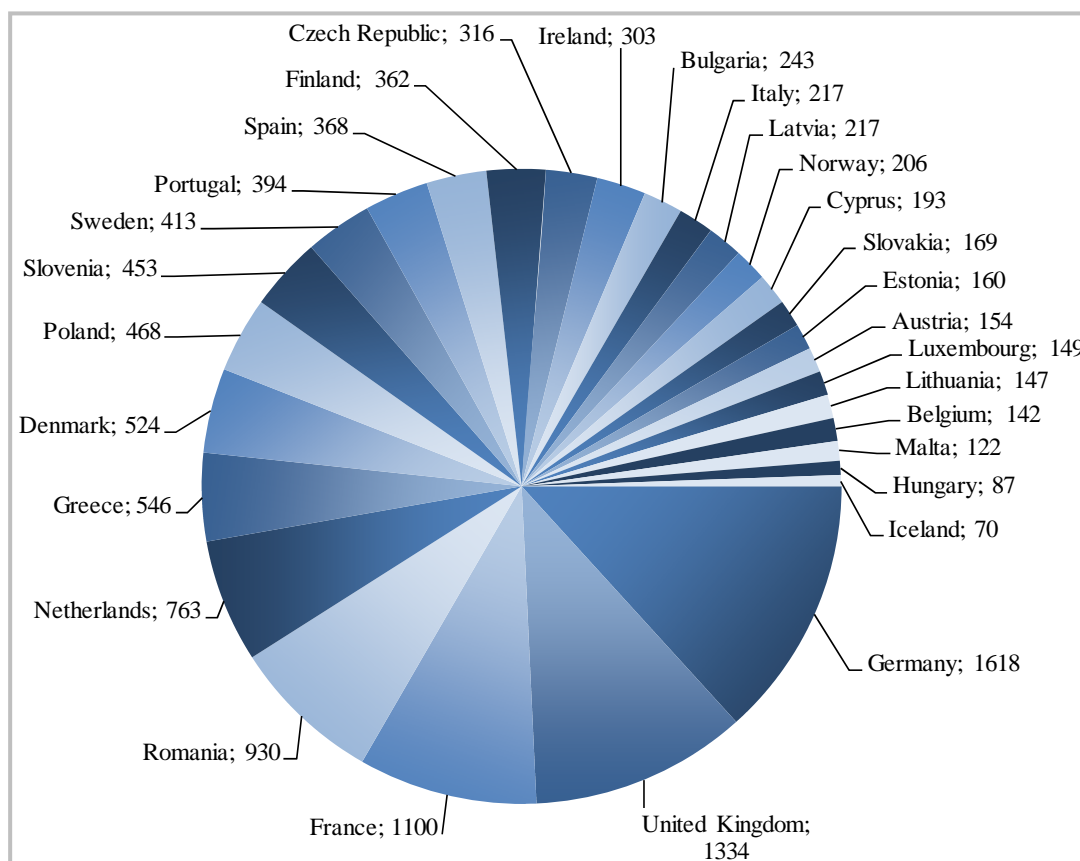
(h): According to Regulation (EC) No 901/2009 the results for dimethoate and omethoate had to be reported as a sum, but also separately.

(i): Since 4,4'-Methoxychlor listed in Regulation (EC) No 901/2009 is not a pesticide, it is assumed that the control Regulation refers to the active substance methoxychlor.

### 2.1.3. Number of samples

The control programme in Regulation (EC) No 901/2009 defines the minimum number of samples to be analysed by each reporting country in the framework of the 2010 EU-coordinated programme, varying from 12 to 93 samples per product, depending on the population of the Member State (see Table 2-3). The minimum total number of samples per commodity required to obtain representative results at EU level was calculated to be 642 samples<sup>15,16</sup>; a representative proportion of this figure was then assigned to the Member States taking into account the population per reporting country.

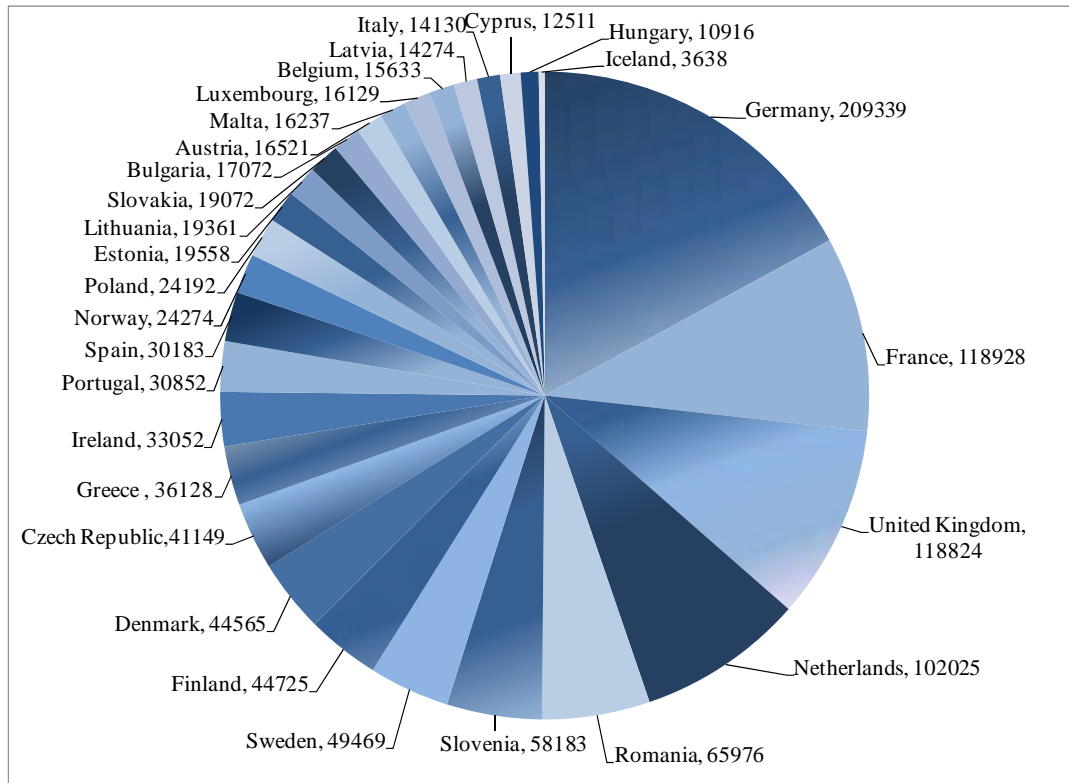
A total number of 12,168 samples of 12 different commodities (“rye and oats” are counted separately) were analysed in the framework of the 2010 EU-coordinated pesticide control programme (Figure 2-6) and 1,226,916 number of determinations were performed (Figure 2-7).



**Figure 2-6:** EUCP – Number of surveillance samples (total of 12,168) taken in the coordinated programme 2010, specified by reporting country.

<sup>15</sup> According to Article 3 of Regulation (EC) No 901/2009, the total number of samples to be analysed was derived on the basis of a binomial probability distribution, which estimated that the examination of 642 samples allows the detection of a sample containing pesticide residues above the limit of determination, with a certainty of more than 99%, provided that no less than 1% of products of plant origin contain residues above that limit. The collection of these samples should be apportioned between Member States on the basis of population and consumer numbers, with a minimum of 12 samples per product and per year.

<sup>16</sup> It should be noted that the calculation of the number of samples necessary to obtain statistically representative results was based on the number of reporting countries of some years ago. Since the number of reporting countries has increased in the meantime, a recalculation of the total number of necessary samples and the sample distribution should be considered. Therefore, in the previous Annual Report EFSA recommended the re-evaluation of the statistical basis for the number of samples taken by the reporting countries and the development of an updated sampling plan regarding the number of samples per commodity and the assignment of a minimum sample number for each reporting country. EFSA and the European Commission have taken the initiative to reassess the programme design by evaluating the representativeness of e.g. the number of samples collected under the EU-coordinated programme to enable the derivation of more accurate conclusions on the overall MRL compliance rate and on the consumer’s exposure assessment. The outcome of this initiative is expected in 2013.



**Figure 2-7:** EUCP – Number of surveillance determinations (total of 1,226,916) performed in the EU-coordinated programme 2010, specified by reporting country.

Table 2-3 gives an overview of the actual number of samples taken by each reporting country for each commodity.

It is noted that some reporting countries did not fulfil their obligations with regard to the minimum number of samples to be taken for one or several commodities; this is particularly true for apples, head cabbage, leek, milk, pears, rye or oats and swine meat. For pears and swine meat, the minimum number of samples required to obtain representative results at EU level (642 samples) was not reached (see also Table 2-3).

**Table 2-3: EUCP – Number of samples taken for each commodity included in the 2010 EU-coordinated programme.**

Country	Minimum No. of samples per commodity	Actual number of samples taken											Total
		Apples	Head cabbage	Leek	Lettuce	Milk	Peaches	Pears**	Rye or oats	Strawberries	Swine meat	Tomatoes	
Austria	12/15*	15	15	15	15	17	17	0	13	15	16	16	154
Belgium	12/15*	15	15	15	15	15	15	0	8	14	15	15	142
Bulgaria	12/15*	35	32	37	29	0	36	0	6	31	0	37	243
Cyprus	12/15*	28	0	14	27	5	27	0	0	27	36	29	193
Czech Republic	12/15*	53	39	26	40	0	28	10	51	18	0	51	316
Denmark	12/15*	72	24	22	57	15	53	0	37	60	120	64	524
Estonia	12/15*	17	19	15	13	15	12	0	13	24	15	17	160
Finland	12/15*	102	16	17	47	16	16	6	29	50	16	47	362
France	66	135	64	79	312	0	88	120	83	97	0	122	1100
Germany	93	204	184	191	175	94	188	0	92	199	98	193	1618
Greece	12/15*	90	27	28	78	0	61	26	5	53	15	163	546
Hungary	12/15*	0	10	0	14	0	16	0	15	15	0	17	87
Iceland	12/15*	16	10	7	8	0	9	0	0	5	0	15	70
Ireland	12/15*	89	16	15	38	68	20	0	22	17	0	18	303
Italy	65	56	0	13	17	0	27	1	4	30	2	67	217
Latvia	12/15*	29	30	25	27	8	24	0	9	22	16	27	217
Lithuania	12/15*	20	17	15	14	10	14	0	16	19	8	14	147
Luxembourg	12/15*	20	14	9	18	18	15	9	0	15	15	16	149
Malta	12/15*	15	15	15	15	0	15	0	0	14	15	18	122
Netherlands	17	132	71	56	156	22	70	0	9	97	20	130	763
Norway	12/15*	18	19	22	21	15	22	15	16	19	15	24	206
Poland	45	61	60	50	50	1	50	0	50	49	47	50	468
Portugal	12/15*	63	63	65	41	0	33	0	7	53	0	69	394
Romania	17	296	99	25	74	38	56	0	11	94	0	237	930
Slovakia	12/15*	20	15	15	15	15	14	14	16	13	15	17	169
Slovenia	12/15*	76	30	25	75	1	60	31	20	60	15	60	453



Country	Minimum No. of samples per commodity	Actual number of samples taken											
		Apples	Head cabbage	Leek	Lettuce	Milk	Peaches	Pears**	Rye or oats	Strawberries	Swine meat	Tomatoes	Total
Spain	45	88	5	24	46	16	35	7	9	32	0	106	368
Sweden	12/15*	149	18	25	35	30	31	0	28	34	16	47	413
United Kingdom	66	143	72	96	96	235	148	149	83	96	108	108	1334
<b>Total</b>		<b>2057</b>	<b>999</b>	<b>961</b>	<b>1568</b>	<b>654</b>	<b>1200</b>	<b>388</b>	<b>652</b>	<b>1272</b>	<b>623</b>	<b>1794</b>	<b>12168</b>

\* A minimum of 12 samples had to be taken if a single residue method was applied. Otherwise (i.e. multi residue methods), 15 samples was the minimum number of samples to be taken according to the legislation.

\*\* For pears, only amitraz had to be analysed.

## 2.2. National programmes (NCP)

The official controls carried out at national level within the framework of the **national control programmes** are complementary to the controls performed in the context of the EU-coordinated programme. They are performed to ensure compliance with the provisions established in food legislation regarding pesticide residues. The reporting countries have to define their priorities regarding the design of the national control programmes for pesticide residues in food (see Appendix II).

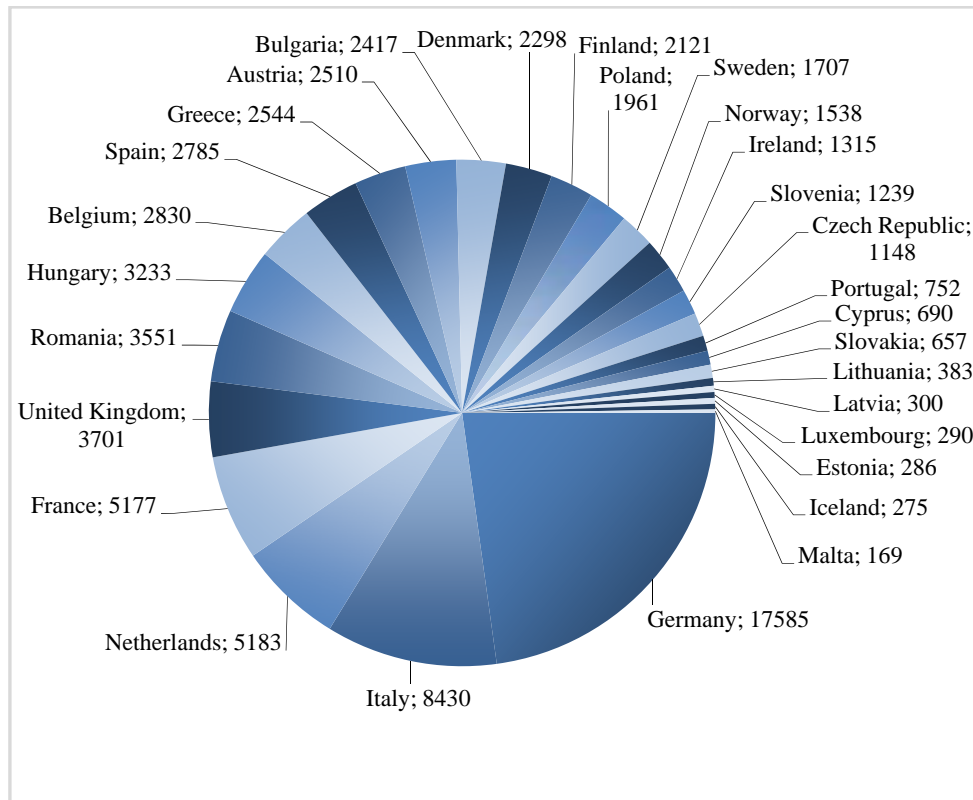
In designing their national control plans, the reporting countries typically take into account the importance of a commodity in national food habits, the food commodities with high residues/non-compliance rates in previous years, the use pattern of pesticides and the laboratory capacity. Additional details are available in section 2.2 of the 2009 European Report on Pesticide Residue in Food (EFSA, 2011).

More details on the design of the national control programmes are reported in Appendix II of the current report. The number of samples and the analytical scope of the analyses performed by the participating countries are strongly determined by national budgets. Thus, reporting countries have to focus on the specific aspects which are considered most relevant for their national control activities. These results are of value for assessing the MRL compliance at national level; however, due to the variability of the programme designs, the comparison of results from different reporting countries needs to take into account the different objectives and priorities of the national programmes.

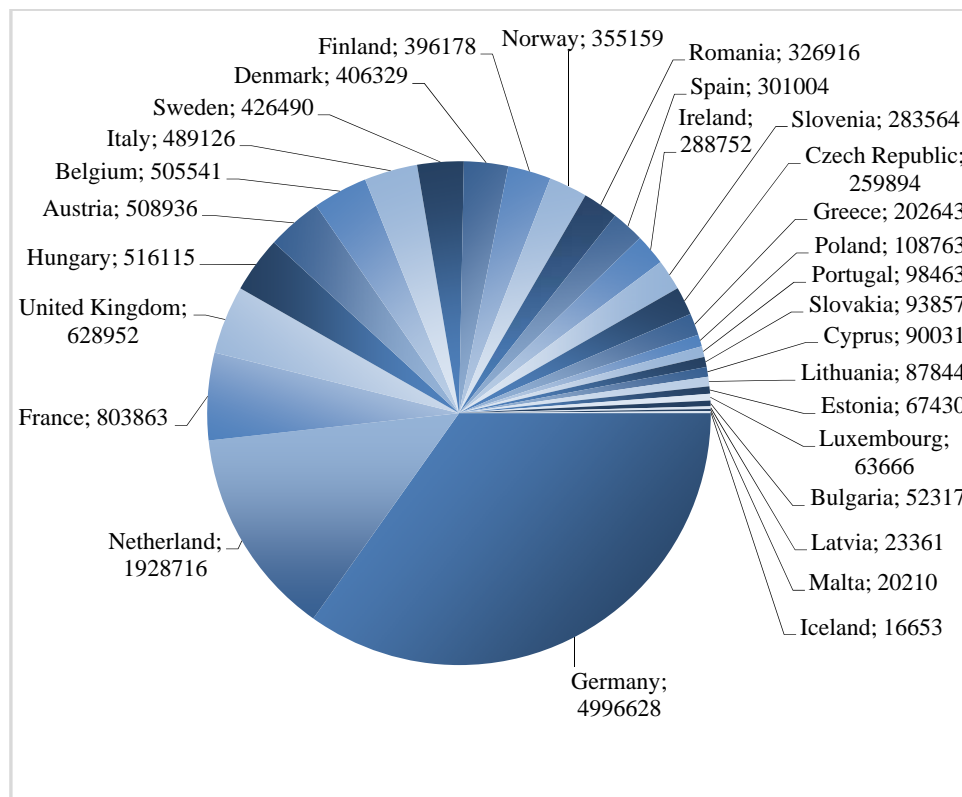
### 2.2.1. Number of samples – national programmes

The total number of samples taken in the context of the national programmes in 2010 was 77,075. Compared to the previous year, an increase of 13.4% was recorded.

In Figure 2-8, the distribution of the total number of samples taken by the reporting countries is displayed. In a second pie chart (Figure 2-9) the number of the single analytical determinations carried out by each reporting country is depicted.



**Figure 2-8:** EU+NCP – Total number of samples taken (total of 77,075) by each reporting country (surveillance and enforcement) in the framework of the national control programmes.



**Figure 2-9:** EU+NCP – Total number of analytical determinations carried out (total of 14,347,401) in 2010 by each reporting country (surveillance and enforcement) in the framework of the national control programmes.

Depending on the sampling strategy applied, the national programmes are classified as either surveillance or enforcement programmes<sup>17</sup>.

In the surveillance programmes, samples are taken without any particular suspicion towards a specific producer and/or consignment. The EU-coordinated control programme is an example of a surveillance programme. However, in most cases the national surveillance programmes are more targeted to achieve the objectives defined in the national control programmes and are therefore already focussed on specific pre-selected food products and countries, but the selection of the consignment/lot is randomised. Follow-up or enforcement sampling is directed at a specific grower/producer or at a specific consignment. In enforcement programmes, the probability of finding samples with positive results or samples exceeding the legal limits is higher than in surveillance programmes.

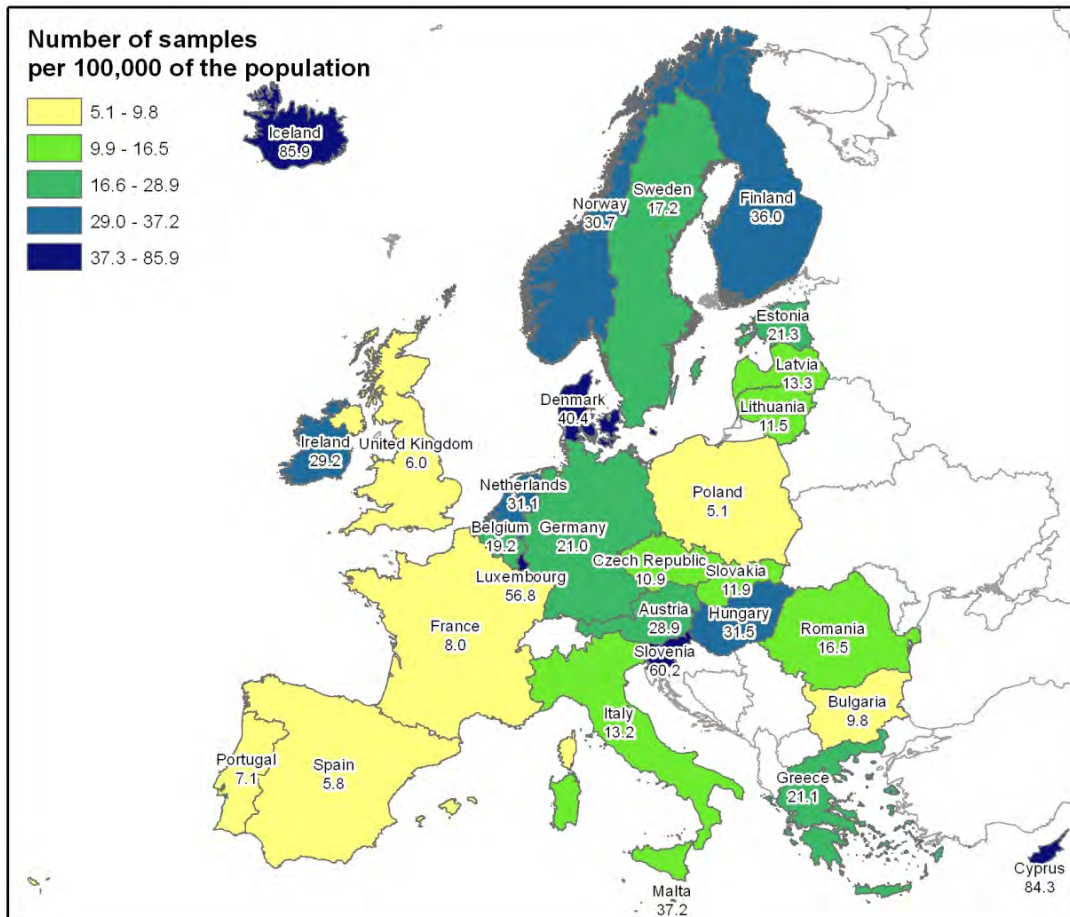
In 2010, the majority of the samples taken were classified as surveillance samples (72,813 samples, 94.5% of the total number of samples). 4,262 (5.5% of the total number of samples) were enforcement samples. Table 2-4 splits them up into the different food product groups.

**Table 2-4:** EU+NCP – Number of surveillance and enforcement samples in different product groups - 2010.

Product	Surveillance	Enforcement	Total	% of samples
	Number of samples	Number of samples	Number of samples	
Vegetables	29227	2959	32186	41.8
Fruits and nuts	27217	1046	28263	36.7
Animal products	5261	25	5286	6.9
Cereals	4200	81	4281	5.6
Other plant products	2550	102	2652	3.4
Other products	2131	32	2163	2.8
Baby food/Infant formulas	1828	2	1830	2.4
Fish products	399	15	414	0.5
<b>Total</b>	<b>72813</b>	<b>4262</b>	<b>77075</b>	<b>100.0</b>

The number of surveillance samples taken by the participating countries, normalised by the national population, is depicted in Map 2-1.

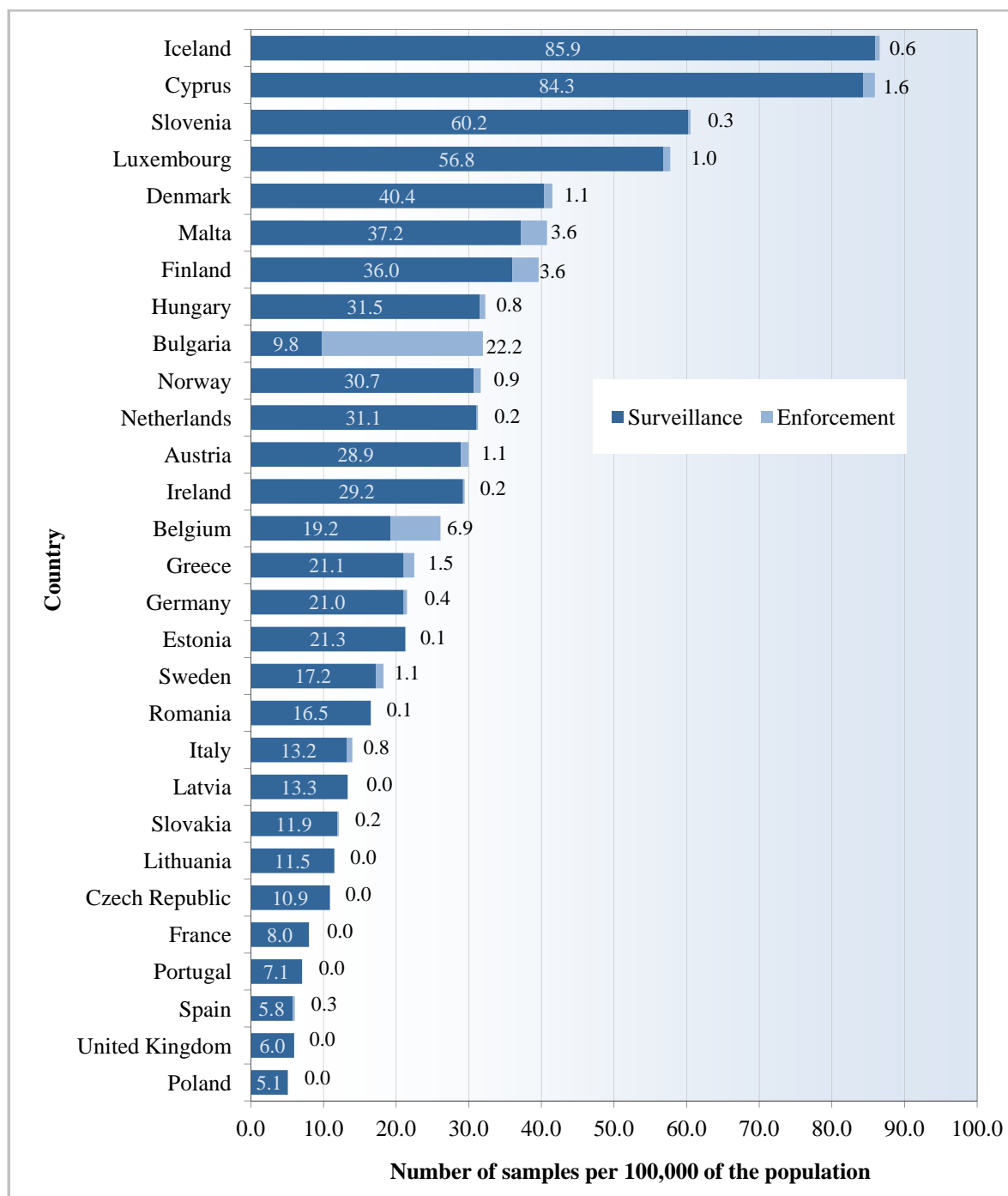
<sup>17</sup> See “Sampling strategy” in the Glossary.



**Map 2-1:** EU+NCP – Number of surveillance samples taken in 2010 by each reporting country normalised by the national population<sup>18</sup>.

The number of surveillance samples taken and normalised per 100,000 national inhabitants varied from 5.1 (Poland ) to 85.9 (Iceland ) (Figure 2-10). In one single country (Bulgaria) the majority of the samples were classified as enforcement.

<sup>18</sup> Source of population per country 2010: Eurostat <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=tps00001> (Download: 30-01-2012 13:54:49)



**Figure 2-10:** EU+NCP – Number of surveillance and enforcement samples by countries normalised by the national population - 2010.

### 2.2.2. Pesticides analysed – national programmes

In 2010, approximately 500 pesticides were authorised for use as plant protection products in EU Member States<sup>19,20</sup>. However, more than 998 pesticides can potentially be used as plant protection products worldwide and may result in residues in food traded and consumed in Europe. In addition, metabolites resulting from these pesticides may be present in food as well.

<sup>19</sup> Information from the European Commission database available at: [http://ec.europa.eu/sanco\\_pesticides/public/index.cfm](http://ec.europa.eu/sanco_pesticides/public/index.cfm)

<sup>20</sup> See “Pesticide Residues” in the Glossary.

In 2010, the total number of pesticides sought was 996<sup>21</sup>. Including the metabolites the total number of analytes covered by all reporting countries was 1,096.

Table 2-5 shows the number of pesticides sought in the selected commodity groups by each reporting country. This number varies within a wide range, e.g. in fruits and nuts between 61 and 789 pesticides were sought. It is noted that due to the nature of the national control programmes not all samples were analysed for the full scope of the active substances reported in the table below, but in certain cases (e.g. for enforcement samples) a lower number of analytes was searched in the samples.

**Table 2-5:** EU+NCP – Number of different residues<sup>22</sup> sought in selected commodity groups by each reporting country in 2010.

Country	Animal products	Baby and infant food	Cereals	Fruits and nuts	Vegetables	Total sought
Austria	133	384	401	397	397	407
Belgium	47	466	286	470	493	497
Bulgaria	-	129	155	155	155	155
Cyprus	103	238	239	241	243	256
Czech Republic	35	258	261	262	261	281
Denmark	115	238	164	235	236	252
Estonia	48	273	259	260	361	367
Finland	39	245	264	279	278	290
France	291	290	328	332	332	336
Germany	573	733	758	789	788	839
Greece	47	227	248	293	278	307
Hungary	1	297	317	319	321	343
Iceland	-	-	-	61	61	61
Ireland	291	290	294	294	294	299
Italy	57	273	318	343	336	362
Latvia	33	140	144	142	142	162
Lithuania	34	239	242	241	240	251
Luxembourg	61	377	341	397	367	422
Malta	37	143	-	155	172	289
Netherlands	50	403	249	411	410	421
Norway	32	254	265	269	257	278
Poland	65	115	129	188	186	201
Portugal	-	231	43	240	239	240
Romania	38	75	135	137	137	180
Slovakia	35	147	217	221	217	245
Slovenia	34	263	256	260	260	285
Spain	255	383	421	491	469	560

<sup>21</sup> The number of pesticides sought refers to the residue definitions (see “Residue definition” in the Glossary). Metabolites or degradation products included in a residue definition are not counted separately.

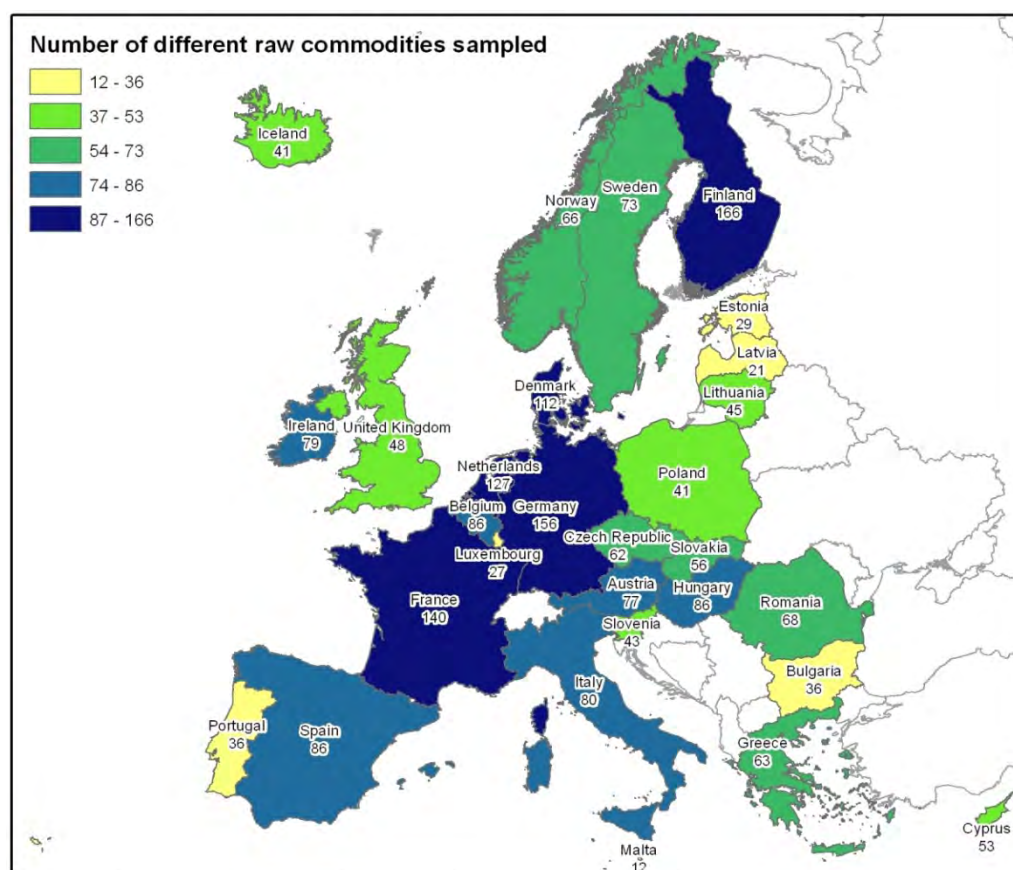
<sup>22</sup> The number of different residues reported in Table 2-5 also includes the number of distinct metabolites and degradation products of the pesticides analysed. In Table 2-5 the pesticides sought in the food group “other plant products” (see “Food commodities” in the Glossary) are not reported.

Country	Animal products	Baby and infant food	Cereals	Fruits and nuts	Vegetables	Total sought
Sweden	54	338	221	325	326	371
United Kingdom	37	144	66	349	355	369
<b>Total number of distinct pesticides</b>	<b>707</b>	<b>967</b>	<b>926</b>	<b>1007</b>	<b>1005</b>	<b>1075</b>

### 2.2.3. Food commodities analysed – national programmes

The EU MRL legislation lists about 400 food commodities<sup>23</sup> for which MRLs have been established. The commodities were classified into 12 main food categories<sup>24</sup>. These products and product groups refer to unprocessed raw commodities of plant or animal origin as placed on the market. The description of the commodities and the parts of the products to which the MRLs apply can be found in Annex I to Regulation (EC) No 396/2005.

In 2010, 529 different food commodities (including processed and unprocessed food commodities) were analysed for pesticide residues among all 29 reporting countries. The number of different raw commodities sampled by each reporting country is shown in Map 2-2. The data shown in the Map reveals that the sampling design with regards the selection of the food commodities greatly varies among the reporting countries.



**Map 2-2:** EU+NCP Number of different raw commodities sampled by each reporting country (excluding processed and baby food) - 2010.

<sup>23</sup> This figure includes the main crops and related varieties or other crops to which the MRLs apply.

<sup>24</sup> See “Food commodities” in the Glossary.



#### 2.2.4. Baby food monitoring

A general default EU MRL of 0.01 mg/kg is applicable to all pesticides in baby food samples, unless specific MRLs lower than 0.01 mg/kg, are established under the specific EU legislation for baby food (Table 2-6). Table 2-7 lists the pesticides which according to the EU<sup>25</sup> legislation<sup>26,27</sup> shall not be used in agricultural production intended for the production of infant and follow-on formulae, processed cereal-based foods and baby foods for infants and young children. They are considered as not used if their residues do not exceed 0.003 mg/kg. Most of these substances are not approved under Regulation (EC) 1107/2009<sup>28</sup> and therefore cannot be used throughout Europe.

**Table 2-6:** Substances for which specific MRLs lower than 0.01 mg/kg are established for baby food.

Chemical name of the substance (residue definition)	MRL (mg/kg)
Cadusafos	0.006
Demeton-S-methyl/demeton-S-methyl sulfone/oxydemeton-methyl (individually or combined, expressed as demeton-S-methyl)	0.006
Ethoprophos	0.008
Fipronil (sum of fipronil and fipronil-desulfinyl, expressed as fipronil)	0.004
Propineb/propylenethiourea (sum of propineb and propylenethiourea)	0.006

**Table 2-7:** Substances which shall not be used in agricultural production intended for the production of infant formulae and follow-on formulae, processed cereal-based foods and baby foods for infants and young children.

Chemical name of the substance (residue definition)
Aldrin and dieldrin, expressed as dieldrin
Disulfoton (sum of disulfoton, disulfoton sulfoxide and disulfoton sulfone expressed as disulfoton)
Endrin
Fensulfothion (sum of fensulfothion, its oxygen analogue and their sulfones, expressed as fensulfothion)
Fentin, expressed as triphenyltin cation
Haloxypop (sum of haloxypop, its salts and esters including conjugates, expressed as haloxypop)
Heptachlor and trans-heptachlor epoxide, expressed as heptachlor
Hexachlorobenzene
Nitrofen
Omethoate
Terbufos (sum of terbufos, its sulfoxide and sulfone, expressed as terbufos)

According to Regulation (EC) No 901/2009 on the 2010 EU-coordinated control programme at least ten samples of baby food based mainly on vegetables, fruit or cereal had to be analysed in each Member State. The Regulation, however, did not specify which pesticides had to be included in the analytical scope for the baby food analysis.

In 2010, a total of 1,828 surveillance samples of baby food were reported by 28 countries (Map 2-3).

EFSA notes that for the same pesticides, the residue definitions established in Regulation (EC) No 396/2005 and those regulations specific for baby food differ; this fact results in an additional burden

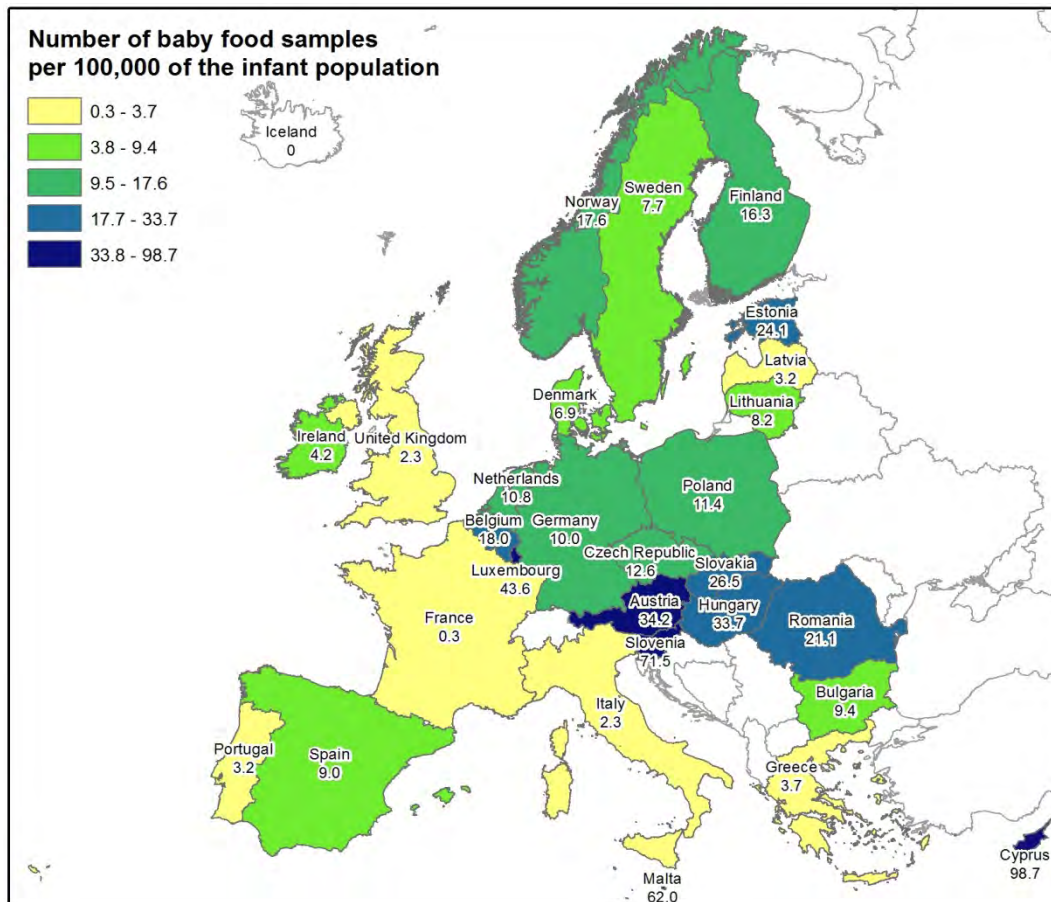
<sup>25</sup> See “MRL” in the Glossary.

<sup>26</sup> Commission Directive 2006/125/EC of 5 December 2006 on processed cereal-based foods and baby foods for infants and young children. OJ L 339, 6.12.2006, p. 16 - 35.

<sup>27</sup> Commission Directive 2006/141/EC of 22 December 2006 on infant formulae and follow-on formulae and amending Directive 1999/21/EC. OJ L 401, 20.12.2006, p. 1 - 33.

<sup>28</sup> Commission Regulation (EC) No 1107/2009 of 21 October 2009 concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC. OJ L 309, 24.11.2009, p. 1 - 50.

on control laboratories and hampers the comparability of monitoring results for different food products. Therefore, in order to avoid enforcement problems, it would be desirable to establish the same residue definition for baby food as for other food items covered by Regulation (EC) No 396/2005.



**Map 2-3:** EU+NCP – Number of baby food samples (only surveillance) normalised by the national infant population<sup>29</sup> - 2010.

### 2.2.5. Organic food monitoring

At EU level, no specific MRLs for organic products have been established. Thus, the MRLs set in Regulation (EC) No 396/2005 equally apply to organic food. However, Regulation (EC) No 834/2007<sup>30</sup> and Regulation (EC) No 889/2008<sup>31</sup> on organic production of agricultural products define specific labelling provisions and production methods which entail significant restrictions on the use of pesticides. In cases of immediate threat to the crop only those products listed in Table 2-8 may be used according to the national authorisations.

<sup>29</sup> Source of infant population per country 2010: Eurostat [http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo\\_pjan&lang=en](http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo_pjan&lang=en) (Download: 02-02-2012 15:50:24).

<sup>30</sup> Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labelling of organic products and repealing Regulation (EEC) No 2092/91. OJ L 189, 20.7.2007, p. 1 – 23.

<sup>31</sup> Commission Regulation (EC) No 889/2008 of 5 September 2008 laying down detailed rules for the implementation of Council Regulation (EC) No 834/2007 on organic production and labelling of organic products with regard to organic production, labelling and control. OJ L 250, 18.9.2008, p. 1 – 82.

**Table 2-8:** Pesticides allowed in organic farming.

Group	Name	Description of use conditions <sup>(a)</sup>
<b>1. Substances of plant or animal origin</b>		
	Azadirachtin extracted from <i>Azadirachta indica</i> (Neem tree)	Insecticide
	Beeswax	Pruning agent
	Gelatine	Insecticide
	Hydrolysed proteins	Attractant, only in authorised applications in combination with other appropriate products of this list.
	Lecithin	Fungicide
	Plant oils (e.g. mint oil, pine oil, caraway oil).	Insecticide, acaricide, fungicide and sprout inhibitor.
	Pyrethrins extracted from <i>Chrysanthemum cinerariaefolium</i>	Insecticide
	Quassia extracted from <i>Quassia amara</i>	Insecticide, repellent
	Rotenone extracted from <i>Derris</i> spp. and <i>Lonchocarpus</i> spp. and <i>Terphrosia</i> spp.	Insecticide
<b>2. Micro-organisms used for biological pest and disease control</b>		
	Micro-organisms (bacteria, viruses and fungi)	
<b>3. Substances produced by micro-organisms</b>		
	Spinosad	Insecticide Only where measures are taken to minimise the risk to key parasitoids and to minimise the risk of development of resistance.
<b>4. Substances to be used in traps and/or dispensers</b>		
	Diammonium phosphate	Attractant, only in traps
	Pheromones	Attractant; sexual behaviour disruptor; only in traps and dispensers
	Pyrethroids (only deltamethrin or lambda-cyhalothrin)	Insecticide; only in traps with specific attractants; only against <i>Bactrocera oleae</i> and <i>Ceratitis capitata</i> Wied.
<b>5. Preparations to be surface-spread between cultivated plants</b>		
	Ferric phosphate (iron (III) orthophosphate)	Molluscicide
<b>6. Other substances from traditional use in organic farming</b>		
	Copper in the form of copper hydroxide, copper oxychloride, (tribasic) copper sulphate, cuprous oxide, copper octanoate	Fungicide for perennial crops
	Ethylene	Degreening bananas, kiwis and kakis; degreening of citrus fruit only as part of a strategy for the prevention of fruit fly damage in citrus; flower induction of pineapple; sprouting inhibition in potatoes and onions.
	Fatty acid potassium salt (soft soap)	Insecticide
	Potassium aluminium (aluminium sulphate) (Kalinite)	Prevention of ripening of bananas
	Lime sulphur (calcium polysulphide)	Fungicide, insecticide, acaricide
	Paraffin oil	Insecticide, acaricide

Group	Name	Description of use conditions <sup>(a)</sup>
	Mineral oils	Insecticide, fungicide To be used only in fruit trees, vines, olive trees and tropical crops (e.g. bananas).
	Potassium permanganate,	Fungicide, bactericide; only in fruit trees olive trees and vines.
	Quartz sand	Repellent
	Sulphur	Fungicide, acaricide, repellent
<b>7. Other substances</b>		
	Calcium hydroxide	Fungicide Only in fruit trees, including nurseries, to control <i>Nectria galligena</i> .
	Potassium bicarbonate	Fungicide

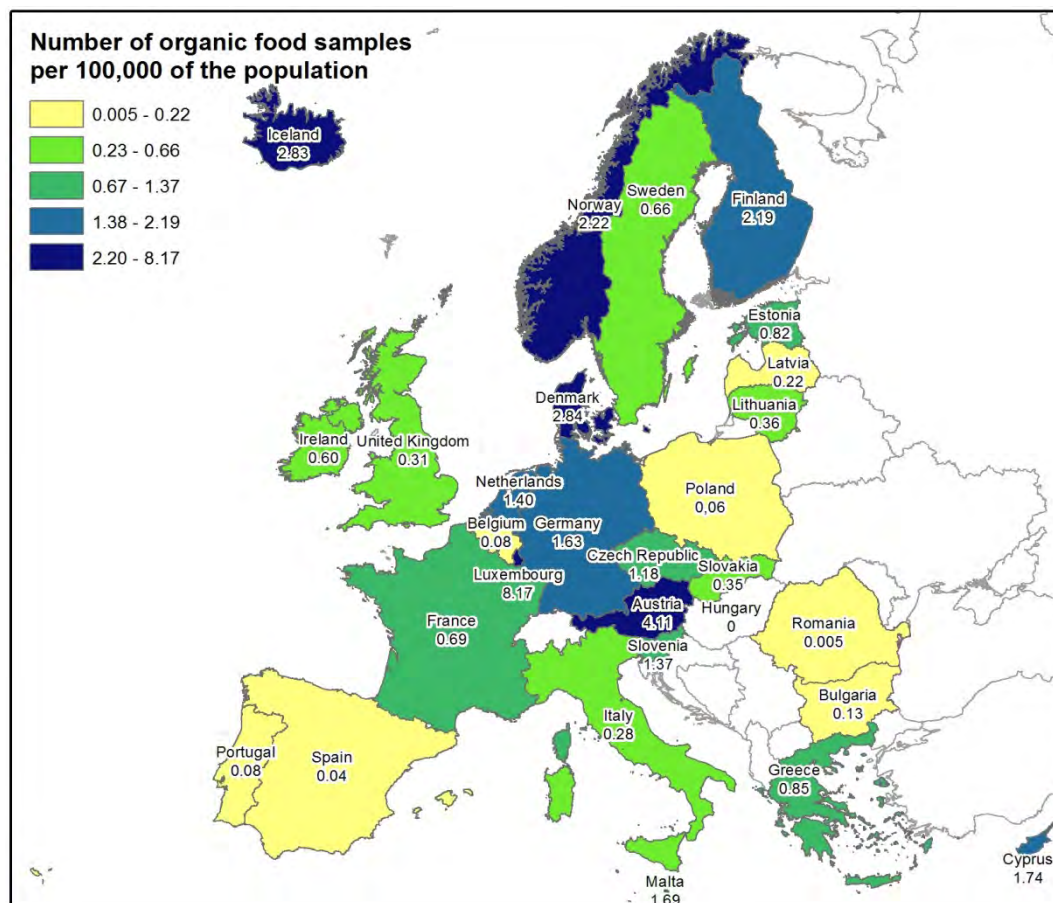
(a) For the detailed description of the uses and restrictions please make reference to Regulation (EC) No 834/2007.

The European Commission requested that at least one sample, where available, is taken from the following commodities: apples, head cabbage, leek, lettuce, milk, peaches, pears, rye or oats, strawberries, swine meat and tomatoes (i.e. the products covered by the EU-coordinated programme). The number of samples of organic farming should represent the market share of organic production in each Member State.

In 2010, a total of 3,571 samples of organic origin were reported by 28 countries (Table 2-9 and Map 2-4), which corresponds to 4.9% of all surveillance samples taken in the reporting countries. It is noted that some countries did not report to EFSA all the results concerning organic samples taken and analysed in the framework of national control results.

**Table 2-9:** EU+NCP – Number of samples (only surveillance) in organic food in 2010.

Product	Organic samples	Organic samples in % of total samples
Fruits and nuts	987	3.6
Vegetables	1253	4.3
Cereals	554	13.2
Other plant products	242	9.5
Animal products	229	4.4
Fish products	1	0.3
Baby food/Infant Formulas	297	16.3
Other products	8	0.4
<b>Total</b>	<b>3571</b>	<b>4.9</b>



**Map 2-4:** EU+NCP – Number of organic food samples (surveillance and enforcement) reported in 2010, normalised by the national population<sup>29</sup>.

### 2.2.6. Processed food monitoring

For processed or composite food, the MRLs established in the MRL legislation for raw commodities are applicable, taking into account changes in the levels and the nature of pesticide residues caused by processing or mixing (processing factors).

Annex VI of Regulation (EC) No 396/2005, which will include processing factors for processed products, has not yet been established but other sources provide summary information on the impact of processing on the nature and magnitude of pesticide residues (e.g. information provided in EFSA conclusions and EFSA reasoned opinions<sup>32</sup> and the German database developed by the Federal Institute for Risk Assessment<sup>33</sup>). These sources can be considered to enforce the legal provisions in processed food.

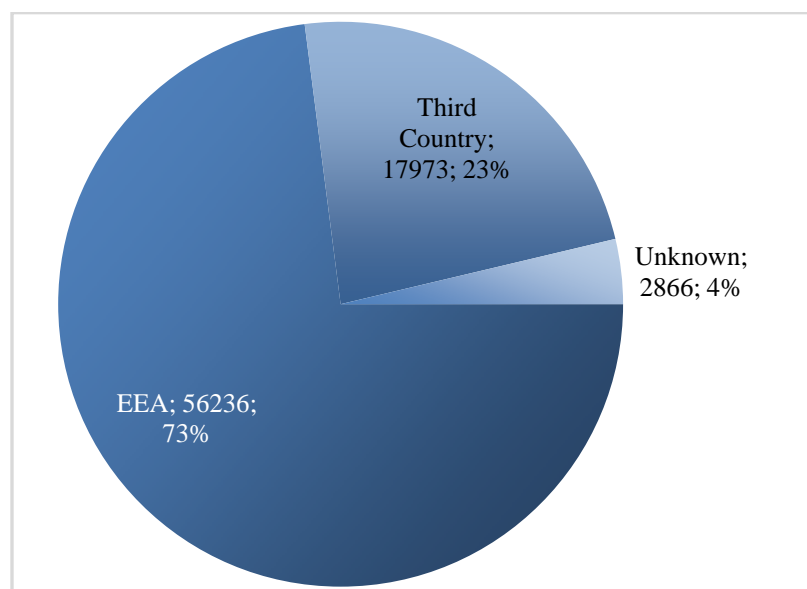
In 2010, a total of 14,146 samples (surveillance and enforcement) of processed products (without baby food) were taken by 28 countries: all 29 but one country (Iceland). This makes up 18.4% of the total samples. The samples cover a range of approximately 190 different products; 1,650 of the processed samples referred to products derived from grapes (wine or other processed grape products), 601 samples were produced from citrus fruits (e.g. oranges), mainly juices. It is noted that in 2009 the percentage of processed food samples was lower (13.5%).

<sup>32</sup> <http://www.efsa.europa.eu/en/publications.htm>

<sup>33</sup> The database is available at <http://www.bfr.bund.de/cd/579> (BfR compilation of 2009-07-01).

### 2.2.7. Origin of samples

National programmes cover samples originating from domestic, European Union, EFTA countries and third country production (Figure 2-11). The majority of samples taken were produced in one of the reporting countries (73%). 23% of the samples were taken from imported consignments or lots. In 4% of the samples the origin of the samples was not reported.



**Figure 2-11:** EU+NCP – Origin of samples according to the regional origin (surveillance and enforcement).

In Table 2-10, the number of samples according to the country of origin (only EU) is further split up into individual countries. In Table 2-11, the samples originating from third countries are further specified.

**Table 2-10:** EU+NCP – Number of samples 2010 by origin country (only EEA).

Origin (EEA)	Number of samples		
	Surveillance	Enforcement	Total
Italy	10456	513	10969
Germany	8297	125	8422
Spain	7720	65	7785
France	4473	4	4477
Netherlands	3321	28	3349
Greece	2643	95	2738
Romania	2220	13	2233
United Kingdom	2052	-	2052
Hungary	1963	77	2040
Poland	1896	11	1907
Belgium	1714	20	1734
Austria	1280	29	1309
Portugal	854	1	855
Denmark	838	-	838
Ireland	708	6	714
Bulgaria	628	-	628
Sweden	583	2	585
Cyprus	574	9	583

Origin (EEA)	Number of samples		
	Surveillance	Enforcement	Total
Slovenia	511	7	518
Czech Republic	499	2	501
Norway	498	-	498
Finland	324	-	324
Slovakia	270	1	271
Estonia	210	-	210
Latvia	137	-	137
Lithuania	116	3	119
Malta	115	15	130
Iceland	64	-	64

**Table 2-11:** EU+NCP – Number of samples 2010 originating from Third Countries (TC)<sup>(a)</sup>.

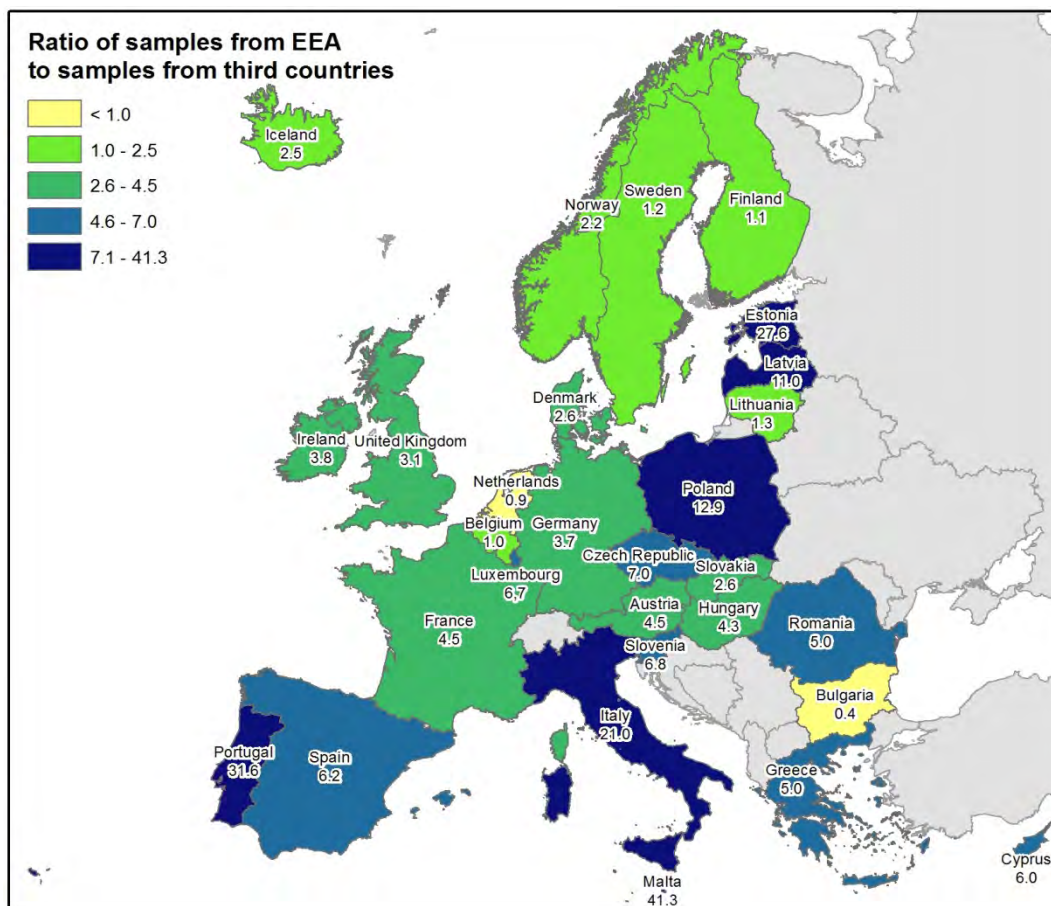
Origin (TC)	Number of samples		
	Surveillance	Enforcement	Total
Turkey	1578	1763	3341
Thailand	1230	370	1600
Dominican Republic	733	477	1210
South Africa	1196	7	1203
Egypt	714	185	899
Chile	784	20	804
Argentina	731	53	784
Israel	710	21	731
Brazil	688	32	720
Morocco	659	7	666

(a) Only the top 10 countries are listed in the table.

Table 2-11 shows the number of samples taken, which originated from third countries. It is noticed that the highest percentages of enforcement samples are taken from those countries mentioned in Regulation (EC) No 669/2009<sup>34</sup> on the increased control on imported food: Turkey (52.8% of enforcement samples out of the total number of Turkish samples), Thailand (23.1%), Dominican Republic (39.4%) and Egypt (20.6%).

Map 2-5 shows the ratio of samples originating from the EEA area and third countries for each reporting country. These data demonstrate that only a few countries focus the national control programmes on food products imported from third countries (ratio <1) whereas most reporting countries prioritise samples originating from EEA countries (ratio >1).

<sup>34</sup> Commission Regulation (EC) No 669/2009 of 24 July 2009 implementing Regulation (EC) No 882/2004 of the European Parliament and of the Council as regards the increased level of official controls on imports of certain feed and food of non-animal origin and amending Decision 2006/504/EC. Official Journal L 194, 25.7.2009, p. 11 – 21.



**Map 2-5:** EU+NCP – Ratio of EEA and third country samples taken in 2010 (surveillance and enforcement) by the 29 reporting countries.

### 2.3. Quality assurance

According to Regulation (EC) No 882/2004, laboratories designated for official controls must be accredited to ISO/IEC 17025 (ISO, 2005). A specific guidance document (EC, 2009) describes in detail the method validation and analytical quality control requirements to ensure the quality, accuracy and comparability of analytical results generated by the control laboratories with the purpose of checking compliance with MRLs.

In 2010, the control laboratories in the majority of countries were accredited, but in six countries part of the samples were analysed by non-accredited laboratories. These countries are: Bulgaria, France, Italy, Portugal, Romania and Spain. Although not all laboratories are accredited in these countries, the determinations belonging to the EU-control programme have a high accreditation percentage within the country. EFSA noted that there is not a common interpretation and implementation of the accreditation procedures throughout Europe. Therefore, EFSA is recommended to give the Member States further guidance on how to clearly and unambiguously report information on the status of accreditation/validation for each pesticide/matrix combinations analysed.

From the data submitted to EFSA it was also noted that not all the laboratories analysed and reported the monitoring results in line with the legal residue definitions set in the EU MRL legislation. Therefore, EFSA recommends that laboratories make an effort to analyse the pesticides as requested by Regulation (EC) No 396/2005. The EURLs could continue to provide assistance to the laboratories in enhancing their analytical capabilities (e.g. providing analytical standards); EFSA also suggests making profit of the SRM-PinBoard Service offered by the EURL-SRM to help the laboratories analysing the pesticides by means of a Single Residue Method trough collaboration with other national



laboratories in the Union, together with the use of the Conversion Factors e-learning tool available on the EURL-FV web site to avoid conversion factor problems when submitting the official results<sup>35</sup>.

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<sup>35</sup> Services available at: <http://www.eurl-pesticides.eu/docs/public/tmpl article.asp?CntID=713&LabID=100&Lang=EN>.

## SUMMARY CHAPTER 2

EU Member States perform official controls to ensure the compliance of feed and food samples with regard to the pesticide MRL legislation. Furthermore, national control programmes (designed by each country) and the EU-coordinated control programme are in place.

The EU-coordinated control programme for 2010 was laid down in Commission Regulation (EC) No 901/2009. The food commodities to be analysed in 2010 were apples, head cabbage, leek, lettuce, milk, peaches, pears, rye or oats, strawberries, swine meat and tomatoes. This programme defined 157 pesticides to be analysed in food of plant origin (38 of them had to be analysed on a voluntary basis) and 34 pesticides in food of animal origin (six of them to be analysed on a voluntary basis), for a total of 178 distinct pesticides.

The control programme in Regulation (EC) No 901/2009 defines the minimum number of samples to be analysed in each country in the framework of the 2010 EU-coordinated programme; this number varies from 12 to 93 samples per food product, depending on the population of the Member State.

A total number of 12,168 samples of 12 different commodities were analysed in the 2010 EU-coordinated monitoring programme. It should be noted that seven commodities (apples, head cabbage, leek, pears, rye or oats, swine meat) were not analysed by all reporting countries. In pears only one pesticide had to be analysed (amitraz): for this pesticide no results were reported by 18 countries. For the commodities of animal origin – milk and swine meat – no results were reported by nine countries. For pears and swine meat, the minimum number of 642 samples required to obtain representative results at EU level was not achieved.

The total number of samples taken in the context of the national and the EU-coordinated programme in 2010 was 77,075. Compared with the previous year, this is an increase of 13.4%. In 2010, the majority of the samples taken were classified as surveillance samples (72,813 samples, 94.5% of the total number of samples). The total number of enforcement samples taken by all reporting countries was 4,262 (5.5% of the total number of samples). The number of pesticides sought in 2010 was 982 (excluding metabolites). In 2010, 529 different food commodities (including processed and unprocessed food samples) were surveyed.

Regarding baby food, a general default EU MRL of 0.01 mg/kg is applicable to all pesticides, unless specific MRLs lower than 0.01 mg/kg are established under specific EU legislation. In 2010, a total of 1,828 surveillance samples of baby food were reported by 28 countries.

At European level, no specific MRLs for organic products are established, but Regulation (EC) No 834/2007 and Regulation (EC) No 889/2008 on organic production of agricultural products define specific labelling provisions and production methods and list the pesticides that are allowed in organic farming. In 2010, a total of 3,571 samples of organic origin were taken by a total of 28 countries, which corresponds to 4.9% of all surveillance samples taken overall in the reporting countries.

In 2010, a total of 14,146 samples (surveillance and enforcement) of processed products (baby food excluded) were taken by 28 countries. This is 18.4% of the total samples taken in 2010.

The majority of total samples taken in 2010 were produced in one of the reporting countries (73%). 23% of the samples originated from third countries. For 4% of the total samples, the origin of the samples was not reported. The data submitted demonstrates that the ratio of samples with EU provenience and samples imported from third countries varied significantly among the reporting countries.

In 2010, the majority of countries used accredited laboratories for the control programmes, but in six countries part of the samples were analysed by non accredited laboratories.

**Recommendations:**

EFSA recommends that reporting countries should investigate for the reasons why not all pesticides included in the 2010 EU-coordinated programme were analysed by the laboratories in the reporting countries. If needed, support should be provided by the EU Reference Laboratories to improve the analytical capabilities and seek to make available necessary analytical standards and methods in order to cover all substances foreseen in the coordinated multiannual control programme. EFSA is recommended to provide the reporting countries with more guidance on how to clearly and unambiguously report information on the status of accreditation/validation of the analytical results.

EFSA recommends improving the compatibility of the EU legislation for baby food with the legislation for pesticide authorization and pesticide MRLs. In particular, the residue definitions set in Regulation (EC) No 396/2005 and in the specific legislation for baby food should be harmonised. In addition, the criteria for setting specific MRLs in baby food should be reconsidered and the MRL levels should be revised where necessary. Efforts have to be made to develop analytical methods, which are capable of quantifying low residue concentrations as required in the baby food MRL legislation. EFSA also recommends that in future EU Regulations on the EU-coordinated monitoring programme it should be specified that baby food samples have to be analysed for all pesticides listed in the baby food legislation with specific MRLs and for all the pesticides listed in the EU monitoring regulation.

In certain reporting countries the analytical methods used in the official food control have to be improved, including more pesticides in the analytical programme to ensure that the pesticides MRL legislation can be enforced. The currently established complex residue definitions, which often require expensive single-residue methods to be used in enforcement practice, should be reviewed and possibilities to simplify residue definitions to allow the use of multi-residue methods should be considered.

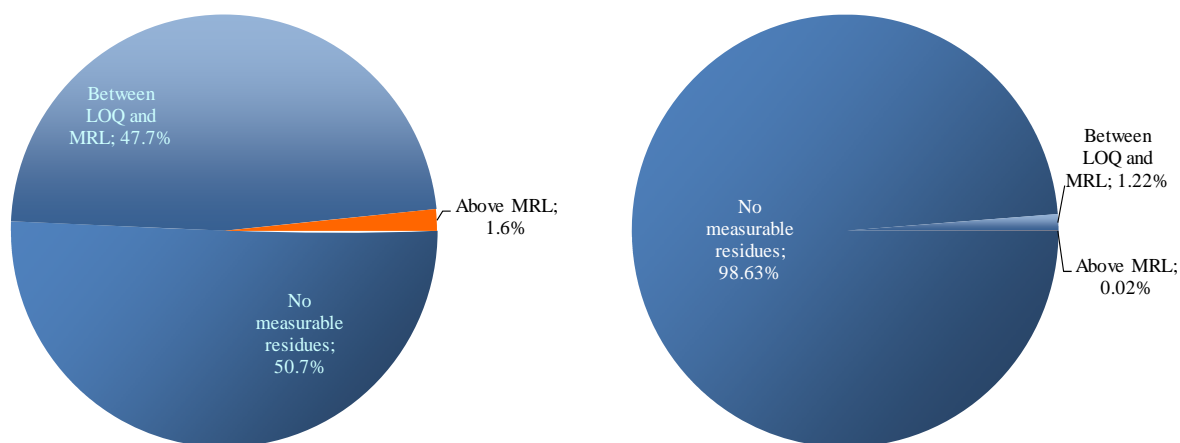
EFSA recommends making efforts to harmonise the accreditation approaches at EU level. Common standards would be desirable to improve Europe-wide comparability of the results generated by different laboratories. In particular, EFSA recommends the validation and accreditation of the whole pesticide scope including the metabolites and/or all parts of the residue definitions set in the European legislation. Finally, EFSA suggests taking advantage of the SRM-PinBoard Service offered by the EURL-SRM to help the laboratories analysing the pesticides by means of a Single Residue Method through the collaboration among other national laboratories in the EU and making use of the Conversion Factors e-learning tool available on the EURL-FV web site to avoid conversion factor problems when submitting the official results.

### 3. Results of the EU-coordinated programme

#### 3.1. Overall results

The analysis of the results of the 2010 EU-coordinated programme shows that 1.6% of the samples taken exceeded the MRL (197 out of the 12,168 samples), while 47.7% of the samples (5,802 samples) had measurable residues above the reporting level, but below or at the MRL<sup>36</sup>. In 50.7% of the samples (6,169 samples) no residues were measured above the quantification limits (Figure 3-1). The percentage of samples exceeding the MRLs was rather stable over the last four years (2007 to 2010) with only small variations; the % of samples exceeding the legal limits in this reference period has ranged from 1.2% to 2.3%.

Taking into account all the individual analyses of pesticides on the 12 food commodities, 1,226,916 singular analytical determinations were reported under the EU-coordinated programme<sup>37</sup>. 0.02% of the determinations exceeded the MRL, while 1.22% of the determinations had measurable residues above the reporting level, but below or at the MRL. 98.76% of all data points were free of measurable residues (Figure 3-1).



**Figure 3-1:** EUCP – Overall frequency of samples taken (left pie chart) and determinations carried out (right pie chart) without measurable residues, with measurable residue below the MRL and with residues exceeding the MRL.

Table 3-1 gives an overview of the results of the 2010 EU-coordinated programme for each pesticide/crop combination tested, presenting the percentages of samples exceeding the MRL (left part of the table) and the percentages of samples with measurable residues above the LOQ (right part of the table). White cells in Table 3-1 refer to pesticide/crop combinations which were not requested to be analysed. The lightest shaded cells on the right part of the table refer to pesticide/crop combinations where all determinations were found below the LOQ; the lightest shaded cells on the left part of the table refers to combinations for which no MRL exceedances were reported. Cells filled with darker colours (on the right and left parts of the table) correspond to higher percentages of samples with measurable residues and MRL exceedances, respectively. The numerical values of the percentages reported in this “heat map” can be found in Appendix III/Table E.

The pesticide/crop combinations for which residue concentrations above the reporting level were found most frequently were chlormequat/oats (64.6%), dithiocarbamates/head cabbage (50.3%), dithiocarbamates/leek (40.8%) and chlormequat/rye (35.9%), as can be seen in Figure 3-15, Figure 3-7, Figure 3-9 and Figure 3-19. Residues of chlormequat are due to the authorised use pattern of this

<sup>36</sup> See “MRL exceedance” in the Glossary.

<sup>37</sup> The term “determination” refers to the individual measurement obtained in the chemical analysis of a sample. If a sample is analysed for 200 different pesticides, 200 determinations are reported.

substance on cereals. The findings concerning dithiocarbamates may be due to the contribution of naturally occurring substances in brassica vegetables (e.g. head cabbage) or *Allium* species (e.g. leek); the analytical methods routinely applied are not able to distinguish between the natural occurrence of CS<sub>2</sub> precursors and the applied dithiocarbamates in these crops.

The highest percentages of MRL exceedances were found for chlormequat in oats, where the MRL was exceeded in 8.1% of all samples, followed by residues of ethephon in tomatoes (2.3%), amitraz in pears (1.3%) and bromide ion in lettuce (0.8%).

More detailed information on the findings for each commodity is reported in section 3.3, while in section 3.4 the results are summarised at pesticide level.

**Table 3-1: EUCP – Heat maps on residues above the MRL and above the LOQ – 2010.**

Pesticide	% above MRL											% above LOQ															
	Apples	Head cabbage	Leek	Lettuce	Milk	Oats	Peaches	Pears (2)	Rye	Strawberries	Swine meat	Tomatoes	Ranking of the MRL exceedances (more than 1% of the samples)	Apples	Head cabbage	Leek	Lettuce	Milk	Oats	Peaches	Pears	Rye	Strawberries	Swine meat	Tomatoes	Ranking of the most frequent detections (more than 20% of the samples)	
2,4-D (sum)																											
Abamectin (sum)																											
Acephate																											
Acetamiprid																											
Acrinathrin																											
Aldicarb (sum)																											
Aldrin and Dieldrin																											
Amitraz (sum)													3 (pears)														
Amitrole																											
Azinphos-ethyl																											
Azinphos-methyl																											
Azoxystrobin																											
Benfuracarb																											
Bifenthrin																											
Bitertanol																											
Boscalid																										9 (strawberries)	
Bromide ion																										6 (tomatoes); 7 (lettuce); 11 (rye)	
Bromopropylate																											
Bromuconazole (sum)																											
Bupirimate																											
Buprofezin																											
Cadusafos																											
Camphechlor (sum AP)																											
Captan																											
Captan/Folpet (sum)																											
Carbaryl																											
Carbendazim and benomyl																											
Carbofuran (sum)																											
Carbosulfan																											
Chlordane (sum AP)																											
Chlorfenapyr																											
Chlorfenvinphos																											
Chlormequat													1 (oats)													1 (oats); 4 (rye)	
Chlorobenzilate																											
Chlorothalonil																											
Chlorpropham (sum)																											
Chlorpyrifos																											
Chlorpyrifos-methyl																											
Clofentezine																											
Clofentezine (sum AP/cereals)																											
Clothianidin																											
Cyfluthrin (sum)																											
Cypermethrin (sum)																											
Cyproconazole																											
Cyprodinil																										5 (strawberries)	

Pesticide	% above MRL													% above LOQ													
	Apples	Head cabbage	Leek	Lettuce	Milk	Oats	Peaches	Pears (2)	Rye	Strawberries	Swine meat	Tomatoes	Ranking of the MRL exceedances (more than 1% of the samples)	Apples	Head cabbage	Leek	Lettuce	Milk	Oats	Peaches	Pears	Rye	Strawberries	Swine meat	Tomatoes	Ranking of the most frequent detections (more than 20% of the samples)	
DDT (sum)																											
Deltamethrin																											
Diazinon																											
Dichlofluanid																											
Dichlorvos																											
Dicloran																											
Dicofol (sum)																											
Difenoconazole																											
Dimethoate (1)																											
Dimethoate (sum)																											
Dimethomorph																											
Dinocap (sum)																											
Diphenylamine																											
Dithiocarbamates																											2 (head cabbage); 3 (leek); 13 (apples);14 (lettuce)
Endosulfan (sum)																											
Endrin																											
Epoxiconazole																											
Ethephon																											2 (tomatoes)
Ethion																											
Ethoprophos																											
Etofenprox																											
Fenamiphos (sum)																											
Fenarimol																											
Fenazaquin																											
Fenbuconazole																											
Fenbutatin oxide																											
Fenhexamid																											10 (strawberries)
Fenitrothion																											
Fenoxycarb																											
Fenpropathrin																											
Fenpropimorph																											
Fenthion (sum)																											
Esfenvalerate (sum)																											
Fipronil (sum)																											
Fluazifop-P-butyl (sum)																											
Fludioxonil																											8 (strawberries)
Flufenoxuron																											
Fluquinconazole																											
Flusilazole																											
Flutriafol																											
Folpet																											
Formetanate (sum)																											
Fosthiazate																											
Glyphosate																											12 (oats)
Haloxypol including haloxyfop-R																											

Pesticide	% above MRL													% above LOQ														
	Apples	Head cabbage	Leek	Lettuce	Milk	Oats	Peaches	Pears (2)	Rye	Strawberries	Swine meat	Tomatoes	Ranking of the MRL exceedances (more than 1% of the samples)	Apples	Head cabbage	Leek	Lettuce	Milk	Oats	Peaches	Pears	Rye	Strawberries	Swine meat	Tomatoes	Ranking of the most frequent detections (more than 20% of the samples)		
HCH alpha																												
HCH beta																												
Heptachlor (sum)																												
Hexachlorobenzene																												
Hexaconazole																												
Hexythiazox																												
Imazalil																												
Imidacloprid																												
Indoxacarb																												
Iprodione																												
Iprovalicarb																												
Kresoxim-methyl																												
Lambda-Cyhalothrin																												
Lindane																												
Linuron																												
Lufenuron																												
Malathion (sum)																												
Mepanipyrim (sum)																												
Mepiquat																												
Metalaxyl (sum)																												
Metconazole																												
Methamidophos																												
Methidathion																												
Methiocarb (sum)																												
Methomyl and Thiodicarb																												
Methoxychlor																												
Methoxyfenozide																												
Monocrotophos																												
Myclobutanil																												
Omethoate (1)																												
Oxadixyl																												
Oxamyl																												
Oxydemeton-methyl (sum)																												
Paclotrazol																												
Parathion																												
Parathion-methyl (sum)																												
Penconazole																												
Pencycuron																												
Pendimethalin																												
Permethrin (sum)																												
Phenthoate																												
Phosalone																												
Phosmet (sum)																												
Phoxim																												
Pirimicarb (sum)																												



Pesticide	% above MRL													Ranking of the MRL exceedances (more than 1% of the samples)	% above LOQ													Ranking of the most frequent detections (more than 20% of the samples)						
	Apples	Head cabbage	Leek	Lettuce	Milk	Oats	Peaches	Pears (2)	Rye	Strawberries	Swine meat	Tomatoes	Apples		Head cabbage	Leek	Lettuce	Milk	Oats	Peaches	Pears	Rye	Strawberries	Swine meat	Tomatoes									
Pirimiphos-methyl																																		
Prochloraz (sum)																																		
Procyimidone																																		
Profenofos																																		
Propamocarb (sum)																																		
Propargite																																		
Propiconazole																																		
Propyzamide																																		
Prothioconazole-Desthio																																		
Pyraclostrobin																																		
Pyrazophos																																		
Pyrethrins																																		
Pyridaben																																		
Pyrimethanil																																		
Pyriproxyfen																																		
Quinoxifen																																		
Quintozene (sum)																																		
Resmethrin (sum)																																		
Spinosad (sum)																																		
Spiroxamine																																		
tau-Fluvalinate																																		
Tebuconazole																																		
Tebufozide																																		
Tebufoxyrad																																		
Tecnazene																																		
Teflubenzuron																																		
Tefluthrin																																		
Tetraconazole																																		
Tetradifon																																		
Thiabendazole																																		
Thiacloprid																																		
Thiametoxam (sum)																																		
Thiophanate-methyl																																		
Tolclofos-methyl																																		
Tolyfluanid (sum)																																		
Triadimefon (sum)																																		
Triazophos																																		
Trichlorfon																																		
Trifloxystrobin																																		
Triflumuron																																		
Trifluralin																																		
Triticonazole																																		
Vinclozolin (sum)																																		
Zoxamide																																		

Legend (in %) >1 <=1 <0.5 <0.2 <0.1 0 No Samples >20 <20 <10 <5 <2 <1 <0.5 0 No Samples

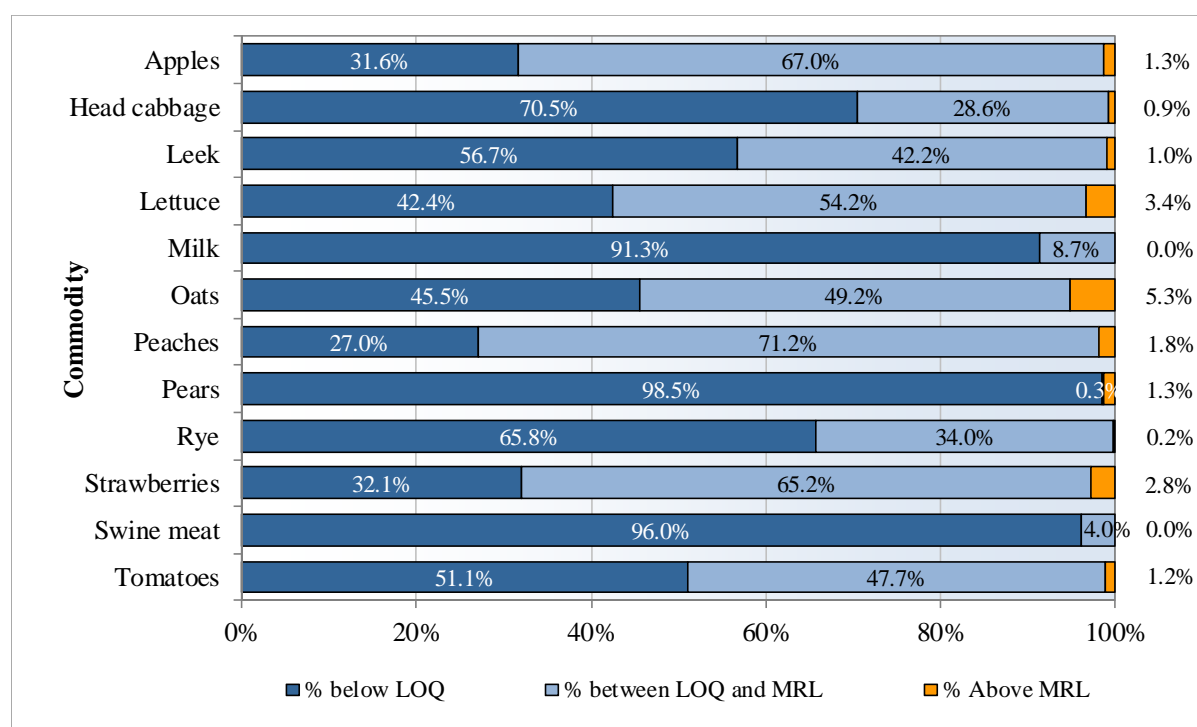
(1): The findings reported separately for dimethoate and omethoate are displayed in this table, but not further reported in other tables and graphs of the report. There, only the results reported in line with the full residue definition (sum of dimethoate and omethoate) are considered.

(2): In 2010 pears had to be analysed for amitraz only.

### 3.2. Results by food commodity

Among the 12 food commodities analysed in the 2010 EU-coordinated control programme, the highest percentage of samples exceeding the MRL was identified for oats (5.3%), followed by lettuce (3.4%), strawberries (2.8%), peaches (1.8%), apples (1.3%), pears<sup>38</sup> (1.3%), tomatoes (1.2%), leek (1.0%), head cabbage (0.9%) and rye (0.3%). In animal products (milk and swine meat) no MRL exceedances were identified.

Peaches had the highest percentage of samples with measurable pesticide residues below or at the MRL (71.2%), followed by 67.0% of the apple samples and 65.2% of the strawberry samples. Samples of pears, swine meat or milk less frequently contained measurable residues at or below the MRL (Figure 3-2).



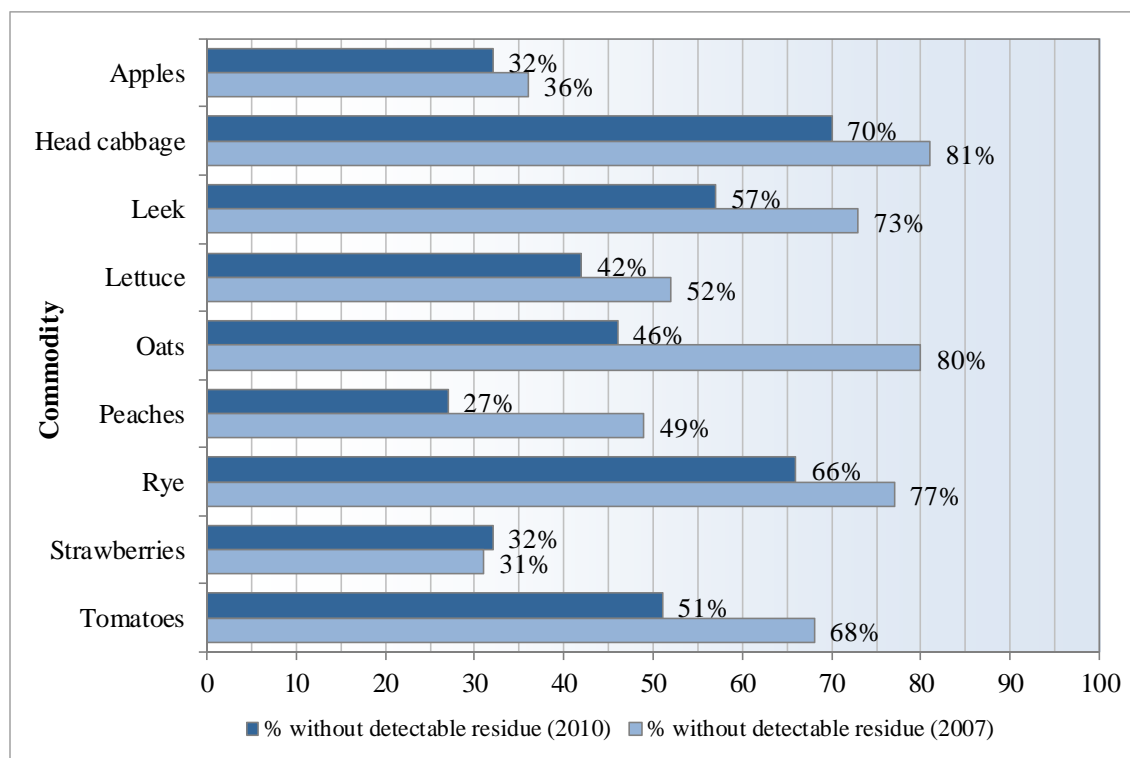
**Figure 3-2:** EUCP – Percentage of samples not measurable, below MRL and above MRL for the 12 food commodities in the EU-coordinated programme 2010<sup>39</sup>.

Compared to the results of the 2007 EU-coordinated control programme, where the same food commodities of plant origin were analysed as in 2010 (except for pears), in 2010 the percentages of samples free of detectable residues were lower for all commodities except for strawberries where a slight increase was noticed (31.1% in 2007 to 32.1% in 2010<sup>40</sup>). The findings for the commodities analysed in both control years 2007 and 2010 are reported in Figure 3-3.

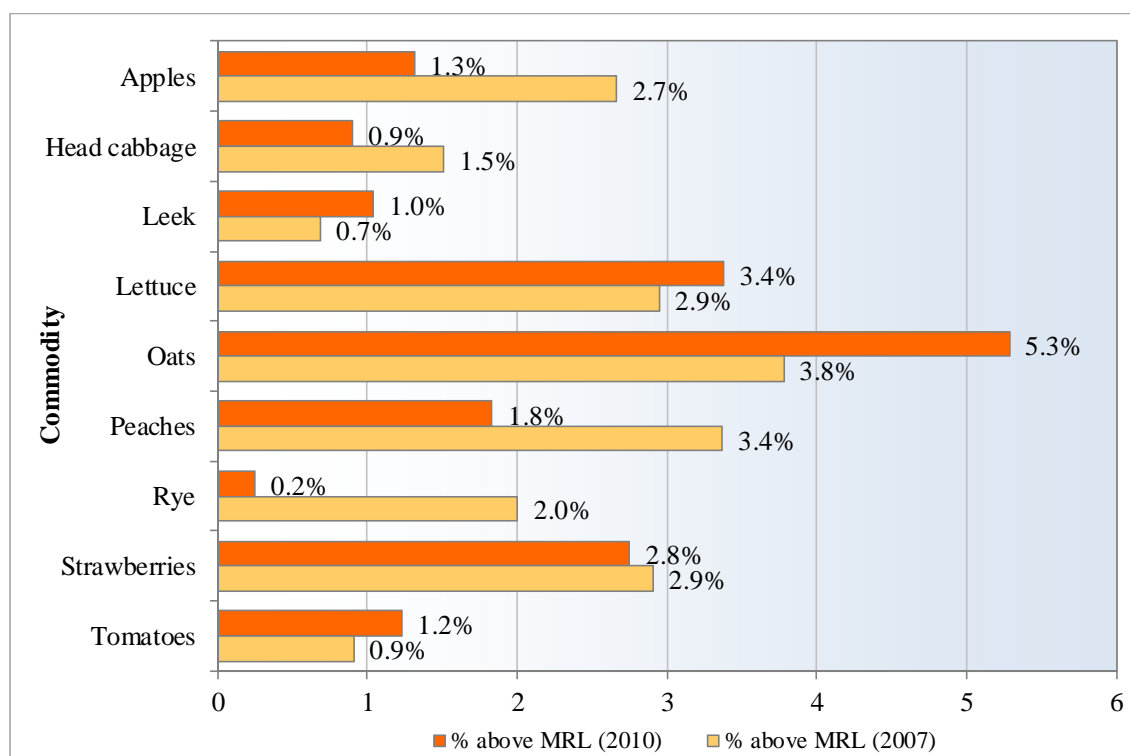
<sup>38</sup> The results for pears refer only to amitraz. In 2010, no other pesticides had to be analysed on this crop.

<sup>39</sup> Due to the rounding of the single percentages, the summed percent may slightly differ from 100%.

<sup>40</sup> In 2007 and in 2010 the same commodities of plant origin were analysed (with the exception of pears). However, the number and pesticides included in 2007 and 2010 in the EUCP were different and therefore a direct comparison of the results is hampered.



**Figure 3-3:** EUCP – Percentage of samples free from measurable residues for the nine food commodities analysed in the EU-coordinated programmes 2007 and 2010<sup>39</sup>.



**Figure 3-4:** EUCP – Percentage of samples with residues above MRL for the nine food commodities analysed in both the EU-coordinated programmes 2007 and 2010<sup>39</sup>.

Detailed results per commodity and reporting country of the EU-coordinated control programme are listed in Appendix III, Table F. For apples, head cabbage, peaches, rye and strawberries the percentage of samples exceeding the MRL was lower in 2010 compared to 2007, whereas for leek, lettuce, oats and tomatoes a slight increase was observed. The highest difference regarding the non-compliance rate

was detected for rye (2007: 2.0%, 2010: 0.2%) followed by peaches (2007: 3.4% 2010: 1.8%). In Figure 3-4 the comparison of the MRL exceedances observed in 2007 and 2010 is depicted for all nine overlapping commodities.

### 3.3. Results by pesticide-commodity combination

In this section, more detailed information on the 12 commodities covered by the 2010 EU-coordinated programme is reported. For each commodity, the following analysis is reported:

- A chart presenting the pesticides found sorted according to the frequency of detection<sup>41</sup> (upper x-axis scale). In the same chart, the percentages of residues exceeding the MRLs (lower x-axis scale) are also included<sup>42</sup>. The total number of samples tested for each pesticide is reported in brackets next to the pesticide name.
- A table listing the pesticides most frequently found in the concerned commodity. Only the pesticides for which measurable residues were detected in at least 10% of the samples are reported. The tables also contain background information on the listed pesticides.
- A figure (made up of two plots) presenting the distribution of the measured residue levels (results above the LOQ only), expressed in percent of the MRL applicable for the specific pesticide/commodity combination<sup>43</sup>. The distributions of the results (first plot) are depicted as box plots (only for those pesticide/crop combinations for which residues were detected in at least four samples). There, the 25<sup>th</sup> percentile<sup>44</sup> (lower edge of the box), the median (line within the box) and the 75<sup>th</sup> percentile (upper edge of the box) of the distributions are represented. The whiskers of the bars (lines with margins) denote the minimum and the maximum residue level (expressed as percent of the MRL) among all samples analysed for each pesticide/crop combination. In the lower part of the figure (second plot), the findings for those pesticide/crop combinations for which the concerned pesticide was detected in measurable quantity only in less than four samples are plotted as dots. For each pesticide/crop combination, the number of samples with residues above the LOQ and the total number of samples tested for the concerned combination are reported in brackets next to the pesticide name.

#### 3.3.1. Apples

In apples, 94 different pesticides were found. The most frequently found active substances (Figure 3-5) were dithiocarbamates (21.4% of samples analysed for this pesticide), captan/folpet (sum) (19.3%) and diphenylamine (14.6%). Background information on the use of these substances found in apples is reported in Table 3-2.

MRL exceedances were detected for 15 active substances in 27 samples. Samples with MRL exceedances originated mainly from Portugal (5), Chile (3) and Romania (3). For dicofol (sum) the median of the four residue levels (above the LOQ) was higher than 300% of the MRL (Figure 3-6); the

<sup>41</sup> It is noted that not all samples were analysed for all active substances. For this reason, the same number of samples with detection or instances of exceedance can result in different frequencies within the same commodity. In addition, analyses of a lower number of samples regarding a specific pesticide residue have an influence on the frequency.

<sup>42</sup> For pesticides with complex residue definitions (residue definition comprising the active substance and one or several metabolites, e.g., endosulfan) the MRL normally refers to the sum of the individual compounds covered by the definition, expressed as parent active substance (e.g. sum of alpha, and beta-isomers and endosulfan-sulphate, expressed as endosulfan). In some cases, the reporting countries did not analyse for all individual components covered by the residue definition. In the following figures, the results for samples fully compliant with the residue definition and those results which cover only part of the residue definition were aggregated.

<sup>43</sup> EFSA compared the reported residue levels with the MRL figures available in the DG SANCO database. In a few cases, the MRL used by the national authorities to check the sample compliance deviated from the values in the DG SANCO database (e.g. in cases where the MRL changed during the reference period). As a result, a few discrepancies may be observed in the frequency chart and in the box plot (e.g. some substances results may not appear in the plots).

<sup>44</sup> The 25<sup>th</sup> and the 75<sup>th</sup> percentile represent the residue levels (expressed in % of the MRL) below which 25% and 75% of the results are found, respectively.

origin of the samples exceeding the dicofol MRL was not reported. It is noted that dicofol is no longer authorised in Europe.

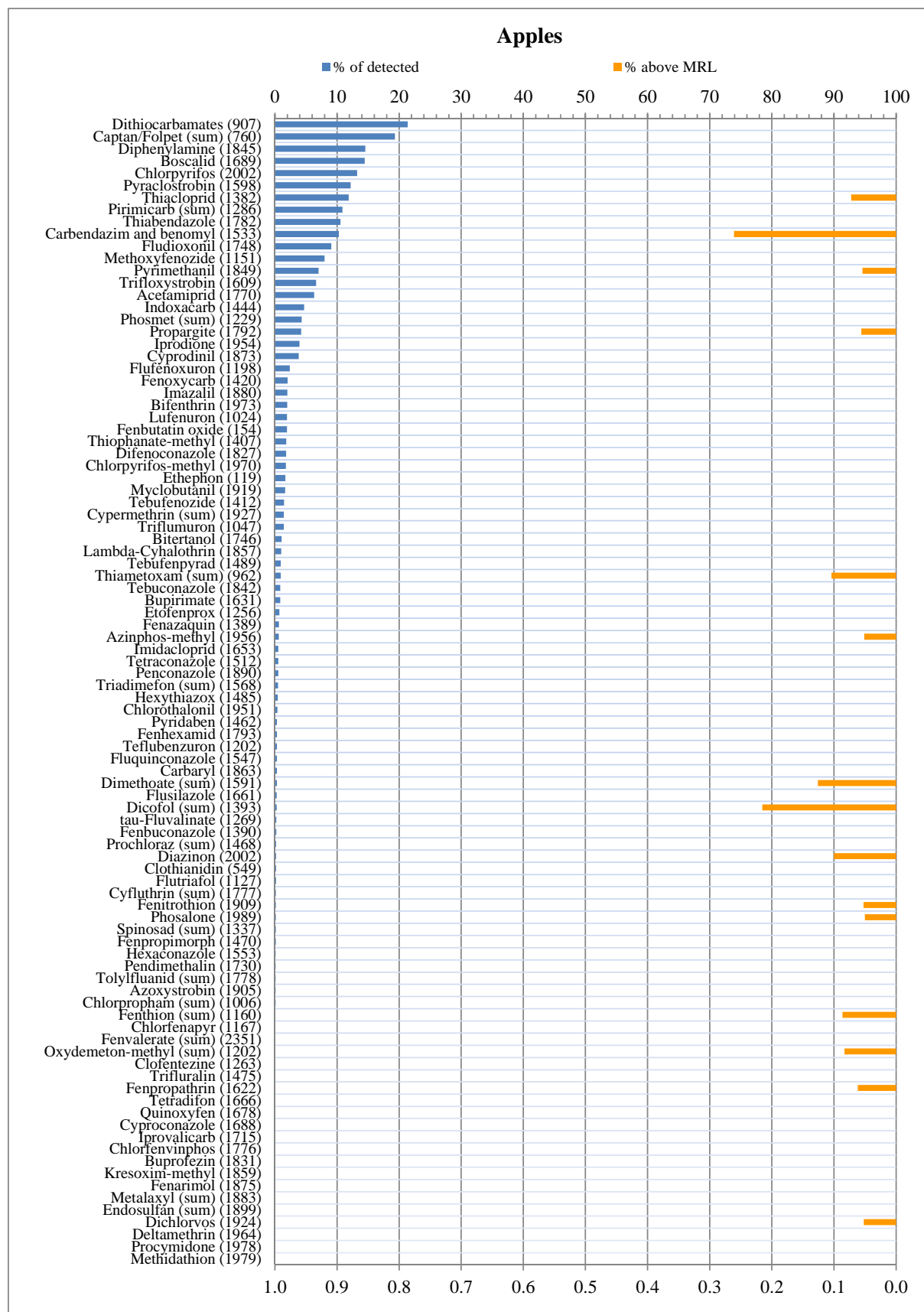


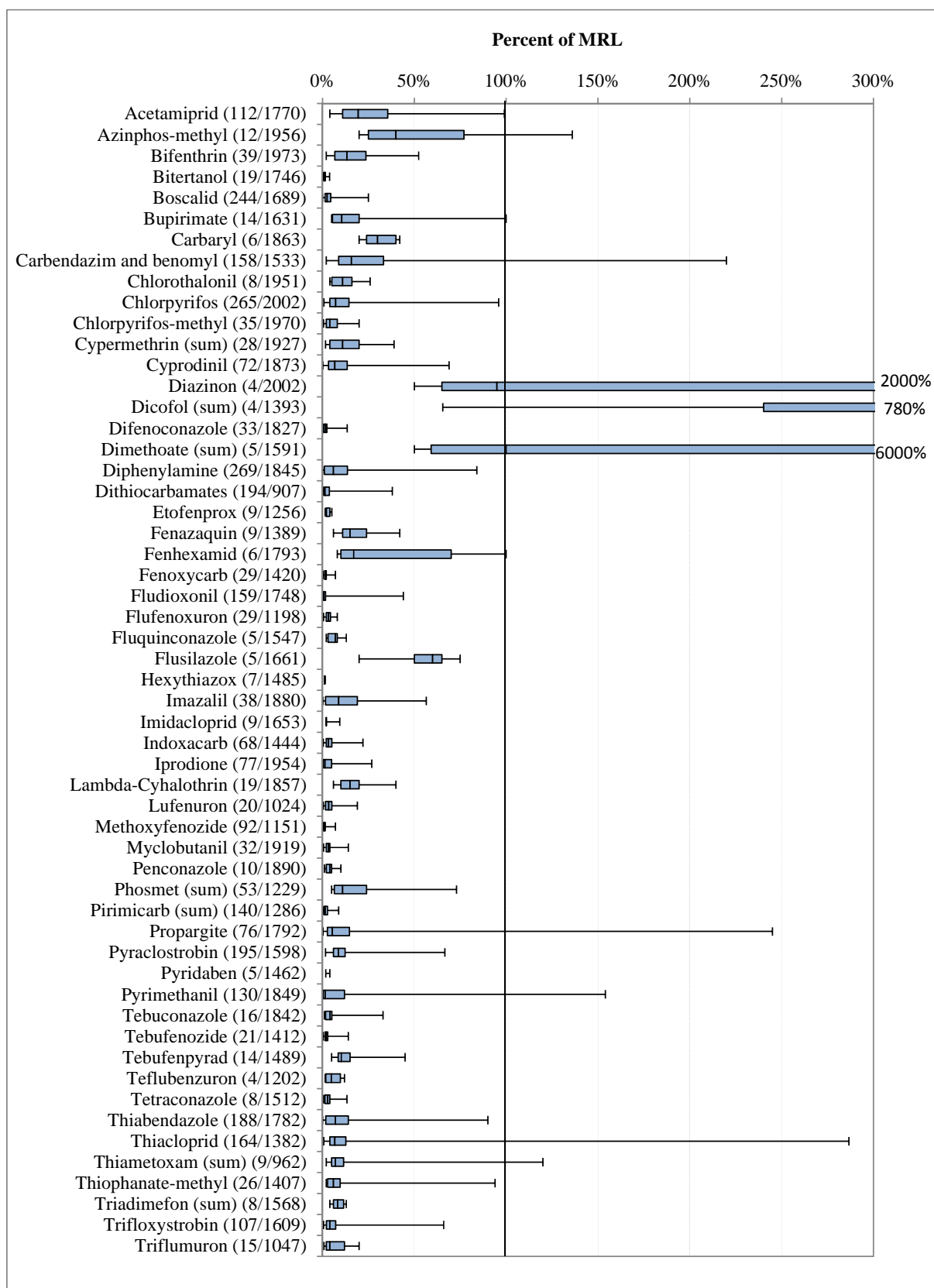
Figure 3-5: EUCP – Percentage of apple samples with measurable residues (upper x-axes scale) and

residues above the MRL (lower x-axis scale); the number of apple samples tested for the specific pesticide is reported in brackets next to the pesticide name.

**Table 3-2:** EUCP – Pesticides most frequently detected in apples (only results above 10% are reported).

Product	Compound	% samples above LOQ	Background information on the active substances found
Apples	Dithiocarbamates	21.39	Group of non-systemic <sup>45</sup> fungicides used in a wide range of fruit and vegetables.
	Captan/Folpet (sum)	19.34	Non-systemic fungicide used to control fungal diseases in a wide range of fruit and other crops.
	Diphenylamine	14.58	Plant growth regulator; used for post harvest treatment of pome fruit against scald. Since May 2010 no longer authorized in the EU.
	Boscalid	14.45	Systemic fungicide used to control fungal diseases in a wide range of fruit and other crops.
	Chlorpyrifos	13.24	Non-systemic insecticide used to control different pests in fruit and other crops.
	Pyraclostrobin	12.20	Systemic fungicide used to control plant diseases in a wide range of fruit and other crops.
	Thiacloprid	11.87	Systemic insecticide used against different pests in a wide range of crops.
	Pirimicarb (sum)	10.89	Systemic insecticide used against different pests in a wide range of crops.
	Thiabendazole	10.55	Mainly used as post-harvest fungicide to control a wide range of plant pathogens and storage diseases.
	Carbendazim and benomyl	10.31	Carbendazim is a systemic fungicide. Since 2007 the use is restricted to certain crops only. The use on fruit is not permitted. Carbendazim is also formed as metabolite resulting from the use of thiophanate-methyl, a pesticide which is authorised in the EU. Benomyl, was used as fungicide in the past but is no longer authorised in Europe. Benomyl would also produce carbendazim as metabolite.

<sup>45</sup> See “Pesticide” in the Glossary.



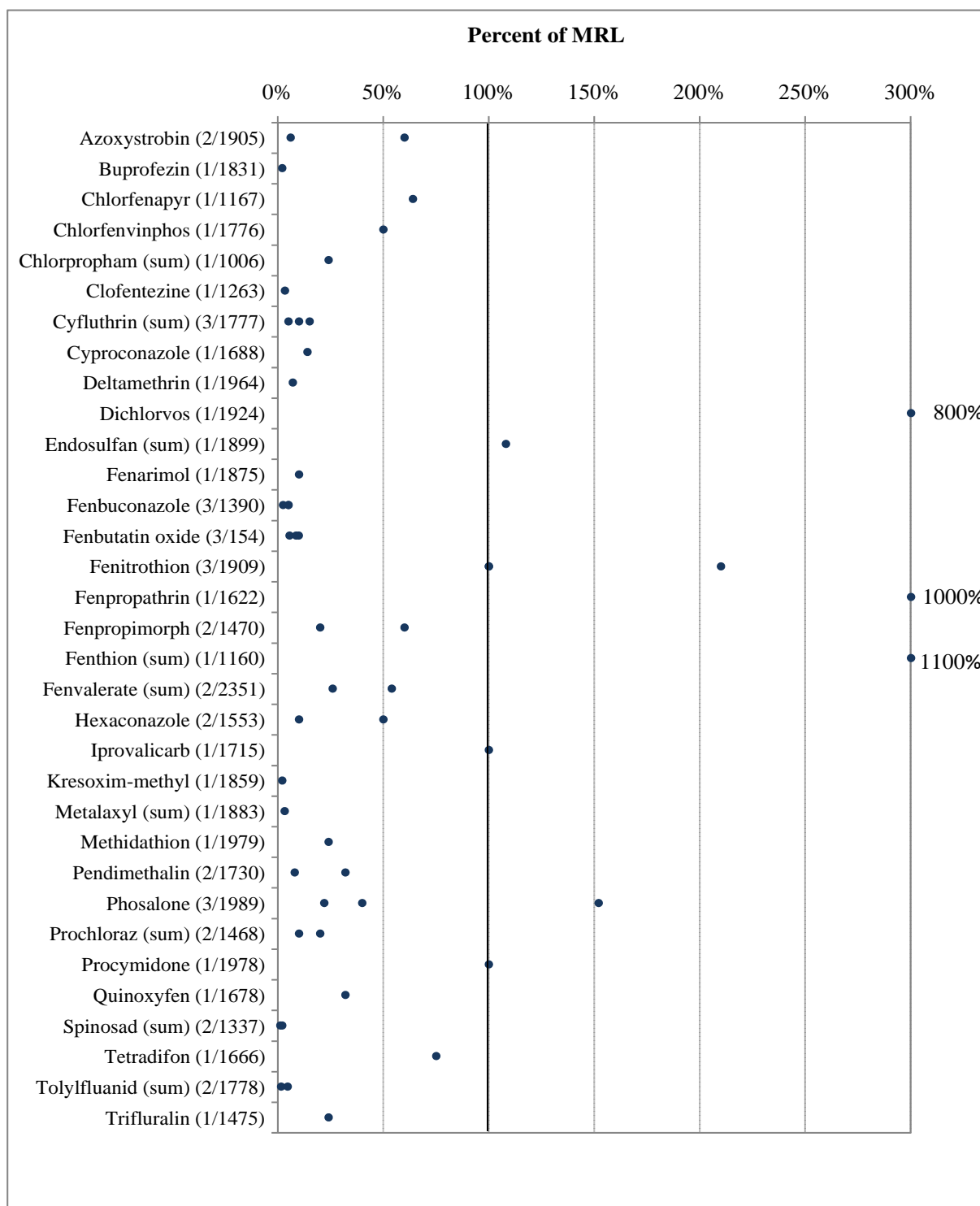


Figure 3-6: EUCP – Apples: measured residues (>LOQ) expressed as % of the MRL.

### 3.3.2. Head Cabbage

In head cabbage, 49 different pesticides were found (see Figure 3-7). The most frequently found active substances were dithiocarbamates (50.3% of the samples analysed for this group of pesticides), bromide ion (2.2%), iprodione and imidacloprid (both 1.7%). The prominent results regarding the high frequency of dithiocarbamates detections (Figure 3-7) are probably not the consequence of a pesticide treatment, but in most cases false positive results. Brassica vegetables naturally contain substances which may lead to the formation of CS<sub>2</sub> during the analytical process (Perz *et al.*, 2000) and may mimic the occurrence of dithiocarbamates residues on food. At the moment, no routine analytical

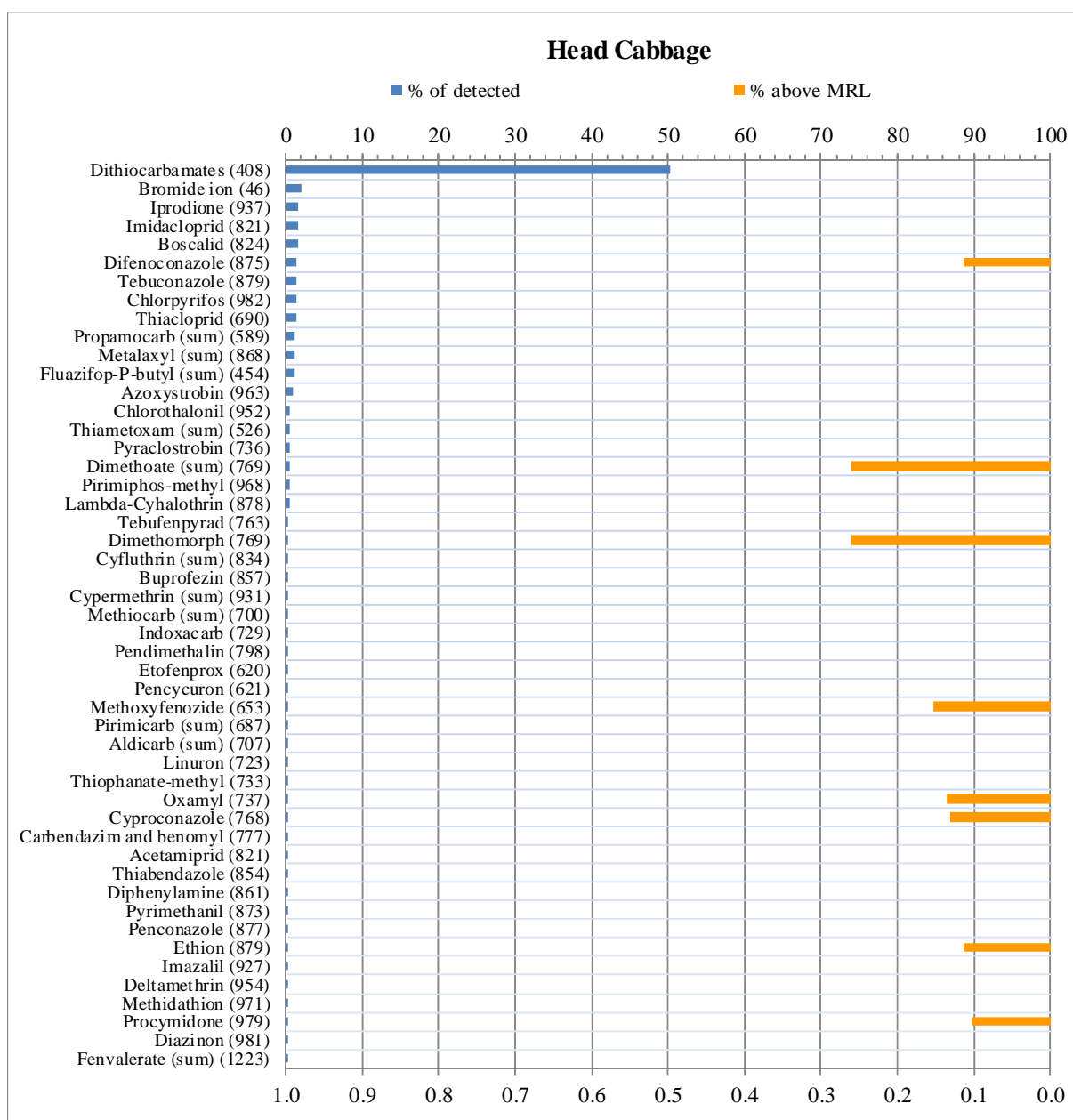


methods are available to distinguish the applied dithiocarbamates pesticides from the naturally occurring CS<sub>2</sub> precursors.

Information on the use of the pesticides detected in head cabbage samples is reported in Table 3-3.

MRL exceedances were observed for eight active substances (Figure 3-7). MRL exceedances for dimethoate (sum) and dimethomorph were found in two samples each, the remaining residues in just one sample. Head cabbage samples exceeding the MRL were reported to originate mainly from France (2), Czech Republic (2) and Thailand (2).

The distribution of the measured residue levels (results above the LOQ only), expressed in percent of the MRL applicable for the specific pesticide/commodity combination is reported in Figure 3-8.

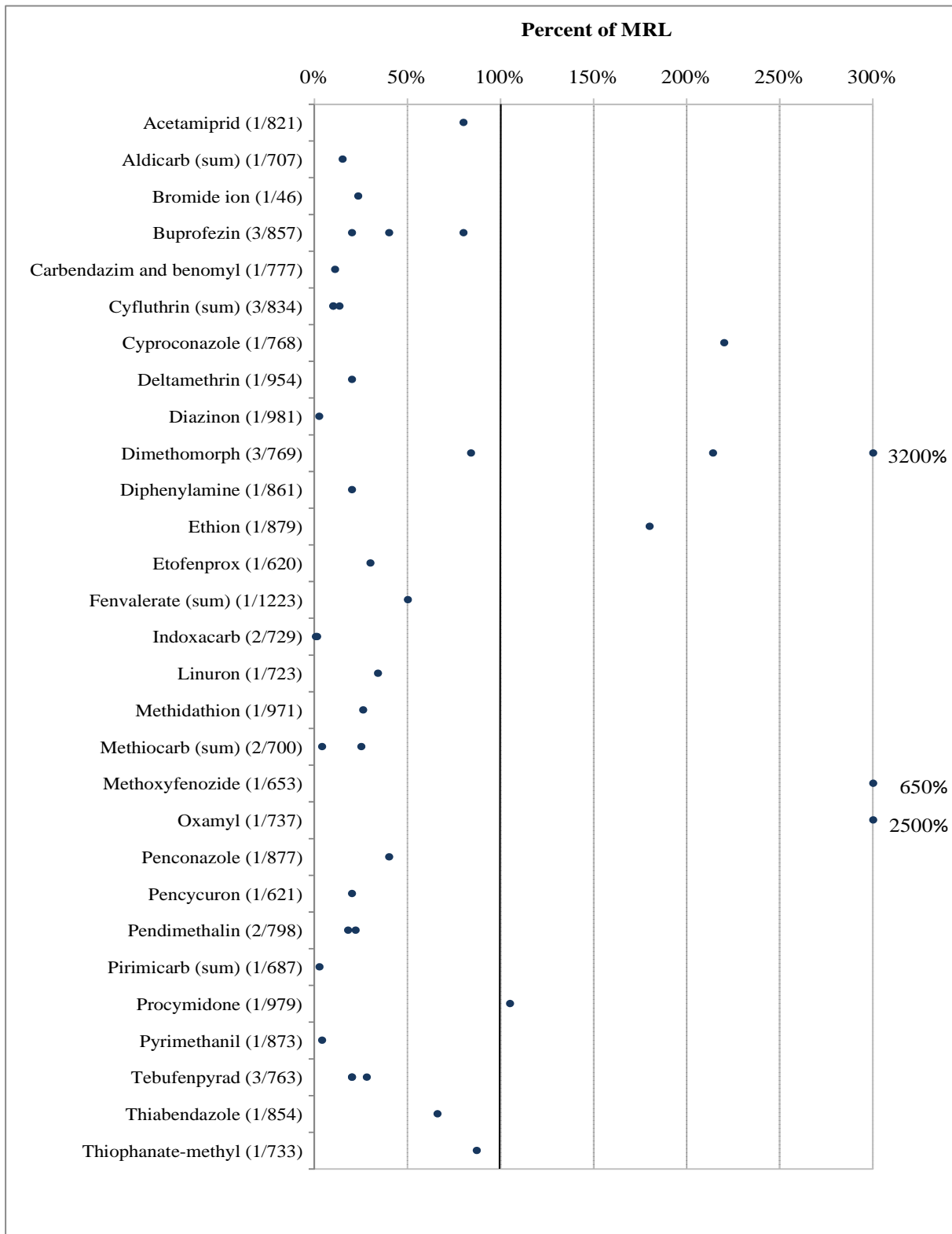


**Figure 3-7:** EUCP – Percentage of head cabbage samples with measurable residues (upper x-axis scale) and residues above the MRL (lower x-axis scale); the number of head cabbage samples tested for the specific pesticide is reported in brackets next to the pesticide name.

**Table 3-3:** EUCP – Pesticides most frequently detected in head cabbage (only results above 10% are reported).

Product	Compound	% samples above LOQ	Background information on the active substances found
Head cabbage	Dithiocarbamates	50.25	Group of non-systemic fungicides used on a wide range of fruit and vegetables. Probably false positive results arising from natural occurring substances in brassica vegetables mimicking the presence of dithiocarbamates.





**Figure 3-8:** EUCP – Head cabbage: measured residues (>LOQ) expressed as % of the MRL.

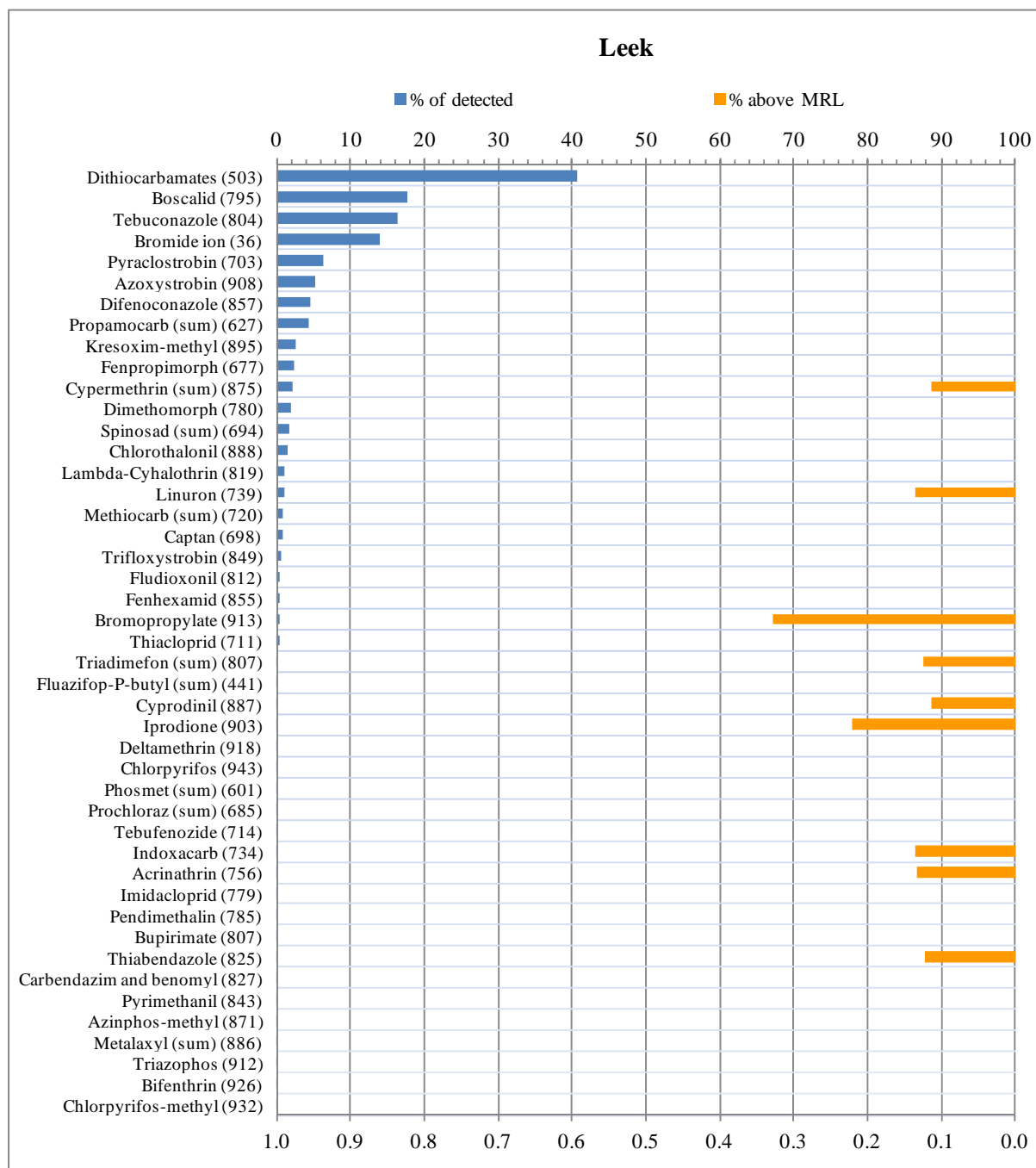
### 3.3.3. Leek

In leek, 45 different pesticides were found. Dithiocarbamates were found most often (40.8% of samples analysed for this pesticide), followed by boscalid (17.6%) and tebuconazole (16.4%). As previously indicated for head cabbage (see section 3.3.2) the findings regarding the high frequency of dithiocarbamates detections are probably not the result of a pesticide treatment but are most likely false positive results in leek.

Additional information on the pesticides found and their uses in leek samples in below reported (Figure 3-9).

Nine different pesticides were found in concentrations exceeding the MRL. Bromopropylate was found exceeding the legal limit most frequently (3 samples; 0.33% of the samples), followed by iprodione (2 samples; 0.22% of the samples). For the other residues, MRL exceedances were found in one sample each. Samples reported as exceeding the MRL originated mostly from Portugal (3), Denmark (2), France (2) and Spain (2).

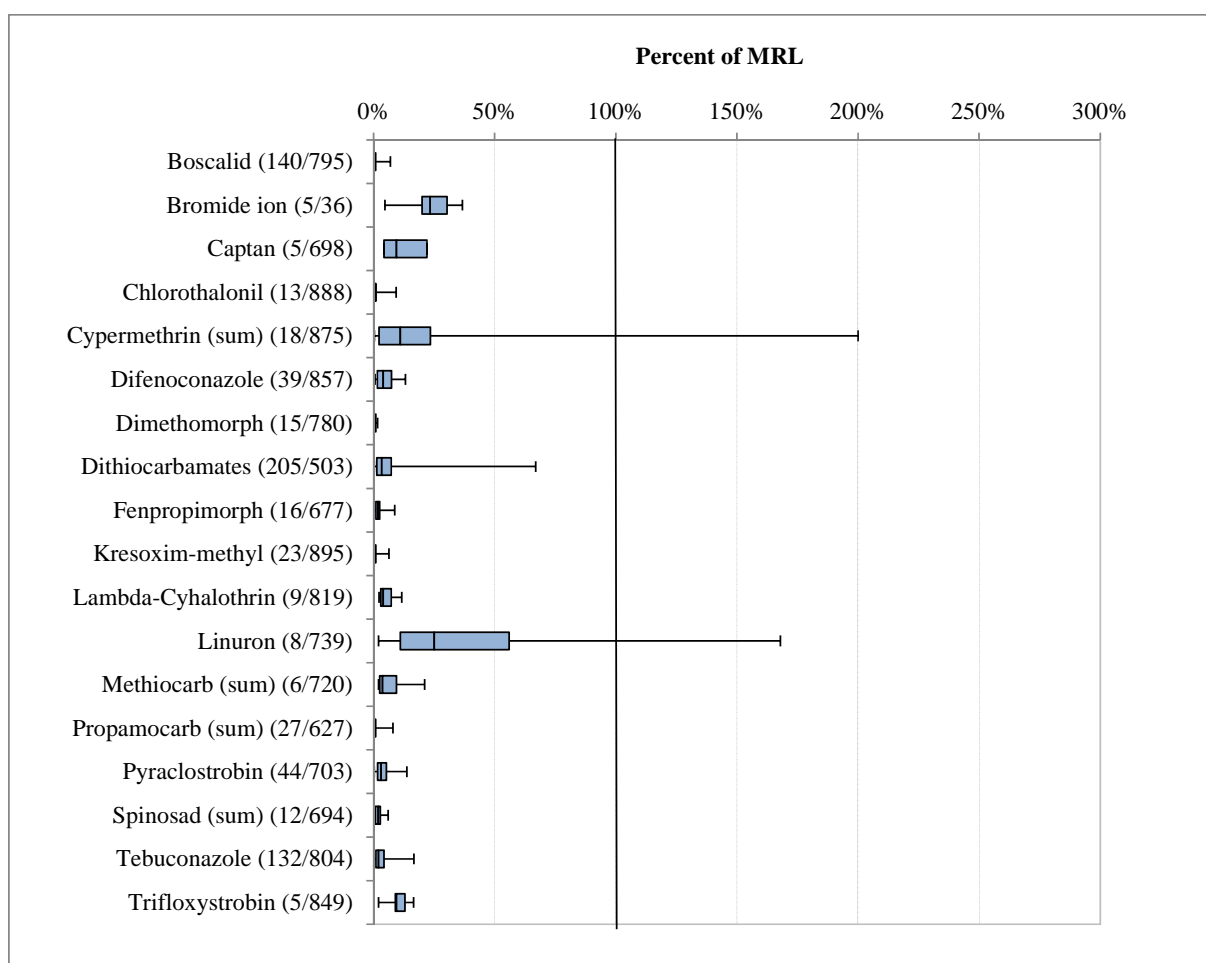
The distribution of the measured residue levels (results above the LOQ only), expressed in percent of the MRL applicable for the specific pesticide/commodity combination is reported in Figure 3-10.

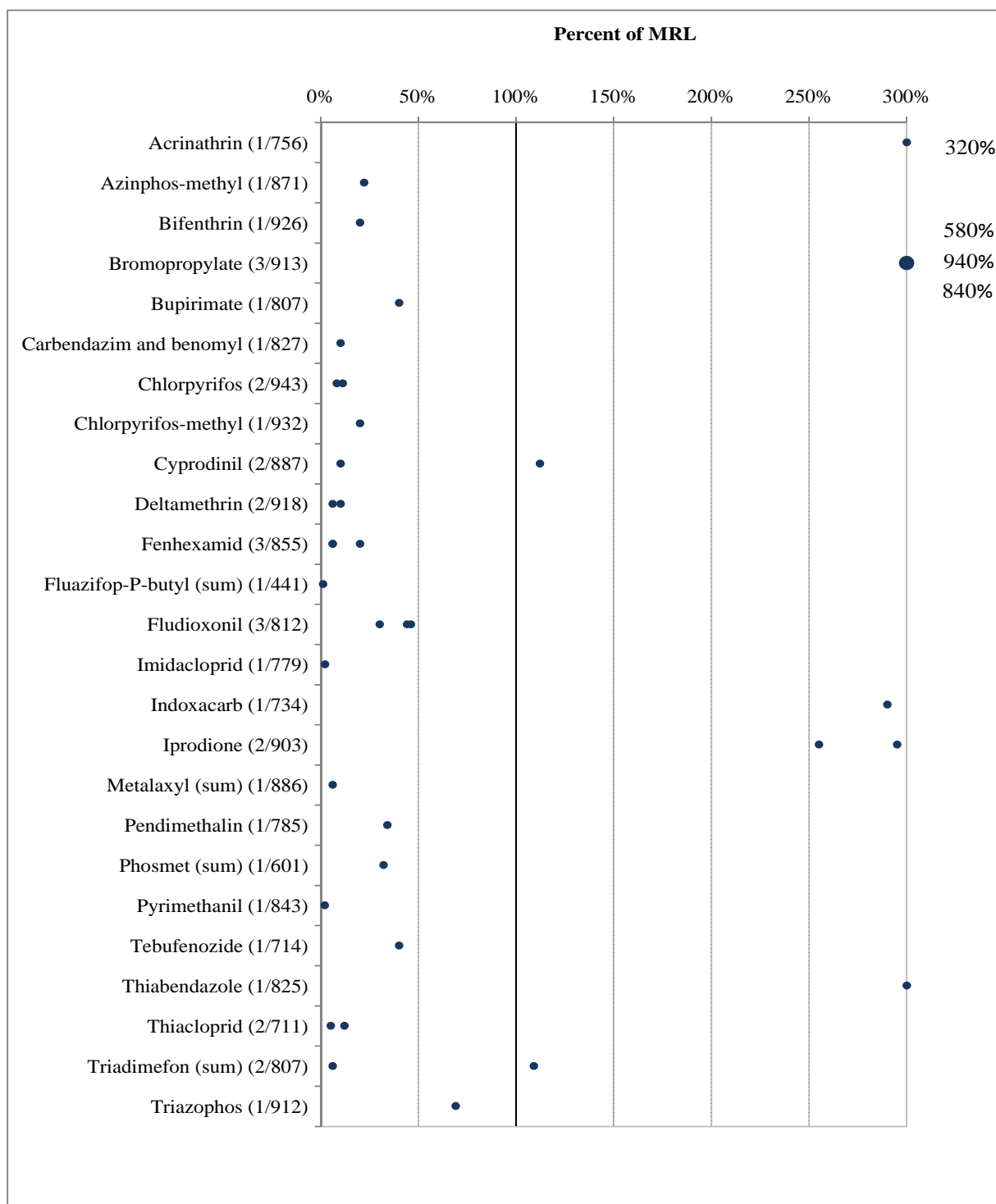


**Figure 3-9:** EUCP – Percentage of leek samples with measurable residues (upper x-axis scale) and residues above the MRL (lower x-axis scale); the number of leek samples tested for the specific pesticide is reported in brackets next to the pesticide name.

**Table 3-4:** EUCP – Pesticides most frequently detected in leek (only results above 10% are reported).

Product	Compound	% samples above LOQ	Background information on the active substances found
Leek	Dithiocarbamates	40.76	Group of non-systemic fungicides used on a wide range of fruit and vegetables. Probably false positive results resulting from natural occurring substances in leek mimicking the presence of dithiocarbamates.
	Boscalid	17.61	Systemic fungicide used to control plant diseases in a wide range of crops.
	Tebuconazole	16.42	Systemic fungicide used to control plant diseases in a wide range of crops.
	Bromide ion	13.89	Naturally occurring substance and metabolite of the pesticide methylbromide. As from 2009 methyl bromide is no longer approved at EU level.





**Figure 3-10:** EUCP – Leek: measured residues (>LOQ) expressed as % of the MRL.

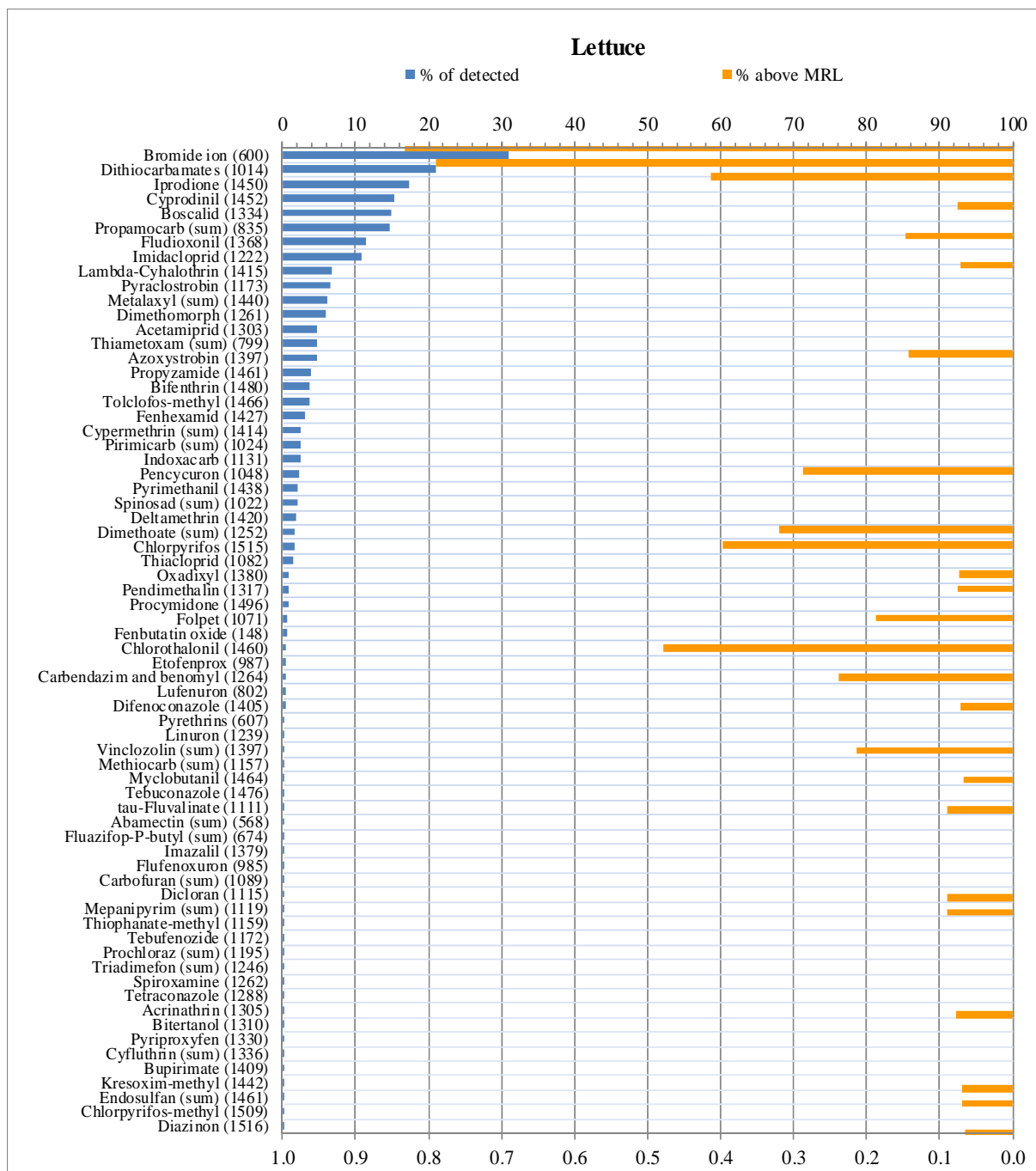
### 3.3.4. Lettuce

In lettuce, 68 different pesticides were found. The most frequently found pesticides were bromide ion, dithiocarbamates and iprodione: 31.0%, 21.0% and 17.3% of the lettuce samples analysed for these pesticide residues, respectively. For first two of these residues also the highest percentage of MRL exceedances was reported (see Figure 3-11).

In lettuce samples, 25 active substances were found above the MRL. Samples with residues most frequently above the MRL originated from France (20), Germany (6), Cyprus (4), Greece (4) and Romania (4).

The highest median residue level calculated on the basis of seven samples with residues above the LOQ was identified for chlorothalonil (4,070% of the MRL), being this value derived from the seven samples with measurable residues (the highest residue level amounted to 3.28 mg/kg; the MRL is set at the LOQ of 0.01 mg/kg). It is noted that this finding was notified to the RASFF<sup>46</sup>. The use of chlorothalonil is only authorised in land cress (MRL of 5 mg/kg) but not in other varieties of lettuce.

Furthermore, for carbendazim/benomyl the median residue level calculated on the basis of five samples with residues above the LOQ exceeded the MRL (125%).



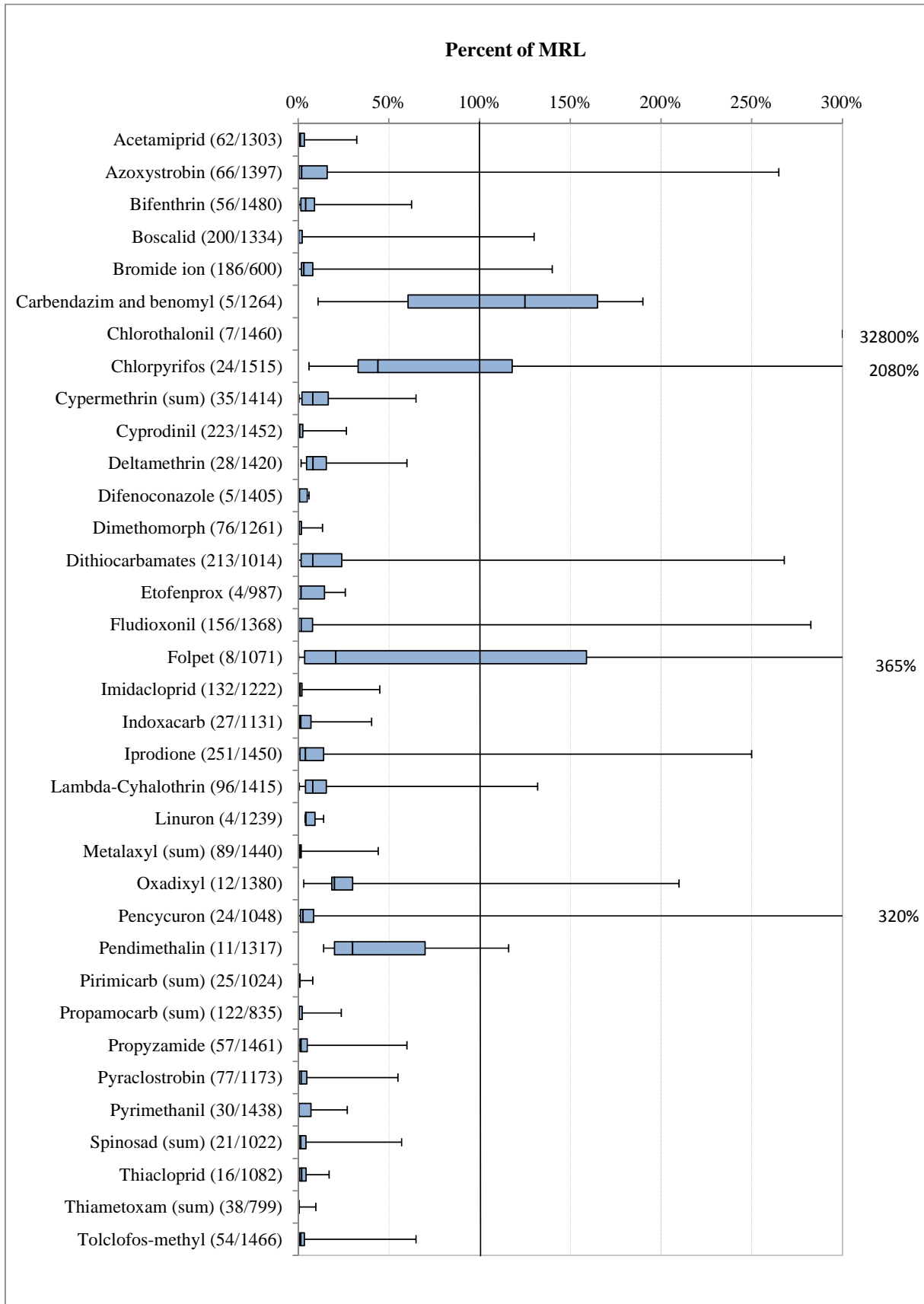
**Figure 3-11:** EUCP – Percentage of lettuce samples with measurable residues (upper x-axes scale) and residues above the MRL (lower x-axis scale); the number of lettuce samples tested for the specific pesticide is reported in brackets next to the pesticide name.

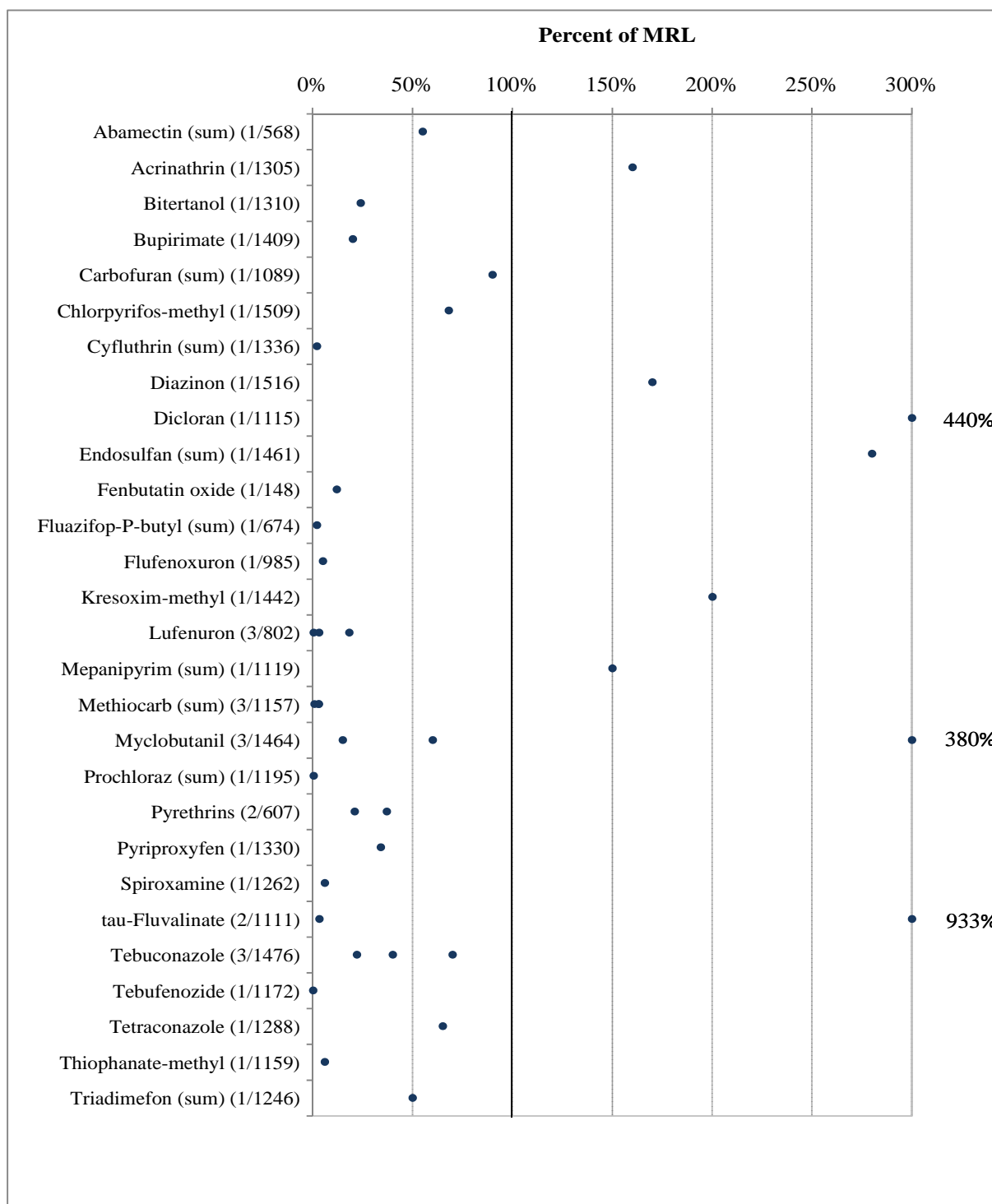
<sup>46</sup> See “RASFF” in the Glossary.

**Table 3-5:** EUCP – Pesticides most frequently detected in lettuce (only results above 10% are reported).

Product	Compound	% samples above LOQ	Background information on the active substances found
Lettuce	Bromide ion	31.00	Naturally occurring substance and metabolite of the pesticide methylbromide. As from 2009 methyl bromide is no longer approved at EU level.
	Dithiocarbamates	21.01	Group of non-systemic fungicides used on a wide range of fruit and vegetables.
	Iprodione	17.31	Non-systemic fungicide used to control plant diseases in a wide range of fruit and other crops.
	Cyprodinil	15.36	Systemic foliar fungicide used for control of plant diseases in a range of fruit and vegetables.
	Boscalid	14.99	Systemic fungicide used to control plant diseases in a wide range of fruit and other crops.
	Propamocarb (sum)	14.61	Systemic fungicide used to control plant diseases in a wide range of vegetables and other crops.
	Fludioxonil	11.40	Systemic fungicide used against plant diseases in fruit and vegetable crops.
	Imidacloprid	10.80	Systemic insecticide used against different pests in a wide range of crops.





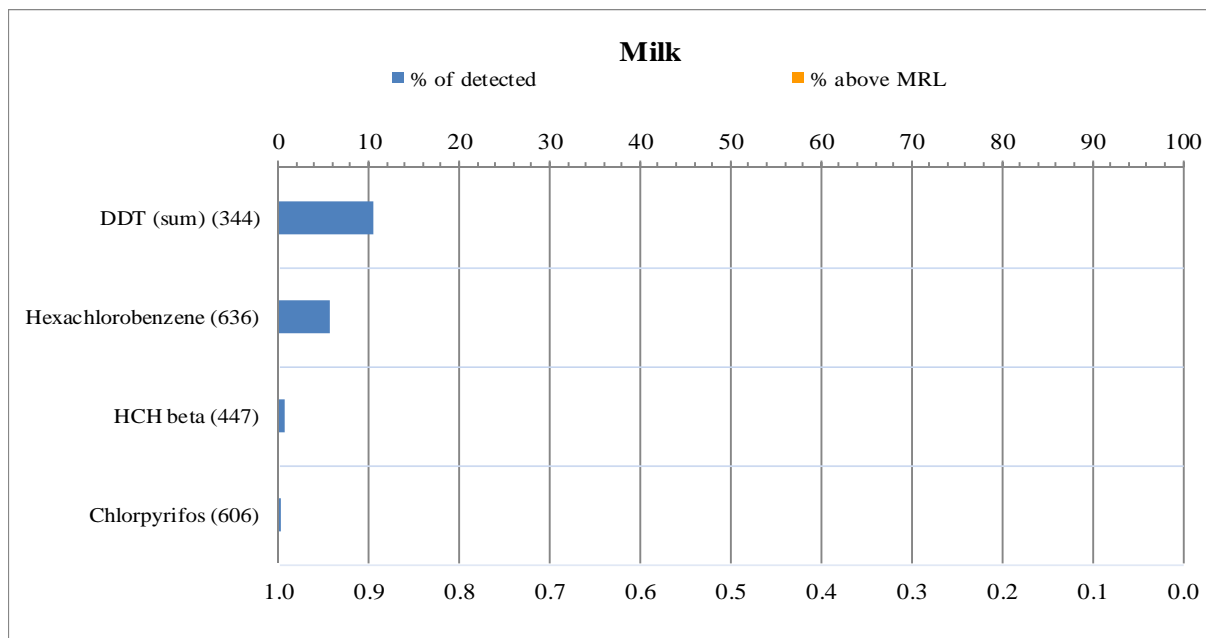


**Figure 3-12:** EUCP – Lettuce: measured residues (>LOQ) expressed as % of the MRL.

### 3.3.5. Milk

In milk, four different pesticides (DDT (sum), hexachlorobenzene, HCH (beta-isomer) and chlorpyrifos) were found. No MRL exceedances were reported (Figure 3-13). The highest residue reported in milk samples (expressed in % of the MRL) was measured for HCH (beta isomer); this accounted for 90% of the MRL (Figure 3-14) and the median residue calculated over three residues exhausted 60% of the MRL.

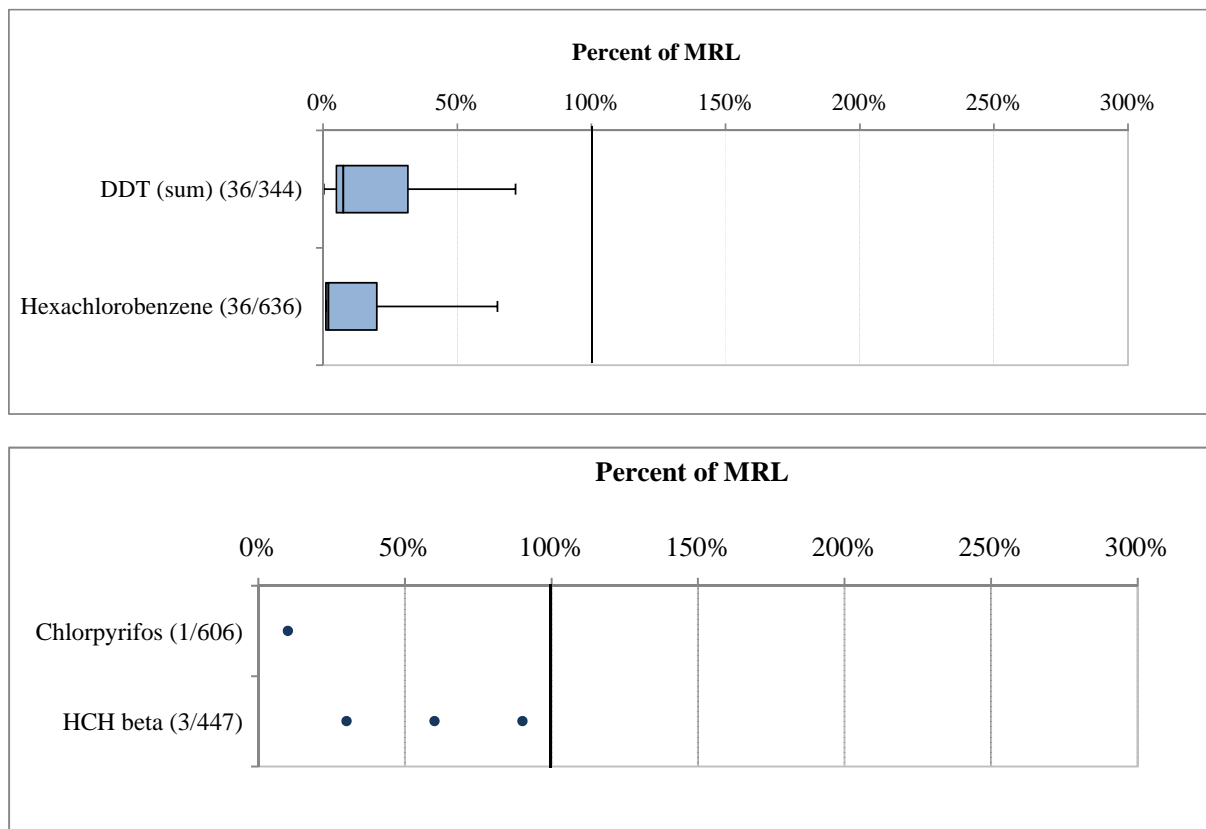
The four pesticides measured in milk samples are considered fat soluble and all but one (chlorpyrifos) are persistent organic pollutants. Only one pesticide (DDT (sum)) was measured with a frequency of more than 10% of the sample (Table 3-6).



**Figure 3-13:** EUCP – Percentage of milk samples with measurable residues and number of milk samples tested for the specific pesticide (reported in brackets next to the pesticide name).

**Table 3-6:** EUCP – Pesticides most frequently detected in milk (only results above 10% are reported).

Product	Compound	% samples above LOQ	Background information on the active substance found
Milk	DDT (sum)	10.47	Persistent organic pollutant, in Europe banned since 1979.

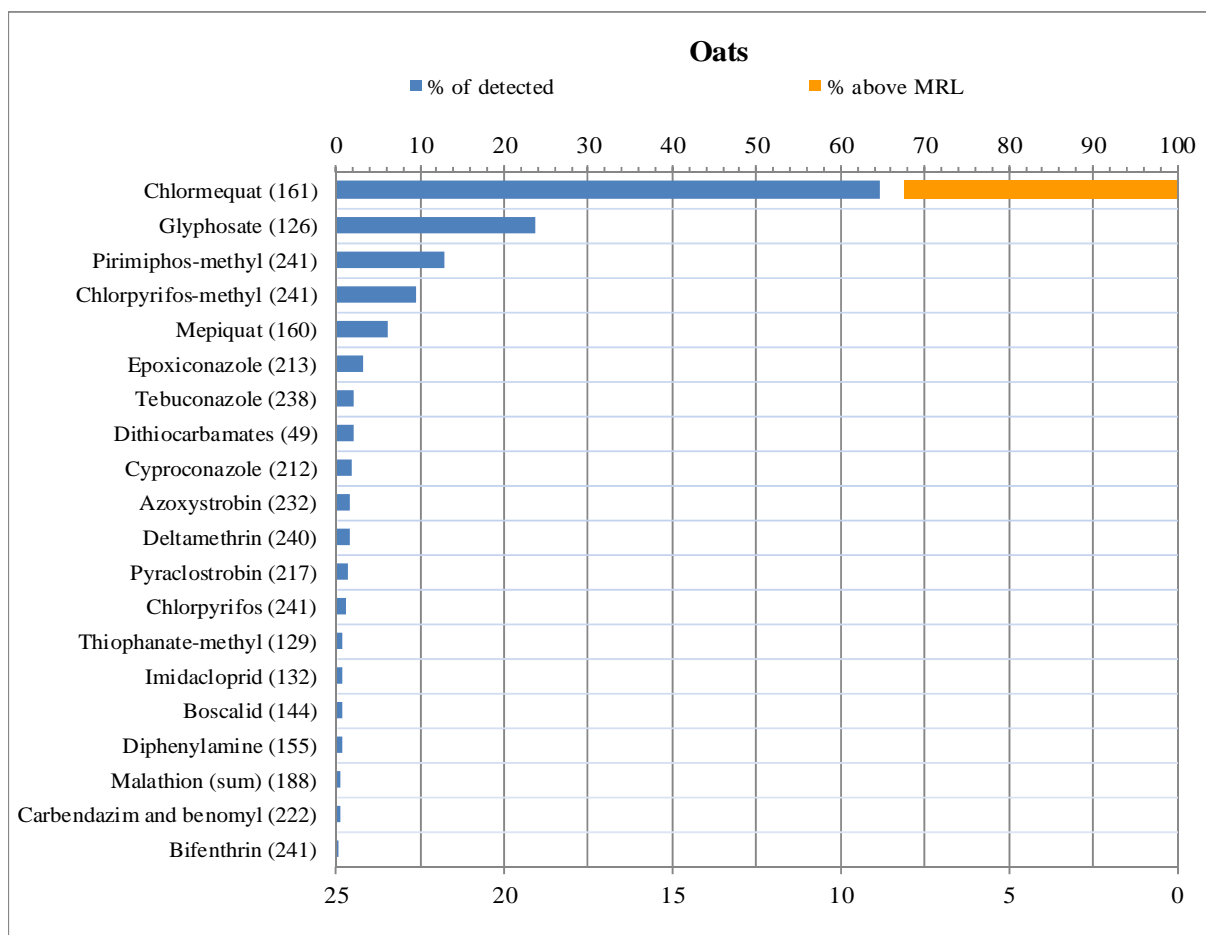


**Figure 3-14:** EUCP – Milk: measured residues (>LOQ) expressed as % of the MRL.

### 3.3.6. Oats

In oats, 20 different pesticides were found (Figure 3-15). The most frequently found substances were chlormequat (64.6% of samples analysed for this pesticide), glyphosate (23.8%) and pirimiphos-methyl (12.9%). Only chlormequat was found exceeding the MRL (8.1% of all oat samples). The median chlormequat value calculated on the basis of 104 determinations above the LOQ accounted for 37% of the MRL (Figure 3-16). The 13 samples exceeding the chlormequat MRL originated from the United Kingdom (12) and Denmark (1).

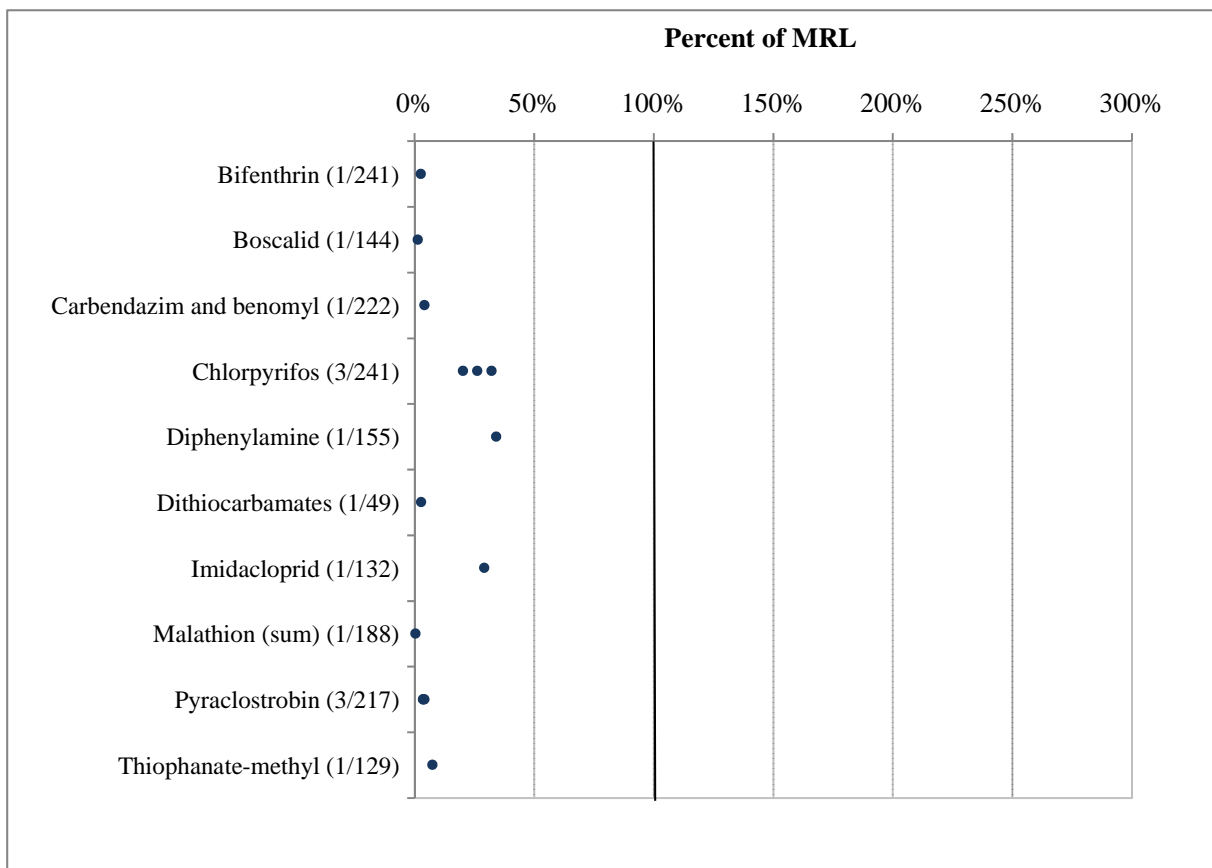
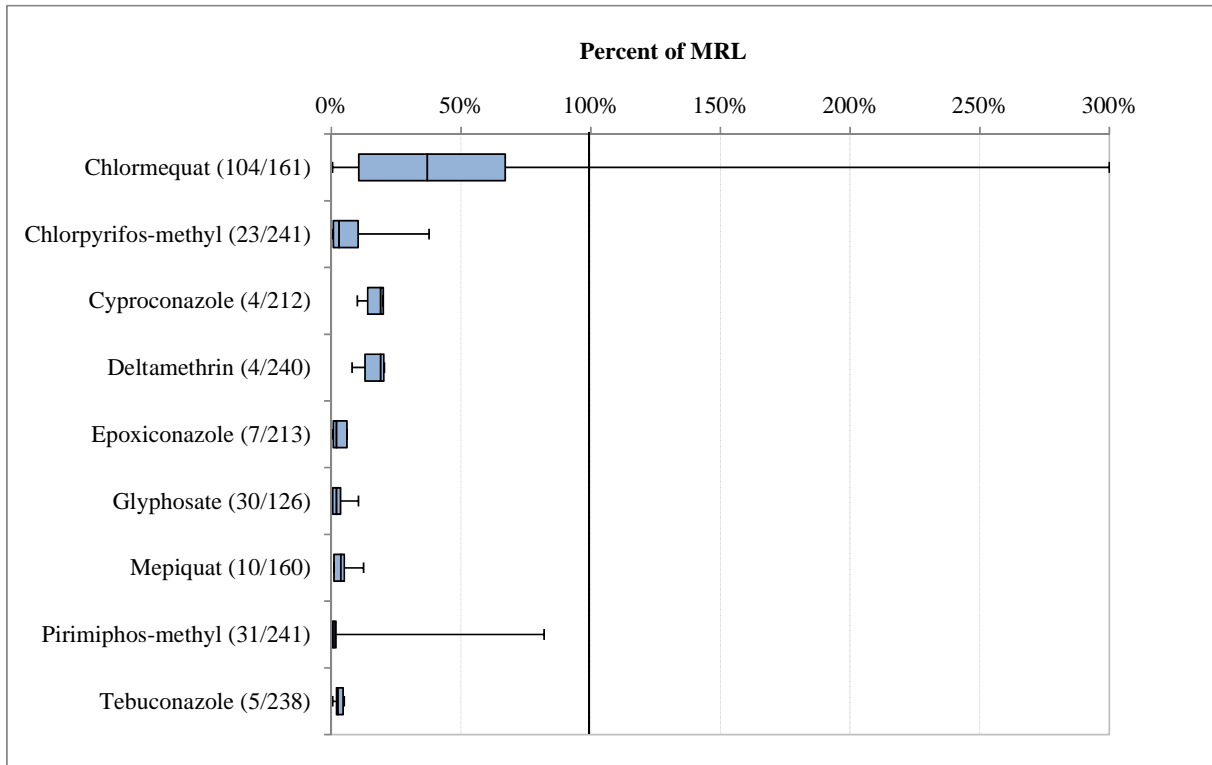
Additional information on the pesticides found and their uses in oat samples is reported below (Table 3-7).



**Figure 3-15:** EUCP – Percentage of oat samples with measurable residues (upper x-axes scale) and residues above the MRL (lower x-axis scale); the number of oat samples tested for the specific pesticide is reported in brackets next to the pesticide name.

**Table 3-7:** EUCP – Pesticides most frequently detected in oats (only results above 10% are reported).

Product	Compound	% samples above LOQ	Background information on the active substances found
Oats	Chlormequat	64.60	Plant growth regulator used in cereals for strengthening the stems.
	Glyphosate	23.81	Non-selective systemic herbicide, also used as desiccant for harvest management.
	Pirimiphos-methyl	12.86	Insecticide used for post-harvest treatment of stored cereals.



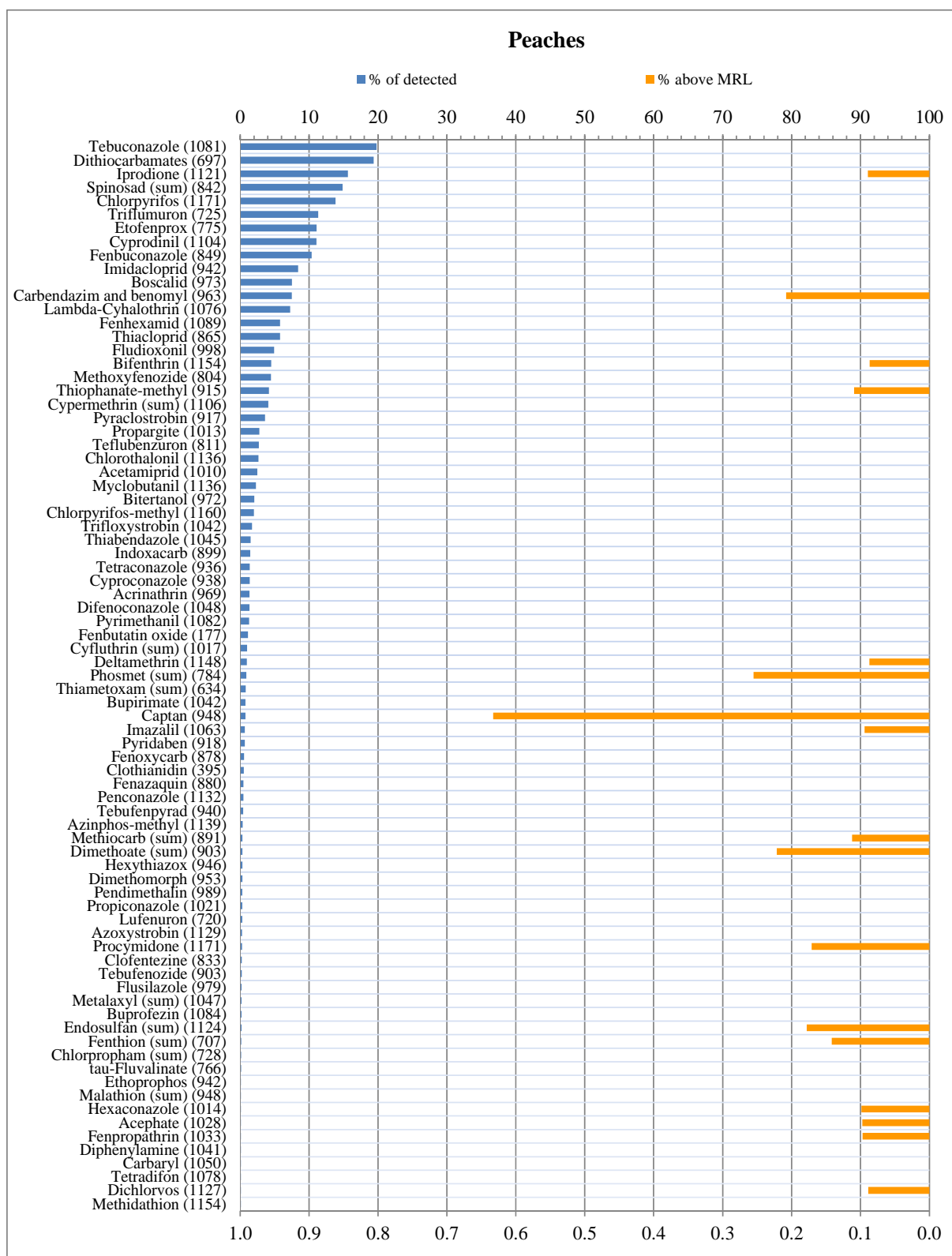
**Figure 3-16:** EUCP – Oats: measured residues (>LOQ) expressed as % of the MRL.

### 3.3.7. Peaches

In peaches, 79 different pesticides were found. The pesticides most frequently found were tebuconazole (19.8%), followed by the dithiocarbamates (19.4%) and iprodione (15.6%). 17 substances were found in concentrations exceeding the MRL (Figure 3-17). The samples that most often exceeded the legal limits originated from Spain (5), Turkey (4) and Malta (3).

Captan showed the highest rate of samples exceeding the MRL (6 samples). For captan the median residue value calculated on the basis of seven samples with measurable residues exceeded 100% of the MRL (Figure 3-18).

Information on the pesticides found and their uses in peach samples is reported in Table 3-8.

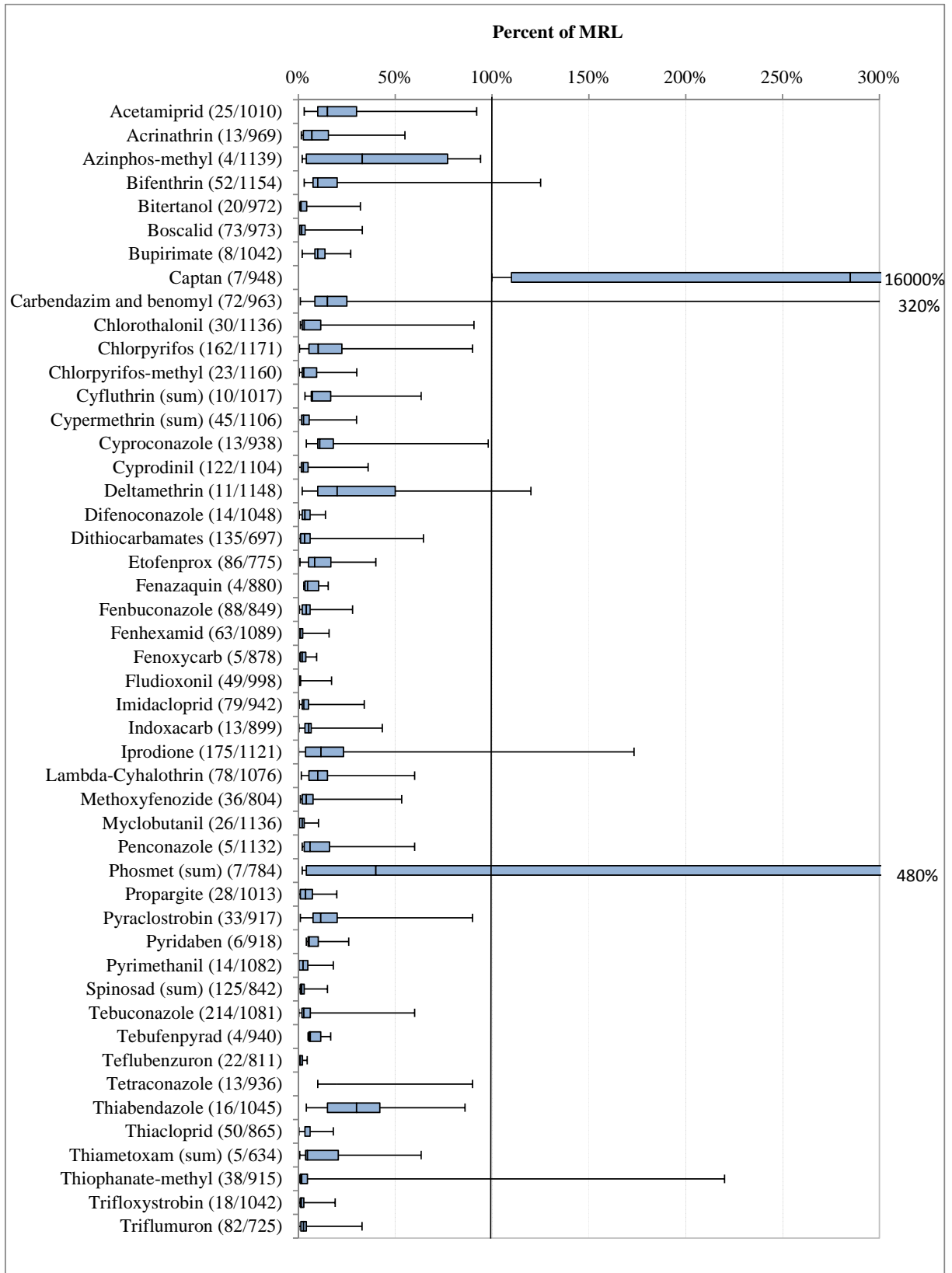


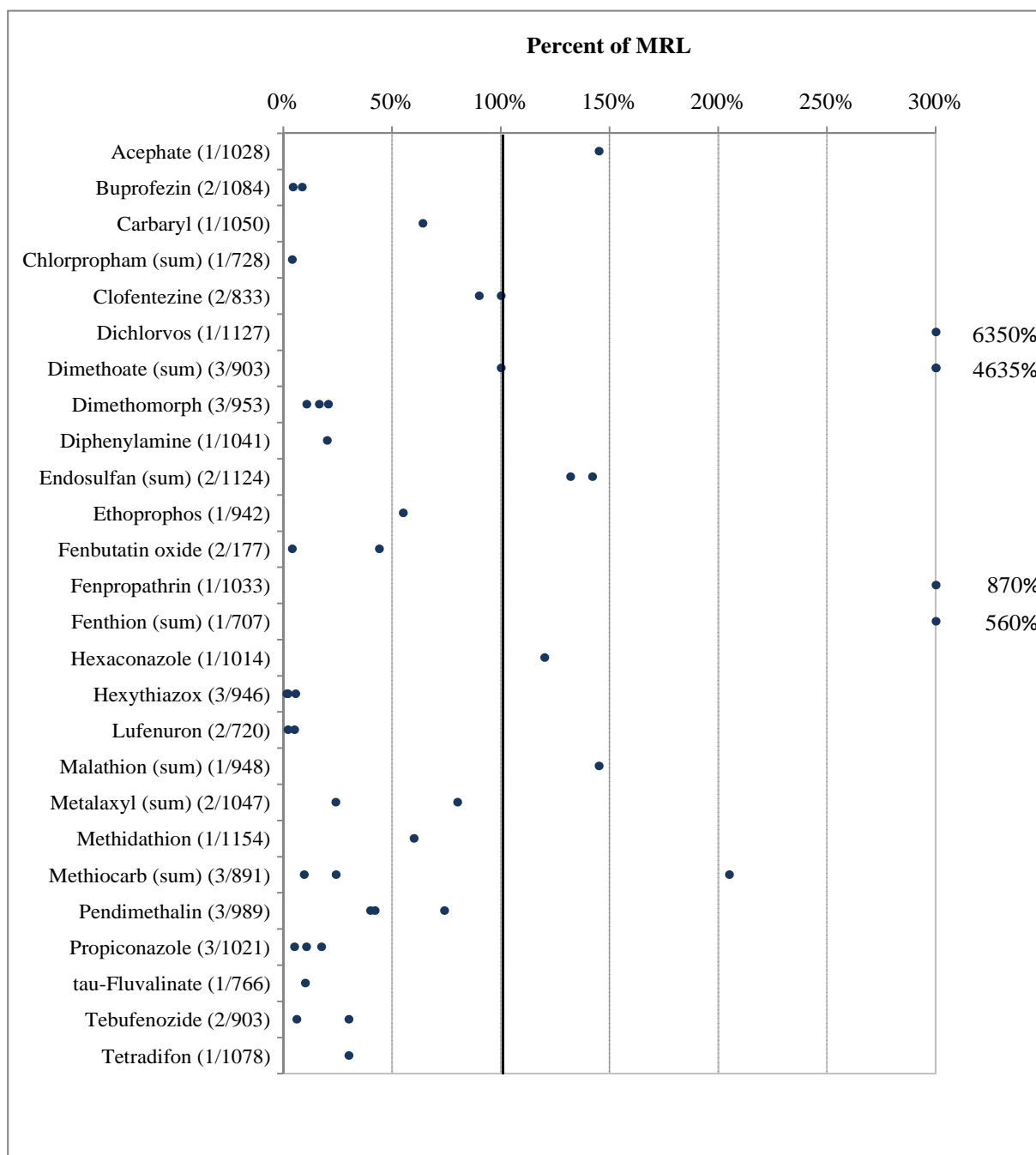
**Figure 3-17:** EUCP – Percentage of peach samples with measurable residues (upper x-axis scale) and residues above the MRL (lower x-axis scale); the number of peach samples tested for the specific pesticide is reported in brackets next to the pesticide name.



**Table 3-8:** EUCP – Pesticides most frequently detected in peaches (only results above 10% are reported).

Product	Compound	% samples above LOQ	Background information on the active substances found
Peaches	Tebuconazole	19.80	Systemic fungicide used to control plant diseases in a wide range of fruit, vegetables and other crops.
	Dithiocarbamates	19.37	Non-systemic fungicide used for foliar treatment of fruit and vegetables.
	Iprodione	15.61	Non-systemic fungicide used to control fungal diseases in a wide range of fruit and other crops.
	Spinosad (sum)	14.85	Insecticide used against different pests in fruits and other crops. Under certain conditions spinosad is also allowed to be used in organic farming.
	Chlorpyrifos	13.83	Non-systemic insecticide used to control different pests in fruit and other crops.
	Triflumuron	11.31	Non-systemic insecticide used to control different pests on foliage in fruit and other crops.
	Etofenprox	11.10	Non-systemic insecticide used to control different pests in fruit and other crops.
	Cyprodinil	11.05	Systemic fungicide used for control of plant diseases in a wide range of fruit and vegetables.
	Fenbuconazole	10.37	Systemic fungicide used to control plant diseases.





**Figure 3-18:** EUCP – Peaches: measured residues (>LOQ) expressed as % of the MRL.

### 3.3.8. Pears

In 2010, the analysis for amitraz was only required for pear samples and not for the remaining commodities included in the 2010 EU-coordinated programme. The reason for including amitraz in the 2010 European control programme was the high rate of MRL violations reported in the past years for pears available on the EU market and originating from Turkey<sup>47</sup>.

Of the 388 pear samples, amitraz was found in six samples, five of these had residues above the MRL (1.3%). The five pear samples found exceeding the MRL of amitraz originated from the United

<sup>47</sup> The findings concerning the residues of amitraz measured in pears were notified to the European Commission through the Rapid Alert System for Food and Feed (RASFF) notification system: [http://ec.europa.eu/food/food/rapidalert/docs/report2009\\_en.pdf](http://ec.europa.eu/food/food/rapidalert/docs/report2009_en.pdf) It should be noted that the analysis of this specific pesticide/crop combination was included in Regulation (EC) No 901/2009 on the 2010 EU-coordinated control programme and that at the time of the preparation of this monitoring plan Regulation (EC) No 669/2009 on the increased level of official controls on imports of certain food had not yet been in place.

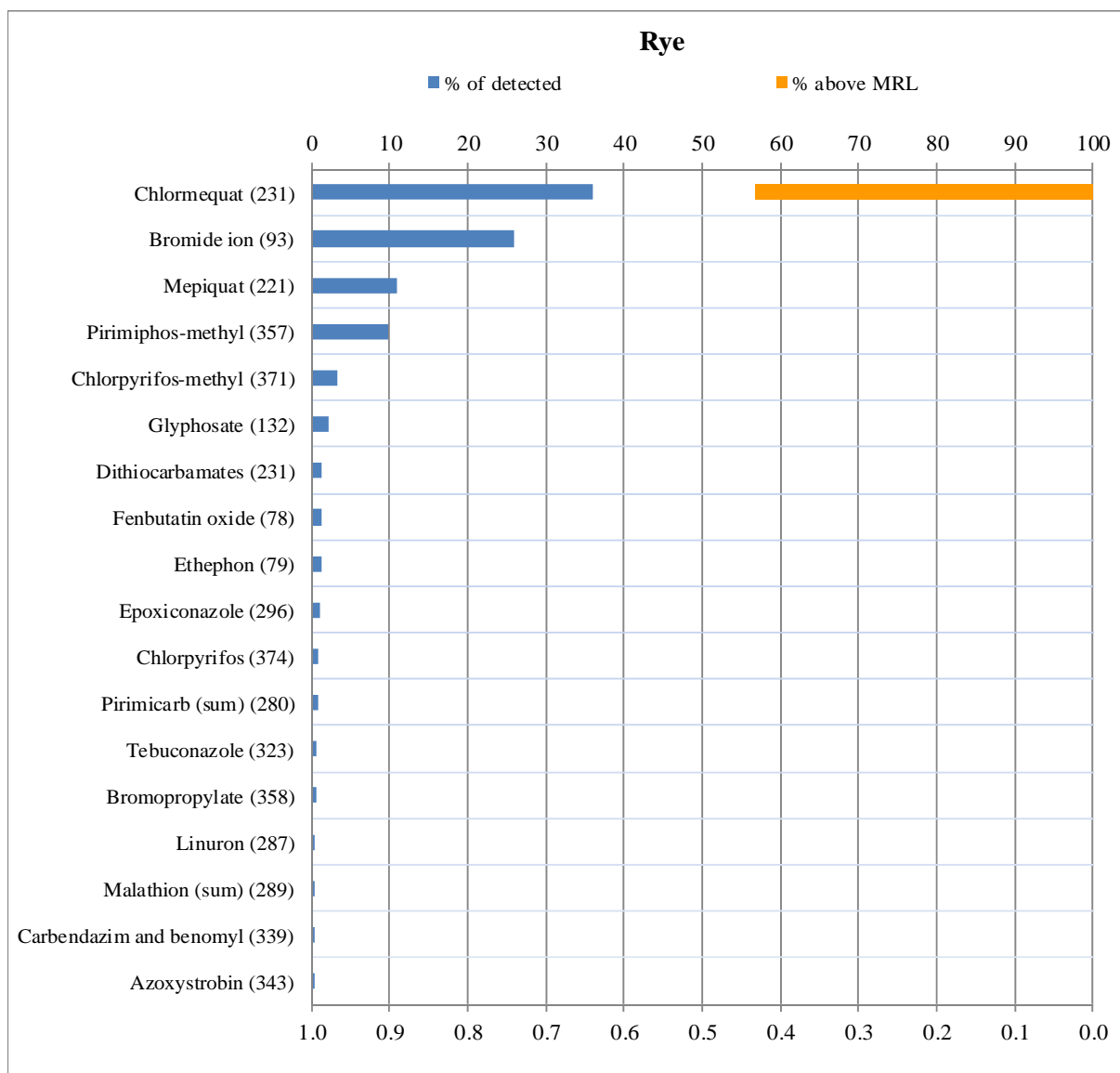
Kingdom (4) and France (1). The highest residue level reported amounted to 0.1 mg/kg (200% of the MRL), while the median residue level accounted for 160% of the legal limit set at the LOQ (0.05 mg/kg). None of the samples analysed in the framework of the EU-coordinated programme originated from Turkey nor have Turkish samples been analysed in the framework of the national control programmes.

### 3.3.9. Rye

In rye, 18 different pesticides were found (Figure 3-19). The most frequently found pesticide residues were chlormequat (35.9%), bromide ion (25.8%) and mepiquat (10.9%) (Table 3-9). The MRL was exceeded in only one sample containing chlormequat. This sample originated from Slovakia.

The distribution of the measured residue levels (results above the LOQ only), expressed in the percentage of the MRL applicable for the specific pesticide/commodity combination is reported in Figure 3-20.

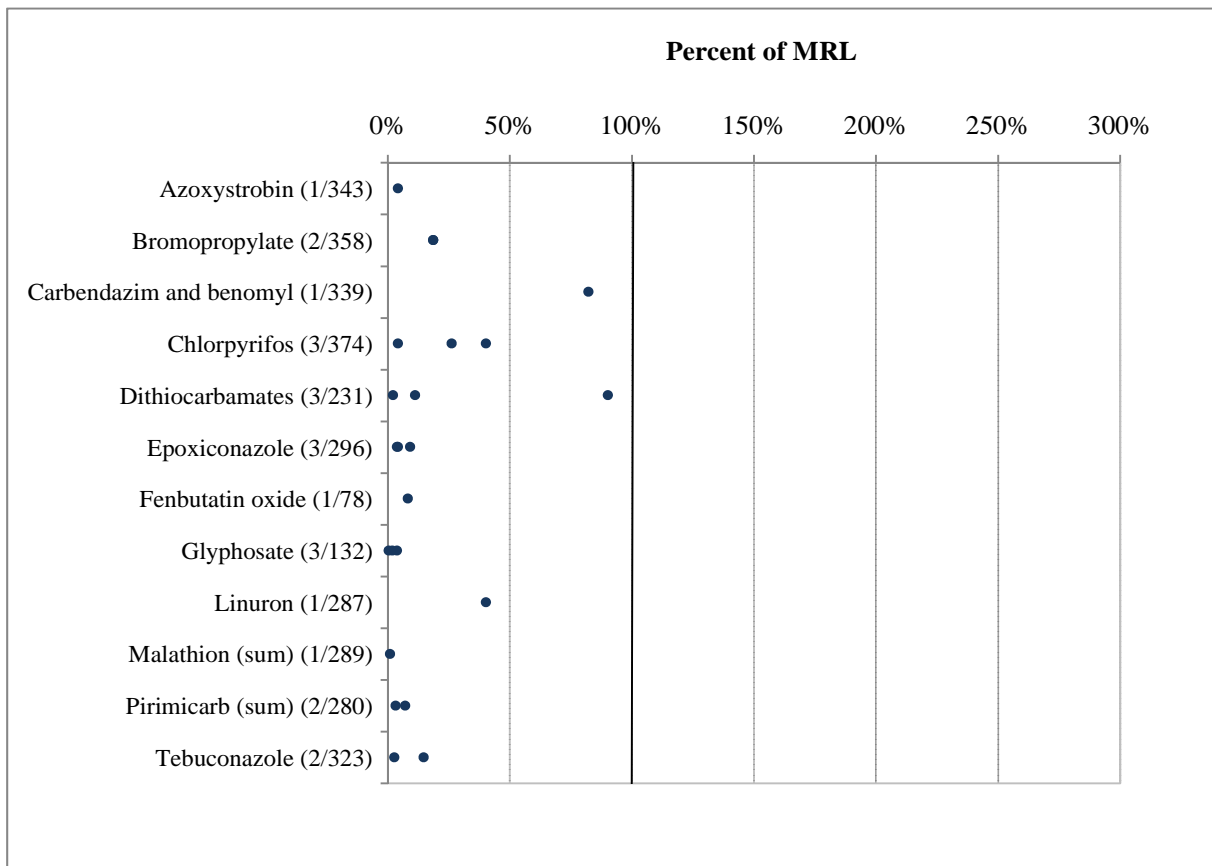
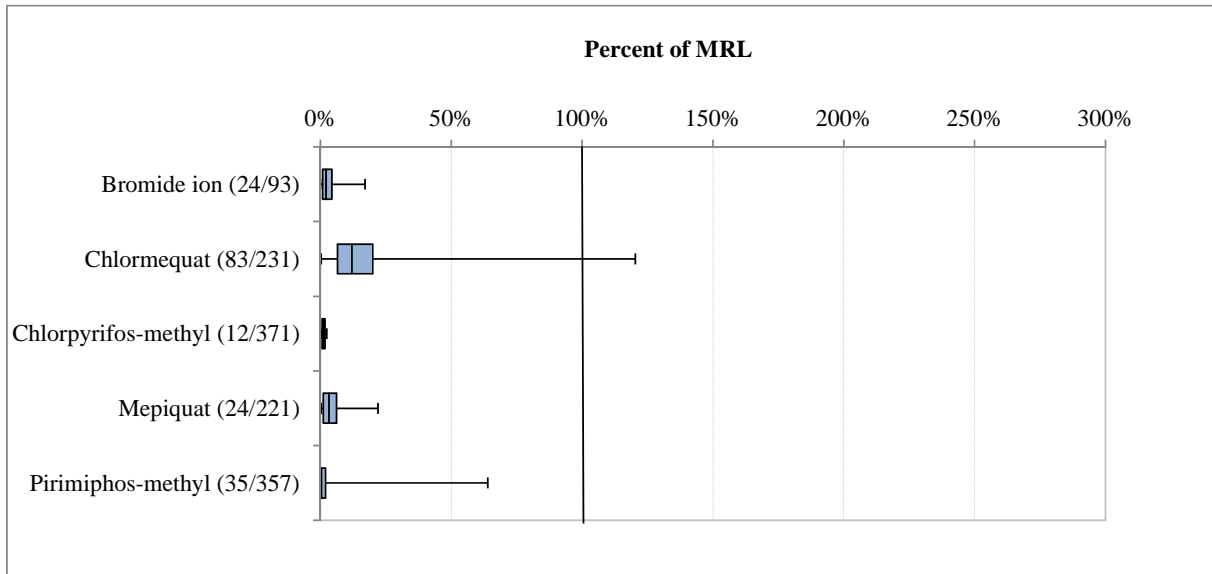
In Table 3-9 information on the pesticides found and their uses in rye samples is reported.



**Figure 3-19:** EUCP – Percentage of rye samples with measurable residues (upper x-axis scale) and residues above the MRL (lower x-axis scale); the number of rye samples tested for the specific pesticide is reported in brackets next to the pesticide name.

**Table 3-9:** EUCP – Pesticides most frequently detected in rye (only results above 10% are reported).

Product	Compound	% samples above LOQ	Background information on the active substances found
Rye	Chlormequat	35.93	Plant growth regulator used in cereals for strengthening the stems.
	Bromide ion	25.81	Naturally occurring substance and metabolite of the pesticide methylbromide. As of 2009 methyl bromide is no longer approved at EU level.
	Mepiquat	10.86	Plant growth regulator used in cereals. Similar mode of action as chlormequat.

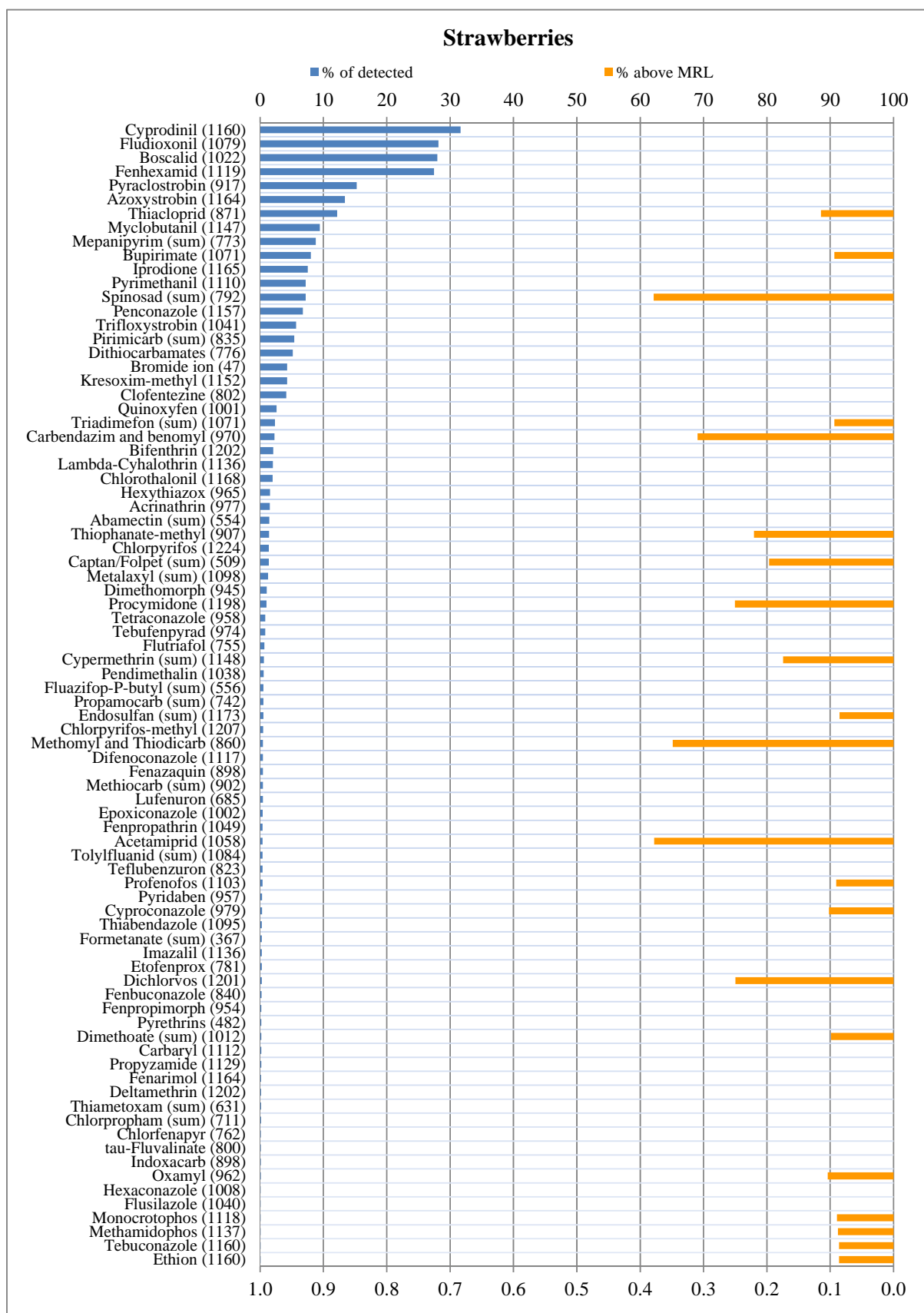


**Figure 3-20:** EUCP – Rye: measured residues (>LOQ) expressed as % of the MRL.

### 3.3.10. Strawberries

In strawberries, 82 different pesticides were found (Figure 3-21). Cyprodinil was most often found (31.6% of the samples), followed by fludioxonil (28.2%) and boscalid (28.0%) (Table 3-10). MRL exceedances were observed for 21 different residues (Figure 3-21). The countries of origin with the highest number of strawberry samples exceeding the legal limits were Egypt (10), France (8), Cyprus (3), Greece (3), Slovenia (3) and Spain (3).

Table 3-10 lists the pesticides found, as well as information on their uses. The median residue level for acetamiprid, calculated on the basis of the four samples containing residues above the LOQ, accounted for 195% of the MRL (Figure 3-22).

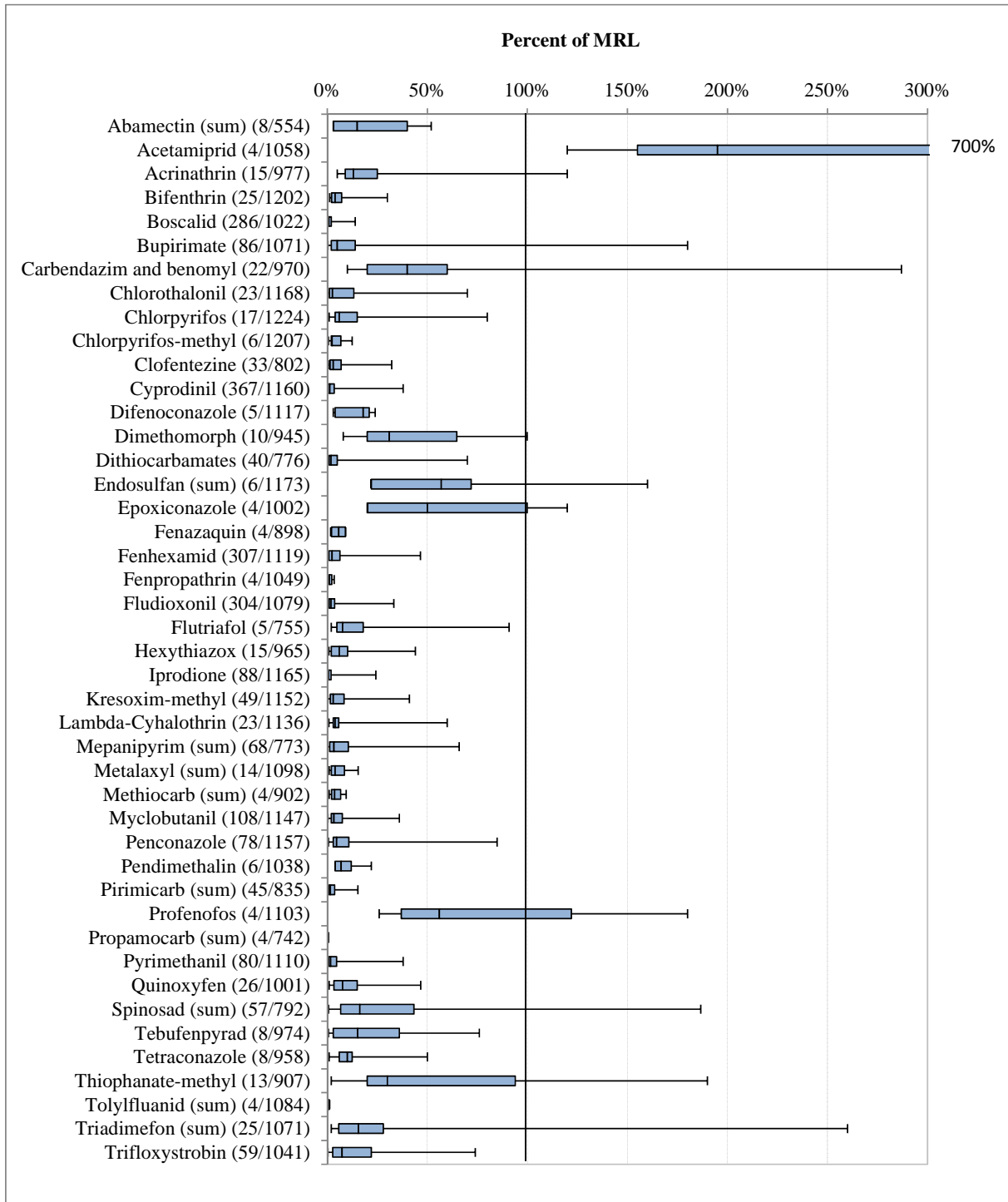


**Figure 3-21:** EUCP – Percentage of strawberry samples with measurable residues (upper x-axis scale) and residues above the MRL (lower x-axis scale); the number of strawberry samples tested for the specific pesticide is reported in brackets next to the pesticide name.



**Table 3-10:** EUCP – Pesticides most frequently detected in strawberries (only results above 10% are reported).

Product	Compound	% samples above LOQ	Background information on the active substances found
Strawberries	Cyprodinil	31.64	Foliar fungicide used for control of plant diseases in a range of fruit and vegetables.
	Fludioxonil	28.17	Systemic fungicide used against powdery mildew in vines and different diseases in fruit and vegetable crops.
	Boscalid	27.98	Systemic fungicide used to control plant diseases in a wide range of fruit and other crops.
	Fenhexamid	27.44	Systemic fungicide used as foliar spray in fruit and other crops.
	Pyraclostrobin	15.27	Systemic fungicide used to control plant diseases in a wide range of fruit and other crops.
	Azoxystrobin	13.40	Systemic fungicide used to control plant diseases in a wide range of fruit and other crops.
	Thiacloprid	12.17	Systemic insecticide used against different pests in a wide range of crops.



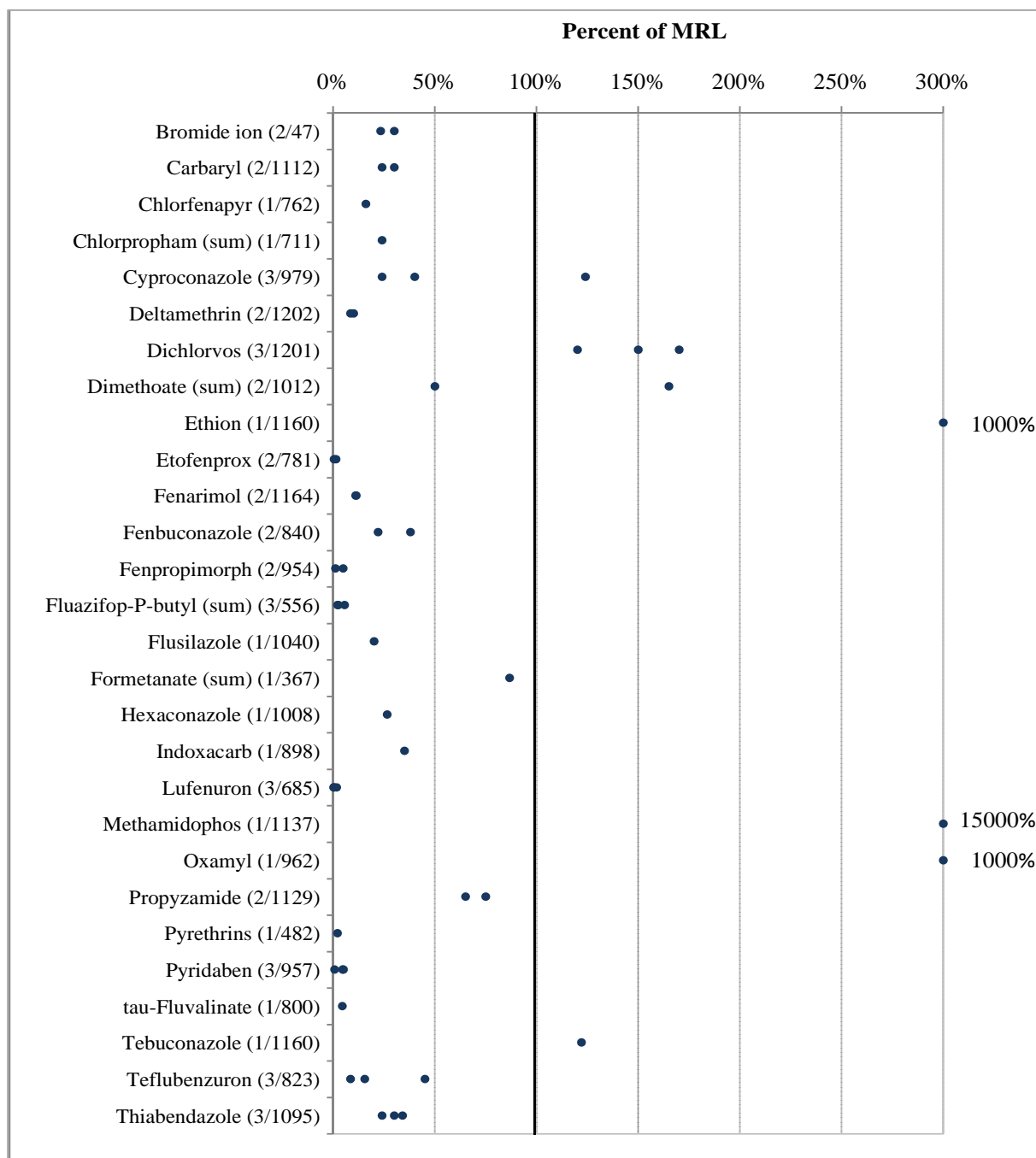
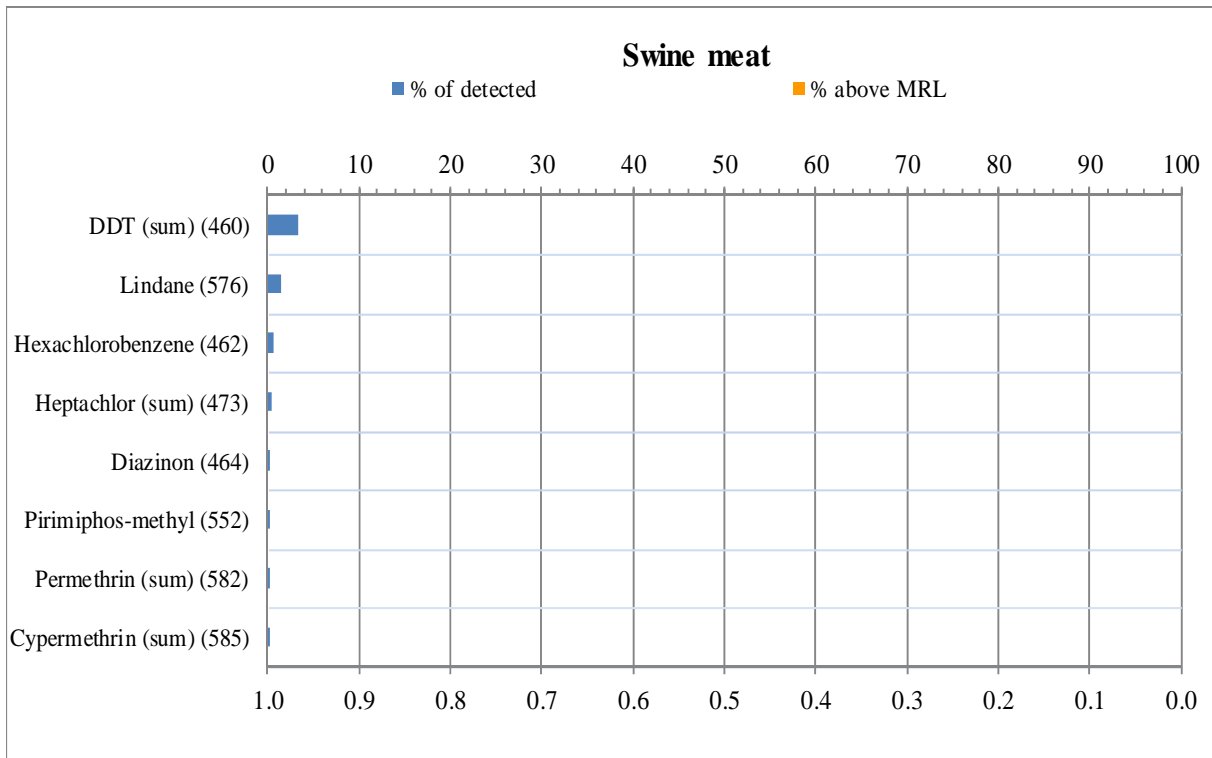


Figure 3-22: EUCP – Strawberries: measured residues (>LOQ) expressed as % of the MRL.

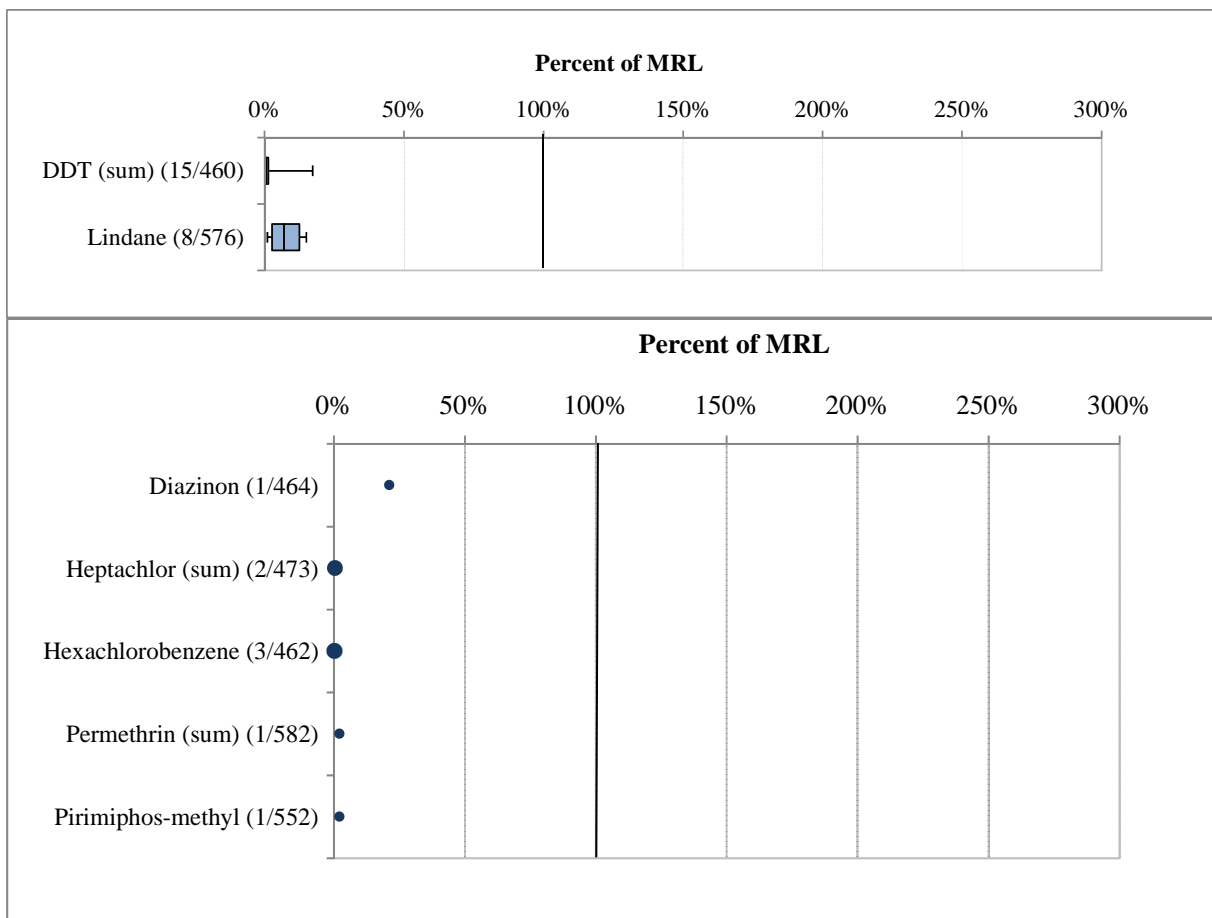
### 3.3.11. Swine meat

In swine meat, eight different pesticides were found (Figure 3-23) but no samples were reported above the MRL (Figure 3-24). The most frequently found pesticide residues were DDT (sum) (3.3%), lindane (1.4%) and hexachlorobenzene (0.7%).

The occurrence of the above mentioned substances in products of animal origin most likely result from environmental contamination due to past uses of the pesticides rather than of the direct use of these substances in agriculture or livestock husbandry. EFSA noted that not all measured residue levels were reported in accordance to the legal provisions for fat soluble substances and therefore more guidance is needed.



**Figure 3-23:** EUCP – Percentage of swine meat samples with measurable residues and residues above the MRL and number of swine meat samples tested for the specific pesticide (reported in bracket on the y-axis).



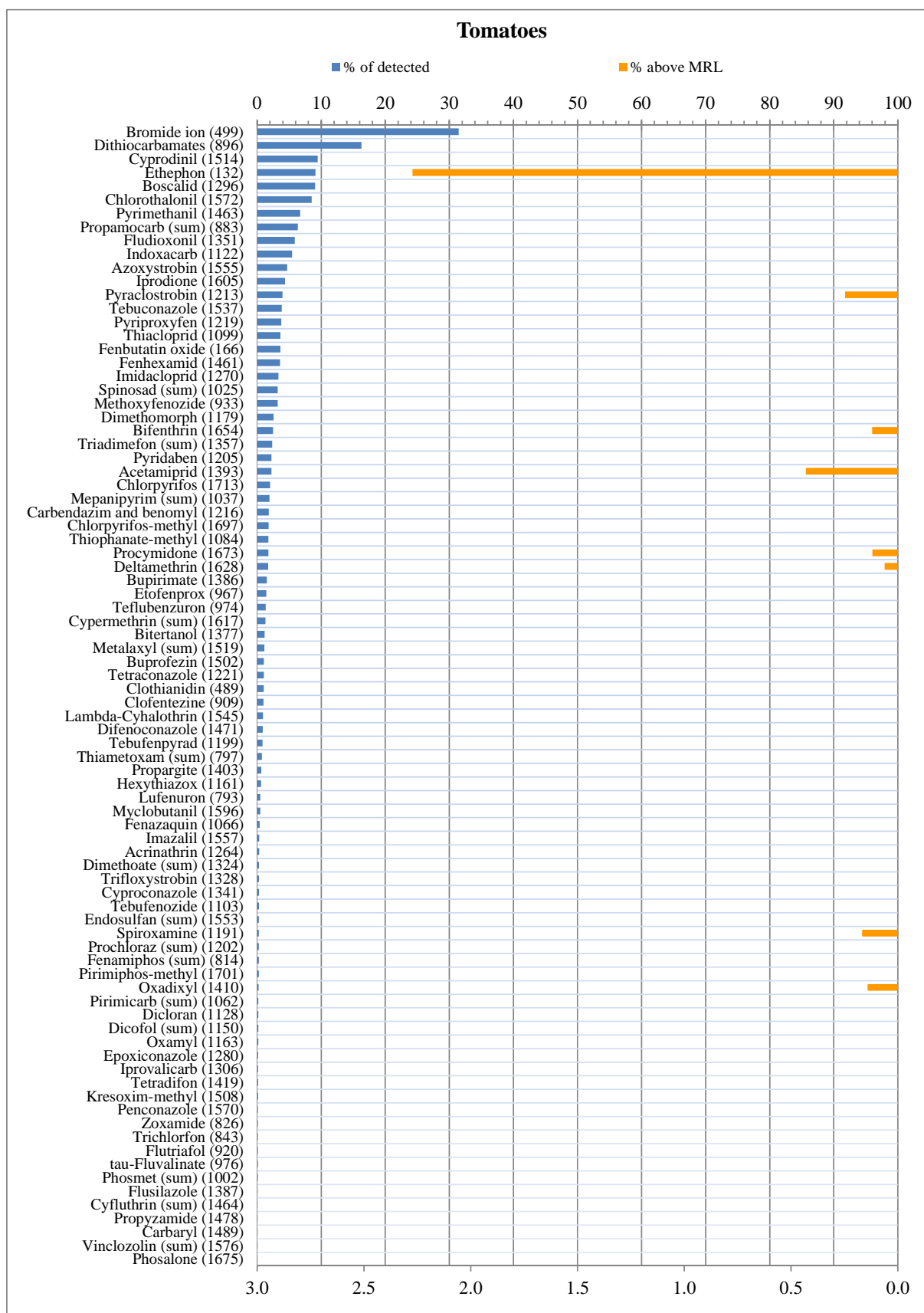
**Figure 3-24:** EUCP – Swine meat: measured residues (>LOQ) expressed as % of the MRL.

### 3.3.12. Tomatoes

In tomatoes, 84 different pesticides were found (Figure 3-25). Bromide ion was the substance most often found (31.5% of samples analysed for this pesticide residue), followed by the dithiocarbamates (16.3%) and cyprodinil (9.5%). MRL exceedances were observed for eight different residues (Figure 3-25). The countries of origin for which the tomato MRLs were most frequently exceeded were Spain (6), Turkey (4) and the Netherlands (3).

Information on the pesticides found in tomatoes and their uses is reported in Table 3-11.

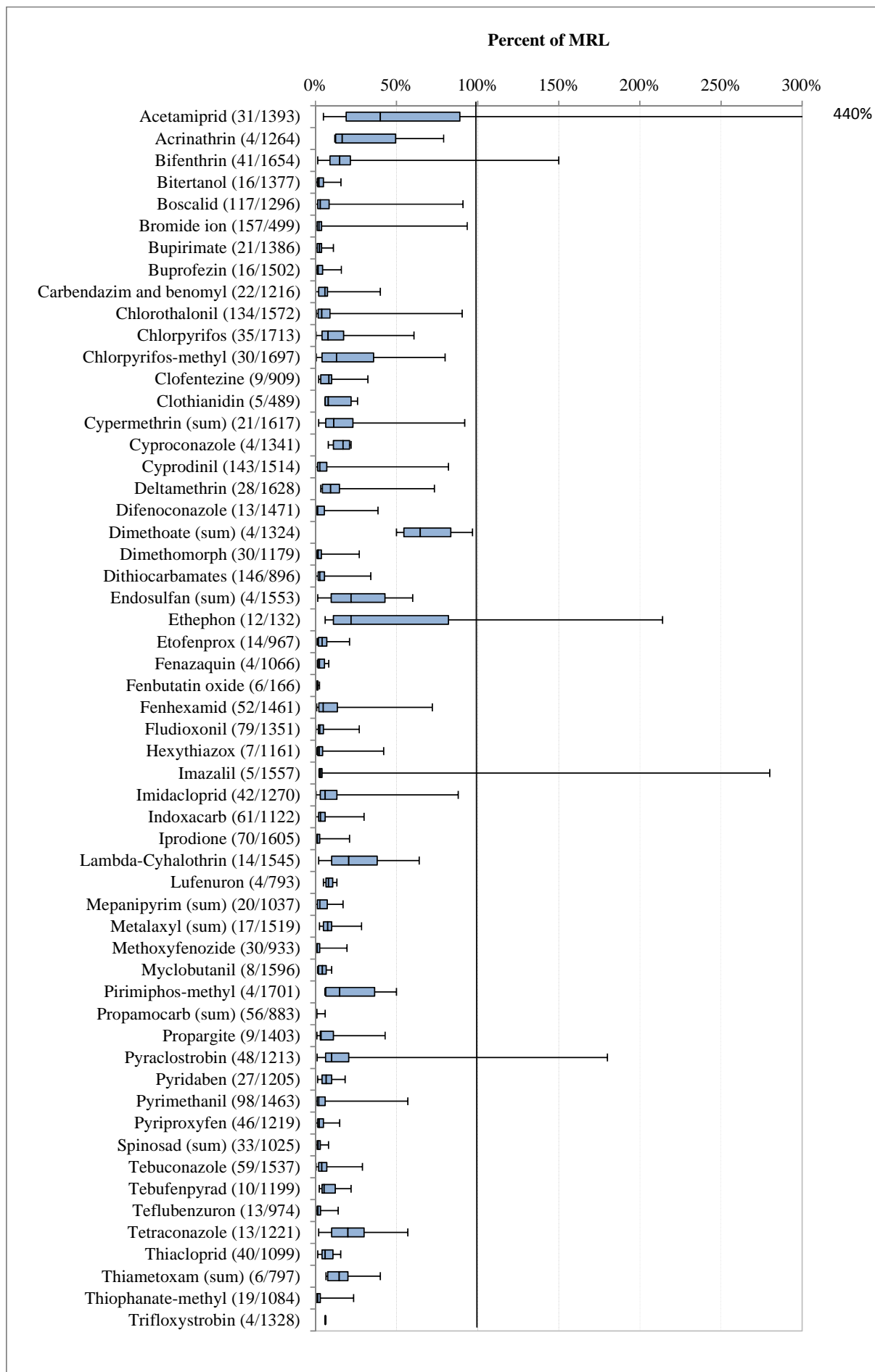
The distribution of the measured residue levels (results above the LOQ only), expressed in the percentage of the MRL applicable for the specific pesticide/commodity combination is reported in Figure 3-26.



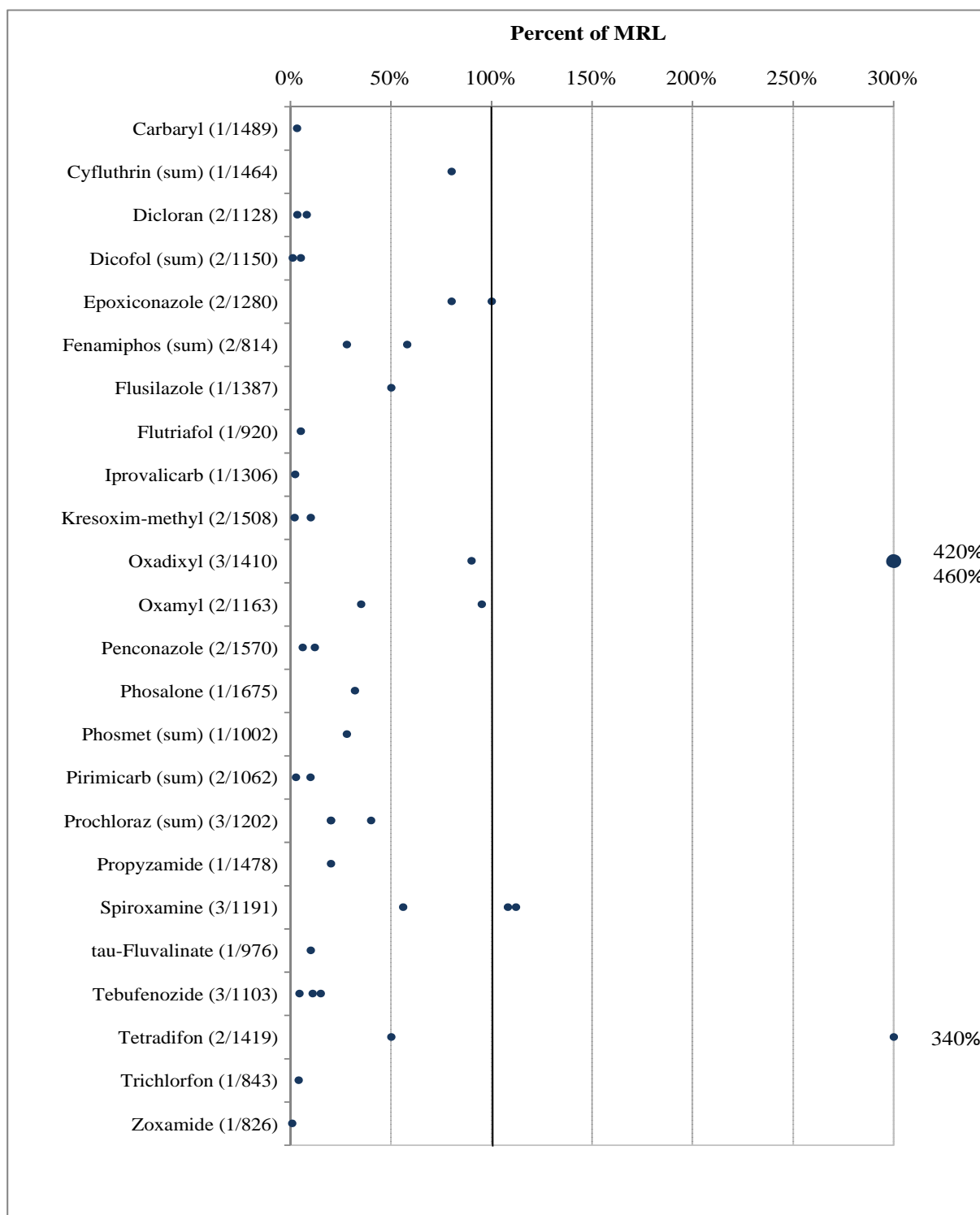
**Figure 3-25:** EUCP – Percentage of tomato samples with measurable residues (upper x-axis scale) and residues above the MRL (lower x-axis scale); the number of tomato samples tested for the specific pesticide is reported in brackets next to the pesticide name.

**Table 3-11:** EUCP – Pesticides most frequently detected in tomatoes (only results above 10% are reported).

Product	Compound	% samples above LOQ	Background information on the active substances found
Tomatoes	Bromide ion	31.46	Naturally occurring substance and metabolite of the pesticide methylbromide. As of 2009 methyl bromide is no longer approved at EU level.
	Dithiocarbamates	16.29	Group of non-systemic fungicides used on a wide range of crops.







**Figure 3-26:** EUCP – Tomatoes: measured residues (>LOQ) expressed as % of the MRL.

### 3.4. Results by pesticides

For the following 33 pesticides<sup>48</sup>, no samples with measurable residues were identified in the EU-coordinated control programme: 2,4-D, aldrin and dieldrin, amitrole, azinphos-ethyl, benfuracarb, bromuconazole, cadusafos, camphechlor, carbosulfan, chlordane, chlorobenzilate, clofentezine, dichlofluanid, dinocap, endrin, fipronil, fosthiazate, haloxyfop including haloxyfop-R, HCH alpha,

<sup>48</sup> The pesticides listed were analysed according to the legal residue definition; in cases of complex residue definition (i.e. definitions that contain more than one component), the full definition is not reported in the list.

metconazole, methoxychlor, paclobutrazol, parathion, parathion-methyl, phenthoate, phoxim, prothioconazole-desmethio, pyrazophos, quintozone, resmethrin, tecnazene, tefluthrin, triticonazole.

Measurable residues were found for 143 different substances. In Figure 3-27 the pesticides above 0.15% of the detected pesticides are shown (94 substances). All the remaining pesticides were found in less than 0.15% of the samples. Chlormequat was found most frequently (47.7% of total 392 samples). Bromide ion, dithiocarbamates, boscalid, glyphosate, cyprodinil, mepiquat, captan/folpet, fludioxonil, pyraclostrobin, iprodione, DDT, thiacloprid and fenhexamid occurred in 5 – 25% of the samples analysed. Tebuconazole, chlorpyrifos, pyrimethanil, azoxystrobin, spinosad, propamocarb, hexachlorobenzene, carbendazim and benomyl, imidacloprid, pirimicarb, diphenylamine, acetamiprid, lambda-cyhalothrin, methoxyfenozide, ethephon, indoxacarb, thiabendazole, chlorothalonil and trifloxystrobin were found with frequencies between 2 and 5% of the samples.

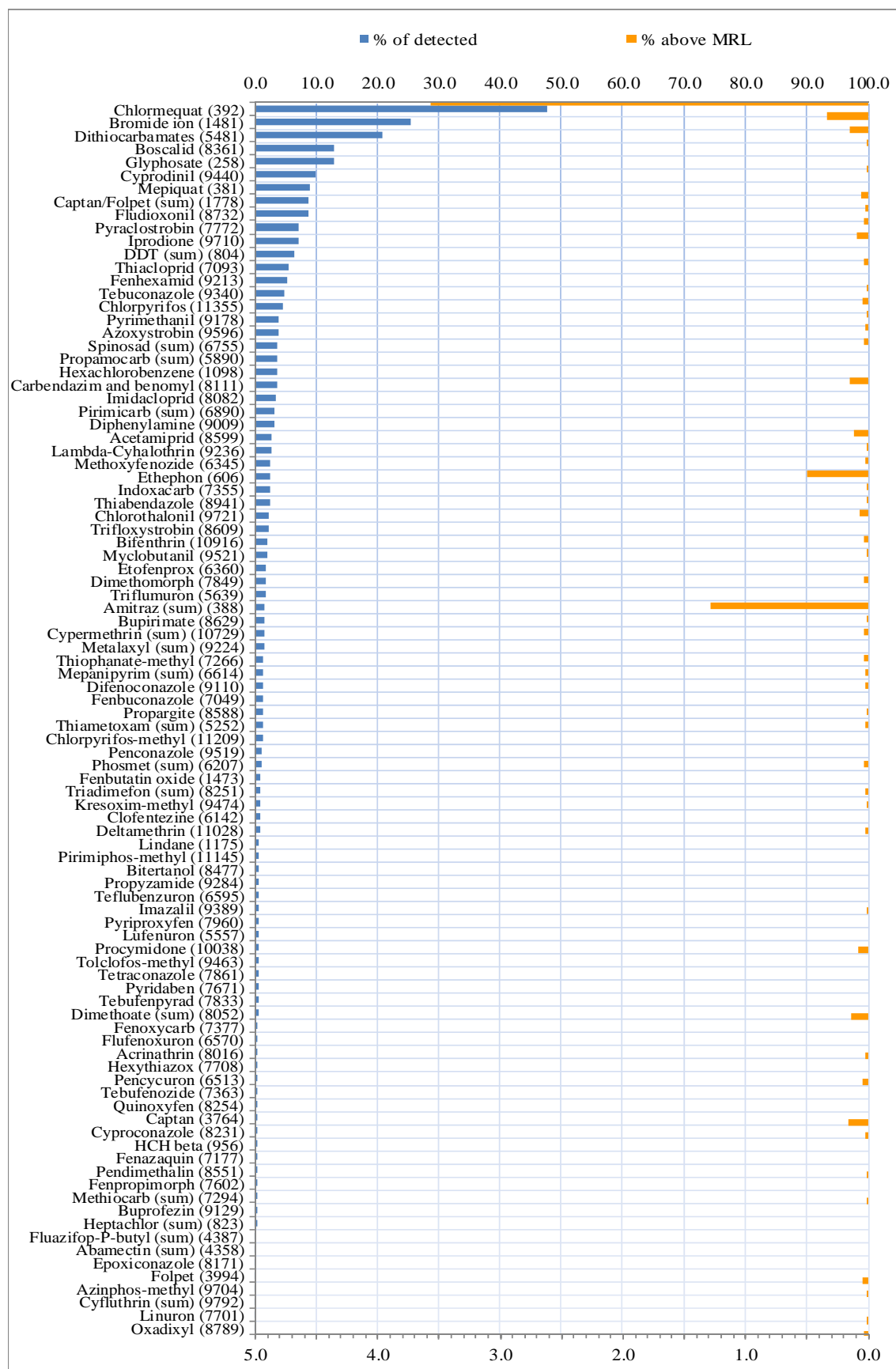
Residues exceeding the MRL were found for 73 different pesticides or group of pesticides (in Figure 3-27 the pesticides exceeding the MRL are reported only for those pesticides most frequently found). The most frequent MRL exceedances (expressed in % of samples analysed for the respective pesticide) were detected for residues of chlormequat (3.6%)<sup>49</sup>. Amitraz (sum) exceeded the MRL in 1.3% of the samples<sup>50</sup>. The third most frequently found pesticide exceeding the MRL was ethephon (0.5%).

Results for all pesticides analysed in the 2010 EU-coordinated control programme are tabulated in Appendix III, Table E.

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<sup>49</sup> According to the 2010 EU-coordinated plan, the analysis of chlormequat was only requested for cereal samples.

<sup>50</sup> According to the 2010 EU-coordinated plan, the analysis of amitraz was only requested for pear samples.



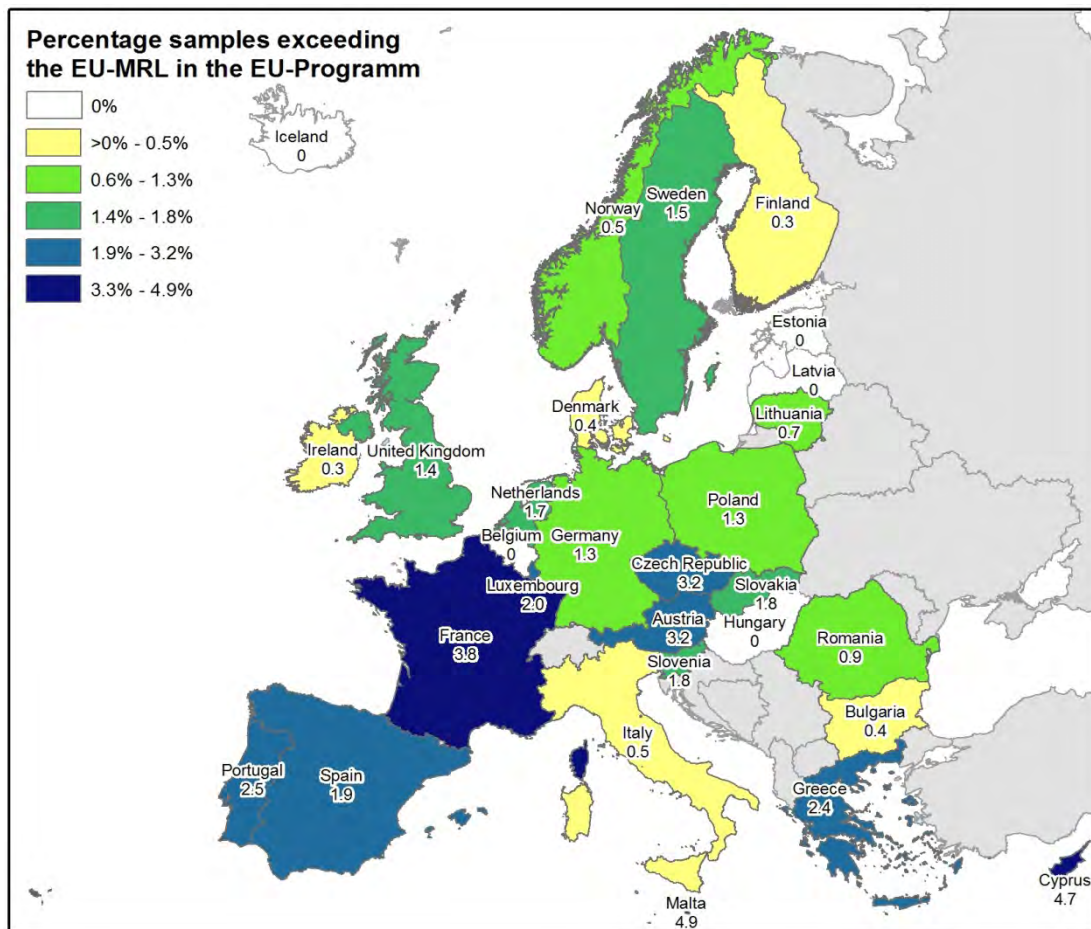
**Figure 3-27:** EUCP – Percentage of samples with measurable residues (upper x-axis scale, only pesticides with measurable residues in at least 0.15% of the samples) and residues above the MRL (lower x-axis scale); the number of samples tested for the specific pesticide is reported in brackets next to the pesticide name.

### 3.5. Results by country

The MRL exceedance rate, as reported by each country, is depicted in Map 3-1. The rates vary among the reporting countries, ranging from 0% to 4.9% of the samples analysed.

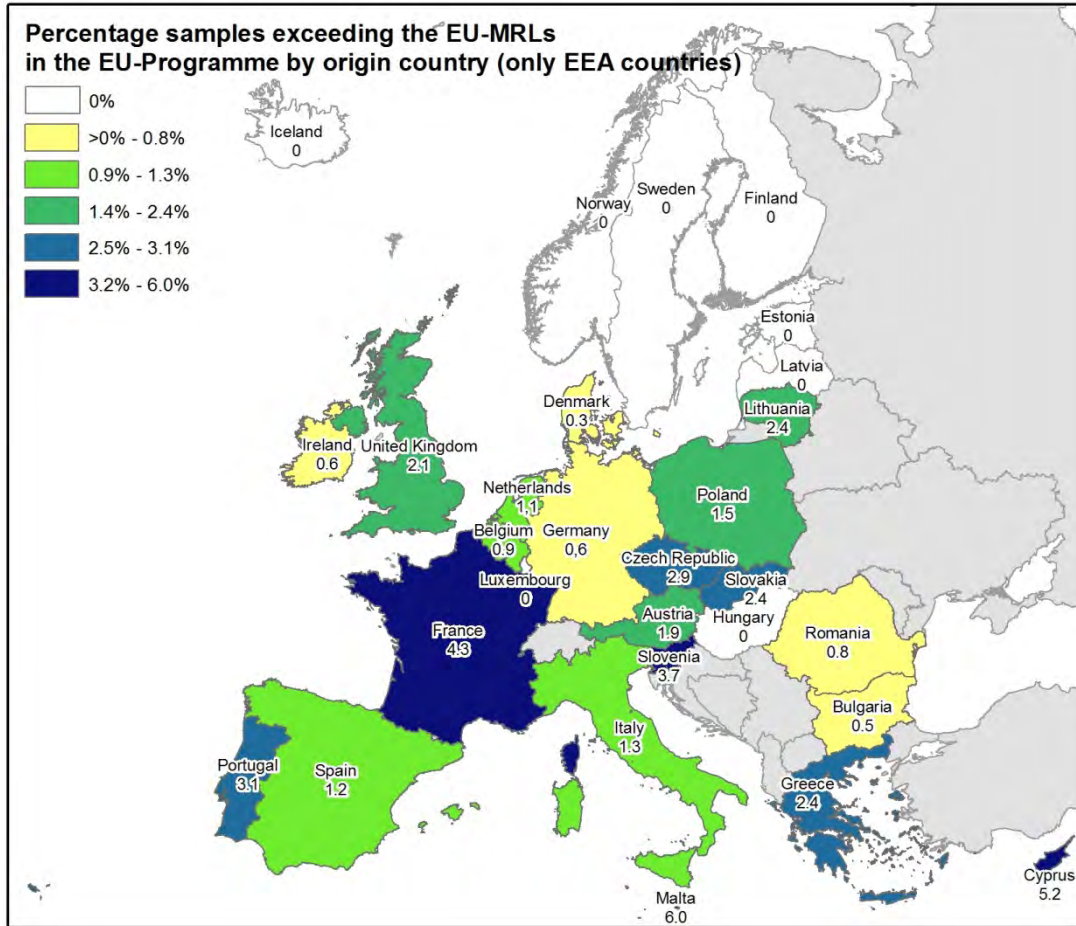
The observed differences may partly be explained by the ratio of three different groups (imported/EU/domestic food) available at country level and by the pesticide use patterns in the producing countries. Furthermore, the percentage of organic samples taken at country level may also have biased the result.

More details on findings in the 2010 EU-coordinated programme by reporting country are reported in Tables D and F of Appendix III.

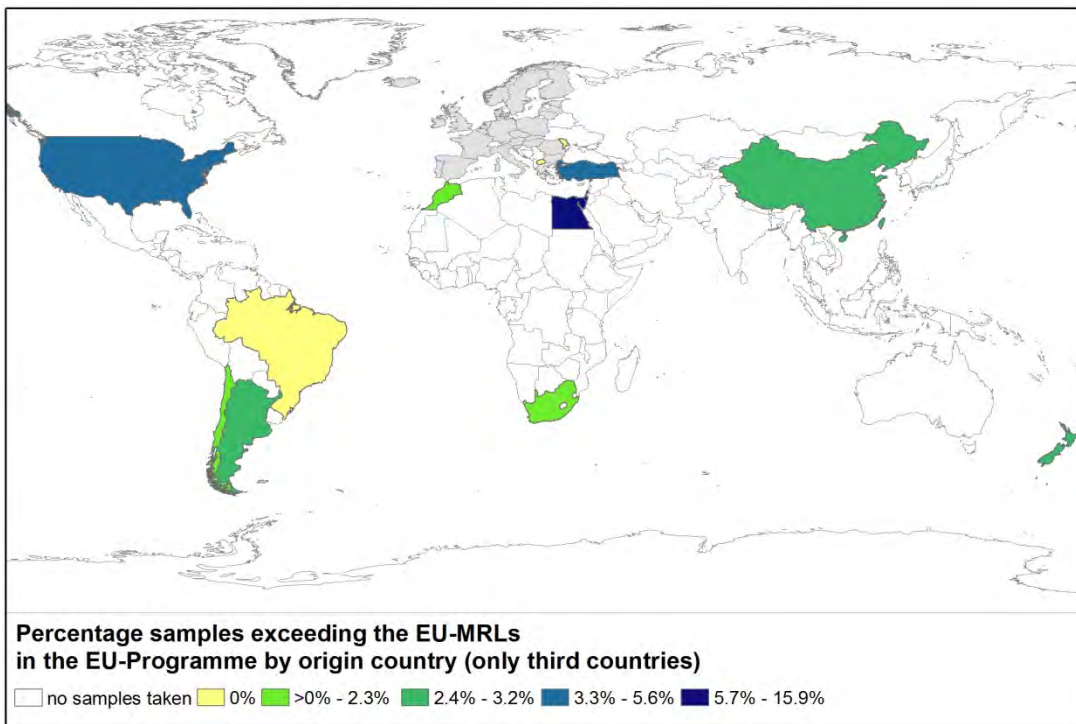


**Map 3-1:** EUCP – Rate of MRL-exceeding samples by reporting country.

In Map 3-2 and Map 3-3 the percentage of the MRL exceedances according to the country of origin is reported for the EEA countries and the third countries, respectively.



Map 3-2: EUCP – Rate of MRL-exceeding samples by country of origin (EEA countries only).



Map 3-3: EUCP – Rate of MRL-exceeding samples by country of origin (third countries only).

### **3.6. Organic food**

The EU-coordinated programme requested Member States to sample and analyse organic food. However, since the total number of organic samples taken in the framework of the European programme among all reporting countries (540 samples among all the 12 commodities tested) was not sufficient to perform reliable statistical analysis, EFSA decided to present the results on the organic food in section 4 of the report. There, the results concerning the national and EU-coordinated programme are combined and summarised.

### SUMMARY CHAPTER 3

The analysis of the results of the 2010 EU-coordinated programme shows that 197 (1.6%) of the 12,168 samples exceeded the MRL, while 5,802 (47.7%) of the samples had measurable residues above the reporting level but below or at the MRL. 6,169 of the samples (50.7%) were free from measurable pesticide residues.

In 2007 and 2010, the same food commodities of plant origin (except pears) were analysed under the EU-coordinated programme. The percentage of samples exceeding the MRLs was rather stable over the last four years (2007 to 2010) with only small variations; the % of samples exceeding the legal limits in this reference period has ranged from 1.2% to 2.3%.

The MRL exceedance rates ranged among the reporting countries from 0.0% to 4.9% of the samples analysed. The highest percentage of samples exceeding the MRL was identified for oats (5.3%), followed by lettuce (3.4%), strawberries (2.8%), peaches (1.8%), apples (1.3%), pears (1.3%), tomatoes (1.2%), leek (1.0%), head cabbage (0.9%) and rye (0.2%). Peaches had the highest percentage of samples with measurable pesticide residues above the LOQ (73%), followed by 68% of the apple samples and 68% of the strawberries. Comparing the results of the 2007 and 2010 EU-coordinated control programmes, it was noted that the only commodity for which the percentage of samples without detectable residues increased was strawberries (from 31.1% in 2007 to 32.1% in 2010); the highest decrease in the percentage of detectable residues was observed for oats (79.7% in 2007 to 45.5% in 2010). The percentage of samples exceeding the MRLs has increased from 2007 to 2010 for the following crops: leek, lettuce, oats, and tomatoes.

*Apples:* 2,057 apple samples were analysed and residues of 94 different pesticides were measured in quantifiable amounts. The most frequently found active substances were dithiocarbamates, captan/folpet (sum), diphenylamine, boscalid, chlorpyrifos, pyraclostrobin, thiacloprid, pirimicarb (sum), thiabendazole and carbendazim and benomyl.

*Head cabbage:* 49 different pesticides were found in the 999 head cabbage samples tested. The dithiocarbamates were detected at the highest frequency rate (on 50.3% of samples); however, it is likely that this result was biased by the presence of naturally occurring substances in brassica vegetables that mimic the occurrence of the dithiocarbamates. The other pesticides were found in 2.2% or less of head cabbage samples. Eight pesticides were found in concentrations exceeding the MRL (dimethoate (sum), dimethomorph, methoxyfenozide, oxamyl, cyproconazole, difenoconazole, ethion and procymidone).

*Leek:* 45 different pesticides were found in the 961 leek samples surveyed. The most frequently found pesticides were the dithiocarbamates, boscalid, tebuconazole and bromide ion. MRL exceedances were observed for nine active substances: bromopropylate, iprodione, indoxacarb, linuron, acrinathrin, triadimefon (sum), thiabendazole, cypermethrin and cyprodinil.

*Lettuce:* 68 different pesticides were found in the 1,568 lettuce samples analysed. The most frequently found pesticides were bromide ion, the dithiocarbamates, iprodione, cyprodinil, boscalid, propamocarb, fludioxonil and imidacloprid. MRL exceedances were observed for 25 active substances. The highest exceedance rate was observed for bromide ion, dithiocarbamates, chlorothalonil, iprodione, chlorpyrifos and dimethoate.

*Milk:* four different pesticides were found in the 654 milk samples taken. These active substances were DDT, hexachlorobenzene, HCH beta and chlorpyrifos. MRL exceedances were not observed.

*Oats:* 20 different pesticides were found in the 246 oat samples analysed. The most frequently found pesticides were chlormequat, glyphosate and pirimiphos-methyl. Chlormequat was the only pesticide found exceeding the MRL, which it did in 8.1% of all oats samples.

*Peaches:* 79 different pesticides were found in the 1,200 peaches samples. The most frequently found pesticides were tebuconazole, dithiocarbamates, iprodione, spinosad (sum), chlorpyrifos, triflumuron, etofenprox, cyprodinil and fenbuconazole. 17 pesticides were found in concentrations exceeding the MRL; the most frequent MRL exceedances concerned captan, phosmet, dimethoate (sum) and carbendazim and benomyl.

*Pears:* In pears, only amitraz (sum) was analysed in 388 samples. Amitraz (sum) was found in six samples, five of these had residues above the MRL.

*Rye:* 18 different pesticides were found in the 406 rye samples tested. The most frequently found pesticide residues were chlormequat, bromide ion and mepiquat. In one sample chlormequat exceeded the MRL.

*Strawberries:* 82 different pesticides were found in the 1,272 samples surveyed. The most frequently found pesticides were cyprodinil, fludioxonil, boscalid, fenhexamid, pyraclostrobin, azoxystrobin and thiacloprid. 21 pesticides were found in concentrations exceeding the MRL; the most frequent MRL exceedances concerned spinosad, acetamiprid, methomyl and thiodicarb, carbendazim and benomyl, procymidone and dichlorvos.

*Swine meat:* Eight different pesticides were found in the 623 samples of swine meat controlled. The active substances were DDT, lindane, hexachlorobenzene, heptachlor, diazinon, pirimiphos-methyl, permethrin and cypermethrin. MRL exceedances were not observed. Some of the residues detected in swine meat may have been caused by environmental contamination due to past uses of these substances (most of those are banned in Europe) rather than direct use of these substances in agriculture or livestock husbandry.

*Tomatoes:* 84 different pesticides were found in the 1,794 samples analysed. The most frequently found pesticides were bromide ion and dithiocarbamates. Eight pesticides were found in concentrations exceeding the MRL: ethephon, acetamiprid, pyraclostrobin, spiroxamine, oxadixyl, bifenthrin, procymidone and deltamethrin.

Overall, the pesticide/crop combinations for which residue concentrations above the reporting level were found most frequently were chlormequat/oats (64.6% of the samples), dithiocarbamates/head cabbage (50.3%) and dithiocarbamates/leek (40.8%).

The highest percentage of MRL exceedances was found for chlormequat in oats, where the MRL was exceeded in 8.1% of all samples.

Of the 178 substances included in the 2010 EU-coordinated programme, residues exceeding the MRL were found for 73 different pesticides. The most frequent MRL exceedances were detected for residues of chlormequat (3.6% of the samples) and amitraz, which exceeded the MRL in 1.3% of the samples. Measurable residues were found for 144 different substances.

### **Recommendations**

EFSA recommends providing the reporting countries with more guidance on the submission of the control results concerning food of animal origin and on the checking of sample compliance against the MRL in line with the legal provisions set out for the samples of animal origin.



#### 4. Results of the national control programmes, including results of the EU-coordinated programme

The findings reported in this section refer to results from both the national and the EU-coordinated control activities. Since samples taken in the framework of the EU-coordinated programme were in many cases analysed for a wider range of active substances than defined in the coordinated programme, they were also counted as samples falling under the national control programmes. A strict separation of the two programmes is therefore not possible.

##### 4.1. Overall results

In total, 77,075 samples were analysed in 2010. The reporting countries submitted results for more than 14 million<sup>51</sup> individual analytical determinations.

97.2% of the surveillance samples analysed (70,771 samples) were below or at the legal MRLs. In 2.8% of the samples the legal limits were exceeded for one or more pesticides (2,042 samples).

In total, residues of 412 different pesticides were found in measurable quantities for surveillance samples. As in previous years, the number of different pesticide residues found in fruit and nuts and vegetables in 2010 (301 and 328 different pesticides, respectively) was higher than the number of pesticides found in cereals (88 pesticides), which also reflects the larger number of plant protection products used in the fruit and vegetables category and the diversity of crops included in this category.

##### 4.2. MRL exceedance rate over time

Considering all samples submitted in the framework of the national and the EU-coordinated monitoring programmes, the percentage of samples exceeding the legal limits was slightly higher in 2010 (2.8%) compared with the results of 2009 (2.6%). From 1996 to 2010, the exceedance rate ranged from 2.6% (2009) to 5.5% (2002).

The overall MRL exceedance rate is a statistical descriptor summarising the findings of the reference year. However, it is important to note that this figure is influenced by a number of factors such as the pesticide use patterns, the design of the monitoring programmes and the legal framework. Since these factors have changed significantly during the last years, the results of 2010 can not directly be compared with the results of previous years to perform trend analysis regarding the actual “quality” of food with respect to pesticide occurrence, or to compare the food available on the EU market with other markets.

##### 4.3. Origin of samples exceeding the EU MRLs (surveillance only)

In 2010, the harmonised EU MRLs were more often exceeded for surveillance samples from third countries (7.9%) than for samples from the EU (1.5%) (Table 4-1).

**Table 4-1:** EU+NCP – Exceedances of MRLs according to the sample origin (EU, imported, unknown) for surveillance samples - 2010.

Sample origin	Number of samples	Above MRL	%	LCL(a)	LCL(b)
EEA	55210	809	1.5	1.4	1.6
Third country	14818	1173	7.9	7.5	8.4
Unknown	2785	60	2.2	1.7	2.8
	<b>72813</b>	<b>2042</b>			

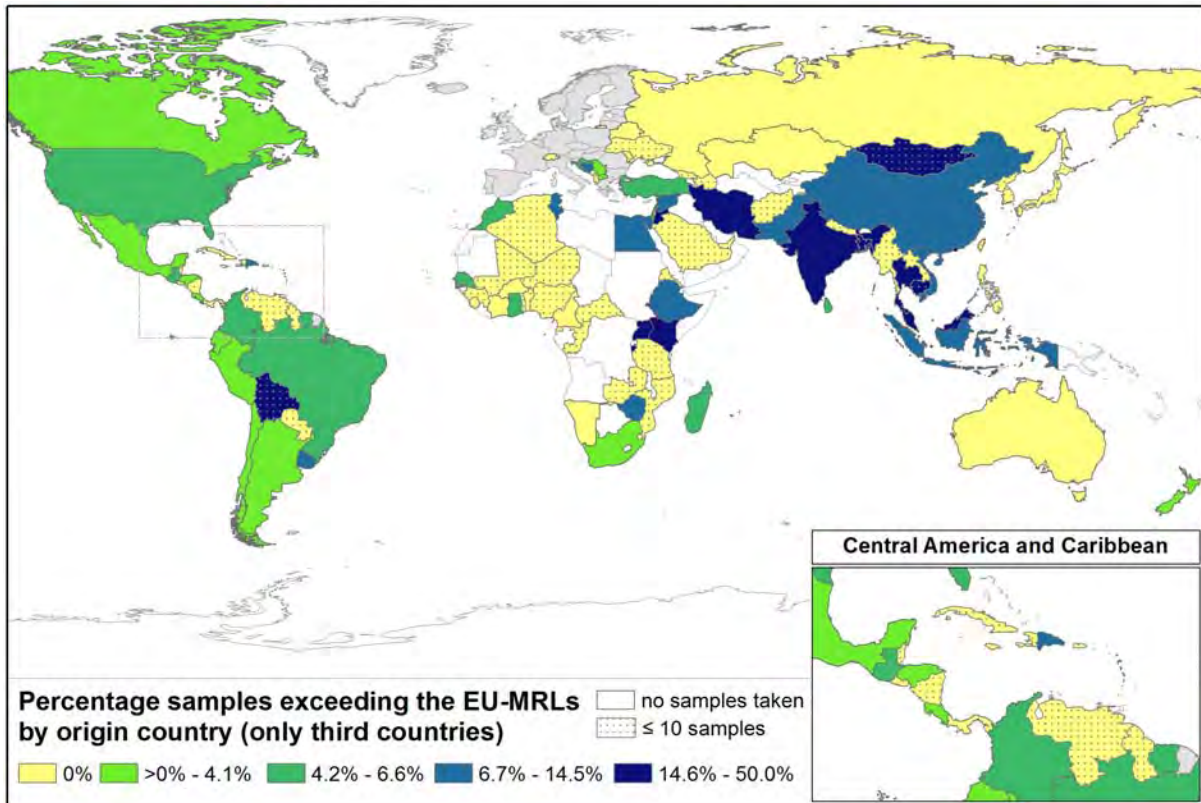
(a): Lower confidence limit<sup>52</sup>

(b): Upper confidence limit

<sup>51</sup> This is the number of determinations in line with the legal residue definition.

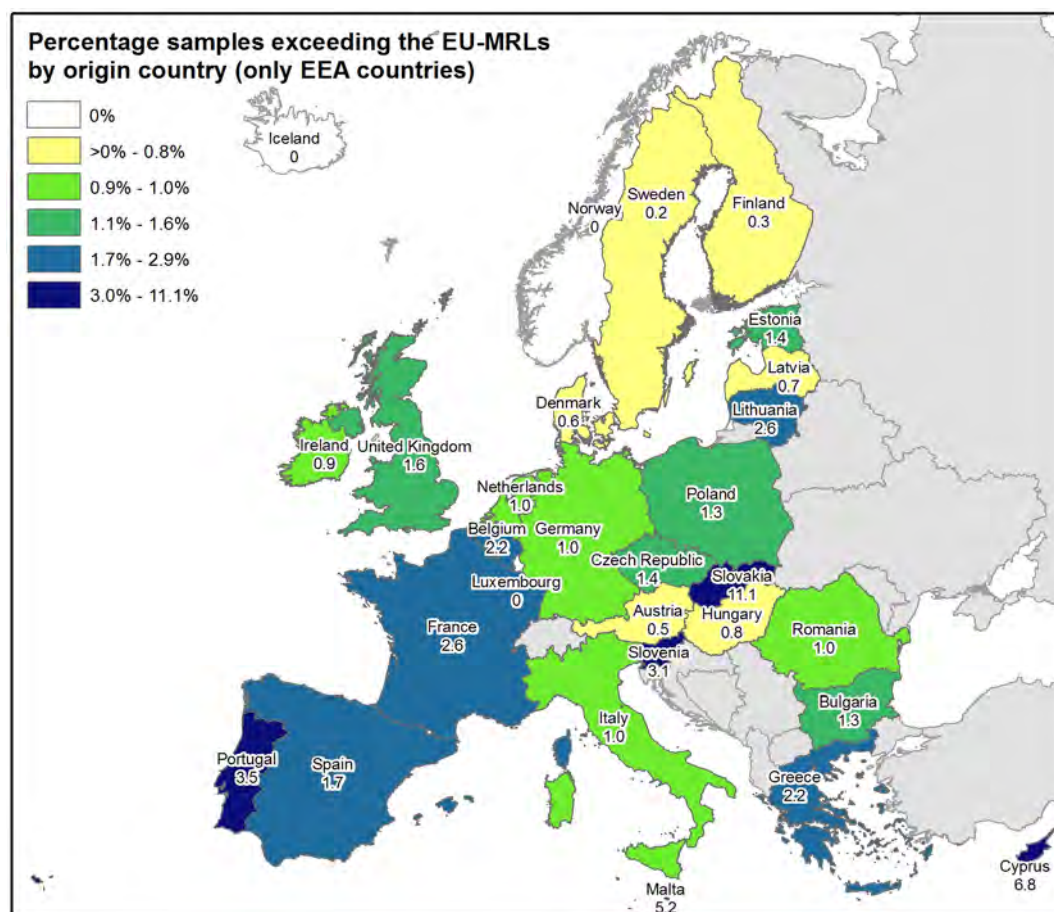
<sup>52</sup> See “Confidence interval” in the Glossary.

The results concerning the MRL exceedances in products produced in third countries and in EEA countries are presented separately in Map 4-1 and Map 4-2. Considering the number of samples taken, the results reported for some countries are subject to high statistical uncertainty. The highest MRL exceedance rates (expressed in percentage of samples analysed) were identified for food originating from Cambodia (50.0% of the samples), Mongolia (50.0%), Hong Kong (47.8%), Bangladesh (44.4%), Bolivia (33.3%), India (28.3%), Uganda (23.6%), Burundi (22.2%), Jordan (21.7%), Iran (21.4%), Thailand (20.9%) and Mauritius (20.0%)<sup>53</sup>. The countries for which a low number of samples were taken (less than or equal to 10) - and therefore their results are affected by high uncertainties - are represented with dots in Map 4-1.



**Map 4-1:** EU+NCP – Percentage of surveillance samples exceeding the MRL by origin country (third countries only) - 2010.

<sup>53</sup> Taking into account that the total number of samples from these countries differ widely (e.g. less than or equal to 10 samples were reported for Cambodia, Mongolia, Bangladesh, Bolivia, Burundi, and Mauritius), the results are affected by statistical uncertainty.



**Map 4-2:** EU+NCP – Percentage of surveillance samples exceeding the MRLs by origin country (countries from the EEA area only) - 2010.

For the EEA area, MRL exceedance rates above 3% were identified for products originating from Slovakia, Cyprus, Malta, Portugal and Slovenia.

Table 4-2 focuses on country/commodity combinations for which at least 10 samples were analysed and more than 15% of the samples exceeded the MRL.

**Table 4-2:** EU+NCP – Imported food products most frequently exceeding the MRL (sorted alphabetically by country of origin) - 2010.

Origin country <sup>(*)</sup>	Food item <sup>(*)</sup>	No. of samples	% of samples above MRL
Brazil	Yams	17	35.29
	Papaya	56	19.64
Canada	Cherries	10	20
China	Chinese cabbage	12	83.33
	Broccoli	13	76.92
	Tomatoes	22	40.91
Colombia	Passion fruit	22	18.18
Dominican Republic	Peppers	68	27.94
	Beans (with pods)	151	25.83
	Aubergines	59	15.25
Ecuador	Papaya	23	17.39
Egypt	Oranges	117	25.64

Origin country <sup>(*)</sup>	Food item <sup>(*)</sup>	No. of samples	% of samples above MRL
	Peppers	19	21.05
	Strawberries	94	19.15
Ethiopia	Strawberries	12	16.67
India	Peppers	17	58.82
	Okra	42	54.76
	Table grapes	198	52.53
	Pomegranate	14	28.57
Israel	Pomegranate	17	23.53
	Strawberries	19	15.79
Jordan	Okra	23	30.43
	Peppers	37	18.92
Kenya	Peas (with pods)	68	38.24
Morocco	Beans (with pods)	103	15.53
Peru	Mandarins	29	17.24
Thailand	Celery leaves	32	56.25
	Lychee	21	52.38
	Beans, dry	10	50
	Peppers	108	46.3
	Chinese cabbage	13	46.15
	Broccoli	24	41.67
	Flowering brassica	13	38.46
	Basil	60	26.67
	Guava	18	22.22
	Okra	18	16.67
	Beans (with pods)	182	15.38
Turkey	Vine leaves	14	64.29
	Pomegranate	31	38.71
Uganda	Peppers	25	48
United States	Walnuts	30	20
Uruguay	Oranges	20	20
Vietnam	Guava	17	29

<sup>(\*)</sup> Only countries where at least 10 samples were taken and 15% or more of the samples exceeded the MRL.

In Table 4-3 additional information on the pesticides found in food items for which a high MRL exceedance rate was identified are reported. The table lists only those combinations of food items, country of origin and compounds for which at least 10 samples were analysed and the MRL exceedances rate accounted for more than 25%. The highest proportion of MRL exceedances was found for acetamiprid in Chinese cabbage from China (83% of the total number of Chinese cabbage samples from China analysed for this pesticide exceeded the MRL). Broccoli with acetamiprid and dimethomorph originating from China had exceedance rates of 77% and 69%, respectively. Also for table grapes from India, a high exceedance rate of 65% was found for chlormequat residues.

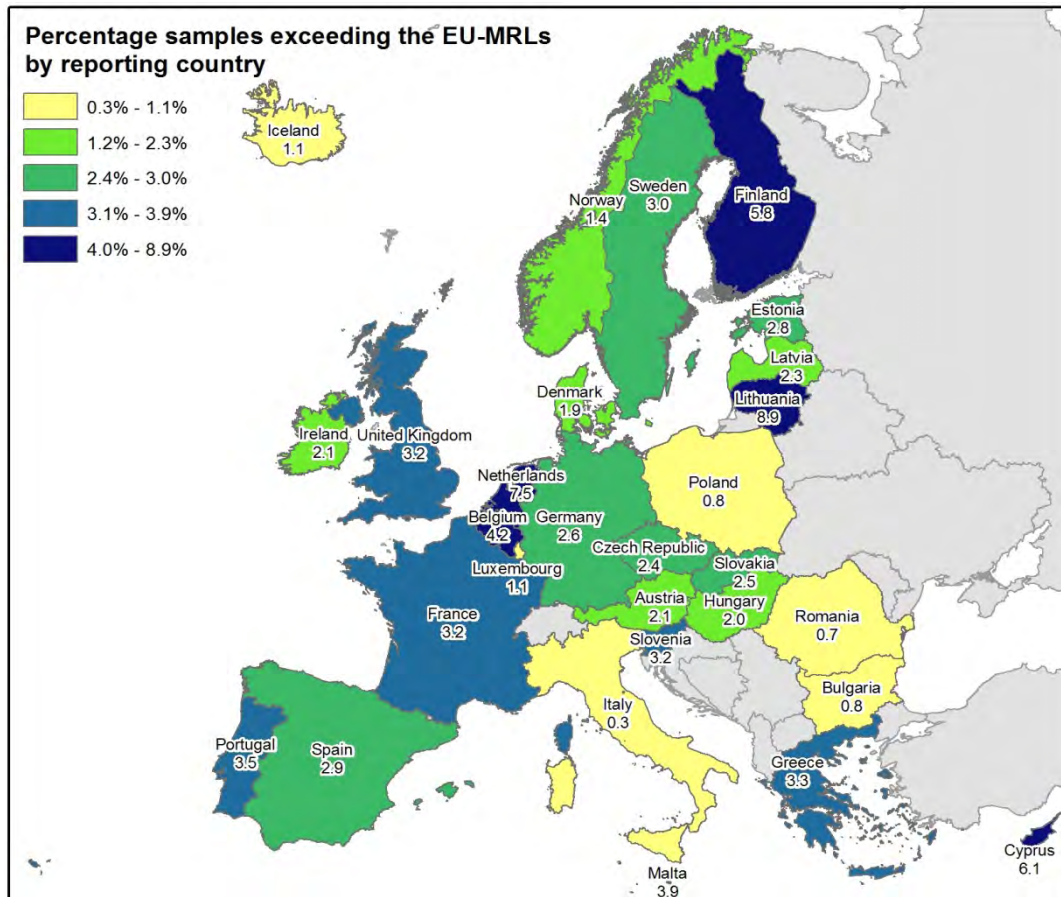
**Table 4-3:** EU+NCP – Combinations of country of origin/food item/ pesticide (sorted alphabetically by country) with the highest percentages of MRL exceedances (surveillance samples only) - 2010.

Country of origin	Product	Compound	No. of samples analysed <sup>(*)</sup>	% of samples analysed with residues above the MRL <sup>(*)</sup>
Argentina	Garlic	2,4,6-Tribromophenol	12	25%
Brazil	Yams	Carbendazim and benomyl	17	35%
China	Broccoli	Acetamiprid	13	77%
		Dimethomorph	13	69%
	Chinese cabbage	Acetamiprid	12	83%
		Dimethomorph	12	58%
		Pyridaben	12	25%
Tomatoes	Acetamiprid	19	47%	
Cyprus	Celery leaves	Chlorpyrifos	13	31%
India	Peppers	Profenofos	12	42%
		Ethion	16	38%
		Acephate	12	25%
	Table grapes	Chlormequat	144	65%
Jordan	Okra	Acetamiprid	23	26%
Kenya	Peas (with pods)	Dimethoate (sum)	68	35%
Import (unknown country)	Rice	Isoprothiolane	40	33%
Slovakia	Infant formulae	Captan	57	46%
Slovenia	Pears	Chlormequat	12	25%
Thailand	Lychee	Carbendazim and benomyl	21	38%
Turkey	Pomegranate	Acetamiprid	31	35%
		Boscalid	13	46%
	Vine leaves	Azoxystrobin	13	46%
		Kresoxim-methyl	12	25%

<sup>(\*)</sup> The full list of results per country of origin for both enforcement and surveillance sampling is given in Appendix III, Table K.

#### 4.4. Results by reporting country

The MRL exceedance rate, calculated for the food sampled in the EEA countries (surveillance samples only), is represented in Map 4-3. Similar to the results found in the EU-coordinated programme (see section 3.5), the results vary significantly among the countries, ranging from an 8.9% MRL exceedance rate in Lithuania to 0.3% in Italy. MRL exceedance rates above the average (2.8%) were observed in Lithuania (8.9%), the Netherlands (7.5%), Cyprus (6.1%), Finland (5.8%), Belgium (4.2%), Malta (3.9%), Portugal (3.5%), Greece (3.3%), France (3.2%), United Kingdom (3.2%), Slovenia (3.2%) and Sweden (3.0%).

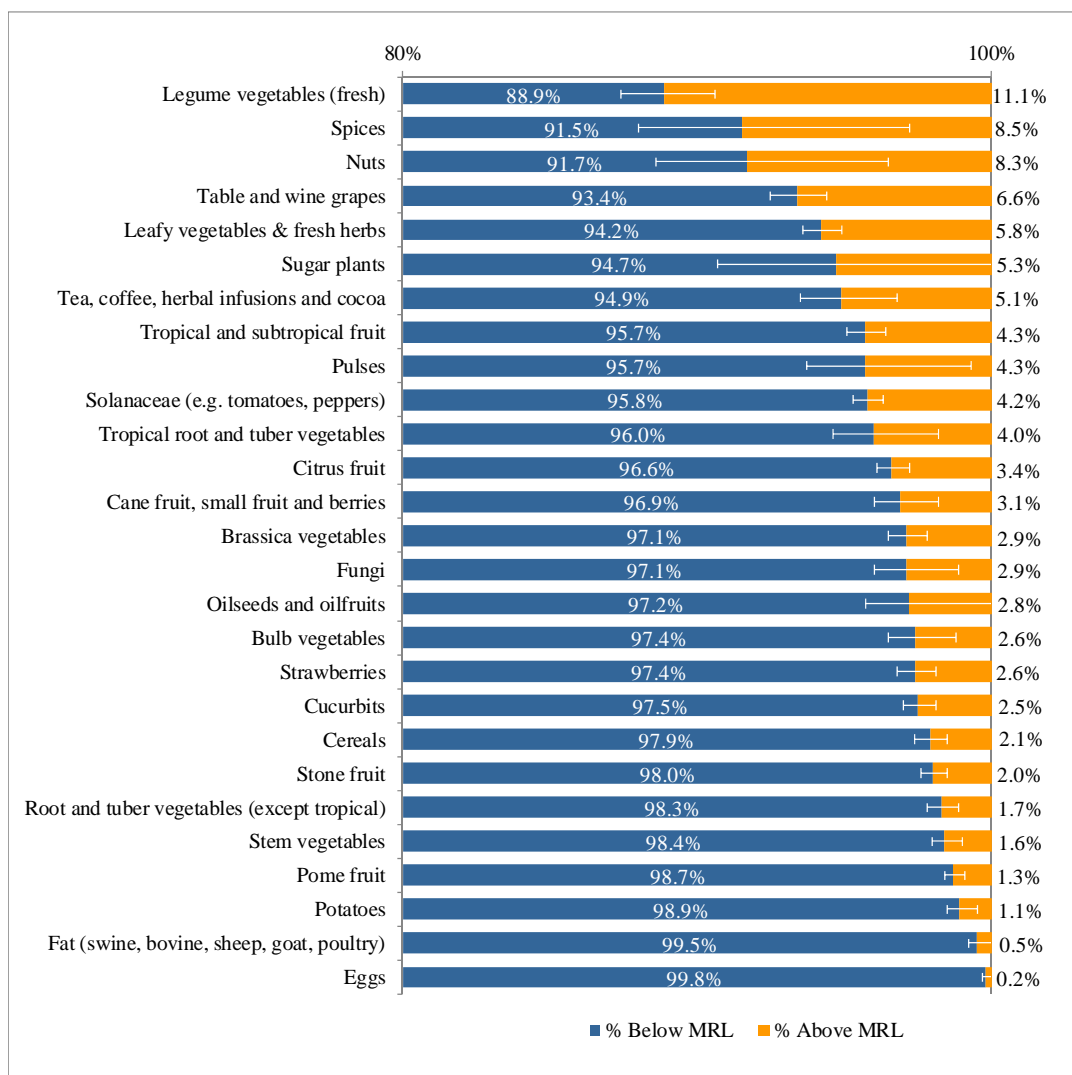


**Map 4-3:** EU+NCP – Percentage of surveillance samples exceeding the EU MRLs by sampling country - 2010.

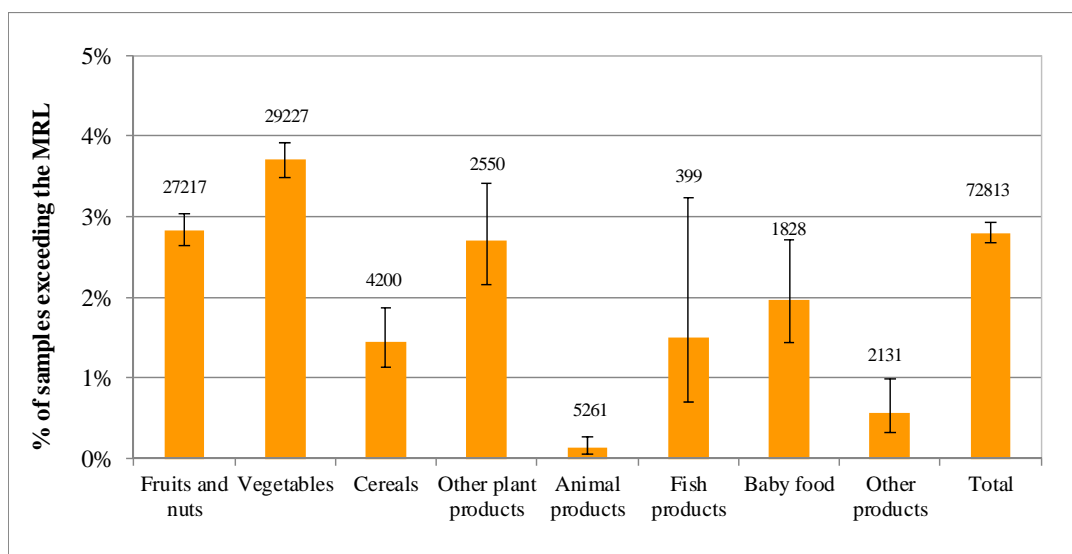
#### 4.5. Results by food commodity group

In Figure 4-1 the MRL exceedance rates are reported for food commodity groups. The highest MRL exceedance rates were detected for legume vegetables (e.g. beans with pods), spices and nuts. High MRL exceedance rates were also observed in table and wine grapes and leafy vegetables (e.g. lettuce) and fresh herbs.

Figure 4-2 shows the MRL exceedance rates (surveillance samples) by larger food groups (processed and unprocessed commodities) with their confidence levels; above the bars for each group the number of samples taken is indicated.



**Figure 4-1:** EU+NCP – Percentage of compliance with EU MRL for unprocessed commodities (surveillance samples) - 2010<sup>54</sup>.



**Figure 4-2:** EU+NCP – MRL exceedance rates of surveillance samples according to the different food group tested (processed and unprocessed commodities); above each bar the number of samples taken is reported.

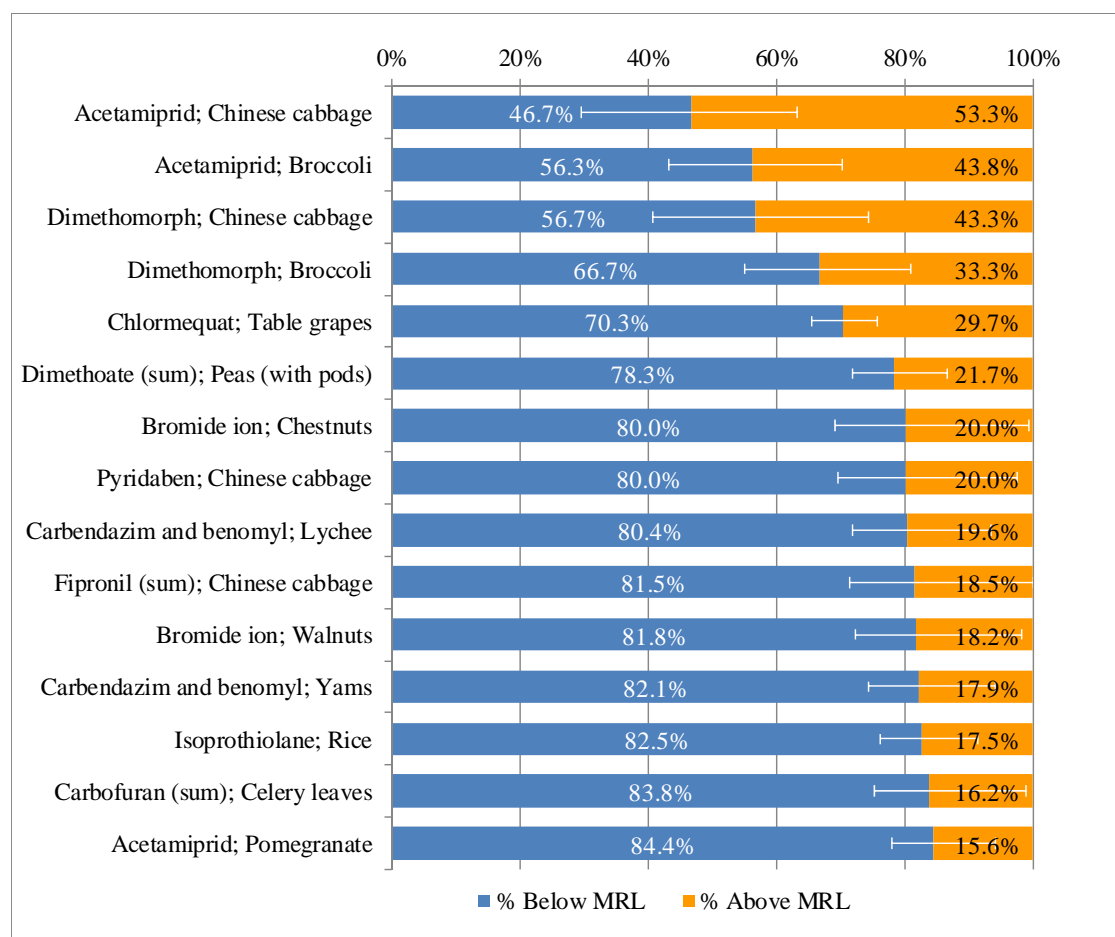
<sup>54</sup> Due to the rounding of the single percentages, the summed percent may slightly differ from 100%.

#### 4.6. Results by pesticide/crop combination

The pesticide/crop combinations with the highest MRL exceedance rates are shown in Figure 4-3. The figure includes only those pesticide/crop combinations for which at least 20 samples were analysed and for which more than 15% of the samples were found exceeding the MRL.

The figure shows that there are specific pesticide/crop combinations, such as acetamiprid in Chinese cabbage (most of them from Hong Kong, China and Thailand), acetamiprid in broccoli (most of them from China and Hong Kong), dimethomorph in Chinese cabbage (most of them from Hong Kong, China and Thailand) with high frequencies of MRL exceedances. If not already analysed, these pesticide/crop combinations could be considered in future control programmes at national level.

The full list of pesticides found in surveillance samples of animal products, cereals, fruit and vegetables can be found in Appendix III, Table A. Results of surveillance sampling per reporting country are listed in Appendix III, Table B (cereals, fruit and nuts, vegetables, other plant products, animal products, and baby food). Results of enforcement sampling per reporting country are tabulated in Appendix III, Table G.



**Figure 4-3:** EU+NCP – Pesticide/crop combinations with MRL exceedance rates >15% and at least 20 samples (surveillance samples), including confidence intervals for percentages- 2010<sup>54</sup>.



#### 4.6.1. Baby Food/Infant Formulae

A general default EU MRL for baby food/infant formulae of 0.01 mg/kg is applicable to all pesticides unless specific MRLs lower than 0.01 mg/kg were established in EU legislation<sup>55</sup> for this food type. In 2010, 28 countries reported data on analyses of baby food. Overall, 1,828 surveillance samples were analysed. Residues above the LOQ were found in 154 samples (8.4% of the samples). In total, 66 different pesticides were measured at quantifiable levels. In 41 samples multiple residues (two or more residues) were measured above the LOQ in the same sample; in one sample six different pesticides (chlordane, cyfluthrin, cypermethrin, deltamethrin, lambda-cyhalothrin and pirimiphos-methyl) were present in measurable quantities. Five out of the six substances measured in the concerned sample are approved for use in Europe; one residue (pirimiphos-methyl, 0.10 mg/kg) exceeded the default MRL of 0.01 mg/kg.

The MRL applicable for baby food was exceeded in 36 samples (2.0%) of the baby food surveillance samples. 26 of the MRL exceedances were related to captan residues; other MRL exceedances in baby food were due to residues of anthraquinone, cypermethrin (sum), chlorpyrifos, imazalil and pirimiphos-methyl. The baby food found violating the EU MRLs originated from Germany, Hungary, Portugal, Slovakia and Spain.

The results of the surveillance samples for baby food for each reporting country are listed in Appendix III, Table B. The analysis of the results revealed that in many cases reporting countries did not apply analytical methods which were sensitive enough to analyse residues below or at the MRL. In particular, all the samples analysed for the following six substances were analysed with analytical methods not sufficiently sensitive (LOQ higher than the MRL): meptyldinocap (nine samples analysed), bromide ion (six samples), glufosinate-ammonium (72 samples), prohexadione (36 samples), hymexazol (31 samples) and chlorpropham (12 samples). Due to the insufficient performance of the analytical methods, a correct enforcement of the baby food legislation is not always ensured. It is therefore recommended to improve the analytical methods in order to be capable of quantifying residues at the MRL with sufficient accuracy. The European Reference Laboratories are advised to continue providing support to the national laboratories regarding the implementation of adequate analytical methods and including in the EU Proficiency Tests the pesticides for which MRLs lower than the default limit of 0.01 mg/kg are set in the legislation specific for baby food.

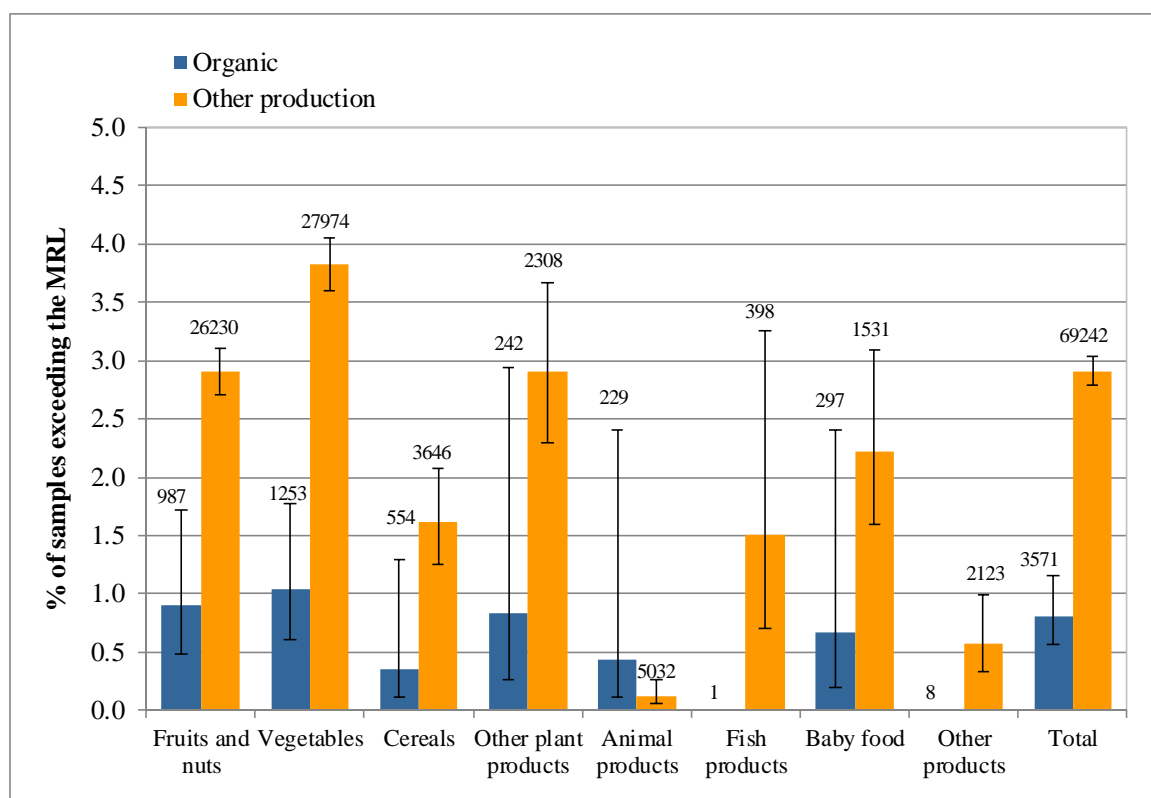
#### 4.6.2. Organic food

In 2010, a total of 3,571 organic samples were analysed and provided by 28 reporting countries; the results concerning these samples are summarised in Figure 4-4.

For all food groups in Figure 4-4 – except for ‘Animal products’ - the conventionally grown products (“Other production” in the Figure) showed a higher MRL exceedance rate than the organic products. For fruit and nuts, a lower rate of MRL exceedances (0.9%) was found in comparison to conventionally grown fruit and nuts (2.9%). For vegetables the exceedance rates of the surveillance samples were 1.0% and 3.8% respectively for organic and conventionally grown products. In organic and conventional animal products, one and seven samples respectively were found exceeding the legal limit. Overall, the MRL exceedance rate for organic food was 0.8%.

Comparison of results regarding organic and other production types per reporting country can be found in Appendix III, Table H. Table I, in Appendix III shows more detailed results on different production types by commodity.

<sup>55</sup> Commission Directive 2006/141/EC for infant formulae and follow-on formulae and in Commission Directive 2006/125/EC for processed cereal-based foods and baby foods for infants and young children.



**Figure 4-4:** Comparison of the results for organic and conventional products: percentages of surveillance samples exceeding the MRL (total number of samples analysed for each food group is displayed on top of the chart bars together with their confidence intervals) - 2010.

In total, 131 different substances were found in organic samples. Table 4-4 lists the pesticides found in measurable levels in at least five organic samples. It is noted that out of these 26 pesticides, one is permitted in organic farming according to Regulation (EC) No 834/2007 and Regulation (EC) No 889/2008; several other pesticides are related to environmental contamination (e.g. hexachlorebenzene and DDT), to naturally occurring substances (e.g. bromide ion, dithiocarbamates measured as carbondisulfide) or to pesticides not allowed in organic production in Europe.

**Table 4-4:** EU+NCP – Pesticides found in organic food (only pesticides which were detected in at least five surveillance samples) - 2010.

Pesticide	Product	Range measured residue (mg/kg)	Number of detections	Note
Hexachlorobenzene	Baby food, cattle, bovine meat and poultry	0.062-0.000013	45	Banned. Organic (POP) <sup>56</sup> Persistent Pollutant
DDT (sum)	Baby food, cattle, carrots, tea, bovine meat, poultry and chicken eggs	0.160-0.00006	34	Banned. POP
Bromide ion	Lettuce, tomatoes, peppers, coconuts, wheat, lentils, rucola, rye and asparagus	50.0-0.06	25	Pesticide use of methylbromide not allowed in organic production. In some of these food products

<sup>56</sup> POP: substances considered as Persistent Organic Pollutants according to Council Decision of 14 October 2004, (2006/507/EC).

Pesticide	Product	Range of measured residue levels (mg/kg)	Number of detections	Note
				inorganic bromide ion occurs naturally
Spinosad (sum)	Rucola, tomatoes, strawberries, apricots, table grapes, mandarins, peppers, apricots, pears and cucumbers	0.153-0.006	22	
Carbendazim and benomyl	Apples, peaches, apricot, tomatoes, raspberries, papaya, beans, mint and honey	0.106-0.004	18	Pesticide use not allowed in organic production
Chlorpyrifos	Tomatoes, oranges, rye, citrus, pears, peaches, peppers, barley and wheat	0.27-0.003	17	Pesticide use not allowed in organic production
Cypermethrin (sum)	Baby food, maize, wheat, apricots, tomatoes, oranges, lychees, lettuce and tea	1.10-0.003	17	Pesticide use not allowed in organic production
Boscalid	Mint, apples, table grapes, carrots, tomatoes, peppers and lettuce	0.110-0.003	14	Pesticide use not allowed in organic production
Chlormequat	Rye, oats, wheat and pears	0.127-0.0011	13	Pesticide use not allowed in organic production
Imidacloprid	Papaya, tomatoes, peppers, cucumbers, maize and rice	0.09-0.005	12	Pesticide use not allowed in organic production
Endosulfan (sum)	Baby food, soya bean, pumpkin seeds and tea leaves	0.03-0.000054	12	Pesticide use not allowed in organic production. Persistent pesticide in the soil. No longer authorised in EU
Orthophenylphenol	Lemons, apples, pears, bananas, potatoes, carrots, onions and maize	0.1-0.04	11	Pesticide use not allowed in organic production
Thiabendazole	Mandarins, bananas, apples, cucumbers, potatoes, oranges, mandarins and fennel	1.78-0.007	11	Pesticide use not allowed in organic production
Imazalil	Mandarins, bananas, lemons, limes, grapefruit, oranges and potatoes	2.50-0.003	10	Pesticide use not allowed in organic production
Dithiocarbamates	Tomatoes, courgettes, head cabbage, lettuce, beans and leek	0.490-0.014	10	Pesticide use not allowed in organic production. Possible false positive results in brassica crops and in leeks
Pirimiphos-methyl	Wheat, maize, linseed and rye	0.040-0.003	8	Pesticide use not allowed in organic production
Acetamiprid	tomatoes, table grapes and apricots	0.620-0.004	8	Pesticide use not allowed in organic production
Chlorpropham (sum)	Potatoes, ginger and onions	0.050-0.006	8	Pesticide use not allowed in organic production
Cyprodinil	Kiwi, table grapes, carrots and raspberries	0.040-0.002	7	Pesticide use not allowed in organic production
Iprodione	Lettuce, apples, peaches, raspberries and cauliflower	10.8-0.007	6	Pesticide use not allowed in organic production
Fenpropimorph	Barley and bananas	0.005-0.003	6	Pesticide use not allowed in organic production

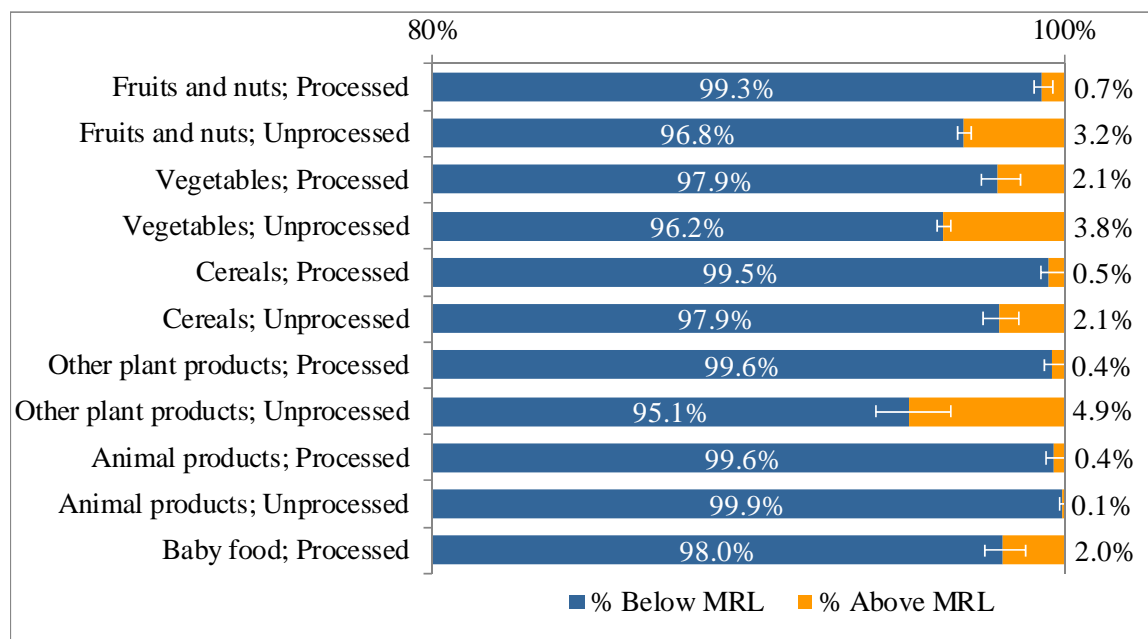
Pesticide	Product	Range of measured residue levels (mg/kg)	Number of detections	Note
Lambda-cyhalothrin	Baby food, chard, tomatoes and tea leaves	0.130-0.004	6	Pesticide use not allowed in organic production
Fludioxonil	Potatoes, carrots and raspberries	0.023-0.002	5	Pesticide use not allowed in organic production
Metalaxyl (sum)	Lychee, mandarins, cauliflower and carrots	0.130-0.008	5	Pesticide use not allowed in organic production
Epoxiconazole	Barley	0.029-0.009	5	Pesticide use not allowed in organic production
Esfenvalerate (sum)	Tomatoes and wheat	0.056-0.005	5	Pesticide use not allowed in organic production

#### 4.6.3. Processed food

The MRLs applicable to processed commodities are based on the MRLs established for raw agricultural commodities, taking into account processing factors which reflect the changes in levels of pesticide residues caused by processing or mixing<sup>57</sup>. Harmonised processing factors however are not yet established at EU level.

In 2010, 28 countries reported data on analysis of processed products. A total of 11,571 surveillance samples were analysed. Residues above the MRL were reported for 125 samples (1.1%) of processed products, including plant products, animal products and baby food.

Figure 4-5 compares the MRL exceedance rates (surveillance samples only) for the main food categories<sup>58</sup> between processed and unprocessed food. In all product categories, except animal commodities, the MRL exceedance rate was lower for processed commodities than for unprocessed products.



**Figure 4-5:** EU+NCP – MRL compliance rate of surveillance samples 2010.

Detailed results for surveillance samples at commodity level are shown in Appendix III, Table J.

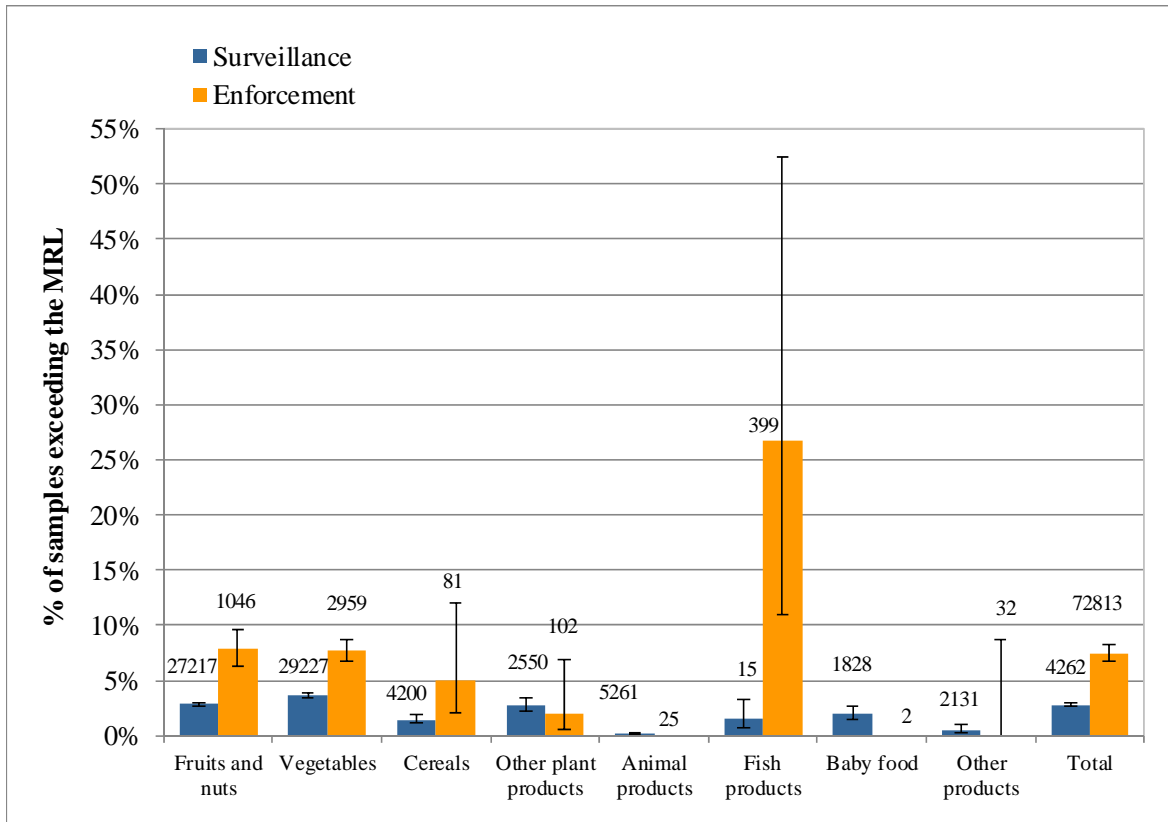
<sup>57</sup> See “MRL” in the Glossary.

<sup>58</sup> See “Food commodities” in the Glossary.

The lack of processing factors in Annex VI of Regulation (EC) No 396/2005 hampers the enforcement of MRLs at national level for those food items requiring conversion. Therefore, EFSA recommends that efforts should be made to establish a harmonised list of processing factors applicable throughout Europe.

#### 4.6.4. Enforcement and surveillance samples

Figure 4-6 shows a comparison of the percentage of samples above the MRL reported for the total of surveillance and enforcement samples for the main food categories.



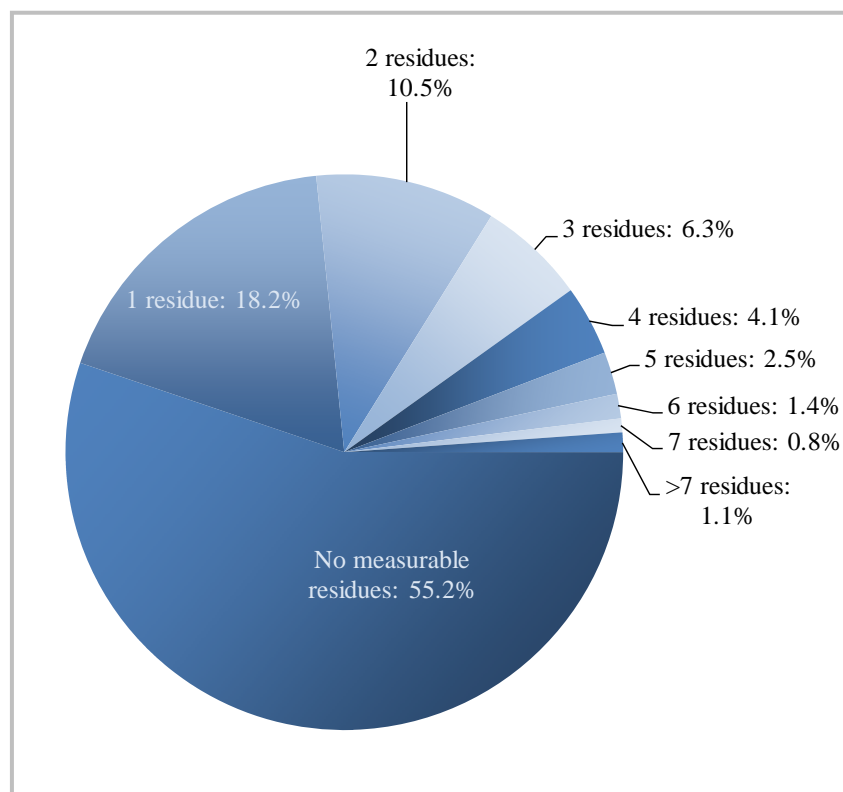
**Figure 4-6:** EU+NCP – Percentage of samples (surveillance and enforcement) exceeding the MRL (total number of samples analysed for each food group is displayed on top of the chart bars) - 2010.

In enforcement samples, the MRL exceedance rate was generally higher than in surveillance samples. In total, 315 samples, corresponding to 7.5% of all enforcement samples, exceeded the MRL. No exceedance of the MRL was observed for enforcement samples of baby food and animal products.

#### 4.6.5. Multiple residues in the same sample

Considering the results of both the national and the EU-coordinated programmes in 2010, residues of two or more pesticides were found in 19,382 samples, corresponding to 26.6% of the surveillance samples analysed (Figure 4-7).

Multiple residues findings were observed by all reporting countries.



**Figure 4-7:** EU+NCP – Percentage of samples according to the number of different residues found in individual surveillance samples in 2010.

Important commodities for human consumption with high frequencies of multiple residues were liver (95.7% of 23 liver samples), citrus fruits (62.8% of 4,363 citrus fruit samples) and strawberries (60.5% of 2,479 strawberries samples). Additional unprocessed commodities with multiple residues, sorted according to the percentage of multiple residues, are listed in Table 4-5.

According to the current EU legislation, the presence of multiple residues in one sample as such is not a reason for considering a sample as not compliant with the MRL legislation as long as the individual residues do not exceed the single MRLs. Legal actions have to be imposed by the Member States in cases where one or more MRLs are exceeded.

In 2010, 338 (0.5% out of the 72,813 surveillance samples) unprocessed samples were found to exceed two or more EU MRLs (Table 4-6). The highest number of multiple MRL exceedances in one sample was 11, measured in vine leaves (processed grape leaves). The commodity with the highest number of samples with multiple MRL exceedances was peppers (46 out of 1,633 unprocessed surveillance samples; 2.8% of the samples).

The number of samples with multiple residues per reporting country can be found in Appendix III, Table C.

**Table 4-5:** EU+NCP – Percentage of unprocessed surveillance samples with multiple residues by commodity groups (only results for commodity groups with more than five samples with multiple residues) – 2010<sup>54</sup>.

Product (Number of samples analysed)	Number of different residues (n) in the same sample									Overall >1
	0	1	2	3	4	5	6	7	>7	
	Percentage of samples according to the number of different residues in the same sample									
Liver (swine, bovine, sheep, goat, poultry) (23)	4.3		34.8	30.4	17.4	4.3	8.7			95.7
Citrus fruit (4363)	19.8	17.4	21.3	17.8	11.5	6.6	2.8	1.3	1.5	62.8
Strawberries (2479)	24.5	14.9	12.8	13.1	12.7	8.7	6	3.5	3.8	60.5
Table and wine grapes (2710)	23.9	18.4	13.5	10.9	11.4	7.5	5.7	3.4	5.3	57.7
Cane fruit, small fruit and berries (1140)	28.9	15	14.1	11.8	10.3	7.5	6.1	2.2	4.1	56.1
Pome fruit (5060)	29.6	20.4	17.6	13.1	8.3	4.7	2.5	1.7	2	50
Stone fruit (3706)	33.4	25.6	16.3	10	5.9	4	2.2	1.5	1.2	41
Leafy vegetables & fresh herbs (5179)	47.1	19.2	11.4	7.5	5	3.8	2.3	1.5	2.3	33.7
Tea, coffee, herbal infusions and cocoa (707)	58.3	14.6	9.1	8.1	4.8	1.8	1.1	1.3	1	27.2
Solanaceae (e.g. tomatoes, peppers) (6315)	52.9	20.5	10.7	6.3	4.1	2.2	1.3	0.6	1.4	26.6
Tropical and subtropical fruit (3662)	48.9	24.5	17	5.4	2.6	1	0.3	0.1	0.2	26.5
Legume vegetables (fresh) (1530)	57.6	21	12.7	4.8	2.2	0.7	0.5	0.1	0.5	21.4
Cucurbits (3091)	62.5	19.1	9.4	4.2	1.9	1.4	0.6	0.4	0.5	18.4
Stem vegetables (2316)	67.4	16.5	7.8	3.4	1.9	1.3	0.7	0.5	0.5	16.1
Root and tuber vegetables (except tropical) (2144)	67.6	17.4	9	3.4	1.4	0.7	0.4	0.1		15
Cereals (2551)	69.4	18.8	8.5	2.4	0.6	0.3	0.0			11.8
Brassica vegetables (2870)	68.5	20.7	5.6	2.6	1.3	0.9	0.3	0.1	0.1	10.9
Spices (142)	68.3	21.8	4.2	4.2	0.7	0.7				9.9
Eggs (509)	81.7	8.8	6.1	2.8	0.4	0.2				9.4
Fungi (524)	70.4	20.2	7.1	1.3	0.6	0.4				9.4
Meat (swine, bovine, sheep, goat, poultry) (1142)	85.8	6.7	4.5	1.8	0.7	0.4	0.1			7.4
Bulb vegetables (801)	79.3	13.4	2.6	2.5	1	0.4	0.5	0.2	0.1	7.4
Potatoes (1832)	68.6	24.6	5.4	1.1	0.2	0.1				6.8
Pulses (211)	79.1	14.2	4.3	1.4	0.9					6.6
Sugar plants (19)	89.5	5.3		5.3						5.3
Oilseeds and oilfruits (217)	75.6	19.4	1.8	1.4			0.5	0.9	0.5	5.1
Milk and milk products (1239)	90.2	5.6	3.4	0.6	0.2					4.2
Tropical root and tuber vegetables (453)	92.1	3.8	4.2							4.2
Nuts (193)	73.1	26.4		0.5						0.5

**Table 4-6:** EU+NCP – Summary of results of unprocessed samples with multiple EU MRL exceedances by commodity (surveillance samples only, data on commodities considered not relevant are not presented) – 2010<sup>54</sup>.

Product (Number of samples analysed)	Number of residues exceeding the MRL in the same sample						Overall >1
	0	1	2	3	4	>4	
	Percentage of samples						
Camomille flowers (1)						100	100
Chicory roots (1)			100				100
Cumin seed (1)				100			100
Rosemary (1)			100				100
Asparagus (6)	50		33.3	16.7			50
Dewberries (2)		50	50				50
Pepper, black and white (5)	40	20	40				40
Vine leaves (24)	58.3	4.2	16.7		4.2	16.7	37.5
Caraway (5)	60	20	20				20
Lychee (28)	50	32.1	7.1	3.6		7.1	17.9
Chives (12)	66.7	16.7	16.7				16.7
Celery leaves (61)	47.5	36.1	9.8	1.6	1.6	3.3	16.4
Okra (107)	65.4	20.6	11.2	0.9	0.9	0.9	14
Passion fruit (51)	74.5	11.8	9.8	3.9			13.7
Chinese cabbage (108)	77.8	9.3	2.8	3.7	4.6	1.9	13
Basil (102)	76.5	11.8	9.8	1	1		11.8
Cassava (21)	81	9.5	9.5				9.5
Spring onions (25)	72	20	8				8
Broccoli (240)	87.5	4.6	5.4	0.8	1.3	0.4	7.9
Flowering brassica (13)	61.5	30.8		7.7			7.7
Kumquats (13)	46.2	46.2	7.7				7.7
Pomegranate (72)	69.4	23.6	2.8	2.8		1.4	6.9
Beans, dry (16)	56.3	37.5	6.3				6.3
Globe artichokes (17)	82.4	11.8	5.9				5.9
Yams (51)	78.4	15.7	5.9				5.9
Guava (38)	68.4	26.3	5.3				5.3
Beans (with pods) (840)	85.2	11	2.9	0.6	0.4		3.8
Chard (98)	87.8	9.2	2	1			3.1
Parsley (165)	84.8	12.1	3				3
Peppers (1633)	90.4	6.8	1.9	0.5	0.2	0.2	2.8
Witloof (36)	94.4	2.8	2.8				2.8
Peas (with pods) (123)	69.9	27.6	0.8	0.8	0.8		2.4
Kale (150)	91.3	6.7	2				2
Fennel (54)	96.3	1.9		1.9			1.9
Rocket, Rucola (56)	91.1	7.1	1.8				1.8
Papaya (119)	79.8	18.5	1.7				1.7
Avocados (60)	93.3	5	1.7				1.7
Figs (62)	93.5	4.8	1.6				1.6
Tea leaves (458)	93.7	4.8	1.3			0.2	1.5
Brussels sprouts (76)	98.7		1.3				1.3
Onions (88)	90.9	8	1.1				1.1
Spinach (550)	94.9	4.4	0.5	0.2			0.7
Aubergines (590)	93.7	5.6	0.5	0.2			0.7
Cherries (470)	94.7	4.7	0.6				0.6



Product (Number of samples analysed)	Number of residues exceeding the MRL in the same sample						Overall >1
	0	1	2	3	4	>4	
	Percentage of samples						
Head cabbage (368)	97	2.4	0.5				0.5
Celery (185)	91.4	8.1	0.5				0.5
Apricots (404)	96.3	3.2	0.5				0.5
Carrots (412)	95.9	3.6	0.5				0.5
Table grapes (2080)	92.4	7.1	0.4	0			0.5
Wine grapes (209)	90.9	8.6		0.5			0.5
Mangoes (428)	97.9	1.6	0.2	0.2			0.5
Lettuce (2214)	96.6	2.9	0.3	0.1			0.5
Lamb's lettuce (240)	97.1	2.5	0.4				0.4
Currants (red, black and white) (243)	94.7	4.9	0.4				0.4
Peaches (1406)	98.3	1.4	0.3	0.1			0.4
Lemons (578)	95.7	4	0.3				0.3
Raspberries (305)	95.1	4.6	0.3				0.3
Kiwi (618)	97.7	1.9	0.3				0.3
Melons (313)	96.2	3.5	0.3				0.3
Leek (660)	98.3	1.4	0.3				0.3
Cucumbers (1047)	96.5	3.2	0.3				0.3
Strawberries (2033)	97	2.8	0.2	0			0.2
Oranges (1314)	95.2	4.6	0.2	0.1			0.2
Potatoes (518)	96.1	3.7	0.2				0.2
Mandarins (938)	97.4	2.5	0.1				0.1
Pears (1174)	98	2	0.1				0.1
Apples (2603)	98.6	1.3	0.1				0.1
Tomatoes (1990)	98.3	1.7	0.1				0.1

Multiple residues in one sample can result from the application of different types of pesticides used to protect the crop against different pests or diseases, e.g. insecticides, fungicides and herbicides. Pesticide formulations often contain a number of pesticides which have different modes of action. The use of pesticides with different modes of action is often recommended by national authorities in integrated pest management strategies in order to minimise the development of pest resistance to pesticides. In addition to the agricultural practices mentioned above (that may be different in the Member States due to e.g. different climate conditions) other possible reasons for the occurrence of multiple residues are:

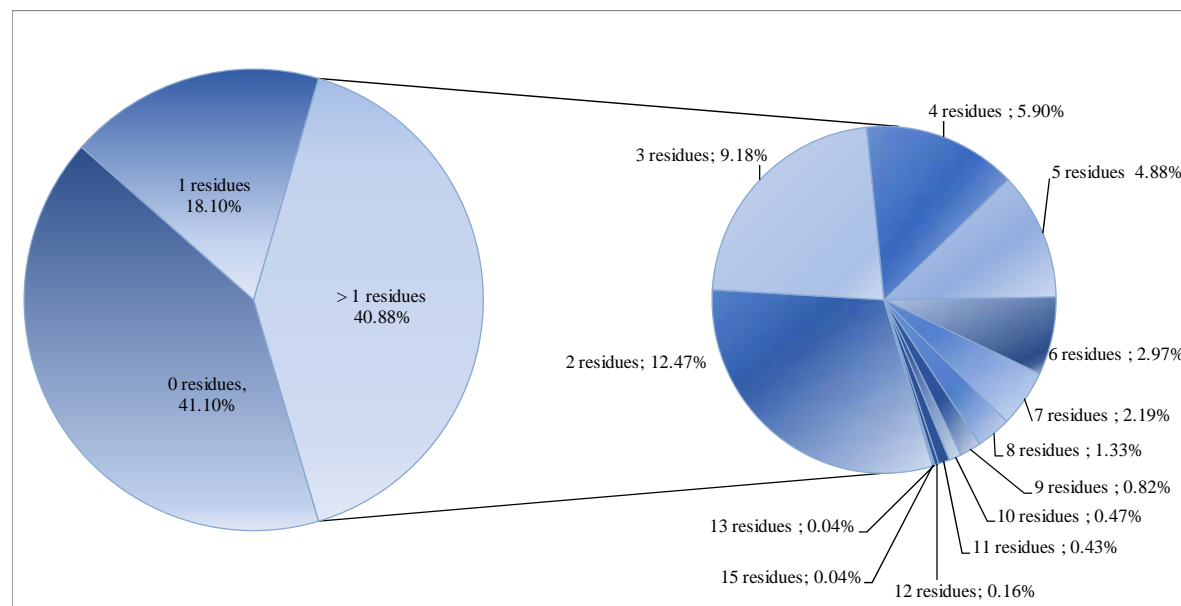
- mixing of lots which were treated with different pesticides, either during the sampling or in the course of the sorting of the commodities (e.g. sorting for quality classes);
- residues resulting from soil uptake in cases where pesticides have high persistence in the soil;
- residues resulting from spray drift from neighbouring plots or cross-contamination in the processing of the crops (e.g. by washing practices);
- contamination during handling, packing and storage.

Further analysis of samples containing multiple residues could help to better understand the reasons for the presence of multiple residues and to derive recommendations and, if needed, to take measures to follow up on this. Considering the total number of data on the commodities of concern, a more detailed data analysis was performed for a single crop (lettuce), for which repeatedly multiple residues were observed.

## 4.6.5.1. Case study on lettuce

Lettuce was chosen for the case study due to the high percentage of multiple residues and MRL exceedances and the importance of lettuce for the human consumption.

The total number of surveillance samples for unprocessed lettuce was 2,559. 41.1% (1,051 samples) of these samples had no measurable residues, and 18.1% (462 samples) had one pesticide residue; the remaining samples (1,046 samples – 40.9%) contained multiple residues (Figure 4-8).



**Figure 4-8:** EU+NCP – Percentage of lettuce samples according to the number of different pesticides found in the same sample - 2010 (surveillance samples only).

In Table 4-7 the results for the multiple residue samples are reported according to the sample origin (only those samples, for which the country of origin was reported and could clearly be identified are included). Some countries have few samples (less than 10) taken so uncertainty is associated with it to conclude any facts. On the contrary, for those countries with higher number of samples taken, the analysis shows that the percentage of samples with none or only one pesticide was the highest for samples originating from Malta and Denmark. Samples from Belgium, Ireland, France, Germany and Hungary had the highest occurrence rates of samples containing more than one pesticide.

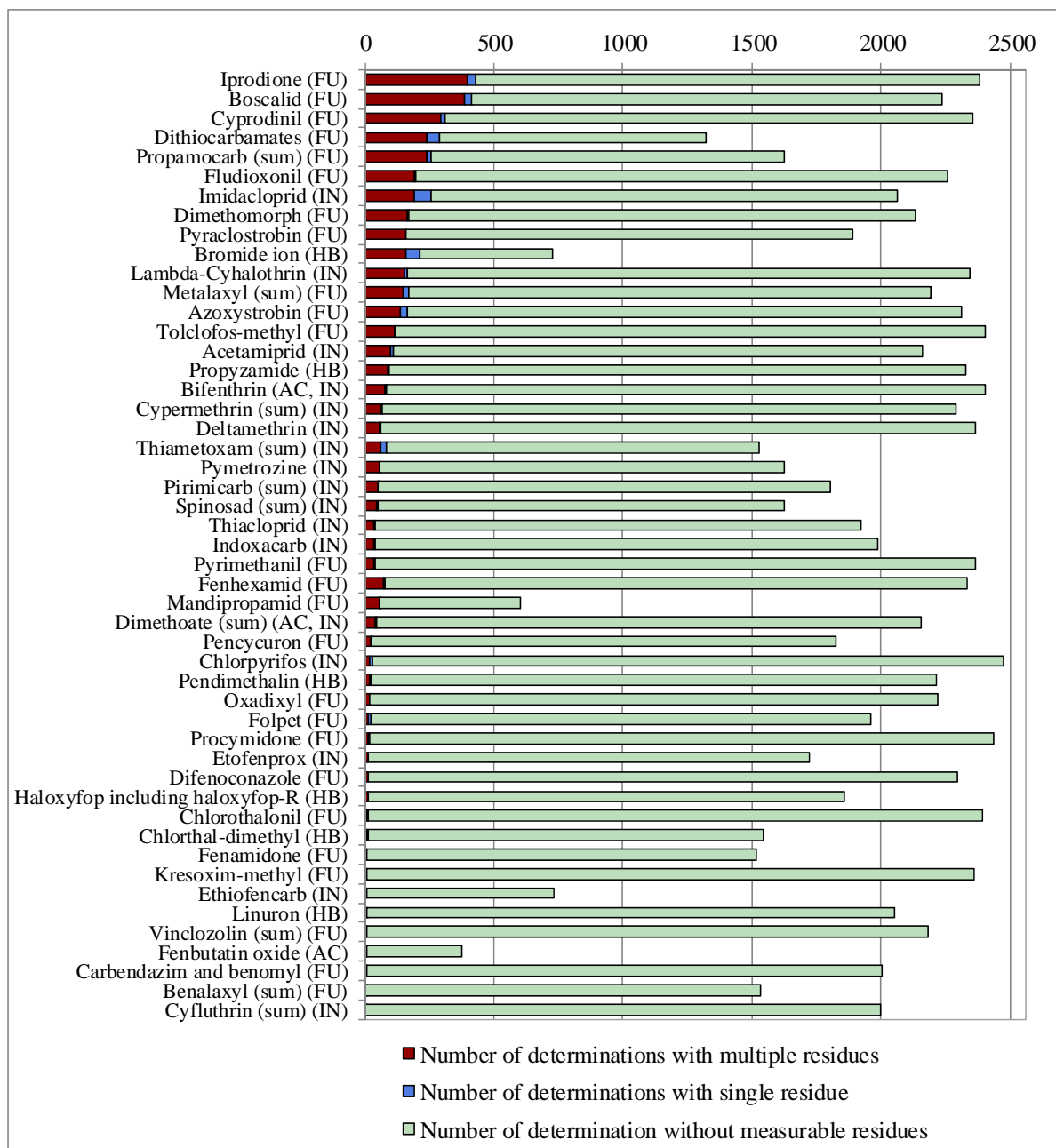
**Table 4-7:** EU+NCP – Numbers of lettuce samples with 0, 1 or >1 residue by country of origin - 2010<sup>54</sup>.

Country of origin (total number of samples analysed)	Number of residues						
	0	1	2	3	4	5	>5
	Percentage of samples						
Albania (4)	100						
Argentina (1)							100
Austria (56)	75	10.7	8.9	1.8	1.8	1.8	
Belgium (224)	10.3	3.6	7.1	10.3	10.3	14.7	43.8
Bulgaria (37)	59.5	24.3	10.8	2.7	.	2.7	
Croatia (2)					50.0		50.0
Cyprus (29)	72.4	10.3	13.8	3.4			
Czech Republic (21)	33.3	33.3	19.0	14.3			
Denmark (23)	87.0	13.0					
Estonia (14)	64.3	35.7					

Country of origin (total number of samples analysed)	Number of residues						
	0	1	2	3	4	5	>5
	Percentage of samples						
Finland (19)	84.2	10.5		5.3			
France (348)	35.6	12.1	14.4	14.9	8.9	7.2	6.9
Germany (358)	28.5	20.1	15.4	12.6	6.1	5.9	11.5
Greece (127)	70.1	17.3	4.7	4.7	0.8		2.4
Hungary (117)	32.5	27.4	22.2	13.7	1.7	2.6	
Iceland (3)	100						
Ireland (28)	17.7	21.4	25.0	14.3	10.7	7.1	3.6
Italy (155)	31.0	20.6	10.3	8.4	6.5	10.3	12.9
Latvia (10)	70.0		30.0				
Lebanon (4)	75.0	25.0					
Lithuania (5)	80.0		20				
Luxembourg (9)	88.9		11.1				
Macedonia, (The Former Yugoslav Republic of) (1)		100					
Malta (15)	93.3		6.7				
Netherlands (122)	32.8	18.0	18.0	12.3	10.7	3.3	4.9
Norway (50)	72.0	26.0	2.0				
Poland (27)	74.1	14.8	11.1				
Portugal (39)	53.9	35.9	5.1	2.6	2.6		
Romania (59)	76.3	17	5.1		1.7		
Senegal (1)							100
Slovakia (2)			100				
Slovenia (43)	60.5	20.9	9.3	2.3	4.7		2.3
South Africa (1)							100
Spain (488)	37.5	23.8	15.6	9.4	7.6	3.5	2.7
Sweden (26)	65.4	19.2	7.7	3.9	3.9		
Turkey (1)	100						
United Kingdom (54)	68.5	22.2	1.9	1.9	1.9	1.9	1.9
United States (1)	100						

The maximum number of residues found in the same sample was 15, found in one sample originating from Belgium. The detected compounds were: boscalid, cyprodinil, dimethomorph, dithiocarbamates, fludioxonil, iprodione, mandipropamid, metalaxyl (sum), oxadixyl, promecarb, propyzamide, pyraclostrobin, spinosad (sum), thiacloprid and tolclofos-methyl.

In total, 108 different pesticides were found in lettuce samples with multiple residues. The 49 pesticides, most frequently found in combination with one or more other residues, are reported in Figure 4-9. The most relevant pesticides were iprodione (398 determinations), boscalid (388 determinations), cyprodinil (293 determinations), propamocarb (sum) and the dithiocarbamates (243 and 240 determinations, respectively).



**Figure 4-9:** EU+NCP – Pesticides most frequently found on lettuce (pesticides with multiple residues only). AC: acaricide; FU: fungicide; HB: herbicide; IN: insecticide; NE: nematocide

The most frequent combinations of two pesticides measured in the same sample were boscalid/iprodione (196 samples, 4.7% of the lettuce samples), cyprodinil/fludioxonil (190 samples, 4.6%) and boscalid/pyraclostrobin (149 samples, 3.6%).

When assessing multiple residues in food, apart from the total number of different pesticides, the concentration of the individual pesticides found on the samples needs to be taken into account. In Figure 4-10 residue concentrations for the most frequent pesticides found in measurable concentrations (>LOQ) on lettuce samples with multiple residues, compared with the MRL for the pertinent pesticide are presented by means of a box plots.

For each pesticide plotted, the following information is presented:

- the left edge of the box (25%-quantile) denotes the residue concentration (expressed in percent of the MRL), that was exceeded in 75% of the samples;

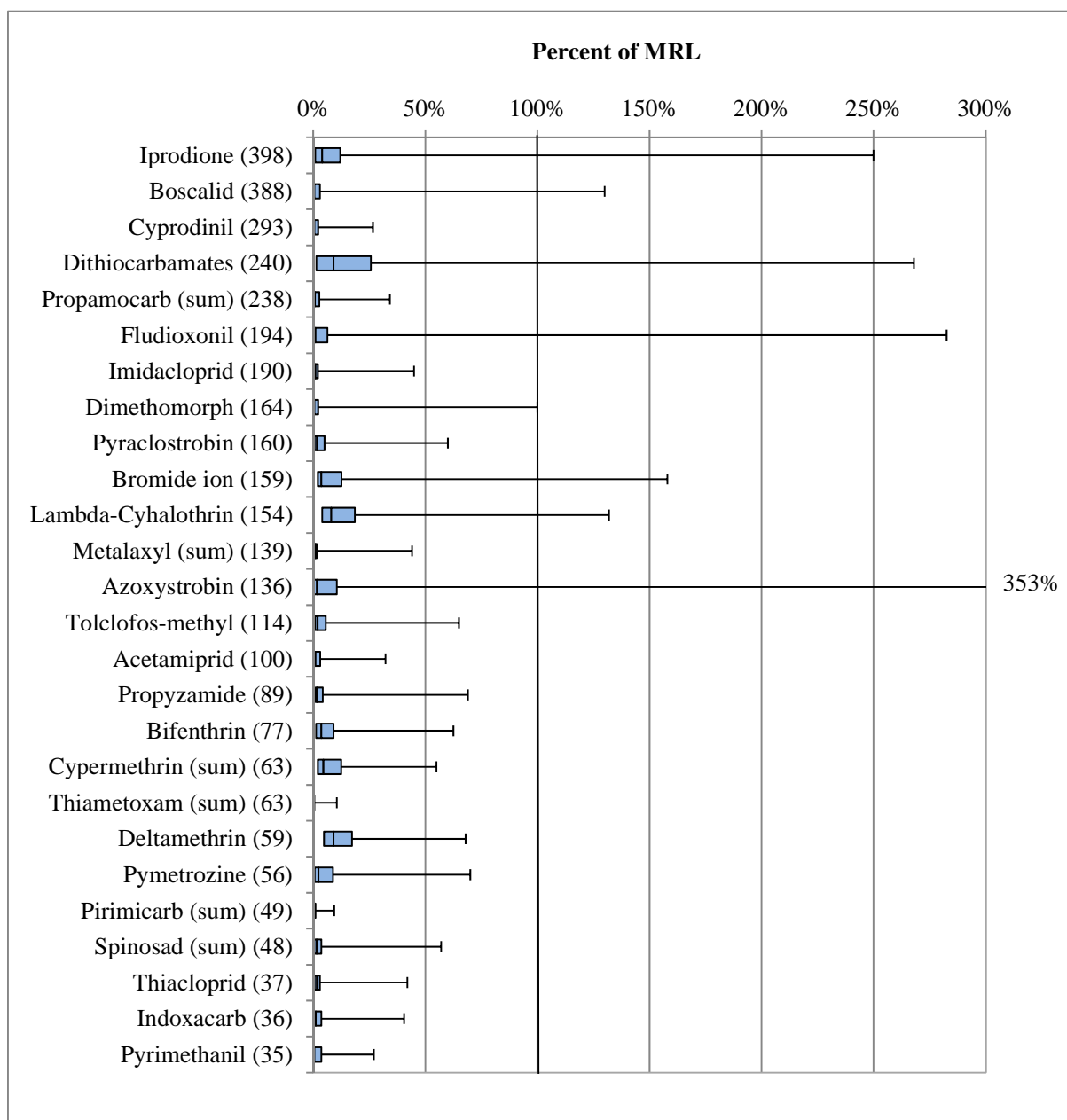
- the median (vertical line within the box) corresponds to the residue concentration (expressed as % of the MRL) exceeded by 50% of the samples;
- the 75%-quantile (upper edge of the box) represents the residue concentration (expressed in % of the MRL) that was exceeded in 25% of the samples;
- the left whisker (lines with margin) represents the lowest measurable residue (expressed in % of the MRL);
- the right whisker represents the highest measured residue value (expressed as % of the MRL).

For example, the results for iprodione are explained: the MRL for iprodione/lettuce is 10 mg/kg. 2,400 samples (see also Figure 4-9) were analysed for iprodione; in 398 samples multiple measurable residues were found. The highest residue found (right whisker) was 25 mg/kg (corresponding to 250% of the MRL). 25% of the samples contained more than 2 mg/kg (20% of the MRL) (75<sup>th</sup> percentile, right edge of the box), in 50% of the samples the residue concentration was below 1 mg/kg (10% of the MRL), represented by the line within the box (median). The LOQ for iprodione is 0.01 mg/kg. This corresponds to 0.1% of the MRL. The 25<sup>th</sup> percentile and the lowest residue (left whisker) are close to 8.3% and 0.1% of the MRL, respectively

From Figure 4-10 it is concluded that all median residue concentrations for the most frequently found pesticides in lettuce were below 10% of the MRL, the 75%-quartiles for all but three cases lay below 15% of the MRL.

As a result of the above, this analysis shows that in most cases with multiple residues on lettuce, the measured residues occur in concentrations below the MRL. Individual samples contained residues in concentrations close to or even above the MRL (please note that for reasons of readability not all extreme values for azoxystrobin, boscalid, bromide ion, dithiocarbamates, fludioxonil, iprodione and lambda-cyhalothrin exceeding 100% of the MRL could be presented).

However, even if the individual MRLs for pesticides are not exceeded, a food item may be of concern if the occurrence of the individual substances causes the same toxicological effect in humans and if the cumulated concentration exceeds the toxicological threshold concentration, taking into account the different toxicological potencies of the individual substances. Thus, if compounds belonging to a group of chemicals which have a common mode/mechanism of action are present in the same sample, a cumulative exposure assessment should be performed. In chapter 5 of the present report the results of an indicative estimate of the cumulative exposure for pesticides found on lettuce are reported.



**Figure 4-10:** EU+NCP – Box plots for the multiple residues in lettuce (unprocessed) 2010, expressed in percentage of the MRL (top 25 results).

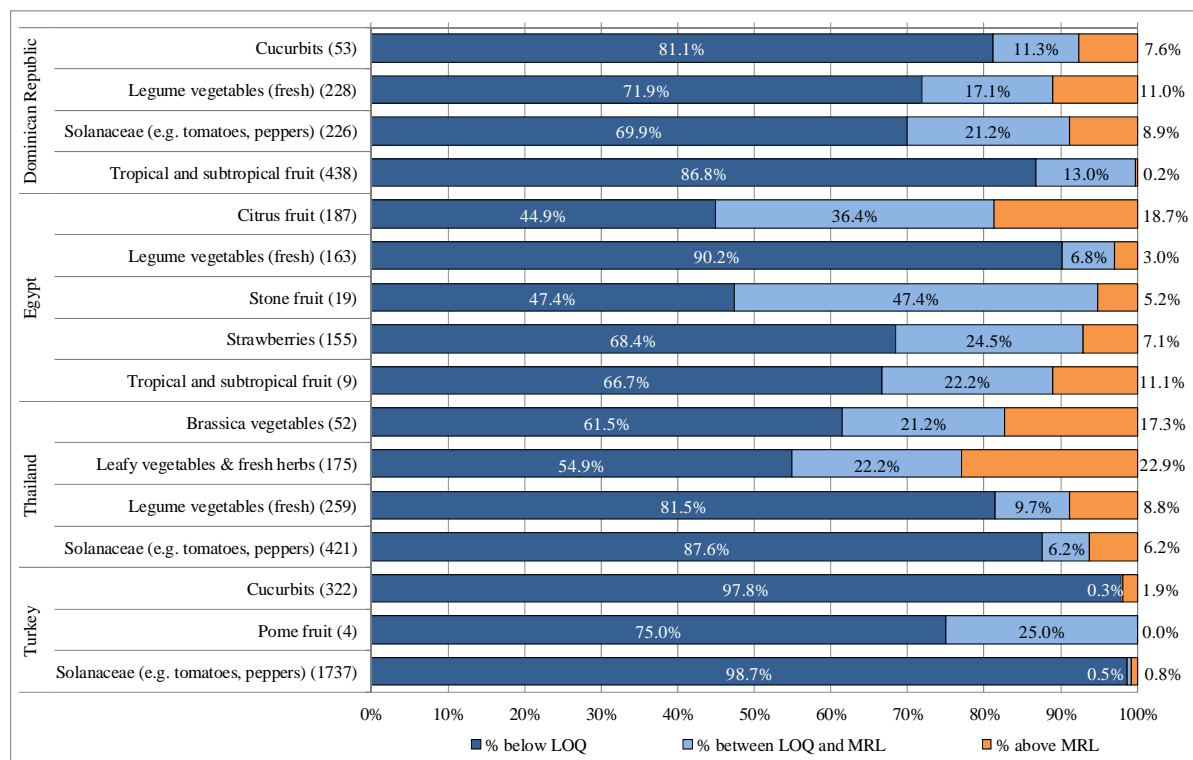
#### 4.6.5.2. Results on import control according to Commission Regulation (EC) No 669/2009

According to Commission Regulation (EC) No 669/2009, which applies from 25<sup>th</sup> of January 2010 onwards, the Member States were requested to control certain products at the point of entry into the European market<sup>59</sup>. The regulation foresees the reinforced control (sampling and analysis) of food from specific countries of origin to be carried out at the point of entry into the EU and to be analysed for specific substances, including some pesticide (or group of pesticides) residues.

The total number of samples analysed for the commodity/pesticide/country combinations indicated in the Regulation was 4,448 (Figure 4-11). Most of these samples were taken as border or import control samples (3,553). As the sampling strategy was targeted for specific combinations of countries/commodities/pesticides for which a high non-compliance rate was expected, the percentage

<sup>59</sup> Regulation (EC) No 669/2009 and its amendments do not specify the absolute number of samples to be analysed, but indicate the percentages of samples to be controlled out of the actual number of samples entering in the EU territory.

of samples not compliant with the European legal limits is generally higher than for the food typically available on the EU market.



**Figure 4-11:** Results of the control activities for the imported food according to the country of origin, the food items and the pesticides listed in Regulation (EC) No 669/2009<sup>54</sup>.

#### 4.6.6. Food of animal origin

In total, 5,261 surveillance samples of animal origin were analysed in 2010, covering meat, fat and liver of bovine, swine, poultry, sheep, goats and horses, milk and milk products, eggs and honey. The majority of the samples were free from detectable residues (87.3% of the samples were reported below the LOQ). In 0.1% of the samples the MRLs were exceeded.

In total, 43 different pesticides were found in products of animal origin; the most frequently found pesticides were DDT (sum), HCH and thiacloprid, which were detected in 13.4%, 11.6% and 10.2% of the samples analysed for these substances, respectively. The 20 pesticides most frequently found in animal products are reported in Table 4-8 (only the pesticides analysed in at least 10 samples are tabulated).

**Table 4-8:** EU+NCP – 20 most frequently detected pesticides in animal product samples (only pesticides for which at least 10 samples were analysed) - 2010.

Compound	No of samples with measurable residues	% of sample with measurable residues	Note
DDT (sum)	421	13.4%	POP <sup>(*)</sup>
HCH (sum)	36	11.6%	POP
Thiacloprid	42	10.2%	Residues detected only in honey
Hexachlorobenzene	319	7.9%	POP
Carbendazim (sum animal products)	13	4.3%	Residues detected only in honey
Thiabendazole (sum animal products)	3	2.0%	Residues in poultry meat and honey
Flusilazole (sum animal products)	2	2.0%	Residues detected only in honey
Boscalid (sum animal products)	6	1.9%	Residues detected only in honey
Lindane	72	1.8%	POP
Dimoxystrobin	2	1.4%	Residues detected only in honey
Iprodione	3	1.0%	Residues detected only in butter
Acetamiprid (sum animal products)	2	1.0%	Residues detected only in honey
HCH alpha	33	0.9%	POP
Pirimicarb (sum)	3	0.9%	Residues detected only in honey
HCH beta	30	0.9%	POP
Spinosad (sum)	1	0.9%	Residue detected in eggs
Amitraz (sum)	1	0.8%	Residue detected only in honey
Nicotine	1	0.8%	Residue detected in eggs
Aldrin and Dieldrin	22	0.8%	POP
Fenhexamid	2	0.7%	Residue detected in butter

<sup>(\*)</sup>POP = Persistent Organic Pollutants under the Stockholm Convention<sup>60</sup>.

DDT (sum) was most frequently found in measurable amounts in bovine liver (23 samples; 100% detection rate), in processed samples of sheep milk (detected in 11 samples; 47.5% of the tested samples) and in swine and poultry meat (detected in 13 and 70 samples; detection rates 40.9% and 39.7%). HCH (sum) was mainly detected in milk products and eggs.

Residues of thiacloprid, carbendazim/benomyl, flusilazole, boscalid, dimoxystrobin, acetamiprid, pirimicarb and amitraz were only found in honey samples. Since amitraz is also used in veterinary medicine for the treatment of bee hives, the residues found in honey are not necessarily related to the pesticide use of amitraz. For the remaining pesticides found in honey samples the residues might be linked to their use as pesticide on areas used by bees for foraging.

Among the most frequently detected residues in samples of animal origin, several are considered as POPs under the Stockholm Convention (Council Decision, 2004). Most of these substances have been

<sup>60</sup> Council Decision of 14 October 2004 concerning the conclusion, on behalf of the European Community, of the Stockholm Convention on Persistent Organic Pollutants; OJ L 209, 31.7.2006, p. 1–2 and Regulation (EC) No 850/2004 of the European parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC; OJ L158, 30.4.2004, p. 7-48.



banned in Europe for more than 30 years<sup>61</sup>. Once released into the environment, these chemicals remain intact for exceptionally long periods of time. They become widely distributed throughout the environment accumulating in the fatty tissue of living organisms including humans.

14 of the POP substances under the Stockholm Convention were used as pesticides in the past until they were banned for use in the European Union and are now covered by the MRL legislation. The Convention encourages the monitoring of these substances at national and/or international level; these pesticide residues are already being analysed by the reporting countries.

The existing MRLs for the POPs are based on residue levels reported in monitoring programmes. These values should be regularly revised in view of the possibility of lowering the MRLs, taking into account the declining concentrations found in the more recent monitoring programmes. An analysis of the findings concerning samples taken in Europe may allow the revision the MRLs currently in place. However, EFSA noticed that some reporting countries did not report the results in compliance with the MRL regulation which requires that the results measured in meat should be expressed on fat basis. Due to the difficulties in comparing the reported results, EFSA could not derive sound conclusions and recommendations on the MRL revision. In order to improve the situation, however, EFSA recommends giving clear guidance to reporting countries on how to report the results for food of animal origin for pesticide residues which are considered as fat soluble and giving practical examples of how the provisions explained in the footnotes of Regulation (EC) No 178/2006<sup>62</sup> and Regulation (EU) No 600/2010<sup>63</sup> are to be applied in practice.

The surveillance sampling results for food of animal origin per reporting country, are listed in Appendix III, Table B.

#### **4.6.7. Reasons for MRL exceedances**

In 2010, 2,361 samples (including enforcement samples) were found to exceed the MRLs. Only a limited number of possible reasons explaining the breaches were reported. Therefore EFSA can not derive general conclusions on the reasons for MRL exceedances<sup>64</sup> or propose risk management options to avoid MRL exceedances in the future. It is therefore recommended that national authorities improve the reporting of this information. This may require improvement of the collaboration with national authorities involved in pesticide use and control and in the traceability of samples.

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<sup>61</sup> Council Directive 79/117/EEC of 21 December 1978 prohibiting the placing on the market and use of plant protection products containing certain active substances. OJ L 33, 08.02.1979, p. 36–40.

<sup>62</sup> Commission Regulation (EC) No 178/2006 of 1 February 2006 amending Regulation (EC) No 396/2005 of the European Parliament and of the Council to establish Annex I listing the food and feed products to which maximum levels for pesticide residues apply. OJ L 29, 2.2.2006, p. 3–25.

<sup>63</sup> Commission Regulation (EU) No 600/2010 of 8 July 2010 amending Annex I to Regulation (EC) No 396/2005 of the European Parliament and of the Council as regards additions and modification of the examples of related varieties or other products to which the same MRL applies. OJ L 174, 09.07.2010, p. 18–39.

<sup>64</sup> See also “MRL exceedances” in the Glossary.

## SUMMARY CHAPTER 4

97.2% of the analysed surveillance samples (national and EU-coordinated multiannual programme) were below or at the legal MRLs. In 2.8% of the samples (surveillance only), the legal limits were exceeded for one or more pesticides.

MRLs were more often exceeded for samples from third countries (7.9% of the surveillance samples) than for samples from the EU and EFTA countries (1.5% of the surveillance samples). For food originating from Cambodia (50.0%), Mongolia (50.0%), Hong Kong (47.8%), Bangladesh (44.4%), Bolivia (33.3%), India (28.3%), Uganda (23.6%), Burundi (22.2%), Jordan (21.7%), Iran (21.4%), Thailand (20.9%) and Mauritius (20.0%) the highest MRL exceedance rates were observed; however, due to the low number of samples originating from these countries, the results are affected by a high statistical uncertainty. For the EEA area, the highest percentage of samples exceeding the MRLs was identified for products originating from Slovakia, Cyprus and Malta.

In terms of commodity groups, most of the MRL exceedances (11.1%) were found in unprocessed surveillance samples of legume vegetables (e.g. beans with pods), spices (8.5%) and nuts (8.3%). High MRL exceedance rates were also observed in table and wine grapes and leafy vegetables (e.g. lettuce) and fresh herbs.

The pesticide/crop combinations which most frequently exceeded the MRLs were acetamiprid in Chinese cabbage and broccoli and dimethomorph in Chinese cabbage.

In total, residues of 328 distinct pesticides were found in measurable quantities in vegetables, 301 in fruit and nuts, while in cereals residues of 88 different pesticides were observed (surveillance samples only).

Overall, 1,828 surveillance samples of baby food/infant formulae were analysed. Residues above the reporting level were found in 154 samples (8.4%), while the MRL was exceeded in 36 samples (2.0%). It was noted that the analytical methods used to analyse baby food were often not sensitive enough to quantify residues at the legal limits.

Data on organic food were provided by 28 reporting countries (3,571 samples). For fruit and nuts, a lower rate of MRL exceedances (0.9%) was found in comparison to conventionally grown fruit and nuts (2.9%). For vegetables the exceedance rates of the surveillance samples were 1.0% and 3.8% respectively for organic and conventionally grown products. Overall, the MRL exceedance rate for organic food was 0.8%. In total, 131 different pesticides were found in organic products; of those, 26 pesticides were found in at least five samples. It is noted that 25 out of these 26 substances are not allowed in organic farming.

A total of 11,571 surveillance samples of processed products were analysed. Residues above the MRL were found in 125 samples (1.1%). It is not reported which processing factors were applied to check the compliance of these samples with the legal limits.

The majority of food of animal origin was free of detectable residues (87.3% of samples were reported below the quantification limits). In total, 43 different pesticides were found in animal products; the most frequently found pesticides were DDT and HCH which were detected in 13.4% and 11.6% of the samples analysed for these pesticides, respectively. These substances are considered as persistent organic pollutants which have a tendency to bio accumulate in fat matrices. In the EU the use of these pesticides is banned.

In 2010, multiple residues of two or more pesticides were found in 26.6% of the analysed surveillance samples. The highest frequency of multiple residues was found in processed peppers (46 surveillance samples; 2.8%). Important commodities with high frequencies of multiple residues were liver (95.7%), citrus fruit (62.8%) and strawberries (60.5%). 338 unprocessed surveillance samples were found to exceed two or more EU MRLs.

A specific analysis regarding multiple residues in lettuce showed that 41.1% (1,051 samples) of surveillance samples for lettuce contained no residues, while 18.1% (462 samples) contained one pesticide residue only. 40.9% of the samples (1,046 samples) had multiple residues. Samples from Belgium, Ireland, France, Germany and Hungary had the highest occurrence rates of samples containing more than one pesticide. The most frequently found pesticides in multiple residue samples were iprodione, boscalid, cyprodinil, dithiocarbamates and propamocarb (sum).

Residues of two or more pesticides were found in 19,382 samples, corresponding to 26.6% of the surveillance samples analysed. Important commodities for human consumption with high frequencies of multiple residues were liver (95.7% of 23 liver samples), citrus fruits (62.8% of 4,363 citrus fruit samples) and strawberries (60.5% of 2,479 strawberries samples).

### **Recommendations**

It is recommended to improve the analytical methods in order to be capable of quantifying residues at the MRL with sufficient accuracy. Therefore, it is considered necessary to continue the collaboration between the European Reference Laboratories and the national laboratories on the development and implementation of adequate analytical methods (in particular for the baby food analysis). It is also recommended to continue including EU Proficiency Tests for pesticides for which MRLs lower than the default limit of 0.01 mg/kg are set in the legislation specific for baby food. Furthermore, the European Commission is recommended to align the residue definitions set in the legislation specific for baby food and in the pesticide MRL legislation in food and feed.

Some data analyses were hampered because relevant information was not reported by the reporting countries. Therefore, it is recommended to the Member States to make efforts, in particular when reporting the following information:

- possible reasons for MRL exceedances and
- production methods for samples analysed (e.g. conventionally or organically produced food)

Member States are encouraged to conduct possible follow-up investigations at farm level for samples of domestic products where exceedances were reported. This would help to better understand the reasons for MRL exceedances and devise strategies for reducing the number of MRL breaches.

EFSA also recommends collecting and publishing processing factors which can be used for enforcement of the legal values in processed commodities in line with the provision of Regulation (EC) No. 396/2005 on the establishment of Annex VI of the processing factors.

EFSA recommends giving clear guidance to reporting countries on how to report the results for food of animal origin for pesticide residues which are labelled as fat soluble in the pesticide legislation and giving practical examples on how the provisions explained in the footnotes of Regulation (EC) No 178/2006 and Regulation (EU) No 600/2010 are to be applied in practice.

## 5. Dietary exposure and dietary risk assessment

According to Article 32 of Regulation (EC) No 396/2005, EFSA is required to assess the consumer dietary exposure to pesticide residues and to provide an analysis of the chronic and acute consumer health risks resulting from pesticide residues in and on food. EFSA should also consider other relevant information to perform these assessments, in particular the reports submitted under Directive 96/23/EC<sup>65</sup>.

Dietary exposure is basically calculated according to the simplified equation:

$$\text{Dietary exposure} = \frac{\sum(\text{residue concentration} \times \text{food consumption})}{\text{body weight}}$$

In the chronic (long-term) and acute (short-term) risk assessment, the estimated dietary exposure for a certain pesticide is compared with its toxicological reference values, i.e. the Acceptable Daily Intake (ADI) and the Acute Reference Dose (ARfD), respectively. The toxicological reference values are derived following a full hazard characterisation of a pesticide.

As long as the dietary exposure is lower than or equal to the toxicological reference values (exposure  $\leq 100\%$  of the ADI or ARfD) a consumer health risk can be excluded with a degree of certainty. However, if the calculated dietary exposure exceeds the ADI or the ARfD, effects on the consumer health might occur and consequently appropriate risk management options should be considered, e.g. the withdrawal of products from the market which were identified as posing a possible health risk or restrictions regarding the use of certain pesticides to avoid future problems.

Usually a tiered approach is recommended for performing exposure assessments, where the lower tier calculations should be based on conservative assumptions which are likely to overestimate the actual consumer exposure (risk screening). The calculation models used for the first tier calculations are typically of lower complexity requiring fewer resources, meaning that the selection of input values and the calculation algorithms are based on simplistic assumptions. Refined calculations (higher tier calculations) usually require more detailed data for both the residue concentrations on the food products consumed and the food consumption, and would involve more sophisticated calculation methodologies.

Currently no agreed international or European methodology for estimating the actual chronic and acute exposure to pesticide residues measured in monitoring programmes is available. EFSA decided to adapt the risk assessment methodology developed for the risk assessment in the context of pesticide authorisations (EFSA PRIMo) for this purpose (EFSA, 2007). The model implements the principles of the WHO methodologies for short-term and long-term risk assessment (FAO, 2009), taking into account the food consumption data available for the European population. The EFSA PRIMo is a risk screening tool which allows the performance of lower tier risk assessments. As long as the results obtained with the EFSA PRIMo standard settings do not raise concerns regarding consumer safety, no further refined calculations are considered necessary.

The assumptions and considerations relevant for the short-term and long-term exposure assessment are outlined in sections 5.1 and 5.3, respectively.

According to the WHO methodology and the risk assessment approach used at EU level in the framework of pesticide authorisations and MRL setting, the dietary exposure to pesticide residues is calculated for each individual active substance separately. However, Regulation (EC) No 396/2005

<sup>65</sup> The report for 2010 on the results from monitoring of veterinary medicinal product residues and other substances in live animals and animal products (EFSA, 2012a) highlighted the limitations of the available monitoring data for veterinary drugs residues. Since the results are reported only in a highly aggregated form, without providing detailed information on the residue concentrations found in the individual samples, the data can not be used for dietary exposure calculations.

acknowledges that consumers are expected to be exposed to multiple residues present on food eaten with one meal, during one day or over a longer period which may lead to cumulative (additive or synergistic) effects on human health. EFSA has therefore initiated the development of a methodology to assess such effects (EFSA, 2008; EFSA, 2009; EFSA, 2012b) and the work is still ongoing on this project. Pending the availability of the final EU methodology, EFSA performed an indicative estimation of the cumulative long-term exposure for one group of pesticides (see section 5.5) and an indicative short-term assessment for one crop which was considered of relevance (lettuce, see section 4.6.5.1). The calculations performed in this context are intended to provide practical examples how cumulative assessments for pesticide residues could be performed in future. However, the calculations are made without any prejudice on the final methodology to be used in the context of post-authorisation risk assessment. Thus, the results have to be taken as indicative.

### 5.1. Model assumptions for the short-term (acute) exposure assessment

For the calculation of the short-term intake, EFSA calculated the International Estimation of Short Term Intake (IESTI) following the methodology described by JMPR (FAO, 2009). However, in some aspects (see below), the methodology was modified. Basically, the IESTI methodology implies the coincidence of the following events:

A consumer who eats a **large portion size** of the food item under consideration (normally 97.5<sup>th</sup> percentile of the daily food consumption reported in food surveys, considering only persons who have consumed the pertinent food item during the reference period) consumes a food item belonging to the **lot which contains the highest residue measured** (HRM) in the framework of the EU-coordinated or any of the national surveillance control programmes. Possible reduction of residues on the food commodity eaten (e.g. via washing, storage etc.) were not considered in the calculations. Finally, it was assumed that the samples containing the HRH originated from lots/consignments placed on the market and therefore were available for consumption.

The HRM is multiplied by a factor (variability factor) which accommodates for potential **inhomogeneous residue distribution** among the individual units in the same lot/sample analysed. The variability factors depend on the unit size of the food item: for food commodities with a unit weight between 25 and 250 g, a factor of 7 is applied (e.g. aubergines, bananas and peppers). The underlying assumption is that the consumer may pick out a highly contaminated unit which contains a residue that is seven-fold higher than that in the composite which was analysed in a monitoring programme. For food commodities with a unit weight of more than 250 g (e.g. cauliflower), a variability factor of 5 is applied. No variability factor is used for commodities with unit weights less than 25 g (e.g. peas without pods and wheat)<sup>66</sup>.

It should be stressed that the co-occurrence of the above events (i.e. large portion size, highest residue measured and inhomogeneous residue distribution) is rather unlikely. In case the estimated consumer exposure based on these very conservative assumptions leads to an exceedance of the toxicological reference values, the degree of exceedance (expressed in percent of the ARfD) and the probability of such an event occurring have to be considered.

The short-term assessment is carried out separately for each pesticide/crop combination as it is considered unlikely that a consumer will eat two or more different commodities in large portions within a short period of time and that all of these commodities contain residues of the same pesticide at the highest level observed during the reporting year.

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<sup>66</sup> In 2007, JMPR recommends to use a variability factor of 3 for all commodities with unit weight greater than 25 g instead of the variability factors of 5, 7 and 10 as recommended in the previous guidelines (FAO, 2009). At European level the choice of the most appropriate variability factor to be used for the acute risk assessment is still under discussion. However, so far Member States did not agree to reduce the variability factor. Thus, at EU level the calculations are performed with the more conservative variability factors of 5 and 7. The variability factor of 10 which was recommended by JMPR to be used for leafy vegetables was found to be overly conservative and was therefore not included in the EFSA PRIMo as default variability factor (EFSA, 2007).

The short-term exposure assessments were performed for the active substances covered by the 2010 EU-coordinated programme (Table 2-2), considering the 11 food commodities for which the reporting countries had to submit data (i.e. apples, head cabbage, leek, lettuce, milk, oats, peaches, rye, strawberries, swine meat and tomatoes) (Table 2-1). In addition, the short-term exposure was calculated for amitraz residues measured in pears, a pesticide/crop combination which was also included in the EU-coordinated programme.

The short-term (acute) consumer exposure is calculated using the following input parameters:

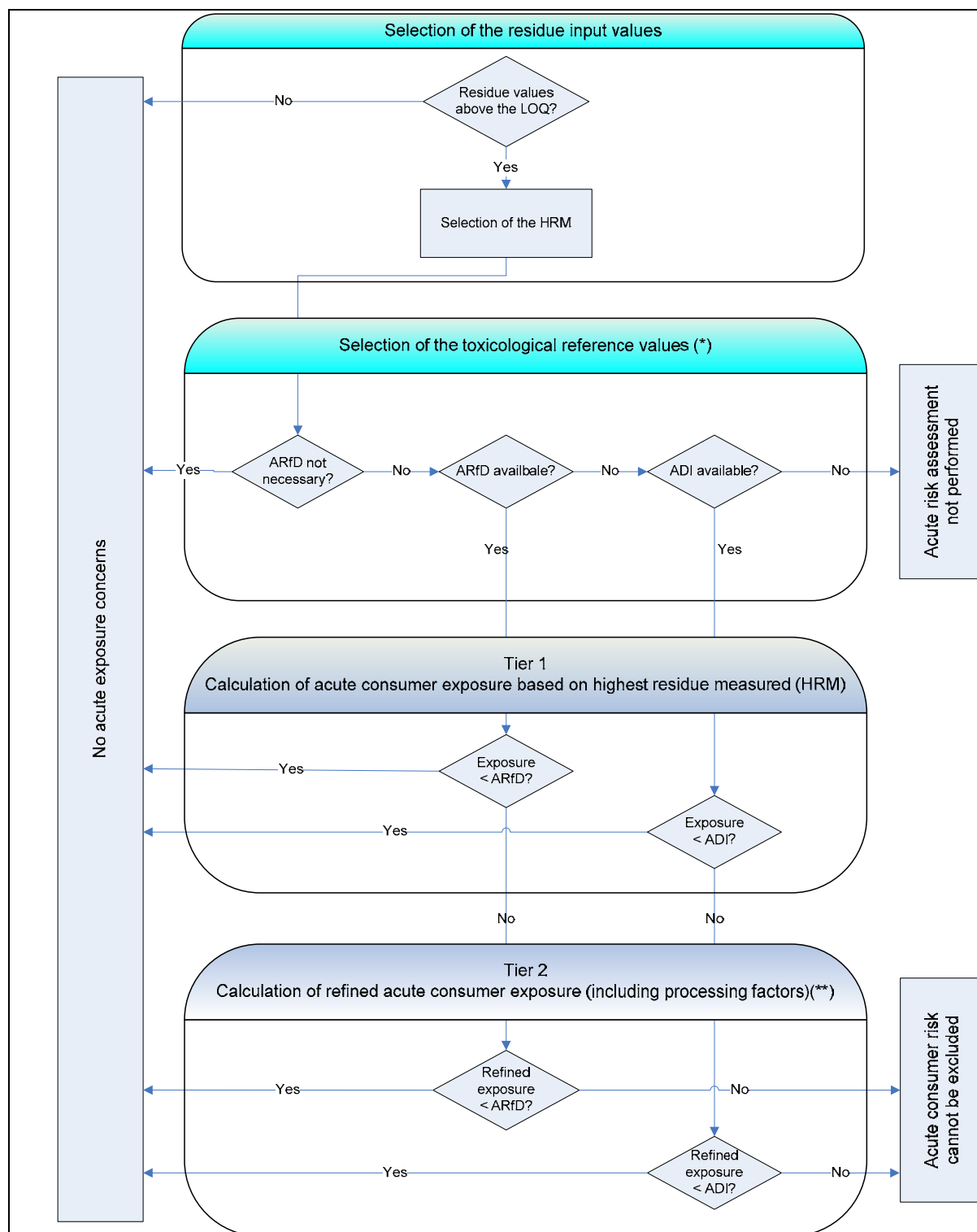
- For each pesticide/crop combination the HRM identified considering all the results reported in the framework of the 2010 EU-coordinated and national programmes (surveillance samples only) and reported above the LOQ. In total, 18,243 samples were considered for this exercise. The following results transmitted by the reporting countries were excluded from the HRM identification:
  - Analytical determinations for which the limit of quantification (LOQ) was not reported;
  - Results not compliant with the legal residue definition.

For deriving the HRM, all results submitted by reporting countries are considered as described. However, it would be desirable to receive more information from reporting countries whether lots which were exceeding the MRL were actually placed on the market and are therefore relevant for deriving the HRM to be used for the acute consumer risk assessment or whether these lots were destroyed/rejected before they actually reached the consumers.

- For swine meat samples, where the residue levels reported were expressed on a fat basis, the residue concentrations have been recalculated taking into account the fat content of the samples as reported.
- Large portion food consumption data retrieved from the EFSA PRIMo (EFSA, 2007)
- Unit weight for the individual food commodities (retrieved from the EFSA PRIMo, EFSA, 2007)

The general approach used in assessing the acute risk is represented in Figure 5-1.

The ARfD values selected for the risk assessment can be found in section 5.1.1.



(\*) In case the residue definition for a given pesticide/crop combination contains more components (each of them having a different ARfD) the ARfD selected for the acute exposure calculation is indicated in Table 5-1.

(\*\*) The processing/peeling factors are applied only to food commodities normally not consumed raw or without processing (i.e. rye, oats and swine meat).

**Figure 5-1:** Flow chart for the tiered approach used in assessing the potential acute consumer health risk for each pesticide/crop combination included in the 2010 EU-coordinated programme.

### 5.1.1. Toxicological reference values for the acute exposure

In order to perform the risk assessment, the calculated exposure for a certain pesticide/crop combination was compared with the ARfD value established for the concerned pesticide. In Table 5-1 the ARfD values used for the acute risk assessment are listed. It should be mentioned that some of the ARfD values were derived recently and were not in place in 2010 when the monitoring results were generated. For 35 substances with low acute toxicity the toxicological assessments concluded that the setting of an ARfD is not necessary. These substances are therefore not relevant for acute exposure assessment.

For a total of 16 substances the short-term risk assessment has been performed with the ADI instead of the ARfD because these have not been evaluated with regard to the setting of the ARfD and/or the setting of the ARfD was not finalised. The list of ADI values can be found in Table 5-1. For seven substances for which neither an ARfD nor an ADI was available (azinphos-ethyl, camphechlor, HCH (alpha isomer), HCH (beta isomer), hexachlorobenzene, propargite and trichlorfon), no acute risk assessment could be performed<sup>67</sup>.

**Table 5-1:** ARfD values used for the short-term risk assessment.

Pesticide	ARfD <sup>(1)</sup> (mg/kg bw)	ARfD evaluation year	ARfD source
2,4-D	ARfD not necessary	2011	COM
Abamectin	0.005	2008	COM
Acephate	0.1	2005	JMPR
Acetamiprid	0.1	1999	COM
Acrinathrin	0.01	2010	EFSA
Aldicarb	0.003	2001	JMPR
Amitraz	0.01	2003	COM
Amitrole	ARfD not necessary	2001	COM
Azinphos-ethyl	No ARfD and no ADI allocated		
Azinphos-methyl	0.01	2006	COM
Azoxystrobin	ARfD not necessary	2011	COM
Benfuracarb	0.02	2009	EFSA
Bifenthrin	0.03	2011	EFSA
Bitertanol	0.01	2011	COM
Boscalid	ARfD not necessary	2008	COM
Bromide ion	No ARfD available; no acute risk assessment is performed		
Bromopropylate	No ARfD available; acute risk assessment performed with ADI (0.03 mg/kg bw per d; 1993 JMPR)		
Bromuconazole	0.1	2010	COM
Bupirimate	ARfD not necessary	2011	COM
Buprofezin	0.5	2010	COM
Cadusafos (aka ebufos)	0.003	2009	EFSA
Camphechlor	No ARfD and no ADI allocated		
Captan	0.3	2008	COM
Carbaryl	0.01	2006	EFSA
Carbendazim	0.02 <sup>(2)</sup>	2010	COM
Carbofuran	0.00015	2009	EFSA
Carbosulfan	0.005	2009	EFSA
Chlordane	No ARfD available; acute risk assessment performed with ADI (0.0005 mg/kg bw per d; 1994 JMPR)		

<sup>67</sup> For some pesticides the toxicological reference values (ADI/ARfD) are not available because the national/EU/international toxicological assessment was not finalised or carried out due to e.g. the incomplete toxicological dossier.



Pesticide	ARfD <sup>(1)</sup> (mg/kg bw)	ARfD evaluation year	ARfD source
Chlorfenapyr	0.015	1999	ECCO
Chlorfenvinphos	No ARfD available; acute risk assessment performed with ADI (0.0005 mg/kg bw per d; 1994 JMPR)		
Chloromequat	0.07 <sup>(3)</sup>	2009	COM
Chlorobenzilate	No ARfD available; acute risk assessment performed with ADI (0.02 mg/kg bw per d; 1980 JMPR)		
Chlorothalonil	0.6	2006	COM
Chlorpropham	0.5	2004	COM
Chlorpyrifos	0.1	2005	COM
Chlorpyrifos-methyl	0.1	2005	COM
Clofentezine	ARfD not necessary	2010	COM
Clothianidin	0.1	2006	COM
Cyfluthrin	0.02	2003	COM
Cypermethrin	0.2 <sup>(4)</sup>	2005	COM
Cyproconazole	0.02	2011	COM
Cyprodinil	ARfD not necessary	2006	COM
DDT	ARfD not necessary	2000	JMPR
Deltamethrin	0.01	2003	COM
Diazinon	0.025	2006	EFSA
Dichlofluanid	No ARfD available; acute risk assessment performed with ADI (0.3 mg/kg bw per d; 1983 JMPR)		
Dichlorvos	0.002 (tentative value)	2006	EFSA
Dicloran	0.025	2010	EFSA
Dicofol	0.2	2011	JMPR
Dieldrin	0.003	2007	EFSA
Difenoconazole	0.2	2008	COM
Dimethoate	0.01 <sup>(5)</sup>	2007	COM
Dimethomorph	0.6	2007	COM
Dinocap	0.004	2007	COM
Diphenylamine	ARfD not necessary	2008	EFSA
Dithiocarbamates: Mancozeb	0.34 <sup>(6)</sup>	2005	COM
Dithiocarbamates: Ziram	0.04 <sup>(6)</sup>	2004	COM
Endosulfan	0.015	2001	ECCO
Endrin	No ARfD available; acute risk assessment performed with ADI (0.0002 mg/kg bw per d; 1994 JMPR)		
Epoconazole	0.023	2008	COM
Esfenvalerate, Fenvalerate	0.05	2000	COM
Ethephon	0.05	2008	COM
Ethion (aka diethion)	No ARfD available; acute risk assessment performed with ADI (0.002 mg/kg bw per d; 1990 JMPR)		
Ethoprophos	0.01	2006	EFSA
Etofenprox	1	2009	COM
Fenamiphos (aka phenamiphos)	0.0025	2006	COM
Fenarimol	0.02	2006	COM
Fenazaquin	0.1	2011	COM
Fenbuconazole	0.3	2010	COM
Fenbutatin oxide	0.1	2011	COM

Pesticide	ARfD <sup>(1)</sup> (mg/kg bw)	ARfD evaluation year	ARfD source
Fenhexamid	ARfD not necessary	2001	COM
Fenitrothion	0.013	2006	EFSA
Fenoxycarb	2	2011	COM
Fenpropathrin	No ARfD available; acute risk assessment performed with ADI (0.03 mg/kg bw per d; 1993 JMPR)		
Fenpropimorph	0.03	2008	COM
Fenthion	0.01	2000	JMPR
Fipronil	0.009	2007	COM
Fluazifop-P-butyl	0.017	2011	COM
Fludioxonil	ARfD not necessary	2007	COM
Flufenoxuron	ARfD not necessary	2011	EFSA
Fluquinconazole	0.02	2011	COM
Flusilazole	0.005 <sup>(7)</sup>	2007	COM
Flutriafol	0.05	2011	COM
Folpet	0.2	2008	COM
Formetanate	0.005	2007	COM
Fosthiazate	0.005	2003	COM
Glyphosate	ARfD not necessary	2001	COM
Haloxypop	0.075	2006	EFSA
HCH (Hexachlorcyclohexane), Alpha-isomer	No ADI and no ARfD allocated		
HCH (Hexachlorcyclohexane), Beta-isomer	No ADI and no ARfD allocated		
Heptachlor	No ARfD available; acute risk assessment performed with ADI (0.0001 mg/kg bw per d; 1994 JMPR)		
Hexachlorobenzene	No ADI and no ARfD allocated		
Hexaconazole	No ARfD available; acute risk assessment performed with ADI (0.005 mg/kg bw per d; 1990 JMPR)		
Hexythiazox	ARfD not necessary	2011	COM
Imazalil	0.05	2011	COM
Imidacloprid	0.08	2008	COM
Indoxacarb	0.125	2005	COM
Iprodione	ARfD not necessary	2002	COM
Iprovalicarb	ARfD not necessary	2002	COM
Kresoxim-methyl	ARfD not necessary	2011	COM
lambda-Cyhalothrin	0.0075	2001	COM
Lindane (HCH, Gamma isomer)	0.06	2000	COM
Linuron	0.03	2002	COM
Lufenuron	ARfD not necessary	2009	COM
Malathion	0.3	2010	COM
Mepanipyrim	ARfD not necessary	2004	COM
Mepiquat	0.23 <sup>(8)</sup>	2008	COM
Metalaxyl-M, metalaxyl	0.5	2002	COM
Metconazole	0.01	2006	COM
Methamidophos	0.003	2007	COM
Methidathion	0.01	1997	JMPR
Methiocarb	0.013	2007	COM
Methomyl	0.0025 <sup>(9)</sup>	2009	COM
Methoxychlor	No ARfD available; acute risk assessment performed with ADI (0.1 mg/kg bw per d; 1977 JMPR)		

Pesticide	ARfD <sup>(1)</sup> (mg/kg bw)	ARfD evaluation year	ARfD source
Methoxyfenozide	0.2	2005	COM
Monocrotophos	0.002	1995	JMPR
Myclobutanil	0.31	2010	COM
Omethoate	0.002 <sup>(5)</sup>	2007	COM
Oxadixyl	No ARfD available; acute risk assessment performed with ADI (0.01 mg/kg bw per d; 1984 FR)		
Oxamyl	0.001	2006	COM
Oxydemeton-methyl	0.0015	2006	COM
Pacllobutrazol	0.1	2011	COM
Parathion	0.005	2001	ECCO 100
Parathion-methyl	0.03	1995	JMPR
Penconazole	0.5	2009	COM
Pencycuron	ARfD not necessary	2011	COM
Pendimethalin	ARfD not necessary	2003	COM
Permethrin	1.5	2000	COM
Phenthoate	No ARfD available; acute risk assessment performed with ADI (0.003 mg/kg bw per d; 1984 JMPR)		
Phosalone	0.1	2006	EFSA
Phosmet	0.045	2007	COM
Phoxim	No ARfD available; acute risk assessment performed with ADI (0.00375 mg/kg bw per d; 2000 EMEA)		
Pirimicarb	0.1	2006	COM
Pirimiphos-methyl	0.15	2007	COM
Prochloraz	0.025	2011	COM
Procymidone	0.012	2007	DAR FR
Profenofos	1	2007	JMPR
Propamocarb	0.84 <sup>(10)</sup>	2007	COM
Propargite	No ADI and no ARfD allocated	2011	EFSA
Propiconazole	0.3	2003	COM
Propyzamide	ARfD not necessary	2003	COM
Prothioconazole	0.01	2008	COM
Pyraclostrobin	0.03	2004	COM
Pyrazophos	0.001	1998	DE
Pyrethrins	0.2	2008	COM
Pyridaben	0.05	2010	COM
Pyrimethanil	ARfD not necessary	2006	EFSA
Pyriproxyfen	10	2008	COM
Quinoxifen	ARfD not necessary	2003	COM
Quintozene	ARfD not necessary	2000	COM
Resmethrin	No ARfD available; acute risk assessment performed with ADI (0.03 mg/kg bw per d; 1991 JMPR)		
Spinosad	ARfD not necessary	2006	COM
Spiroxamine	0.1	2011	COM
Tau-Fluvalinate	0.05	2010	COM
Tebuconazole	0.03	2008	COM
Tebufenozide	ARfD not necessary	2011	COM
Tebufenpyrad	0.02	2009	COM
Tecnazene	No ARfD available; acute risk assessment performed with ADI (0.02 mg/kg bw per d; 1994 JMPR)		

Pesticide	ARfD <sup>(1)</sup> (mg/kg bw)	ARfD evaluation year	ARfD source
Teflubenzuron	ARfD not necessary	2008	COM
Tefluthrin	0.005	2010	COM
Tetraconazole	0.05	2008	COM
Tetradifon	ARfD not necessary	2002	DE
Thiabendazole	ARfD not necessary	2001	COM
Thiacloprid	0.03	2004	COM
Thiametoxam	0.5	2007	COM
Thiophanate-methyl	0.2	2005	COM
Tolclofos-methyl	ARfD not necessary	2006	COM
Tolyfluanid	0.25	2006	COM
Triadimenol	0.05 <sup>(11)</sup>	2008	COM
Triazophos	0.001	2002	JMPR
Trichlorfon	No ADI and no ARfD allocated		
Trifloxystrobin	ARfD not necessary	2003	COM
Triflumuron	ARfD not necessary	2011	COM
Trifluralin	ARfD not necessary	2005	EFSA
Triticonazole	0.05	2006	COM
Vinclozolin	0.06	2006	COM
Zoxamide	ARfD not necessary	2003	COM

- (1) For the short-term risk assessment, the most recent ARfDs available were used. It should be mentioned that some of the ARfD values were derived recently and were not in place in 2010 when the monitoring results were generated. For active substances for which no ARfD was available, the acute risk assessment was performed with the ADI (see Table 5-4).
- (2) Carbendazim and benomyl: the legal residue definition refers to the sum of these two substances. For the acute risk assessment the ARfD set for carbendazim (0.02 mg/kg bw) was applied because the use of benomyl is not authorised in the EU and therefore it is most likely that the measured residues refer to carbendazim.
- (3) Chlormequat: the ARfD derived in the peer review for chlormequat chloride (0.09 mg/kg) was recalculated to chlormequat by applying a molecular weight conversion factor to match with the residue definition which is expressed as chlormequat (ion).
- (4) Cypermethrin: the legal residue definition is set to cypermethrin, including other mixtures of constituent isomers. For the acute risk assessment the ARfD derived for the isomeric mixture is used (0.2 mg/kg bw). For alpha-cypermethrin and zeta-cypermethrin different ARfD values are derived: 0.04 mg/kg bw and 0.125 mg/kg bw respectively.
- (5) Dimethoate: the residue definition (sum of dimethoate and omethoate) comprises compounds for which different ARfD values were set. Therefore two scenarios were calculated, the first with the ARfD of dimethoate (0.01 mg/kg bw), the second with the ARfD of omethoate (0.002 mg/kg bw), assuming that the reported residues (sum of dimethoate and omethoate) comprise only dimethoate (scenario 1) or omethoate (scenario 2).
- (6) Dithiocarbamates: the residue definition covers compounds for which different ARfD values were set. Therefore two scenarios were calculated, the first with the ARfD of mancozeb (highest), the second with the ARfD of ziram (lowest) as both substances are authorised. The ARfDs for mancozeb and ziram derived in the peer review (0.6 mg/kg bw and 0.08 mg/kg bw, respectively) were recalculated to CS<sub>2</sub> by multiplying with a molecular weight correction factor. The following conversion factors were applied: mancozeb: 0.56; ziram: 0.5. For other dithiocarbamates the following ARfD values are available: maneb: 0.2 mg/kg bw, propineb: 0.1 mg/kg bw, thiram: 0.6 mg/kg bw, metiram: no ARfD necessary.
- (7) Flusilazole: according to Review Report of the European Commission the ARfD refers to women of child bearing age (6850/VI/97, 5 January 2007, [http://ec.europa.eu/sanco\\_pesticides/public/index.cfm?event=activesubstance\\_detail](http://ec.europa.eu/sanco_pesticides/public/index.cfm?event=activesubstance_detail)).
- (8) Mepiquat: the ARfD derived in the peer review for mepiquat chloride (0.03 mg/kg bw) by recalculated to mepiquat multiplying with a molecular weight correction factor to match with the residue definition which is expressed as mepiquat (ion).
- (9) Methomyl: the legal residue definition is set to the sum of methomyl and thiodicarb. For the acute risk assessment, the methomyl ARfD (0.0025 mg/kg bw) was used, as the use of methomyl is authorised at EU level (the use of thiodicarb is not authorised) and therefore the summed residues reported are most likely due to methomyl rather than thiodicarb residues.
- (10) Propamocarb: the ARfD derived by the peer review for propamocarb hydrochloride (1 mg/kg bw) was recalculated to propamocarb by multiplying with a molecular weight correction factor to match with the residue definition which is expressed as propamocarb.
- (11) Triadimenol: the residue definition is set to the sum of triadimenol and triadimefon. For the acute risk assessment, the triadimenol ARfD (0.05 mg/kg bw) was used as its use is authorised at EU level, while the use of triadimefon is not authorised. As a result, the summed residues are most likely due to the residues of triadimenol.

### 5.1.2. Residue levels

The first tier IESTI calculations were performed with the residue levels reported in Table 5-2. The table does not contain data concerning pesticides for which no ARfD was deemed necessary or where no toxicological reference value is available (see Table 5-1). Shaded cells in the table refer to pesticide/crops which were not covered by the 2010 EU-coordinated programme. White empty cells refer to pesticide/crop combinations for which samples were analysed, but none of the samples contained measurable residues (i.e. all results were reported below the LOQ).

The monitoring results were reported according to the enforcement residue definition as defined in Regulation (EC) No 396/2005. A re-calculation to the risk assessment residue definition was not possible because the conversion factors are currently not available.

**Table 5-2:** Highest residue measured (HRM) in mg/kg used as input values for the short-term dietary exposure calculations (tier 1).

Pesticide (residue definition for the concerned food commodities)	Apples	Head cabbage	Leek	Lettuce	Milk	Oats	Peaches	Rye	Strawberries	Swine meat	Tomatoes
Abamectin (sum of avermectin B1a, avermectin B1b and delta-8,9 isomer of avermectin B1a)				0.055					0.052		
Acephate	0.010						0.029				
Acetamiprid	0.099	0.008		1.61			0.092		0.070		0.670
Acrinathrin			0.160	0.080			0.110		0.240		0.079
Aldicarb (sum of aldicarb, its sulfoxide and its sulfone, expressed as aldicarb)		0.003									
Aldrin and dieldrin (aldrin and dieldrin combined expressed as dieldrin)											
Azinphos-methyl	0.068		0.011				0.047		0.020		
Benfuracarb											
Bifenthrin	0.157		0.010	1.25		0.012	0.250		0.150		0.300
Bitertanol	0.077			0.012			0.320				0.573
Bromopropylate			0.470			0.020		0.009			0.016
Bromuconazole (sum of diastereoisomers)											
Buprofezin	0.010	0.040		0.028			0.060				0.480
Cadusafos											
Captan			0.440	0.020			3.20				
Captan/Folpet (sum of captan and folpet)	2.72								3.70		
Carbaryl	0.021						0.032		0.015		0.016
Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)	0.440	0.011	0.010	0.190		0.078	0.640	0.082	0.287		0.200
Carbofuran (sum of carbofuran and 3-hydroxycarbofuran expressed as carbofuran)				0.018							
Carbosulfan											
Chlordane (sum of cis- and trans-isomers and oxychlordane expressed as chlordane)											
Chlorfenapyr	0.032								0.170		0.034
Chlorfenvinphos	0.010			0.002							
Chlormequat						15.0		2.41			
Chlorobenzilate											
Chlorothalonil	0.260	0.600	0.930	3.28			0.906		2.10		1.81
Chlorpropham (chlorpropham and 3-chloroaniline expressed as chlorpropham)	0.021						0.002		0.047		0.010
Chlorpyrifos	0.500	0.290	0.099	1.04	0.001	0.040	0.680	0.020	0.160		0.410
Chlorpyrifos-methyl	0.270		0.010	0.034		1.13	0.500	0.071	0.138		0.400
Clothianidin	0.012			0.023			0.012				0.030
Cyfluthrin (cyfluthrin incl. other mixtures of constituent isomers (sum of isomers))	0.030	0.040		0.116			0.190				0.040

Pesticide (residue definition for the concerned food commodities)	Apples	Head cabbage	Leek	Lettuce	Milk	Oats	Peaches	Rye	Strawberries	Swine meat	Tomatoes
Cypermethrin (cypermethrin incl. other mixtures of constituent isomers (sum of isomers))	0.390	0.590	1.00	1.30			0.600		0.140	0.030	0.460
Cyproconazole	0.014	0.110				0.020	0.098		0.062		0.049
Deltamethrin (cis-deltamethrin)	0.036	0.020	0.020	0.340		0.410	0.120		0.076		0.220
Diazinon	0.200	0.012		0.017		0.015			0.012	0.011	
Dichlofluanid	0.160										0.003
Dichlorvos	0.080						0.030		0.029		0.010
Dicloran		0.017		0.440							0.180
Dicofol (sum of p,p' and o,p' isomers)	0.156										0.050
Difenoconazole	0.080	0.380	0.090	0.180			0.070		0.024		0.770
Dimethoate (sum of dimethoate and omethoate expressed as dimethoate )	1.20	0.089		0.700			1.27		0.033		0.045
Dimethoate	1.20	0.015		0.580					0.033		0.030
Omethoate	0.120	0.056		0.120							0.018
Dimethomorph	0.050	1.60	0.031	10.0			0.010		0.064		0.270
Dinocap (sum of dinocap isomers and their corresponding phenols expressed as dinocap)											
Dithiocarbamates (dithiocarbamates expressed as CS <sub>2</sub> , including maneb, mancozeb, metiram, propineb, thiram and ziram)	1.90	3.00	2.01	13.4		0.050	1.29	0.900	7.00		1.11
Endosulfan (sum of alpha- and beta- isomers and endosulfan-sulphate expressed as endosulfan)	0.054			0.140			0.071		0.080		0.300
Endrin					0.00008						
Epoxiconazole						0.060		0.018	0.060		0.050
Ethephon	0.043							0.010			3.80
Ethion		0.018							0.320		
Ethoprophos							0.011				
Etofenprox	0.051	0.600		0.780			0.200		0.059		0.210
Fenamiphos (sum of fenamiphos and its sulfoxide and sulfone expressed as fenamiphos)		0.009									0.030
Fenarimol	0.030			0.020					0.078		0.016
Fenazaquin	0.050						0.077		0.210		0.041
Fenbuconazole	0.022						0.140		0.019		
Fenbutatin oxide	0.199			0.014			0.022	0.004	0.011		0.051
Fenitrothion	0.021										
Fenoxycarb	0.123						0.094				
Fenpropathrin	0.100						0.087		0.070		
Fenpropimorph	0.030		0.087	0.005					0.049		
Fenthion (sum of fenthion and its oxygen analogue, their sulfoxides and sulfone expressed as parent)	0.110						0.056				
Fenvalerate and Esfenvalerate (sum of RS/SR and RR/SS isomers)							0.026				
Fipronil (sum of fipronil and sulfone metabolite (MB46136) expressed as fipronil)											
Fluazifop (fluazifop-P-butyl (fluazifop acid (free and conjugate)))		0.255	0.038	0.004					0.011		
Fluquinconazole	0.020										
Flusilazole	0.015					0.030	0.006		0.004		0.010
Flutriafol	0.030								0.454		0.055
Folpet				17.0							
Formetanate (sum of formetanate and its salts expressed as formetanate (hydrochloride))									0.260		
Fosthiazate											
Haloxypop including Haloxypop-R (Haloxypop-R methyl ester, haloxypop-R and conjugates of haloxypop-R expressed as haloxypop-R)			0.055	0.024					0.003		
Heptachlor (sum of heptachlor and										0.0007	

Pesticide (residue definition for the concerned food commodities)	Apples	Head cabbage	Leek	Lettuce	Milk	Oats	Peaches	Rye	Strawberries	Swine meat	Tomatoes
heptachlor epoxide expressed as heptachlor)											
Hexaconazole	0.050						0.024		0.053		
Imazalil	1.13	0.014		0.020			0.066		0.023		1.40
Imidacloprid	0.070	0.120	0.001	0.900		0.029	0.170		0.120		0.550
Indoxacarb (indoxacarb as sum of the isomers S and R)	0.174	0.160	0.058	0.810			0.130		0.010		0.150
Lambda-Cyhalothrin	0.087	0.064	0.035	0.660			0.200		0.300		0.064
Lindane (gamma-isomer of hexachlorocyclohexane (HCH))					0.00008					0.0002	
Linuron		0.017	0.084	0.018				0.020			
Malathion (sum of malathion and malaoxon expressed as malathion)						0.012	0.029	0.060			
Mepiquat						0.250		1.74			
Metalaxyl and metalaxyl-M (metalaxyl incl. other mixtures of constituent isomers incl. Metalaxyl-M (sum of isomers))	0.032	0.024	0.012	0.882			0.040		0.077		0.110
Metconazole											
Methamidophos	0.060								1.50		0.026
Methidathion	0.012	0.026					0.030				
Methiocarb (sum of methiocarb and methiocarb sulfoxide and sulfone, expressed as methiocarb)		0.025	0.042	0.030			0.410		0.310		
Methomyl and Thiodicarb (sum of methomyl and thiodicarb expressed as methomyl)		0.055		0.024					0.435		
Methoxychlor											
Methoxyfenozide	0.176	0.130					0.160				0.390
Monocrotophos									0.028		
Myclobutanil	0.106			0.076			0.079		0.390		0.050
Oxadixyl				0.210							0.046
Oxamyl		0.250							0.100		0.380
Oxydemeton-methyl (sum of oxydemeton-methyl and demeton-S-methylsulfone expressed as oxydemeton-methyl)	0.026										
Paclobutrazole	0.010										
Parathion											
Parathion-methyl (sum of parathion-methyl and paraoxon-methyl expressed as parathion-methyl)									0.020		
Penconazole	0.042	0.020					0.100		0.424		0.100
Permethrin (sum of isomers)										0.001	
Phentoate											
Phosalone	0.470										0.016
Phosmet (phosmet and phosmet-oxon expressed as phosmet)	0.160		0.016				0.240				0.014
Phoxim											
Pirimicarb (sum of pirimicarb and desmethyl pirimicarb expressed as pirimicarb)	0.222	0.080		0.468			0.086	0.035	0.460		0.099
Pirimiphos-methyl		0.023		0.029		4.10		3.20		0.001	0.500
Prochloraz (sum of prochloraz and its metabolites containing the 2,4,6-trichlorophenol moiety expressed as prochloraz)	0.027			0.020							0.020
Procymidone	0.020	0.021		0.700			0.088		0.590		0.470
Profenofos									0.090		
Propamocarb (sum of propamocarb and its salt expressed as propamocarb)		0.660	0.800	17.1			0.033		0.069		0.800
Propiconazole							0.035				0.011
Prothioconazole (prothioconazole (prothioconazole-desthio))											
Pyraclostrobin	0.200	0.070	0.069	1.20		0.012	0.180		0.470		0.360
Pyrazophos											
Pyrethrins	0.023			0.370					0.020		0.072

Pesticide (residue definition for the concerned food commodities)	Apples	Head cabbage	Leek	Lettuce	Milk	Oats	Peaches	Rye	Strawberries	Swine meat	Tomatoes
Pyridaben	0.030						0.130		0.050		0.055
Pyriproxyfen				0.017							0.150
Resmethrin (resmethrin including other mixtures of constituent isomers (sum of isomers))											
Spiroxamine	0.001			0.003							0.056
Tau-fluvalinate	0.034			2.80			0.010		0.022		0.010
Tebuconazole	1.00	0.300	0.167	0.035		0.100	0.600	0.029	0.061		0.290
Tebufenpyrad	0.090	0.014					0.050		0.429		0.110
Tecnazene											
Tefluthrin											0.029
Tetraconazole	0.110			0.013			0.090		0.150		0.057
Thiacloprid	0.860	0.076	0.012	0.840			0.080		1.09		0.170
Thiamethoxam (sum of thiamethoxam and clothianidin expressed as thiamethoxam)	0.240	0.018		0.524			0.190		0.200		0.080
Thiophanate-methyl	0.470	0.087		0.006		0.022	4.40		1.50		0.470
Tolylfluanid (sum of tolylfluanid and dimethylaminosulfotoluidide expressed as tolylfluanid)	0.140			0.020					0.160		0.047
Triadimefon and Triadimenol (sum of triadimefon and triadimenol)	0.040		0.109	0.050					1.30		0.130
Triazophos			0.007								
Triticonazole											
Vinclozolin (sum of vinclozolin and all metabolites cont. the 3,5- dichloraniline moiety, expressed as vinclozolin)		0.010		0.152					0.261		0.017

In addition to the pesticides and commodities listed in Table 5-2 reporting countries had to analyse for amitraz residues on pears. The HRM for this combination amounted to 0.22 mg/kg.

## 5.2. Results of the short-term risk (acute) assessment

The results of the short-term risk assessment are presented in Table 5-3<sup>68</sup>. The exposure resulting from the highest residue measured for a certain pesticide/crop combination was calculated according to the model assumptions explained in section 5.1. The results are expressed in percent of the toxicological reference values. Thus, for pesticide/crop combinations where the exposure is below or at 100% no short-term consumer health risk is expected. Blank cells in the table refer to pesticide/crop combinations where the exposure was considered to be negligible because none of the samples analysed contained measurable residues. Results reported in bold font refer to residue findings which exceeded the MRL.

For 20 substances no residues were detected in quantifiable concentrations in any of the samples taken for the food commodities requested to be analysed: aldrin and dieldrin, benfuracarb, bromuconazole (sum), cadusafos, carbosulfan, chlordane (sum), chlorbenzilate, dinocap (sum), fipronil (sum), fosthiazate, metconazole, methoxychlor, parathion, phenthoate, phoxim, prothioconazole, pyrazophos, resmethrin, tecnazene and triticonazole. These substances appear as completely empty rows in Table 5-3. For 30 pesticides at least one sample was identified which contained residues in concentrations that could pose a potential consumer health risk. The pesticide/crop combinations for which exceedances of the ARfD (or ADI) were identified are highlighted in the Table 5-3 by shading the respective cells in dark orange (exposure between 100% and 1,000% of the toxicological reference value) or dark red (exposure exceeding 1,000% of the ARfD/ADI).

For two compounds included in the EU monitoring programme (i.e. dimethoate/omethoate and dithiocarbamates) the residue definitions contain compounds with significantly different toxicity.

<sup>68</sup> The table does not contain the pesticides for which an ARfD was considered not necessary and substances for which no toxicological reference values for acute risk assessment are available.



Without knowing the nature of the residue found on the samples it is therefore impossible to perform an unambiguous risk assessment. Thus, for these two compounds EFSA calculated two scenarios: scenario 1 is based on the less conservative assumptions<sup>69</sup>, whereas in scenario 2 the worst case assumptions – likely to be overly conservative - are implemented<sup>70</sup>.

In total, for 79 samples/determinations the short-term consumer health risk could not be excluded. This number of samples/determinations reflects the calculations on the basis of the less conservative scenarios (scenario 1 for dimethoate/omethoate and dithiocarbamates). In scenario 2, calculated for dimethoate/omethoate and dithiocarbamates, for a total of 200 samples/determinations a potential acute risk was identified. The number of samples exceeding the toxicological threshold for a pesticide/crop combination is reported in brackets in Table 5-3.

Under scenario 1, the pesticide/crop combinations for which a potential acute risk could not be excluded amounted to 51.

Amitraz, which had to be analysed only in pears, is not included in Table 5-3. The highest estimated short-term exposure for this pesticide/crop combination accounted for 200.4% of the ARfD; the only sample that was found exceeding the toxicological threshold was also not compliant with the EU MRL.

The detailed results of the acute exposure assessments are reported individually for each pesticide in an exposure assessment summary report in Appendix IV.

**Table 5-3:** Summarized results of short-term dietary exposure assessment (exposure expressed in % of the ARfD or ADI – tier 1 calculation). The figure in brackets indicates the number of samples exceeding the toxicological threshold level; numbers reported in bold refer to combinations for which an MRL exceedance was reported.

Pesticide(*)	Apples	Head cabbage	Leek	Lettuce	Milk	Oats	Peaches	Rye	Strawberries	Swine Meat	Tomatoes
Abamectin (sum)				29.6					16.2		
Acephate	1.0						1.7				
Acetamiprid	9.7	0.4		43.4			5.5		1.1		39.0
Acrinathrin			94.3	21.5			65.3		37.4		45.9
Aldicarb (sum)		5.3									
Aldrin and Dieldrin (sum)											
Azinphos-methyl	66.6		6.5				27.9		3.1		
Benfuracarb											
Bifenthrin	51.3		2.0	112.1 (2)		0.2	49.4		7.8		58.1
Bitertanol	75.4			3.2			189.9 (1)				333.2 (5)
Bromopropylate			92.4			0.3		0.2			3.1

<sup>69</sup> Scenario 1 for dimethoate/omethoate: it is assumed the samples would not contain the more toxic omethoate; the total residue reported as sum of dimethoate and omethoate expressed as dimethoate would only contains dimethoate. Scenario 1 for dithiocarbamates: it is assumed that the samples would contain only the less toxic compound of the dithiocarbamates group (i.e. mancozeb).








<sup>70</sup> Scenario 2 for dimethoate/omethoate: it is assumed the samples would contain only the more toxic omethoate. It is noted that omethoate is no longer authorised in the EU. However, it is formed to a certain extent as metabolite from dimethoate. Scenario 2 for dithiocarbamates: it is assumed that the samples would contain only the more toxic ziram. However, it is noted that ziram is not authorised in the EU for the crops under consideration.

Pesticide(*)	Apples	Head cabbage	Leek	Letfuce	Milk	Oats	Peaches	Rye	Strawberries	Swine Meat	Tomatoes
Bromuconazole (sum)											
Buprofezin	0.2	0.4	0.0	0.2			0.7				5.6
Cadusafos							0.0				
Captan <sup>(1)</sup>	88.8		8.6	0.2			63.3		19.2		
Carbaryl	20.6						19.0		2.3		9.3
Carbendazim and benomyl	215.5 (4)	2.9	2.9	25.6		1.6	189.9 (1)	2.6	22.4		58.1
Carbofuran (sum)				322.8 (1)							
Carbosulfan											
Chlordane (sum)											
Chlorfenapyr	20.9								17.7		13.2
Chlorfenvinphos	195.9 (1)			10.8							
Chlormequat						85.3		21.7			
Chlorobenzilate											
Chlorothalonil	4.2	5.3	9.1	14.7			9.0		5.5		17.5
Chlorpropham (sum)	0.4						<0.1		0.1		0.1
Chlorpyrifos	49.0	15.3	5.8	28.0	0.1	0.2	40.3	0.1	2.5		23.8
Chlorpyrifos-methyl	26.5		0.6	0.9		4.5	29.7	0.4	2.2		23.3
Clothianidin	1.2			0.6			0.7				1.7
Cyfluthrin (sum)	14.7	10.5		15.6			56.4				11.6
Cypermethrin (sum)	19.1	15.5	29.5	17.5			17.8		1.1	0.1	13.4
Cyproconazole	6.9	28.9				0.4	29.1		4.8		14.2
Deltamethrin	35.3	10.5	11.8	91.5		16.3	71.2		11.8		127.9 (2)
Diazinon	78.4	2.5		1.8		0.2			0.7	0.4	
Dichlofluanid	5.2										0.1
Dichlorvos	391.9 (1)						89.0		22.6		29.1
Dicloran		3.6		47.4							41.9
Dicofol (sum)	7.6										1.5
Difenoconazole	3.9	10.0	2.7	2.4			2.1		0.2		22.4
Dimethoate (sum)/Dimethoate <sup>(2)</sup>	1175.6 (1)	46.8		188.3 (2)			753.5 (2)		5.1		25.9
Dimethoate (sum)/Omethoate <sup>(2)</sup>	5877.9 (5)	234.2 (2)		941.6 (13)			3767.5 (2)		25.7		129.4 (1)
Dimethomorph	0.8	14.0	0.3	44.8			0.1		0.2		2.6
Dinocap (sum)											
Dithiocarbamates/ mancozeb <sup>(3)</sup>	54.7	46.4	34.8	106.0 (1)		0.1	22.5	1.7	32.1		19.0
Dithiocarbamates/ ziram <sup>(3)</sup>	465.3 (18)	394.7 (10)	296.2 (7)	901.3 (55)		0.5	191.3 (3)	14.2	272.8 (1)		161.4 (7)

Pesticide(*)	Apples	Head cabbage	Leek	Lettuce	Milk	Oats	Peaches	Rye	Strawberries	Swine Meat	Tomatoes
Endosulfan (sum)	35.3			25.1			28.1		8.3		116.3 (1)
Endrin					5.0						
Epoxiconazole						1.0		0.5	4.1		12.6
Ethephon	8.4							0.1			441.9 (5)
Ethion		47.4							249.5 (1)		
Ethoprophos							6.5				
Etofenprox	0.5	3.2		2.1			1.2		0.1		1.2
Fenamiphos (sum)		18.9									69.8
Fenarimol	14.7			2.7					6.1		4.7
Fenazaquin	4.9						4.6		3.3		2.4
Fenbuconazole	0.7						2.8		0.1		
Fenbutatin oxide	19.5			0.4			1.3	<0.1	0.2		3.0
Fenitrothion	15.8										
Fenoxycarb	0.6						0.3				
Fenpropathrin	32.7						17.2		3.6		
Fenpropimorph	9.8		17.1	0.4					2.5		
Fenthion (sum)	107.8 (1)						33.2				
Fenvalerate/ Esfenvalerate (sum)							3.1				
Fipronil (sum)											
Fluazifop-P-butyl (fluazifop acid (free and conjugate))		78.9	13.2	0.6					1.0		
Fluquinconazole	9.8										
Flusilazole	29.4					2.4	7.1		1.2		11.6
Flutriafol	5.9								14.2		6.4
Folpet <sup>(4)</sup>	133.2 (3)			228.7 (6)					28.8		
Formetanate (sum)									81.1		
Fosthiazate											
Haloxifop including haloxifop-R (sum)			4.3	0.8					0.1		
Heptachlor										5.7	
Hexaconazole	98.0						28.5		16.5		
Imazalil	221.4 (6)	1.5		1.1			7.8		0.7		162.8 (1)
Imidacloprid	8.6	7.9	0.1	30.3		0.1	12.6		2.3		40.0
Indoxacarb	13.6	6.7	2.7	17.4			6.2		0.1		7.0
Lambda-Cyhalothrin	113.6 (1)	44.9	27.5	236.8 (6)			158.2 (1)		62.4		49.6
Lindane					<0.1					<0.1	

Pesticide(*)	Apples	Head cabbage	Leek	Lettuce	Milk	Oats	Peaches	Rye	Strawberries	Swine Meat	Tomatoes
Linuron		3.0	16.5	1.6				0.4			
Malathion (sum)						<0.1	0.6	0.1			
Mepiquat						0.4		4.8			
Metalaxyl (sum)	0.6	0.3	0.1	4.7			0.5		0.2		1.3
Metconazole											
Methamidophos	195.9 (1)								779.6 (1)		50.4
Methidathion	11.8	13.7					17.8				
Methiocarb (sum)		10.1	19.1	6.2			187.1 (1)		37.2		
Methomyl and Thiodicarb		115.8 (1)		25.8					271.2 (1)		
Methoxychlor											
Methoxyfenozide	8.6	3.4					4.7				11.3
Monocrotophos									21.8		
Myclobutanil	3.4			0.7			1.5		2.0		0.9
Oxadixyl				56.5							26.7
Oxamyl		1315.8 (1)							155.9 (1)		2209.6 (4)
Oxydemeton-methyl (sum)	169.8 (1)										
Paclobutrazol	1.0										
Parathion											
Parathion-methyl (sum)									1.0		
Penconazole	0.8	0.2					1.2		1.3		1.2
Permethrin										<0.1	
Phenthoate											
Phosalone	46.0										0.9
Phosmet (sum)	34.8		2.1				31.6				1.8
Phoxim											
Pirimicarb (sum)	21.7	4.2		12.6			5.1	0.2	7.2		5.8
Pirimiphos-methyl		0.8		0.5		10.9	0.0	13.5		<0.1	19.4
Prochloraz (sum)	10.6			2.2			0.0				4.7
Procymidone	16.3	9.2		156.9 (2)			43.5		76.7		227.7 (3)
Profenofos									0.1		
Propamocarb (sum)		3.5	4.7	46.0			0.2		0.1		4.7
Propiconazole							0.7				0.2
Prothioconazole (prothioconazole-desthio)											
Pyraclostrobin	65.3	12.3	13.6	107.6 (1)		0.2	35.6		24.4		69.8

Pesticide(*)	Apples	Head cabbage	Leek	Lettuce	Milk	Oats	Peaches	Rye	Strawberries	Swine Meat	Tomatoes
Pyrazophos											
Pyrethrins	1.1			5.0					0.2		2.1
Pyridaben	5.9						15.4		1.6		6.4
Pyriproxyfen				<0.1							0.1
Resmethrin											
Spiroxamine	0.1			0.1							3.3
tau-Fluvalinate	6.7			150.7 (1)			1.2		0.7		1.2
Tebuconazole	326.6 (2)	52.6	32.8	3.1		1.3	118.7 (1)	0.6	3.2		56.2
Tebufenpyrad	44.1	3.7					14.8		33.4		32.0
Tecnazene											
Tefluthrin											33.7
Tetraconazole	21.6			0.7			10.7		4.7		6.6
Thiacloprid	280.8 (1)	13.3	2.4	75.3			15.8		56.6		32.9
Thiametoxam (sum)	4.7	0.2		2.8			2.3		0.6		0.9
Thiophanate-methyl	23.0	2.3		0.1		<0.1	130.5 (1)		11.7		13.7
Tolyfluanid (sum)	5.5			0.2					1.0		1.1
Triadimenol (sum) <sup>(5)</sup>	7.8		12.9	2.7					40.5		15.1
Triazophos			40.7								
Trichlorfon									0.0		18.6
Triticonazole											
Vinclozolin (sum)		0.9		6.8					6.8		1.6

Legend:  less than 1% of ARfD/ADI  less than 10 % of ARfD/ADI  less than 100% of ARfD/ADI  
 less than 1000% of ARfD/ADI  more than 1000% of the ARfD/ADI  
 no sample analysed  no samples above the LOQ - negligible exposure

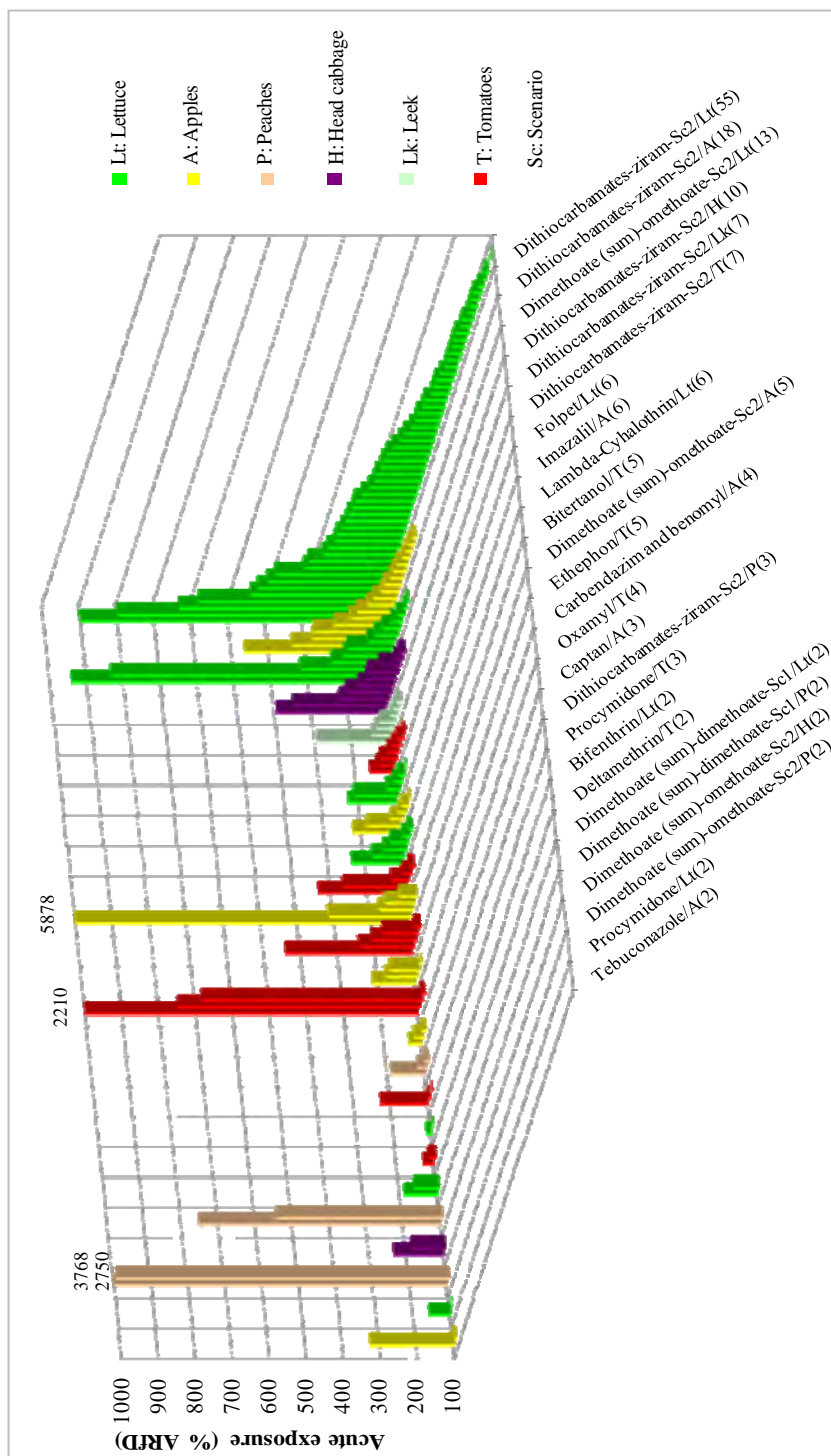
(\*) The cells concerning pesticide/crop combinations shaded and empty refer to combinations were not covered by the 2010 EU-coordinated programme defined in Regulation (EC) No 901/2009.

- (1) For apples, strawberries and tomatoes, the results reported for the sum of captan and folpet were used for calculating the exposure, using the ARfD set for captan.
- (2) For dimethoate/omethoate, the estimated exposure was assessed twice, once on the basis of the ARfD set for dimethoate and once with the ARfD set for omethoate (see Table 5-1). It is noted that the omethoate scenario (Scenario 2) is rather conservative,
- (3) For the dithiocarbamates, the estimated exposure was assessed twice, once on the basis of the ARfD set for mancozeb and once with the ARfD set for ziram (see Table 5-1). It is noted that the ziram-scenario (Scenario 2) is rather unlikely since in the EU ziram is not authorised for any of the crops under consideration.
- (4) For apples, strawberries and tomatoes, the results reported for the sum of captan and folpet were used for calculating the exposure, using the ARfD set for folpet.
- (5) For triadimenol, the estimated exposure was assessed on the bases of triadimenol ARfD (see Table 5-1).

Considering the 51 pesticide/crop combinations for which a consumer risk could not be excluded, the commodities that most often raised a potential intake concern (scenario 1 and 2) were lettuce (87 and 22 samples) followed by apples and tomatoes (45 and 23; 29 and 21 samples, respectively). It is noted

that for milk, oats, rye and swine meat none of the tested samples contained residues in concentrations that may have posed an acute risk. None of the samples posing a potential acute consumer risk concerned organically produced food.

The results of the exposure calculations presented in Table 5-3 refer to the samples with the highest residue measured. For the pesticide/crop combinations where more than one sample contained residues above the toxicological threshold more details can be found in Figure 5-2: there, the estimated acute exposure (expressed in % of the ARfD) is presented individually for each of the samples concerned.



**Figure 5-2:** Distribution of the acute exposure (expressed in % of the ARfD) for those combinations for which more than one samples were found exceeding the toxicological threshold.

Refinements of the estimated short-term exposure calculations (tier 2, see Figure 5-1) were not performed as all the pesticide/crop combinations for which a potential consumer risk could not be excluded in the first tier calculation concerned food commodities commonly consumed raw and/or unprocessed. Thus, the correction of the estimated exposure by a processing/peeling factor was not considered appropriate. However, usual food handling and household practices (e.g. washing) are expected to lead to a reduction of the residue concentrations on the food item consumed. Thus, the calculated theoretical consumer exposure might have overestimated the real consumer risk.

Table 5-3 contains as an additional piece of information an indication whether the highest residue measured exceeded the MRL for the pertinent pesticide/crop combination (results reported in bold font). As an example, the entry for acephate/peaches, for which the estimated short-term exposure accounted for 1.7% of the ARfD is highlighted in bold font, indicating that the highest residue reported (i.e. 0.03 mg/kg) exceeded the MRL which is set at the LOQ of 0.02 mg/kg.

Most of the samples for which an acute risk could not be excluded referred to samples that exceeded the EU MRLs. However, a potential short-term consumer risk was identified for some samples which were compliant with the MRL. This was for example the case for bifenthrin/lettuce, bitertanol/peaches and tomatoes and imazalil/apples and tomatoes. Similar situations were identified for endosulfan, lambda-cyhalothrin, procymidone, pyraclostrobin and tebuconazole. These findings imply that for some pesticide/crop combinations MRLs were set at a level which was not sufficiently protective for European consumers. However, the overall conservatism of the assumptions for exposure assessment (see 5.1) should be borne in mind.

It is noted that the toxicological reference values for bifenthrin, bitertanol and imazalil were lowered in 2011 on the basis of the most recent scientific knowledge. It is therefore necessary to review the existing MRLs to ensure that the MRLs are safe for European consumers. Also for endosulfan/tomatoes, lambda-cyhalothrin/apples and peaches, pyraclostrobin/lettuce and tebuconazole/apples and peaches the existing MRLs should be reviewed since there are indications that the existing MRLs are set at levels which lead to an exceedance of the toxicological reference values. For procymidone the MRLs in place in 2010 were set at levels for which a consumer risk could not be excluded. However, for this substance a decision on the lowering of the MRLs in place at the beginning of 2010 has been already taken. For carbofuran/lettuce and chlorfenvinphos/apples residues at the LOQ caused an exceedance of the ARfD. The MRLs for substances with extremely low toxicological reference values like carbofuran and chlorfenvinphos should be set at the lowest level achievable from an analytical point of view. Therefore it should be explored if a further lowering of the LOQs for these two substances is feasible.

### 5.3. Model assumptions for long-term (chronic) risk assessment

The chronic or long-term exposure assessment estimates the expected exposure of an individual over a long period, predicting the lifetime exposure. According to JMPR, the long-term dietary intakes are calculated by multiplying the residue concentration on food by the average daily per capita consumption estimated for each commodity, on the basis of appropriate food consumption data, and summing the intakes for each food (FAO, 2009). Ideally, the long-term exposure assessment should be calculated by means of probabilistic modelling, using the distributions of the individual food consumption reported by the respondents of food surveys and the distribution of the measured residue concentration identified in the monitoring programmes. Since a methodology for probabilistic calculations is not yet available, EFSA calculated the long-term exposure with a deterministic model, analogous to the calculation of the Theoretical Maximum Daily Intake (TMDI). The TMDI is calculated according to the following equation which was developed for the assessment of the long-term dietary intake in the framework of setting MRLs (WHO, 1997):

$$\text{TMDI} = \sum (\text{MRL}_i * F_i)$$

MRL<sub>i</sub>: Maximum residue level for food commodity i

F<sub>i</sub>: Food consumption of food commodity i

For the purpose of the risk assessment in the framework of this report, the MRL that is normally used in the TMDI calculation has been replaced with the mean residue concentration found in 2010 monitoring samples. If the calculated exposure, normalised by body weight, is below the toxicological reference value derived for long-term exposure, i.e. the Acceptable Daily Intake (ADI)<sup>71</sup>, the consumer is considered as adequately protected.

The following input values are required to calculate the actual chronic exposure:

- Residue concentration to which the consumer is exposed (see section 5.3.2)
- Mean food consumption, taken from the EFSA PRIMo (EFSA, 2007).
- Processing/peeling factors are used to perform more refined intake calculations for those crops that normally are not consumed raw/unprocessed (see section 5.3.2).<sup>72</sup>

As reported in section 2.1.1, the contribution of the food commodities of plant origin monitored in the 2010 EU-coordinated programme represents 8 to 36% of the total dietary daily intake of the European consumers. In order to be more representative for the total intake, the chronic risk assessment also included the commodities of plant origin which are relevant for 2011 and 2012 monitoring years (see section 2.1.1)<sup>73</sup>. With this approach, 39% to 95% of the total dietary intake of food of plant origin is represented. EFSA took into account also the exposure to swine meat and milk (including milk products).

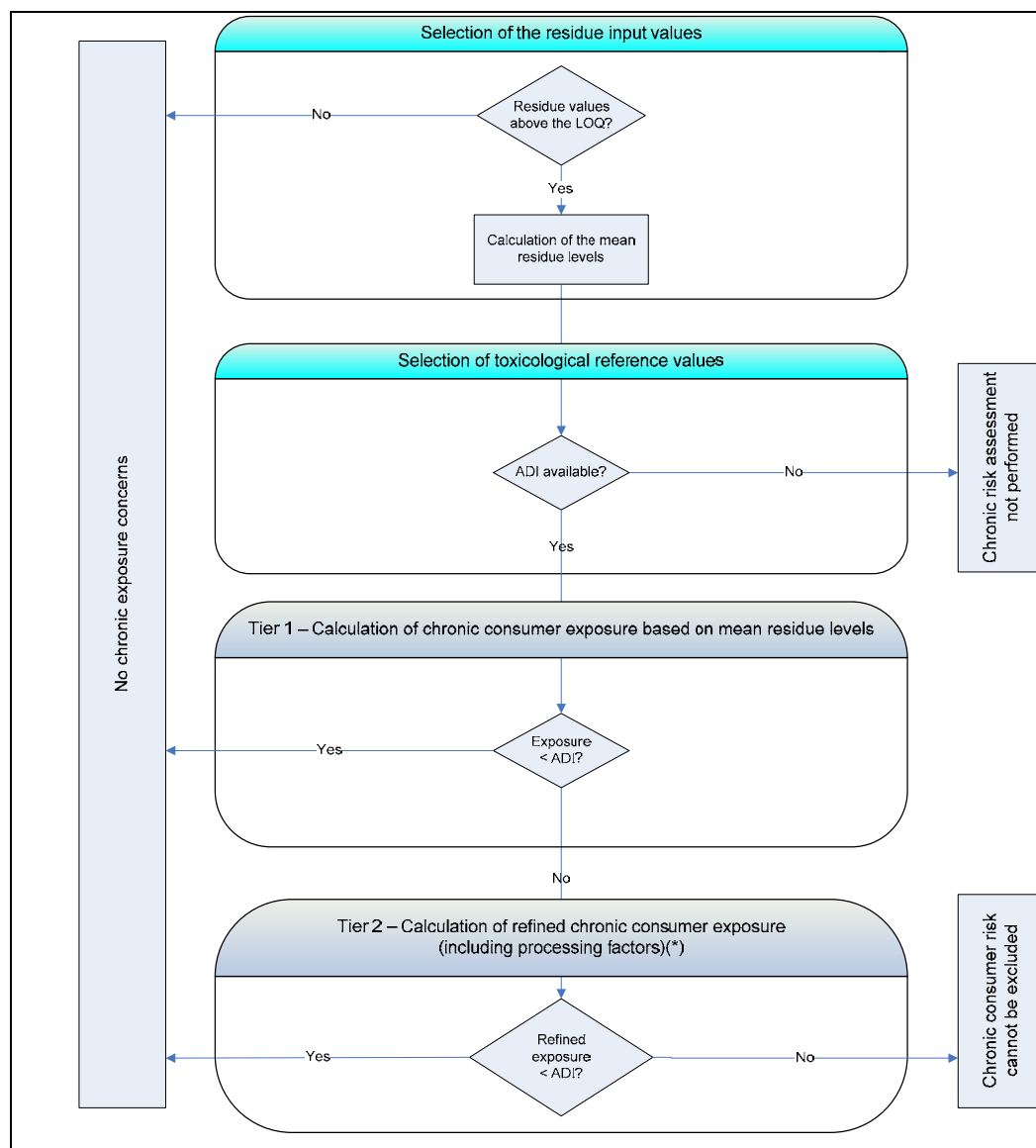
In Figure 5-3 the tiered approach used in assessing the chronic risk is represented.

<sup>71</sup> See “Acceptable Daily Intake (ADI)” in the Glossary.

<sup>72</sup> The peeling /processing factors are available in a database developed by the Federal Institute for Risk Assessment (BfR), which includes a collection of processing factors from annually published reports and evaluations by the FAO/WHO Joint Meeting on Pesticide Residues (JMPR), from draft assessment reports (DAR) prepared in the European Pesticide Risk Assessment Peer Review Programme (PRAPeR) and from residue data which were submitted within the framework of national authorisation procedures. Additional data concerning pulp/peel distribution were provided for BfR by retailers and have been collected within the framework of national food monitoring programmes. The database is available at : <http://www.bfr.bund.de/cd/579> (BfR compilation of 2011-10-20).

<sup>73</sup> The following food commodities were not considered in the chronic exposure assessment: butter, wheat flour, orange juice, poultry meat, liver, eggs because of limited availability of results and/or processing factors.





(\*) If needed, the processing/peeling factors are applied only to food commodities normally not consumed as raw (i.e. oats, rye and swine meat).

**Figure 5-3:** Flow chart for the tiered approach used in assessing the chronic consumer health risk.

### 5.3.1. Acceptable Daily Intake values (ADIs)

The list of the ADI values used for the assessment of the chronic exposure is reported in Table 5-4.

**Table 5-4:** ADI values used as input values for the long-term risk assessment.

Pesticide	ADI (mg/kg bw per d)	ADI evaluation year	ADI <sup>(1)</sup> source
2,4-D	0.05	2001	COM
Abamectin	0.0025	2008	EFSA
Acephate	0.03	2005	JMPR
Acetamiprid	0.07	1999	COM
Acrinathrin	0.01	2010	EFSA
Aldicarb	0.003	2001	JMPR
Amitraz	0.003	2003	COM
Amitrole	0.001	2001	COM
Azinphos-ethyl	No ADI allocated		

Pesticide	ADI (mg/kg bw per d)	ADI evaluation year	ADI <sup>(1)</sup> source
Azinphos-methyl	0.005	2006	COM
Azoxystrobin	0.2	2011	COM
Benfuracarb	0.01	2009	EFSA
Bifenthrin	0.015	2011	EFSA
Bitertanol	0.003	2011	COM
Boscalid	0.04	2008	COM
Bromide ion	1	1988	JMPR
Bromopropylate	0.03	1993	JMPR
Bromuconazole	0.01	2010	COM
Bupirimate	0.05	2011	COM
Buprofezin	0.01	2010	COM
Cadusafos	0.0004	2009	EFSA
Camphechlor	No ADI allocated	1973	JMPR
Captan	0.1	2008	COM
Carbaryl	0.0075	2006	EFSA
Carbendazim	0.02	2010	COM
Carbofuran	0.00015	2009	EFSA
Carbosulfan	0.005	2009	EFSA
Chlordane	0.0005	1994	JMPR
Chlorfenapyr	0.015	1999	ECCO
Chlorfenvinphos	0.0005	1994	JMPR
Chlormequat	0.031 <sup>(2)</sup>	2009	COM
Chlorobenzilate	0.02	1980	JMPR
Chlorothalonil	0.015	2006	COM
Chlorpropham	0.05	2004	COM
Chlorpyrifos	0.01	2005	COM
Chlorpyrifos-methyl	0.01	2005	COM
Clofentezine	0.02	2010	COM
Clothianidin	0.097	2006	COM
Cyfluthrin	0.003	2003	COM
Cypermethrin	0.05 <sup>(3)</sup>	2005	COM
Cyproconazole	0.02	2011	COM
Cyprodinil	0.03	2006	COM
DDT	0.01	2000	JMPR
Deltamethrin	0.01	2003	COM
Diazinon	0.0002	2006	EFSA
Dichlofluanid	0.3	1983	JMPR
Dichlorvos	0.00008	2006	EFSA
Dicloran	0.005	2010	EFSA
Dicofol	0.002	1992	JMPR
Dieldrin	0.0001	1994	JMPR
Difenoconazole	0.01	2008	COM
Dimethoate	0.001 <sup>(4)</sup>	2007	COM
Dimethomorph	0.05	2007	COM
Dinocap	0.004	2007	COM
Diphenylamine	0.075	2008	EFSA
Dithiocarbamates: Mancozeb	0.05 <sup>(5)</sup>	2005	COM
Dithiocarbamates: Ziram	0.006 <sup>(5)</sup>	2004	COM
Endosulfan	0.006	2006	JMPR
Endrin	0.0002	1994	JMPR
Epoxiconazole	0.008	2008	COM
Esfenvalerate	0.02	2000	COM
Ethephon	0.03	2006	COM

Pesticide	ADI (mg/kg bw per d)	ADI evaluation year	ADI <sup>(1)</sup> source
Ethion (aka diethion)	0.002	1990	JMPR
Ethoprophos	0.0004	2006	EFSA
Etofenprox	0.03	2009	COM
Fenamiphos (aka phenamiphos)	0.0008	2006	COM
Fenarimol	0.01	2006	COM
Fenazaquin	0.005	2011	COM
Fenbuconazole	0.006	2010	COM
Fenbutatin oxide	0.05	2011	COM
Fenhexamid	0.2	2001	COM
Fenitrothion	0.005	2006	EFSA
Fenoxycarb	0.053	2011	COM
Fenpropathrin	0.03	1993	JMPR
Fenpropimorph	0.003	2008	COM
Fenthion	0.007	2000	JMPR
Fipronil	0.0002	2007	COM
Fluazifop-P-butyl	0.01	2011	COM
Fludioxonil	0.37	2007	COM
Flufenoxuron	0.01	2011	EFSA
Fluquinconazole	0.002	2011	COM
Flusilazole	0.002	2007	COM
Flutriafol	0.01	2011	COM
Folpet	0.1	2007	COM
Formetanate	0.004	2007	COM
Fosthiazate	0.004	2003	COM
Glyphosate	0.3	2001	COM
Haloxfop	0.00065	2006	EFSA
HCH – $\alpha$ isomer	No ADI allocated	1973	JMPR
HCH – $\beta$ isomer	No ADI allocated	1973	JMPR
Heptachlor	0.0001	1994	JMPR
Hexachlorobenzene	No ADI allocated	1978	JMPR
Hexaconazole	0.005	1990	JMPR
Hexythiazox	0.03	2011	COM
Imazalil	0.025	2011	COM
Imidacloprid	0.06	2008	COM
Indoxacarb	0.006	2005	COM
Iprodione	0.06	2002	COM
Iprovalicarb	0.015	2002	COM
Kresoxim-methyl	0.4	2011	COM
lambda-Cyhalothrin	0.005	2001	COM
Lindane	0.005	2000	COM
Linuron	0.003	2002	COM
Lufenuron	0.015	2009	COM
Malathion	0.03	2010	COM
Mepanipyrim	0.02	2004	COM
Mepiquat	0.154 <sup>(6)</sup>	2008	COM
Metalaxyl-M	0.08	2002	COM
Metconazole	0.01	2006	COM
Methamidophos	0.001	2007	COM
Methidathion	0.001	1997	JMPR
Methiocarb (aka mercaptodimethur)	0.013	2007	COM
Methomyl	0.0025	2009	COM
Methoxychlor	0.1	1977	JMPR
Methoxyfenozide	0.1	2005	COM

Pesticide	ADI (mg/kg bw per d)	ADI evaluation year	ADI <sup>(1)</sup> source
Monocrotophos	0.0006	1995	JMPR
Myclobutanil	0.025	2010	COM
Omethoate	0.0003 <sup>(4)</sup>	2007	COM
Oxadixyl	0.01	1984	FR
Oxamyl	0.001	2006	COM
Oxydemeton-methyl	0.0003	2006	COM
Paclobutrazol	0.022	2011	COM
Parathion	0.0006	2001	ECCO 100
Parathion-methyl	0.003	2003	JMPR
Penconazole	0.03	2009	COM
Pencycuron	0.2	2011	COM
Pendimethalin	0.125	2003	COM
Permethrin	0.05	2000	COM
Phenthoate	0.003	1984	JMPR
Phosalone	0.01	2006	EFSA
Phosmet	0.01	2011	COM
Phoxim	0.00375	2000	EMEA
Pirimicarb	0.035	2006	COM
Pirimiphos-methyl	0.004	2007	COM
Prochloraz	0.01	2011	COM
Procymidone	0.0028	2007	DAR FR
Profenofos	0.03	2007	JMPR
Propamocarb	0.244 <sup>(7)</sup>	2007	COM
Propargite	No ADI allocated	2011	EFSA
Propiconazole	0.04	2003	COM
Propyzamide	0.02	2003	COM
Prothioconazole	0.01	2008	COM
Pyraclostrobin	0.03	2004	COM
Pyrazophos	0.001	1999	ECCO 73
Pyrethrins	0.04	2008	COM
Pyridaben	0.01	2010	COM
Pyrimethanil	0.17	2006	COM
Pyriproxyfen	0.1	2008	COM
Quinoxifen	0.2	2004	COM
Quintozene	0.01	2000	COM
Resmethrin	0.03	1991	JMPR
Spinosad	0.024	2007	COM
Spiroxamine	0.025	1999	COM
tau-Fluvalinate	0.005	2010	COM
Tebuconazole	0.03	2008	COM
Tebufenozide	0.02	2011	COM
Tebufenpyrad	0.01	2009	COM
Tecnazene	0.02	1994	JMPR
Teflubenzuron	0.01	2008	COM
Tefluthrin	0.005	2010	COM
Tetraconazole	0.004	2008	COM
Tetradifon	0.015	2001	DE
Thiabendazole	0.1	2001	COM
Thiacloprid	0.01	2004	COM
Thiametoxam	0.026	2007	COM
Thiophanate-methyl	0.08	2005	COM
Tolclofos-methyl	0.064	2006	COM
Tolyfluanid	0.1	2006	COM

Pesticide	ADI (mg/kg bw per d)	ADI evaluation year	ADI <sup>(1)</sup> source
Triadimefon	0.03 <sup>(8)</sup>	2004	JMPR
Triadimenol	0.05 <sup>(8)</sup>	2008	COM
Triazophos	0.001	2002	JMPR
Trichlorfon	No agreed ADI available	2006	EFSA
Trifloxystrobin	0.1	2003	COM
Triflumuron	0.014	2011	COM
Trifluralin	0.015	2005	EFSA
Triticonazole	0.025	2006	COM
Vinclozolin	0.005	2006	COM
Zoxamide	0.5	2003	COM

- (1) For the long-term risk assessment, the most recent ADI values available were used. It should be mentioned that some of the ADI values were derived recently and were not in place in 2010 when the monitoring results were generated.
- (2) Chlormequat: the ADI derived in the peer review for chlormequat chloride (0.04 mg/kg bw per d) was recalculated to chlormequat by applying a molecular weight conversion factor to match with the residue definition which is expressed as chlormequat (ion).
- (3) Cypermethrin: For the chronic risk assessment the ADI derived for the sum of isomers is used. For alpha-cypermethrin and zeta-cypermethrin different ADI values were derived: alpha-cypermethrin: 0.015 mg/kg bw per d, zeta-cypermethrin: 0.04mg/kg bw per d).
- (4) Dimethoate: The residue definition (sum of dimethoate and omethoate) comprises compounds for which different ADI values were set. Therefore two scenarios were calculated, the first with the ADI of dimethoate (0.001 mg/kg bw per d), the second with the ADI of omethoate (0.0003 mg/kg bw per d), assuming that the reported residues (sum of dimethoate and omethoate) comprise only dimethoate (scenario 1) or omethoate (scenario 2).
- (5) Dithiocarbamates: The residue definition covers compounds for which different ADI values were set. Therefore two scenarios were calculated, the first with the ADI of mancozeb, the second more conservative scenario with the ADI of ziram) The ADIs for mancozeb (0.6 mg/kg bw per d) and ziram (0.006 mg/kg bw per d) derived in the peer review were recalculated to CS<sub>2</sub> by multiplying with a molecular weight correction factor. The following conversion factors were applied: mancozeb: 0.56; ziram: 0.5. For other dithiocarbamates the following ADI values are available: maneb: 0.5 mg/kg bw per d, propineb: 0.007 mg/kg bw per d, thiram: 0.01 mg/kg bw per d, metiram: 0.03 mg/kg bw per d.
- (6) Mepiquat: the ADI derived in the peer review for mepiquat chloride (0.2 mg/kg bw per d) by recalculated to mepiquat multiplying with a molecular weight correction factor to match with the residue definition which is expressed as mepiquat (ion).
- (7) Propamocarb: the ADI derived by the peer review for propamocarb hydrochloride (0.29 mg/kg bw per d) was recalculated to propamocarb by multiplying with a molecular weight correction factor to match with the residue definition which is expressed as propamocarb.
- (8) Triadimenol/triadimefon: the residue definition is set to the sum of triadimenol and triadimefon. For the chronic risk assessment, the ADI derived for triadimefon was used.

### 5.3.2. Residue levels

For each pesticide/crop combination, the mean residue levels to be used as input value in the chronic exposure estimations were derived according to the following approach:

- For each pesticide/crop combination an overall mean value was calculated, using the actual values measured in the individual samples, without applying analytical determination uncertainty factors. For samples with residues below the LOQ, EFSA used as a conservative assumption the numerical value of the LOQ to calculate the overall mean.
- For the crops covered by the 2010 EU-coordinated monitoring programme (apples, head cabbage, leek, lettuce, milk, peaches, pears (only for amitraz), oats, rye, strawberries, swine meat and tomatoes) the mean residue concentration was calculated from the results presented in section 3 of this report.
- For the remaining food commodities considered in the long-term exposure assessment, the residue input figures were derived from the results of the 2010 national programmes (surveillance samples only). This applies to aubergines, banana, beans (with pods), carrots, cauliflower, cucumbers, mandarins, oranges, peas (without pods), peppers, potatoes, rice, spinach, table grapes and wheat.

- For swine meat samples, where the residue levels reported were expressed on fat basis, the residue concentrations have been recalculated taking into account the fat content of the samples as reported.
- Results concerning samples analysed with analytical methods for which the LOQ was greater than the corresponding EU MRL were disregarded.
- Results that were not compliant with the residue definition were normally omitted. However, for some pesticides some of the results which were not fully compliant with the residue definitions were included in the calculation of the mean residue concentration (see footnotes to Table 5-5). The pesticides concerned were: captan/folpet, fenvalerate/esfenvalerate, and metalaxyl/metalaxyl-M.
- If for a given pesticide/crop combination no positive findings were reported by any of the reporting countries (i.e. all the results reported below the LOQ), then the contribution of these crops to the total dietary intake was not considered, assuming a “no use/no residue” situation.

The residue values reported according to the residue definition for enforcement (in accordance with the EU MRL legislation) were not recalculated to the residue definition for risk assessment<sup>74</sup> because no agreed conversion factors are available at the moment.

The residue levels used as input values for the calculation of the long-term exposure are reported in Table 5-5. Empty cells in the table concern pesticides/commodity combinations for which none of the samples tested contained quantifiable residues.

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<sup>74</sup> See “residue definition” in the Glossary.

**Table 5-5:** Mean residue concentrations (in mg/kg) used as input values for the long-term dietary exposure calculations.

Pesticide (residue definition) <sup>(1)</sup>	Apples	Aubergines	Bananas	Beans (with pods)	Milk	Carrots	Cauliflower	Cucumbers	Eggs	Head cabbage	Leek	Lettuce	Mandarins	Oats	Oranges	Pears	Peaches	Table grapes	Strawberries	Potatoes	Tomatoes	Peppers	Spinach	Peas (without pods)	Rice	Rye	Wheat	Swine meat				
2,4-D (sum of 2,4-D and its esters expressed as 2,4-D)		0.0043				0.0060									0.0116			0.0064														
Abamectin (sum of avermectin B1a, avermectin B1b and delta-8,9 isomer of avermectin B1a)		0.0085		0.0086							0.0157	0.0094							0.0141													
Acephate		0.0115		0.0115													0.0111	0.0111				0.0119										
Acetamiprid	0.0112	0.0123		0.0100		0.0091	0.0123		0.0091		0.0170	0.0101			0.0101	0.0111	0.0102	0.0092	0.0093		0.0114	0.0137	0.0114		0.0085							
Acrinathrin			0.0228	0.0146				0.0193			0.0134	0.0163	0.0183			0.0227	0.0240	0.0172	0.0186		0.0189	0.0185										
Aldicarb (sum of aldicarb, its sulfoxide and its sulfone, expressed as aldicarb)										0.0098																						
Aldrin and dieldrin (aldrin and dieldrin combined expressed as dieldrin)									0.0056																							
Amitraz (amitraz including the metabolites containing the 2,4-dimethylaniline moiety expressed as amitraz)																0.0348																
Amitrole																																
Azinphos-methyl	0.0185		0.0177							0.0163						0.0181	0.0192					0.0170			0.0119							
Azoxystrobin	0.0135	0.0139	0.0233	0.0154		0.0152	0.0110	0.0199		0.0157	0.0164	0.0360	0.0170	0.0142	0.0145		0.0137	0.0219	0.0315	0.0129	0.0172	0.0245	0.0196	0.0138	0.0118	0.0114	0.0131					
Bifenthrin	0.0140	0.0129	0.0127	0.0109		0.0117		0.0124			0.0148	0.0182	0.0115	0.0140		0.0138	0.0152	0.0129	0.0133	0.0135	0.0156	0.0124	0.0137				0.0134					
Bitertanol	0.0189		0.0309	0.0179				0.0170				0.0192			0.0127	0.0202	0.0208				0.0167											
Boscalid	0.0203	0.0134	0.0137	0.0126		0.0198	0.0160		0.0128	0.0184	0.0773	0.0113	0.0134	0.0115	0.0371	0.0175	0.0602	0.0541	0.0130	0.0184	0.0200	0.0247	0.0155				0.0137					
Bromide ion								1.7860	3.4163	3.9069	7.3228							5.1094		4.6006					7.5783	2.1113	3.6590					
Bromopropylate		0.0135		0.0091				0.0132			0.0154				0.0093			0.0091				0.0137	0.0201			0.0133						
Bromuconazole (sum of diastereoisomers)																		0.0140														
Bupirimate	0.0117	0.0124				0.0115	0.0115	0.0126			0.0107	0.0110	0.0114		0.0119		0.0117	0.0128	0.0211		0.0132	0.0132										
Buprofezin	0.0168	0.0142	0.0166	0.0123				0.0147		0.0142			0.0148		0.0143	0.0144	0.0141	0.0135			0.0172	0.0157	0.0166		0.0161							
Cadusafos																						0.0129										
Captan <sup>(2)</sup>	0.0595					0.0166	0.0120				0.0364				0.0121	0.0562	0.0144	0.0122	0.0382			0.0218										
Carbaryl	0.0180		0.0189	0.0131											0.0146		0.0172		0.0165		0.0185	0.0165										
Carbendazim and Benomyl (sum of benomyl and carbendazim)	0.0149	0.0130		0.0144				0.0127		0.0110	0.0114	0.0113	0.0119	0.0129	0.0134	0.0131	0.0139	0.0124	0.0143	0.0115	0.0122	0.0146		0.0196	0.0086	0.0173	0.0189					

Pesticide (residue definition) <sup>(1)</sup>	Apples	Aubergines	Bananas	Beans (with pods)	Milk	Carrots	Cauliflower	Cucumbers	Eggs	Head cabbage	Leek	Lettuce	Mandarins	Oats	Oranges	Pears	Peaches	Table grapes	Strawberries	Potatoes	Tomatoes	Peppers	Spinach	Peas (without pods)	Rice	Rye	Wheat	Swine meat
expressed as carbendazim)																												
Carbofuran (sum of carbofuran and 3-hydroxycarbofuran expressed as carbofuran)		0.0107		0.0100							0.0109				0.0103							0.0103	0.0128					
Carbosulfan		0.0187																				0.0147						
Chlordane (sum of cis- and trans-isomers and oxchlordane expressed as chlordane)									0.0026																			
Chlorfenapyr	0.0152			0.0108				0.0108					0.0127		0.0125				0.0121			0.0120						
Chlorfenvinphos	0.0119					0.0127												0.0110										
Chlormequat														1.7227		0.0359										0.1268	0.0669	
Chlorothalonil	0.0133	0.0163	0.0170	0.0183		0.0173	0.0128	0.0224		0.0165	0.0178	0.0149			0.0094	0.0177	0.0173	0.0169	0.0206		0.0267	0.0156	0.0098					
Chlorpropham (chlorpropham and 3-chloroaniline expressed as chlorpropham)	0.0174					0.0117							0.0139			0.0198	0.0220	0.0203									0.0102	
Chlorpyrifos	0.0188	0.0124	0.0199	0.0114	0.0044	0.0126	0.0105	0.0122		0.0140	0.0147	0.0131	0.0552	0.0127	0.0301	0.0183	0.0164	0.0219	0.0153	0.0121	0.0152	0.0164	0.0164		0.0136	0.0127	0.0145	
Chlorpyrifos-methyl	0.0134	0.0118				0.0107					0.0139	0.0117	0.0138	0.0340	0.0124	0.0135	0.0135	0.0129	0.0130		0.0159	0.0120			0.0184	0.0141	0.0217	
Clofentezin (sum of all compounds containing the 2-chlorobenzoyl-moiety expressed as clofentezin)	0.0119		0.0119	0.0096				0.0091					0.0124		0.0113		0.0099	0.0095	0.0181		0.0143	0.0099						
Clothianidin	0.0096			0.0098				0.0087							0.0098		0.0098	0.0101			0.0095	0.0112	0.0097					
Cyfluthrin (cyfluthrin incl. other mixtures of constituent isomers (sum of isomers))	0.0292	0.0637	0.0132			0.0121		0.0344		0.0283		0.0354					0.0267	0.0259			0.0194	0.0313					0.0105	
Cypermethrin (cypermethrin incl. other mixtures of constituent isomers (sum of isomers))	0.0303	0.0240	0.0193	0.0366				0.0198		0.0285	0.0364	0.0329	0.0218		0.0217	0.0302	0.0313	0.0309	0.0262		0.0285	0.0313	0.0303		0.0170		0.0264	0.0171
Cyproconazole	0.0148			0.0119		0.0141		0.0146		0.0135				0.0163			0.0146	0.0138	0.0154		0.0141	0.0139						
Cyprodinil	0.0177	0.0138	0.0121	0.0116		0.0108		0.0131			0.0112	0.0531	0.0115		0.0117	0.0313	0.0253	0.0491	0.0518		0.0165	0.0136	0.0122		0.0110		0.0141	
DDT (sum of p,p'-DDT, o,p'-DDT, p-p'-DDE and p,p'-DDD (TDE) expressed as DDT)					0.0056				0.0100																			0.0149
Deltamethrin (cis-deltamethrin)	0.0225	0.0153		0.0142		0.0185				0.0179	0.0193	0.0246		0.0250	0.0182	0.0237	0.0238	0.0222	0.0192		0.0221	0.0198	0.0226		0.0258		0.0230	
Diazinon	0.0097									0.0111		0.0096			0.0096					0.0094		0.0111						0.0084
Dichlorvos				0.0092			0.0087	0.0087								0.0091	0.0092		0.0091						0.0085			
Dicloran		0.0122	0.0155			0.0133						0.0141						0.0141			0.0132							



Pesticide (residue definition) <sup>(1)</sup>	Apples	Aubergines	Bananas	Beans (with pods)	Milk	Carrots	Cauliflower	Cucumbers	Eggs	Head cabbage	Leek	Lettuce	Mandarins	Oats	Oranges	Pears	Peaches	Table grapes	Strawberries	Potatoes	Tomatoes	Peppers	Spinach	Peas (without pods)	Rice	Rye	Wheat	Swine meat			
Dicofol (sum of p,p' and o,p' isomers)	0.0122	0.0109		0.0115		0.0116							0.0245		0.0204			0.0231			0.0229	0.0138									
Difenoconazole	0.0126			0.0107		0.0128		0.0133		0.0135	0.0131	0.0155	0.0125			0.0130	0.0223	0.0132	0.0132		0.0150	0.0149	0.0166		0.0128						
Dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	0.0113	0.0114	0.0105	0.0122		0.0100	0.0100	0.0103		0.0105		0.0123	0.0108		0.0105	0.0104	0.0124	0.0102	0.0100		0.0102	0.0120	0.0112	0.0104							
Dimethomorph		0.0114	0.0136	0.0108		0.0124		0.0137		0.0142	0.0111	0.0219					0.0102	0.0289	0.0111	0.0120	0.0125	0.0142	0.0171								
Dinocap (sum of dinocap isomers and their corresponding phenols expressed as dinocap)																		0.0150													
Diphenylamine	0.0912					0.0131				0.0179			0.0131	0.0160	0.0140	0.0545	0.0198	0.0187				0.0134			0.0120						
Dithiocarbamates (dithiocarbamates expressed as CS <sub>2</sub> , including maneb, mancozeb, metiram, propineb, thiram and ziram)	0.0972	0.0935	0.0729	0.0814		0.0488	0.3343	0.1269		0.1423	0.1294	0.3408	0.0974	0.0532	0.0980	0.1504	0.0896	0.1274	0.1041	0.0473	0.1010	0.0806	0.0375			0.0852					
Endosulfan (sum of alpha- and beta-isomers and endosulfan-sulphate expressed as endosulfan)	0.0187	0.0136		0.0131		0.0149		0.0138	0.0129			0.0162	0.0132		0.0144		0.0176	0.0135	0.0163		0.0200	0.0147			0.0142						
Endrin									0.0024																						
Epoxiconazole		0.0113	0.0134											0.0146		0.0127			0.0130	0.0126	0.0131					0.0114	0.0138				
Ethephon	0.0298														0.0411			0.0415			0.0789	0.1187				0.0411					
Ethion				0.0112		0.0087				0.0088					0.0092			0.0090	0.0092			0.0104									
Ethoprophos								0.0101									0.0104					0.0115									
Etofenprox	0.0100	0.0099		0.0095					0.0100		0.0105	0.0123			0.0106	0.0104	0.0149	0.0099	0.0097		0.0110	0.0101	0.0112								
Fenamiphos (sum of fenamiphos and its sulfoxide and sulfone expressed as fenamiphos)																					0.0112	0.0124									
Fenarimol	0.0145												0.0107					0.0122	0.0128			0.0150									
Fenazaquin	0.0111	0.0122	0.0127			0.0092		0.0104					0.0117		0.0111	0.0113	0.0117	0.0109	0.0117		0.0111	0.0114									
Fenbuconazole	0.0131																0.0129	0.0137	0.0111												
Fenbutatin oxide	0.0193			0.0120							0.0131	0.0338			0.0146	0.0207	0.0125	0.0165			0.0153	0.0180	0.0106			0.0146					
Fenhexamid	0.0204	0.0148		0.0124		0.0147	0.0139	0.0334			0.0143	0.0501	0.0141		0.0141	0.0194	0.0247	0.1438	0.0878		0.0220	0.0291			0.0156						
Fenitrothion	0.0093														0.0100							0.0090			0.0150						
Fenoxycarb	0.0146												0.0152			0.0178	0.0140	0.0144					0.0109								
Fenpropathrin	0.0094	0.0099		0.0103											0.0156		0.0094	0.0095	0.0153			0.0095									
Fenpropimorph	0.0119		0.0123			0.0109					0.0105								0.0117	0.0122			0.0123					0.0132			

Pesticide (residue definition) <sup>(1)</sup>	Apples	Aubergines	Bananas	Beans (with pods)	Milk	Carrots	Cauliflower	Cucumbers	Eggs	Head cabbage	Leek	Lettuce	Mandarins	Oats	Oranges	Pears	Peaches	Table grapes	Strawberries	Potatoes	Tomatoes	Peppers	Spinach	Peas (without pods)	Rice	Rye	Wheat	Swine meat	
Fenthion (sum of fenthion and its oxygen analogue, their sulfoxides and sulfone expressed as parent)	0.0096												0.0106		0.0122		0.0089												
Fenvalerate and Esfenvalerate (sum of RS/SR and RR/SS isomers) <sup>(3)</sup>	0.0168			0.0127						0.0162						0.0165		0.0156				0.0137					0.0146		
Fipronil (sum of fipronil and sulfone metabolite (MB46136) expressed as fipronil)															0.0039			0.0038		0.0075		0.0042			0.0141				
Fluazifop (fluazifop-P-butyl (fluazifop acid (free and conjugate)))				0.0079		0.0068	0.0028			0.0114	0.0081	0.0084						0.0088	0.0081		0.0073								
Fludioxonil	0.0210	0.0122	0.0147	0.0112		0.0120		0.0147			0.0114	0.1146	0.0140		0.0124	0.0220	0.0161	0.0318	0.0385		0.0159	0.0141	0.0139				0.0141		
Flufenoxuron	0.0116			0.0107								0.0117	0.0110		0.0119	0.0117		0.0134				0.0119							
Fluquinconazole	0.0124																	0.0127											
Flusilazole	0.0100			0.0100													0.0115	0.0109	0.0101		0.0099	0.0105							
Flutriafol	0.0109			0.0103		0.0134		0.0125					0.0123						0.0120		0.0124	0.0157							
Folpet <sup>(2)</sup>	0.0595					0.0101						0.0444				0.0562		0.0110	0.0382			0.0116	0.0282						
Formetanate (sum of formetanate and its salts expressed as formetanate (hydrochloride))		0.0088						0.0102							0.0118			0.0134		0.0124		0.0151							
Fosthiazate								0.0093												0.0090									
Glyphosate														0.1941												0.1230	0.1357		
Haloxypop including Haloxypop-R (Haloxypop-R methyl ester, haloxypop-R and conjugates of haloxypop-R expressed as haloxypop-R)																						0.0092							
Heptachlor (sum of heptachlor and heptachlor epoxide expressed as heptachlor)																												0.0119	
Hexachlorbenzene					0.0033				0.0044																			0.0069	
Hexachlorocyclohexane (HCH), alpha-isomer									0.0033																				
Hexachlorocyclohexane (HCH), beta-isomer					0.0017				0.0033																				
Hexaconazole	0.0108			0.0102		0.0101							0.0106				0.0101	0.0104	0.0109			0.0102			0.0100				
Hexythiazox	0.0119	0.0156		0.0145				0.0252					0.0134		0.0118	0.0148	0.0136	0.0172	0.0165		0.0144	0.0201	0.0211						
Imazalil	0.0192	0.0138	0.1062			0.0153		0.0164		0.0133	0.0159	0.9876			0.9316	0.0544	0.0142	0.0132	0.0137	0.0156	0.0154	0.0134	0.0172						

Pesticide (residue definition) <sup>(1)</sup>	Apples	Aubergines	Bananas	Beans (with pods)	Milk	Carrots	Cauliflower	Cucumbers	Eggs	Head cabbage	Leek	Lettuce	Mandarins	Oats	Oranges	Pears	Peaches	Table grapes	Strawberries	Potatoes	Tomatoes	Peppers	Spinach	Peas (without pods)	Rice	Rye	Wheat	Swine meat
Imidacloprid	0.0116	0.0154	0.0110	0.0111		0.0112	0.0117	0.0123		0.0111	0.0103	0.0168	0.0122	0.0083	0.0127	0.0131	0.0117	0.0277		0.0124	0.0129	0.0163	0.0111		0.0128		0.0128	
Indoxacarb (indoxacarb as sum of the isomers S and R)	0.0115		0.0149	0.0098			0.0111	0.0121		0.0138	0.0096	0.0154	0.0099			0.0125	0.0121	0.0134	0.0095		0.0138	0.0130	0.0238					
Iprodione	0.0985	0.0180		0.0227		0.0290	0.0147	0.0353		0.0248	0.0131	0.2585	0.0235		0.0128	0.0331	0.1061	0.0701	0.0385		0.0253	0.0305	0.0155	0.0181				
Iprovalicarb	0.0103																	0.0124			0.0100	0.0123	0.0127					
Kresoxim-methyl	0.0125	0.0133		0.0107				0.0125			0.0130	0.0119				0.0128		0.0164	0.0149		0.0125	0.0132					0.0123	
Lambda-Cyhalothrin (lambda-cyhalothrin, incl. other mixtures of constituent isomers (sum of isomers))	0.0134	0.0124		0.0126		0.0101		0.0134		0.0118	0.0124	0.0171	0.0132		0.0125	0.0134	0.0160	0.0146	0.0142		0.0142	0.0138	0.0166		0.0113			
Lindane (gamma-isomer of hexachlorocyclohexane (HCH))									0.0044																			0.0053
Linuron						0.0183				0.0119	0.0113	0.0140											0.0141			0.0106		
Lufenuron	0.0130			0.0093				0.0118				0.0141	0.0116			0.0117	0.0134	0.0133	0.0127		0.0130	0.0127						
Malathion (sum of malathion and malaoxon expressed as malathion)				0.0096									0.0107	0.0113	0.0107	0.0107	0.0106	0.0101				0.0098			0.0154		0.0162	
Mepanipyrim (mepanipyrim and its metabolite (2-anilino-4-(2-hydroxypropyl)-6-methylpyrimidine) expressed as mepanipyrim)																		0.0097	0.0159		0.0105							
Mepiquat														0.0235		0.0169										0.0296	0.0168	
Metalaxyl and Metalaxyl-M (metalaxyl incl. mixtures of constituent isomers incl. Metalaxyl-M (sum of isomers)) <sup>(4)</sup>	0.0190	0.0138	0.0176	0.0114		0.0118	0.0129	0.0162		0.0163	0.0143	0.0162	0.0149			0.0150	0.0156	0.0177	0.0171	0.0151	0.0182	0.0161	0.0180					
Metconazole													0.0101			0.0097												
Methamidophos				0.0122		0.0092									0.0094				0.0107			0.0100						
Methidathion	0.0128									0.0113			0.0172		0.0191	0.0129	0.0120					0.0115						
Methiocarb (sum of methiocarb and methiocarb-sulfoxide and sulfone, expressed as methiocarb)				0.0102				0.0110		0.0092	0.0095	0.0109	0.0107		0.0102		0.0107	0.0116	0.0098		0.0116	0.0127						
Methomyl and Thiodicarb (sum of methomyl and thiodicarb expressed as methomyl)		0.0124	0.0108	0.0108				0.0179					0.0120			0.0101		0.0108	0.0113		0.0169	0.0097						
Methoxychlor									0.0059																			
Methoxyfenozide	0.0109	0.0097		0.0102						0.0089						0.0182	0.0102	0.0148			0.0111	0.0114						

Pesticide (residue definition) <sup>(1)</sup>	Apples	Aubergines	Bananas	Beans (with pods)	Milk	Carrots	Cauliflower	Cucumbers	Eggs	Head cabbage	Leek	Lettuce	Mandarins	Oats	Oranges	Pears	Peaches	Table grapes	Strawberries	Potatoes	Tomatoes	Peppers	Spinach	Peas (without pods)	Rice	Rye	Wheat	Swine meat
Monocrotophos		0.0126		0.0112															0.0133			0.0135						
Myclobutanil	0.0128		0.0157	0.0104		0.0126		0.0164				0.0118	0.0146		0.0135	0.0126	0.0128	0.0165	0.0164		0.0152	0.0132						
Oxadixyl												0.0154									0.0096							
Oxamyl				0.0128				0.0093		0.0091											0.0095	0.0096	0.0088					
Oxydemeton-methyl (sum of oxydemeton-methyl and demeton-S-methylsulfone expressed as oxydemeton-methyl)	0.0109																					0.0099						
Paclbutrazole						0.0097										0.0147												
Penconazole	0.0116		0.0111	0.0099		0.0118		0.0128		0.0108						0.0130	0.0124	0.0132	0.0139	0.0111	0.0135	0.0121						
Pencycuron									0.0089			0.0236	0.0105		0.0106					0.0103			0.0092					
Pendimethalin	0.0124	0.0121		0.0113		0.0140		0.0127		0.0117	0.0131	0.0144	0.0115				0.0134		0.0128				0.0139					
Permethrin (sum of isomers)																												0.0142
Phentoate															0.0118							0.0114						
Phosalone	0.0137			0.0116									0.0132		0.0124						0.0145	0.0138			0.0126			
Phosmet (phosmet and phosmet oxon expressed as phosmet)	0.0122										0.0107		0.0129		0.0139	0.0139	0.0126	0.0156			0.0138							
Phoxim													0.0094															
Pirimicarb (sum of pirimicarb and desmethylpirimicarb expressed as pirimicarb)	0.0159	0.0115		0.0095		0.0096		0.0170		0.0094		0.0108	0.0113		0.0110	0.0133			0.0128		0.0094	0.0120	0.0104			0.0102		
Pirimiphos-methyl								0.0137		0.0133			0.0114	0.0517	0.0117						0.0146	0.0122		0.0187	0.0208	0.0362	0.0504	0.0104
Prochloraz (sum of prochloraz and its metabolites containing the 2,4,6-trichlorophenol moiety expressed as prochloraz)	0.0113	0.0138				0.0156							0.0487		0.0394					0.0120	0.0120	0.0181			0.0194		0.0207	
Procymidone	0.0138	0.0161		0.0172		0.0125		0.0148		0.0127		0.0158				0.0142	0.0150	0.0193	0.0165	0.0127	0.0181	0.0156						
Profenofos		0.0122		0.0129									0.0122		0.0121					0.0124			0.0183					
Propamocarb (sum of propamocarb and its salt expressed as propamocarb)			0.0173	0.0132	0.0120		0.0129	0.0160	0.0527		0.0130	0.0172	0.2000				0.0108		0.0128	0.0112	0.0119	0.0205	0.0170	0.0180			0.0122	
Propargite	0.0371	0.0217		0.0098									0.0150		0.0156	0.0191	0.0297	0.0152			0.0255	0.0214						
Propiconazole			0.0128	0.0116		0.0126							0.0127		0.0120	0.0137	0.0119	0.0134				0.0133	0.0129		0.0116			
Propyzamide												0.0138			0.0114	0.0115			0.0114		0.0123							
Pyraclostrobin	0.0184	0.0112				0.0114				0.0138	0.0119	0.0196	0.0116	0.0105	0.0135	0.0200	0.0133	0.0158	0.0204		0.0170	0.0154	0.0192					

Pesticide (residue definition) <sup>(1)</sup>	Apples	Aubergines	Bananas	Beans (with pods)	Milk	Carrots	Cauliflower	Cucumbers	Eggs	Head cabbage	Leek	Lettuce	Mandarins	Oats	Oranges	Pears	Peaches	Table grapes	Strawberries	Potatoes	Tomatoes	Peppers	Spinach	Peas (without pods)	Rice	Rye	Wheat	Swine meat		
Pyrethrins											0.2866								0.2293			0.3111					0.0619			
Pyridaben	0.0131	0.0118	0.0132	0.0100				0.0110					0.0118		0.0119	0.0119	0.0126	0.0111	0.0119		0.0142	0.0119								
Pyrimethanil	0.0481	0.0123	0.0129	0.0116		0.0123	0.0104	0.0152		0.0110	0.0111	0.0242	0.0472		0.0199	0.0452	0.0219	0.0483	0.0288		0.0147	0.0143	0.0142	0.0095						
Pyriproxyfen		0.0134	0.0119			0.0111						0.0111	0.0137		0.0134						0.0120	0.0130								
Quinoxifen	0.0119															0.0110		0.0125	0.0119			0.0107								
Spinosad (sum of spinosyn A and spinosyn D, expressed as spinosad)	0.0098	0.0103		0.0139				0.0108			0.0094	0.0204	0.0098			0.0101	0.0118	0.0106	0.0153		0.0103	0.0108	0.0114							
Spiroxamine		0.0105		0.0101								0.0115				0.0105		0.0132		0.0107	0.0103	0.0110			0.0145					
Taufluvinate	0.0122			0.0108								0.0149			0.0125		0.0115		0.0137		0.0121	0.0097								
Tebuconazole	0.0142	0.0132		0.0119		0.0124	0.0116	0.0154		0.0137	0.0168	0.0123	0.0137	0.0164	0.0135	0.0140	0.0217	0.0168	0.0136		0.0157	0.0156	0.0151		0.0422	0.0168	0.0195			
Tebufenozide	0.0106									0.0099	0.0123	0.0113	0.0113			0.0113	0.0111	0.0113			0.0109	0.0118			0.0098					
Tebufenpyrad	0.0116									0.0108			0.0127		0.0125		0.0107	0.0117	0.0119		0.0115	0.0129	0.0115							
Teflubenzuron	0.0117					0.0123		0.0163								0.0149	0.0127		0.0159		0.0120	0.0144								
Tefluthrin						0.0124														0.0090										
Tetraconazole	0.0116					0.0103		0.0112			0.0109					0.0115	0.0117	0.0114	0.0120		0.0119	0.0111								
Tetradifon	0.0123	0.0152		0.0140				0.0149							0.0145		0.0118				0.0117	0.0126								
Thiabendazole	0.0784	0.0121	0.1006	0.0116				0.0152		0.0138	0.0121		0.2869		0.3009	0.0416	0.0179	0.0156	0.0125	0.0182		0.0137			0.0149		0.0157			
Thiacloprid	0.0127	0.0119		0.0098		0.0097		0.0102		0.0092	0.0092	0.0107			0.0099	0.0158	0.0100		0.0154		0.0105	0.0118								
Thiamethoxam (sum of thiamethoxam and clothianidin expressed as thiamethoxam)	0.0102	0.0111		0.0114		0.0107		0.0126		0.0105		0.0121			0.0108	0.0099	0.0108	0.0114	0.0106	0.0112	0.0101	0.0134	0.0110							
Thiophanate-methyl	0.0130	0.0138		0.0137				0.0124		0.0143	0.0140	0.0116	0.0093	0.0152	0.0130	0.0211	0.0137	0.0136		0.0144	0.0457									
Tolclofos-methyl						0.0122						0.0156								0.0125										
Tolyfluanid (sum of tolyfluanid and dimethylaminosulfotoluidide expressed as tolyfluanid)	0.0149																		0.0171											
Triadimefon and Triadimenol (sum of triadimefon and triadimenol)	0.0195	0.0167	0.0172	0.0146		0.0174		0.0184			0.0169	0.0185			0.0143						0.0206	0.0210	0.0193							
Triazophos		0.0098		0.0119		0.0087	0.0082				0.0089				0.0092							0.0141			0.0096					
Trichlorfon								0.0122							0.0113						0.0140	0.0134								
Trifloxystrobin	0.0128	0.0107		0.0097				0.0106			0.0112		0.0110		0.0107	0.0126	0.0128	0.0219	0.0154	0.0103	0.0125	0.0118					0.0117			
Triflumuron	0.0108												0.0097		0.0096	0.0118	0.0139			0.0110										
Trifluralin	0.0145					0.0154		0.0157																						

Pesticide (residue definition) <sup>(1)</sup>	Apples	Aubergines	Bananas	Beans (with pods)	Milk	Carrots	Cauliflower	Cucumbers	Eggs	Head cabbage	Leek	Lettuce	Mandarins	Oats	Oranges	Pears	Peaches	Table grapes	Strawberries	Potatoes	Tomatoes	Peppers	Spinach	Peas (without pods)	Rice	Rye	Wheat	Swine meat
Triticonazole																		0.0094										
Vinclozolin (sum of vinclozolin and all metabolites cont. the 3,5-dichloraniline moiety, expressed as vinclozolin)						0.0134						0.0130	0.0137			0.0116		0.0107			0.0218							
Zoxamide																		0.0142			0.0097							

(1) The residues measured refer to the legal residue definitions reported in the EU legislation.

(2) For folpet and captan, the residue levels reported in the table for the following crops refer to the sum of folpet and captan: apples, beans with pods, pears, strawberries and tomatoes.

(3) For fenvalerate and esfenvalerate, the mean residue concentrations were calculated taking into account the results reported for the two separate residue definitions (i.e. sum of RR & SS isomers and sum of RS & SR isomers).

(4) For metalaxyl/metalaxyl-M the mean residue concentrations were calculated taking into account the results reported for the full residue definition (Metalaxyl including other mixtures of constituent isomers including metalaxyl-M(sum of isomers) and the results reported for metalaxyl or metalaxyl-M alone.

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#### 5.4. Results of the long-term (chronic) risk assessment

For each pesticide, the long-term exposure was estimated for all 27 diets included in the EFSA PRIMo model on the basis of the mean residue concentrations for the food commodities covered by the EU-coordinated programme<sup>75</sup>. In Table 5-6 the results of the long-term exposure calculation (maximum exposure among the 27 diets included in the PRIMo model), expressed in percent of the ADI are reported.

The detailed results of the calculations are reported separately for each pesticide in calculation spreadsheets which can be found in Appendix IV of this report.

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<sup>75</sup> For each pesticide/crop combination an overall mean value was calculated, using the actual values measured in the individual samples. For samples with residues below the LOQ, the numerical value of the LOQ was used to calculate the overall mean.

**Table 5-6:** Results of the long-term dietary exposure assessment.

Pesticide	TMDI max (in % ADI)	Pesticide	TMDI max (in % ADI)
2,4-D	0.12	Dicloran	1.38
Abamectin (sum)	0.83	Dicofol (sum)	15.16
Acephate	0.07	Difenoconazole	2.44
Acetamiprid	0.35	Dimethoate (sum)- dimethoate scenario	26.17
Acrinathrin	1.32	Dimethoate (sum)- omethoate scenario	87.24
Aldicarb (sum)	0.20	Dimethomorph	0.33
Aldrin and Dieldrin (sum)	7.52	Dinocap (sum)	0.48
Amitraz (sum)	0.79	Diphenylamine	1.66
Amitrole	No exposure (*) No ADI	Dithiocarbamate-mancozeb scenario	9.18
Azinphos-ethyl	available/no exposure (*)	Dithiocarbamate-ziram scenario	85.75
Azinphos-methyl	5.52	Endosulfan (sum)	6.37
Azoxystrobin	0.24	Endrin	1.63
Benfuracarb	No exposure (*)	Epoxiconazole	2.58
Bifenthrin	2.43	Esfenvalerate (sum)	1.50
Bitertanol	12.37	Ethephon	2.37
Boscalid	1.51	Ethion	3.23
Bromide ion	5.41	Ethoprophos	5.04
Bromopropylate	0.29	Etofenprox	0.71
Bromuconazole (sum)	0.18	Fenamiphos (sum)	5.10
Bupirimate	0.52	Fenarimol	2.06
Buprofezin	3.59	Fenazaquin	5.19
Cadusafos (aka ebufos)	1.60	Fenbuconazole	3.08
Camphechlor (sum)	No ADI available/no exposure (*)	Fenbutatin oxide	0.75
Captan	0.10	Fenhexamid	0.31
Carbaryl	4.52	Fenitrothion	3.15
Carbendazim and benomyl (sum)	2.13	Fenoxycarb	0.41
Carbofuran (sum)	30.75	Fenpropathrin	0.66
Carbosulfan	0.26	Fenpropimorph	8.92
Chlordane (sum)	0.71	Fenthion (sum)	2.42
Chlorfenapyr	1.68	Fipronil (sum)	32.32
Chlorfenvinphos	34.02	Fluazifop-P-butyl (sum)	0.80
Chlormequat	5.27	Fludioxonil	0.14
Chlorobenzilate	No exposure (*)	Flufenoxuron	2.19
Chlorothalonil	2.27	Fluquinconazole	8.29
Chlorpropham (sum)	0.60	Flusilazole	7.81
Chlorpyrifos	6.64	Flutriafol	1.81
Chlorpyrifos-methyl	3.93	Folpet	0.05
Clofentezine (sum)	1.28	Formetanate (sum)	3.09
Clothianidin	0.19	Fosthiazate	1.38
Cyfluthrin (sum)	17.37	Glyphosate	0.46
Cypermethrin (sum)	1.50	Haloxyfop (sum)	0.71
Cyproconazole	1.27	HCH-alpha	No ADI available
Cyprodinil	1.68	HCH-beta	No ADI available
DDT (sum)	2.38	Heptachlor	18.52
Deltamethrin (sum)	5.63	Hexachlorobenzene	No ADI available
Diazinon	93.19	Hexaconazole	3.44
Dichlofluanid	No exposure (*)		
Dichlorvos	30.94		



Pesticide	TMDI max (in % ADI)
Hexythiazox	0.92
Imazalil	17.99
Imidacloprid	0.65
Indoxacarb (sum)	3.86
Iprodione	2.53
Iprovalicarb	1.04
Kresoxim-methyl	0.07
lambda-Cyhalothrin (sum)	5.99
Lindane (sum)	0.22
Linuron	2.52
Lufenuron	1.47
Malathion (sum)	0.60
Mancozeb	9.19
Mepanipyrim (sum)	0.03
Mepiquat	0.16
Metalaxyl-M (sum)	0.50
Metconazole	0.12
Methamidophos	6.15
Methidathion	25.03
Methiocarb (sum)	0.62
Methomyl and thiodicarb (sum)	2.61
Methoxychlor	0.01
Methoxyfenozide	0.18
Monocrotophos	3.44
Myclobutanil	1.28
Omethoate- see dimethoate	
Oxadixyl	0.35
Oxamyl	4.33
Oxydemeton-methyl (sum)	44.70
Paclobutrazol	0.14
Parathion	No exposure (*)
Parathion-methyl (sum)	No exposure (*)
Penconazole	0.86
Pencycuron	0.06
Pendimethalin	0.15
Permethrin (sum)	0.04
Phenthoate	1.61
Phosalone	2.41
Phosmet (sum)	2.51
Phoxim	0.19
Pirimicarb (sum)	0.85
Pirimiphos-methyl	13.07
Prochloraz (sum)	4.60
Procymidone	10.38

Pesticide	TMDI max (in % ADI)
Profenofos	0.21
Propamocarb (sum)	0.13
Propargite	No ADI available
Propiconazole	0.31
Propyzamide	0.34
Prothioconazole (sum)	No exposure (*)
Pyraclostrobin	1.22
Pyrazophos	No exposure (*)
Pyrethrins	2.01
Pyridaben	2.84
Pyrimethanil	0.50
Pyriproxyfen	0.10
Quinoxifen	0.09
Quintozene (sum)	No exposure (*)
Resmethrin (sum)	No exposure (*)
Spinosad (sum)	0.74
Spiroxamine	0.38
tau-Fluvalinate	4.42
Tebuconazole	1.43
Tebufenozide	0.88
Tebufenpyrad	2.34
Tecnazene	No exposure (*)
Teflubenzuron	2.00
Tefluthrin	1.52
Tetraconazole	5.07
Tetradifon	1.54
Thiabendazole	2.55
Thiacloprid	2.43
Thiametoxam (sum)	1.00
Thiophanate-methyl	0.37
Tolclofos-methyl	0.15
Tolyfluanid (sum)	0.19
Triadimefon (sum)	1.38
Triadimenol (sum)	0.09
Triazophos	6.60
Trichlorfon	No ADI available
Trifloxystrobin	0.34
Triflumuron	1.50
Trifluralin	1.34
Triticonazole	0.05
Vinclozolin (sum)	1.75
Zoxamide	0.01

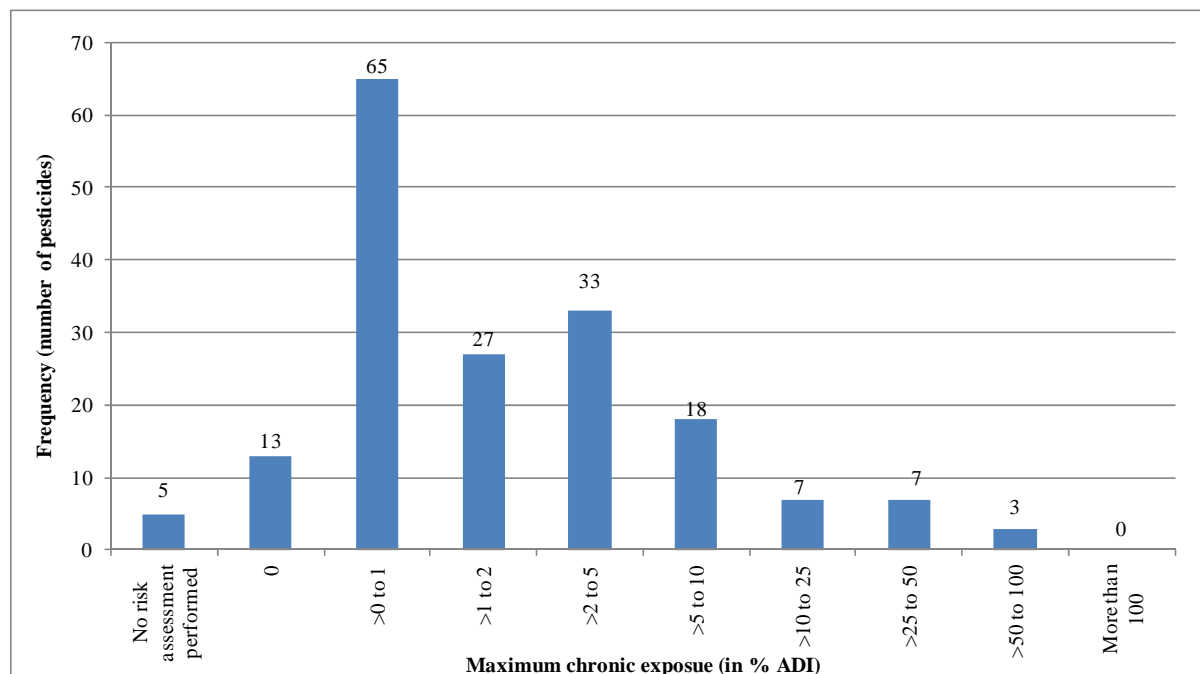
(\*) No exposure = no quantifiable residues were measured above the LOQ in any of the samples analyzed; a "no residue" or a "no use" situation was assumed.

For 11 pesticides (amitrole, benfuracarb, chlorobenzilate, dichlofluanid, parathion, parathion-methyl, prothioconazole, pyrazophos, quintozene, resmethrin and tecnazene) no quantifiable residues were reported in any of the crops considered in the chronic exposure assessment. Thus, it is concluded that the long-term consumer exposure is considered negligible for these pesticides.

The same is true for two of the seven substances included in the 2010 EU-coordinated control programme for which no ADI values were allocated (azinphos-ethyl and camphechlor). For the

remaining pesticides without ADI values (HCH-alpha, HCH-beta, hexachlorobenzene, propargite and trichlorfon) measurable residues at or above the LOQ were found in samples analysed. However, lacking toxicological reference values, no long-term risk assessment could be performed.

Figure 5-4 gives an overview of the results calculated for the 178 pesticides covered by the EU coordinated programme, grouping them in classes according to the percent of the ADI exhaustion.



**Figure 5-4:** Breakdown of the total number of pesticides according to the estimated chronic exposure (expressed in percentage of the ADI) according to scenario 1.

For none of the pesticides covered by the EU-coordinated monitoring programme, the estimated exposure exceeded the ADI value. Therefore, based on the current scientific knowledge, no long-term consumer health risk is expected for these compounds. It is noted that for 105 of the substances (60% of the surveyed substances) the estimated exposure was negligible or accounted for less than 2% of the ADI; only for 3 substances assessed with regard the chronic exposure the estimated TMDI accounted for more than 50% (but less than 100%) of the ADI.

### 5.5. Indicative cumulative risk assessment

According to the methodologies currently used in consumer risk assessment, the exposure assessment is calculated for each pesticide separately. However, since consumers may be exposed to more than one pesticide either within one meal or over a longer period consuming different food, it is of importance to assess whether the combined exposure to the different pesticides actually present on the food eaten is posing a risk to consumer health.

So far at EU level a lot of work has been done to develop a methodology to assess cumulative exposure (EFSA colloquium in 2006; EFSA, 2008; EFSA, 2009; EFSA, 2012b). However, some work still needs to be completed before a cumulative risk assessment can be implemented in routine pesticide risk assessment (EFSA-Q-2009-00860). In addition to the agreement on a methodology to be used in future, it has to be ensured that monitoring data and food consumption data needed are available at the necessary level of detail and in a format suitable for performing cumulative exposure calculations.

EFSA decided to perform indicative cumulative risk assessments in the framework of this report for both, a chronic and an acute scenario to explore potential deficiencies resulting from the monitoring data generated by the reporting countries and other limitations which may impede the practical implementation of the methodologies currently under development. In case such deficiencies become evident, recommendations should be derived with view on how to modify the monitoring programmes and data reporting formats to be prepared for future cumulative risk assessments.

A second purpose of this assessment is to estimate whether lower tier calculations (e.g. deterministic calculations) as described in the opinions of the PPR Panel of EFSA are suitable screening tools to exclude consumer health risks (EFSA, 2008; EFSA 2012b). Alternatively, the need to use refined exposure calculation methodologies, which are characterised by a higher level of complexity, should be explored. It should be highlighted that the purpose of the exercise was not to obtain accurate exposure estimates. Thus, the results presented in the next sections should be regarded as purely indicative reflecting conservative worst-case assumptions which are likely to overestimate the real consumer exposure.

#### **5.5.1. Methodology for chronic cumulative exposure assessment**

In the EFSA Scientific Opinion regarding the suitability of existing methodologies and identification of new approaches to assess cumulative and synergistic risks from pesticides to human health (EFSA, 2008) the framework of cumulative assessments and the selection of the parameters to be considered for the calculations are discussed in detail. In Table 5-7 EFSA describes the modelling approach selected for this specific exercise and the justification for the choices made.

**Table 5-7:** Description of the modelling approach used for the chronic (long-term) cumulative exposure assessment.

Reference to paragraph in scientific opinion (EFSA, 2008)	Approach used	Justification
1.1. Sources and pathways of exposure	<b>Exposure via food ingestion</b> , excluding drinking water, residential or occupational exposure and other routes of exposure (dermal, inhalation)	No data and methodology are available to EFSA regarding other sources/pathways of exposure which could be used for a wider aggregate assessment, than exposure via dietary intake.
1.2. Types of combined action	<b>Dose addition</b> of compounds belonging to the chemical class of organophosphates (OP) and N-methyl carbamates (restricted to those <b>OP pesticides and carbamates which were included in the EU-coordinated monitoring programme</b> , see Table 5-8).	OP pesticides and N-methyl carbamates cause a common toxic effect by the same sequence of major biochemical events, i.e. inhibition of the cholinesterase. The selection of this subgroup of chemicals based on the chemical class was made for pragmatic reasons without prejudice to the final decision on common assessment groups which is currently under discussion (EFSA-Q-2009-00860) <sup>(*)</sup> .
1.3 Types of exposure scenario	Assessment of the <b>chronic (long-term) actual exposure</b>	Relevant scenario for this exercise.
2.2. Methods for assessment of the combined risk	<b>Hazard index (HI)</b> (expressed in percent of the reference value).	The HI is considered as a transparent and understandable approach (EFSA, 2009) which does not require further toxicological assessments. Thus, as it can be implemented without any further toxicological data analysis it is the approach most suitable for this exercise. The exposure is expressed in percent of the toxicological threshold for long-term exposure; thus, an exposure equal or below 100% of the toxicological threshold, meaning that the exposure is not likely to pose a consumer health risk. This presentation of the results allows a direct comparison with the results derived for the individual pesticides where the exposure is expressed in % of the ADI of the respective pesticide.
2.2.1. Toxicological reference value	<b>ADI</b> as reported in Table 5-4 the substances under consideration. It is assumed that parent compound and metabolites included in the residue definition have a comparable toxicity.	Conservative approach which does not require further toxicological evaluations.
3.2. Residues data; 3.2.1.2. Monitoring data	<b>Results</b> reported in the framework of the <b>EU-coordinated monitoring programme</b> for apples, head cabbage, leek, lettuce, milk, peaches, pears, rye, oats, strawberries, swine meat and tomatoes. For the other commodities considered in the exposure assessment described in section 5.3 the results reported in the framework of the <b>national programmes</b> were used. No extrapolation to other food commodities was considered.	The residue results reported in the framework of the EU-coordinated programme are assumed representative with regard to geographical distribution, number of samples and crops. Results are not biased by targeted sampling strategies. To be representative for the whole diet, the residue dataset is completed for the most important food commodities using the results of the national monitoring programmes. Although these data might be more targeted, they are the best data available for the time being to estimate the overall exposure.

Reference to paragraph in scientific opinion (EFSA, 2008)	Approach used	Justification
	<p>Only results which were <b>compliant with the legal enforcement residue definition</b> were included.            No correction for risk assessment residue definition.  <b>No processing data</b> are considered.</p>	
3.2.1.3. Using censored data	<p><u>Scenario 1:</u>            Mean residue concentration as reported in Table 5-5 for the relevant pesticide/crop combinations assuming non-detects as containing the full LOQ (residue concentration equivalent to the LOQ).</p> <p><u>Scenario 2:</u>            Mean residue concentration was calculated replacing the non-detects with zero in case the MRL is set at the limit of quantification for the respective pesticide/crop combination. For pesticide/commodity combinations with MRL above the LOQ the non-detects were still considered as containing the full LOQ.</p> <p><u>Scenario 3:</u>            The mean residue concentrations used as input values for the cumulative exposure were calculated by replacing all the LOQs for non-detects by zero assuming that these samples do not contain any residue of the pesticide under consideration.</p>	<p>Scenario 1 is considered as the “worst-case” scenario since the non-detects have a major impact on the outcome of the exposure calculation, EFSA calculated three scenarios. Scenario 1 is the most conservative approach assuming each non-detected substance is present in the sample at the numerical value of the LOQ (“pessimistic scenario”).</p> <p>Scenario 2 is another possible approach to simulate sample residues between real zero residues and cases where residues might be present in trace concentrations, indirectly taking into account the use pattern of the pesticides. If the MRL is set at the LOQ, this is a strong indication that there is no authorised use for the pesticide/crop combination.</p> <p>Scenario 3 is the “optimistic scenario” assuming that all samples where no measurable residues were detected (residues below LOQ) were free of the pertinent pesticide.</p>
3.3.3. Food consumption data in chronic intake assessments	<b>Mean consumption</b> data for the 27 diets represented in the EFSA <b>PRIMO revision 2</b> .	To be consistent with the risk assessment performed for the single substances, the consumption data of the standard risk assessment model were used.
3.4. Determination of the exposure to each pesticide	Deterministic approach (NEDI approach according to WHO methodology as implemented in the EFSA PRIMO).	First tier calculation suitable to get indicative results, sufficiently conservative, less resources needed compared to probabilistic methodology.

<sup>(\*)</sup> EFSA-Q-2009-00860: Mandate on the identification of pesticides to be included in cumulative assessment groups on the basis of their toxicological profile. Further information can be found at <http://registerofquestions.efsa.europa.eu/roqFrontend/questionsListLoader?panel=ALL>).

Since the non-detects residues are expected to have a major impact on the results of the exposure calculation, the PPR Panel recommended to perform sensitivity analysis, replacing the LOQ partially or completely with zero to quantify the contribution of samples with non-detects to the overall estimated exposure (EFSA, 2008). EFSA therefore calculated three scenarios (see Table 5-7), where scenario 1 is considered to be a rather unrealistic worst case scenario calculating the mean by assuming the samples without detectable residues (<LOQ) contain residue concentrations at the numerical level of the LOQ. Scenario 2 is exploring the possibility to refine the calculations indirectly taking into account the information on authorisations of pesticides for certain uses. The EFSA PPR Panel recommended that for non-detects information on the percentage of the crop treated could be used to replace a certain percentage of the non-detects with zero (EFSA, 2008). To implement this recommendation, statistical data on the use of pesticides in all EU Member States would be required<sup>76</sup>. However, a central repository containing this information currently does not exist. There is also no central register in place on the pesticide authorisations granted at Member State level for each pesticide. This type of information would allow estimating which pesticides are likely to be used on which crops. To overcome this lack of information, EFSA used an alternative approach which takes into account that for a pesticide/crop combination where an authorised use is registered, normally the MRL is set at a level greater than the LOQ. Thus, if the MRL is set at the LOQ<sup>77</sup>, this is a strong indicator that no authorisation exists and that therefore samples free of measurable residues (below LOQ) can be considered as real zeros. Infringements which would lead to residues above the LOQ however would still be considered in the exposure calculation. EFSA also calculated a third scenario (“optimistic scenario”) where the mean residue concentrations were calculated by replacing the LOQ values reported with a zero. This scenario implies that samples with non-detectable residues are completely free of the pertinent pesticide. In reality, these samples, however, might contain traces of the pesticide and therefore this scenario might underestimate the actual exposure.

In the table below (Table 5-8) the 42 pesticides that have been included in the cumulative risk assessment are listed. The list comprises 32 organophosphates and 10 carbamates. 28 of the pesticides are currently not approved under Regulation (EC) No 1107/2009; in 2010 the situation was comparable.

**Table 5-8:** Pesticides included in the common assessment group for cumulative chronic exposure assessment.

Pesticide	Chemical class	Approval status <sup>(a)</sup>	Comment
Acephate	organophosphate	Not approved	
Aldicarb	carbamate	Not approved	
Azinphos ethyl	organophosphate	Not approved	No detectable residues in any sample, no ADI allocated.
Azinphos-methyl	organophosphate	Not approved	
Benfuracarb	carbamate	Not approved	No detectable residues in any sample.
Cadusafos	organophosphate	Not approved	
Carbaryl	carbamate	Not approved	
Carbofuran	carbamate	Not approved	
Carbosulfan	carbamate	Not approved	
Chlorfenvinphos	organophosphate	Not approved	
Chlorpyrifos	organophosphate	Approved	
Chlorpyrifos-methyl	organophosphate	Approved	
Diazinon	organophosphate	Not approved	

<sup>76</sup> For imported products such a refinement would not be possible since the use pattern of pesticides in third countries is not available.

<sup>77</sup> The pesticides belonging to the chemical classes of organophosphates and carbamates which are considered in this exercise are used as insecticides and acaricides. The treatment of the crops usually takes place not only in the very early development stages of the crops and therefore residues are rather likely to occur on the harvested crops. Thus, in case a pesticide is authorised in most cases the MRLs are a level higher than the LOQ.

Pesticide	Chemical class	Approval status <sup>(a)</sup>	Comment
Dichlorvos	organophosphate	Not approved	
Dimethoate/Omethoate <sup>(b)</sup>	organophosphate	Approved	ADI of dimethoate was used to calculate exposure.
Ethion	organophosphate	Not approved	
Ethoprophos	organophosphate	Approved	
Fenamiphos	organophosphate	Approved	
Fenitrothion	organophosphate	Not approved	
Fenthion	organophosphate	Not approved	
Formetanate	carbamate	Approved	
Fosthiazate	organophosphate	Approved	
Malathion	organophosphate	Approved	
Methamidophos	organophosphate	Not Approved	
Methidathion	organophosphate	Not approved	
Methiocarb	carbamate	Approved	
Methomyl/Thiodicarb <sup>(c)</sup>	carbamate	Approved	
Monocrotophos	organophosphate	Not approved	
Oxamyl	carbamate	Approved	
Oxydemeton-methyl	organophosphate	Not approved	
Parathion	organophosphate	Not approved	No detectable residues in any sample.
Parathion-methyl	organophosphate	Not approved	No detectable residues in any sample.
Phenthoate	organophosphate	Not approved	
Phosalone	organophosphate	Not approved	
Phosmet	organophosphate	Approved	
Phoxim	organophosphate	Not approved	
Pirimicarb	carbamate	Approved	
Pirimiphos-methyl	organophosphate	Approved	
Profenofos	organophosphate	Not approved	
Pyrazophos	organophosphate	Not approved	
Triazophos	organophosphate	Not approved	
Trichlorfon	organophosphate	Not approved	No ADI allocated

<sup>(a)</sup> Approved or not approved for use in the EU according to Regulation (EC) No 1107/2009.

<sup>(b)</sup> The cumulative exposure was calculated assuming the reported residues refer exclusively to the authorised dimethoate with no omethoate present in the sample.

<sup>(c)</sup> The cumulative exposure was calculated assuming the reported residues refer exclusively to the authorised methomyl with no thiodicarb present in the sample.

### 5.5.2. Results for chronic cumulative exposure assessment

In Figure 5-5 the results for the cumulative exposure assessment using the methodology described in section 5.5.1 (scenario 1) are presented graphically (only top 10 diets included in the EFSA PRIMo revision 2). The calculations reflect the worst-case scenario, assuming that each individual food commodity has been treated with all 42 pesticides included in the provisional assessment group and contained residues of each of the pesticides at least at the level of quantification. Under this unrealistic worst-case scenario the overall exposure resulting from residues of the organophosphate and carbamate pesticides ranged from 46% to 354% of the toxicological threshold for long-term exposure. As the input data for the long-term cumulative exposure for scenario 1 were derived in the same way as described for the long-term risk assessment performed for the individual compounds, the result of the cumulative exposure assessment is equivalent to the total exposure for the individual substances. For the most critical diet the main contributing pesticides were diazinon, oxydemeton-methyl, chlorfenvinphos and carbofuran; in the other diets, the pattern of the main contributing pesticides was comparable although some variations were observed as regards some individual pesticides. In all diets

the non-approved pesticides were calculated to be the major contributors which accounted on average 75% of the overall calculated exposure. In the German diet for children the exposure resulting from non-authorized pesticides was calculated to be 291% of the toxicological threshold for long-term exposure compared to 62% for authorized pesticides. This high contribution of non-authorized pesticides gives an indication that the exposure calculation in scenario 1 is overemphasizing the presence of non-authorized pesticides which are not likely to be used any more at EU level. For most of these non-authorized pesticides the measured residues corresponded to the LOQ. Thus, the use of residue concentrations at the LOQ in the exposure calculation makes the calculation overly conservative.

Figure 5-6 presents the results of scenario 1 describing the contribution of the individual commodities; from this presentation it becomes evident that in the diet representative for German children, apples were the main source of pesticide exposure accounting for 179% of the toxicological reference value. It is noted that the high apple consumption of German children is mainly related to the consumption of apple juice. Also in other diets apples, oranges, potatoes and beans with pods were the major contributing crops. These results also demonstrate that further refined exposure calculations would be possible if processing factors were available (e.g. processing factor for apple juice, peeling of oranges, cooking of potatoes and beans).

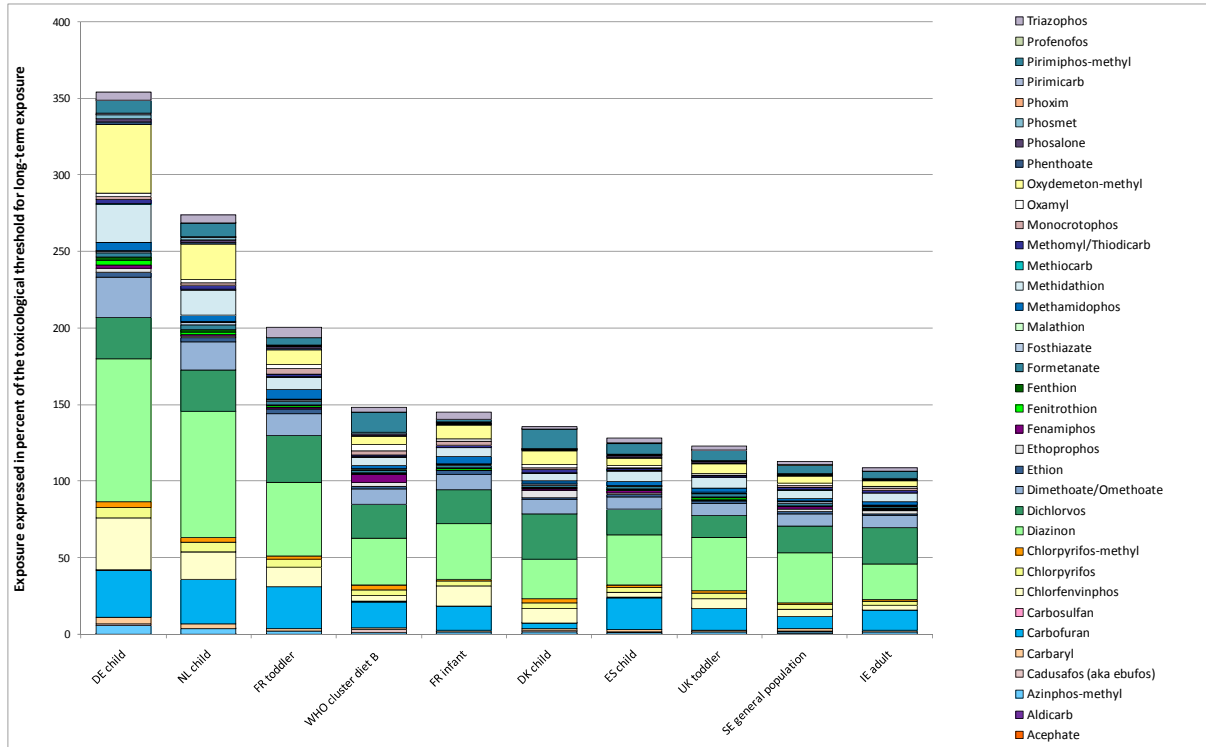
The impact of the non-detects was partially assessed in the refined scenario 2 (Figure 5-7 and Figure 5-8). By omitting the non-detects for the pesticide/crop combinations for which the MRLs are set at the LOQ the overall exposure dropped significantly: the highest exposure was again calculated for the German children with an overall exposure of 150% of the toxicological reference value. For all diets the exposure accounted on average for 35% of the exposure calculated in scenario 1. Thus, it is demonstrated that the non-detects were significantly biasing the overall exposure in the unrefined scenario 1. The exposure resulting from approved pesticides dropped from 62% in scenario 1 to 41% (scenario 2). The non-authorized pesticides dropped from 291% to 108% of the total exposure (expressed in percent of the toxicological threshold). As main contributing pesticides in scenario 2, oxydemeton-methyl, carbofuran, methidathion and dimethoate were identified. The non-authorized pesticides with very low toxicological reference values (diazinon, dichlorvos and chlorfenvinphos), which were major contributors in scenario 1, were of minor importance in scenario 2. While the main contributing commodities in scenario 1 and 2 (Figure 5-6 and Figure 5-8) did not change, the number of commodities contributing to more than 2% to the total exposure was lower in scenario 2 for all of the diets (e.g. German diet: in scenario 1, 16 commodities contributed to more than 2% to the exposure respectively whereas in scenario 2 only six commodities exceeded 2% of the exposure).

In scenario 3 EFSA calculated an “optimistic” scenario in which the samples without measurable residues above the LOQ were considered as completely free of the respective pesticide. The results reflecting this assumption are presented in Figure 5-9 and Figure 5-10. In this scenario the maximum exposure accounted for 16% of the toxicological threshold value (German children). Pirimiphos-methyl, methidathion, chlorpyrifos, carbofuran, dimethoate and diazinon were identified as the main contributing pesticides. All other pesticides resulted in an exposure below 1% of the toxicological reference value. Overall, the pesticides authorized in the EU were the main contributors in the most critical diet (10% of the toxicological reference values); among the pesticides not authorized in the EU, methidathion in oranges was the major source of exposure (3% of the toxicological reference value). As regards the major commodities mostly contributing to the exposure, wheat, oranges and apples were identified as the major source of exposure in most of the diets. Further refinements of the exposure calculation leading to a lower overall exposure could be introduced by using appropriate processing factors (e.g. milling/baking for cereals or peeling for citrus fruit).

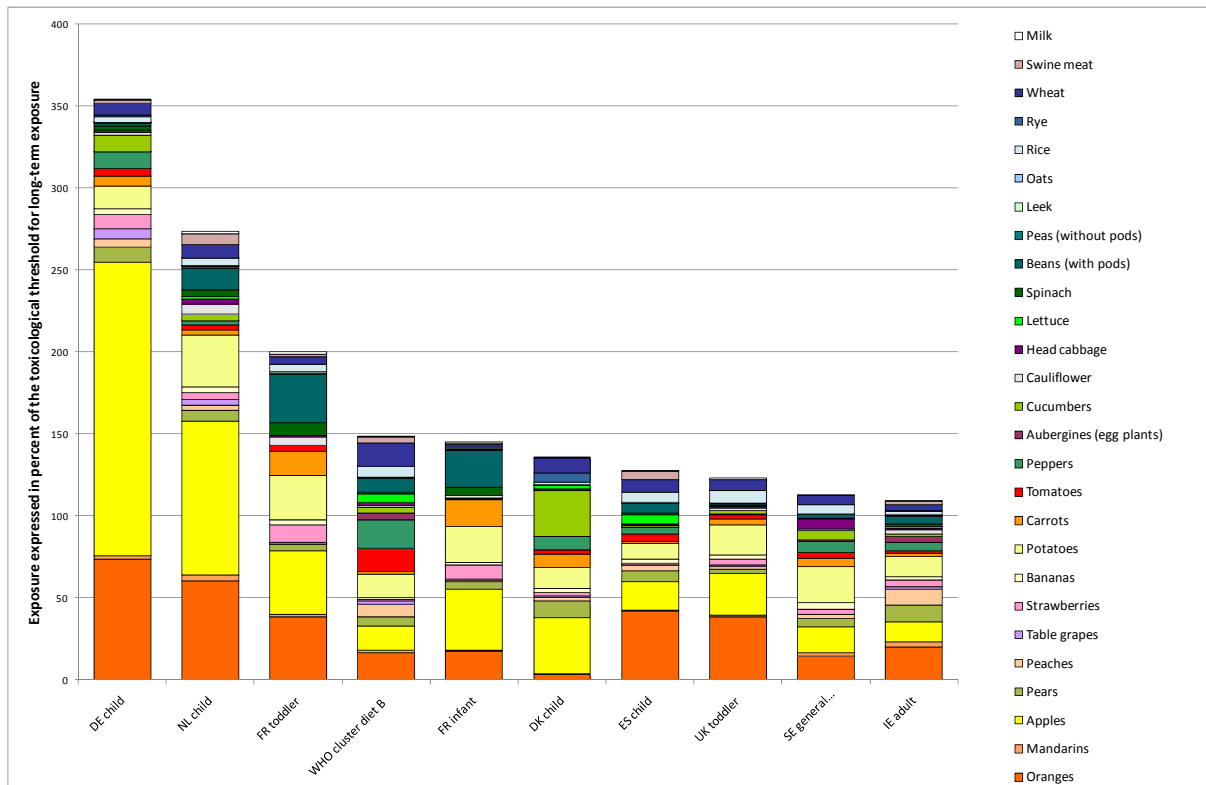
The calculations presented in scenario 1, 2 and 3 do not allow to draw a clear conclusion whether the exposure to the group of OP pesticides and carbamates represented a potential long-term consumer health risk in 2010. While in scenario 3 the estimated exposure was well below the toxicological reference values, the results of scenario 1 and 2 exceeded the toxicological threshold. The comparison



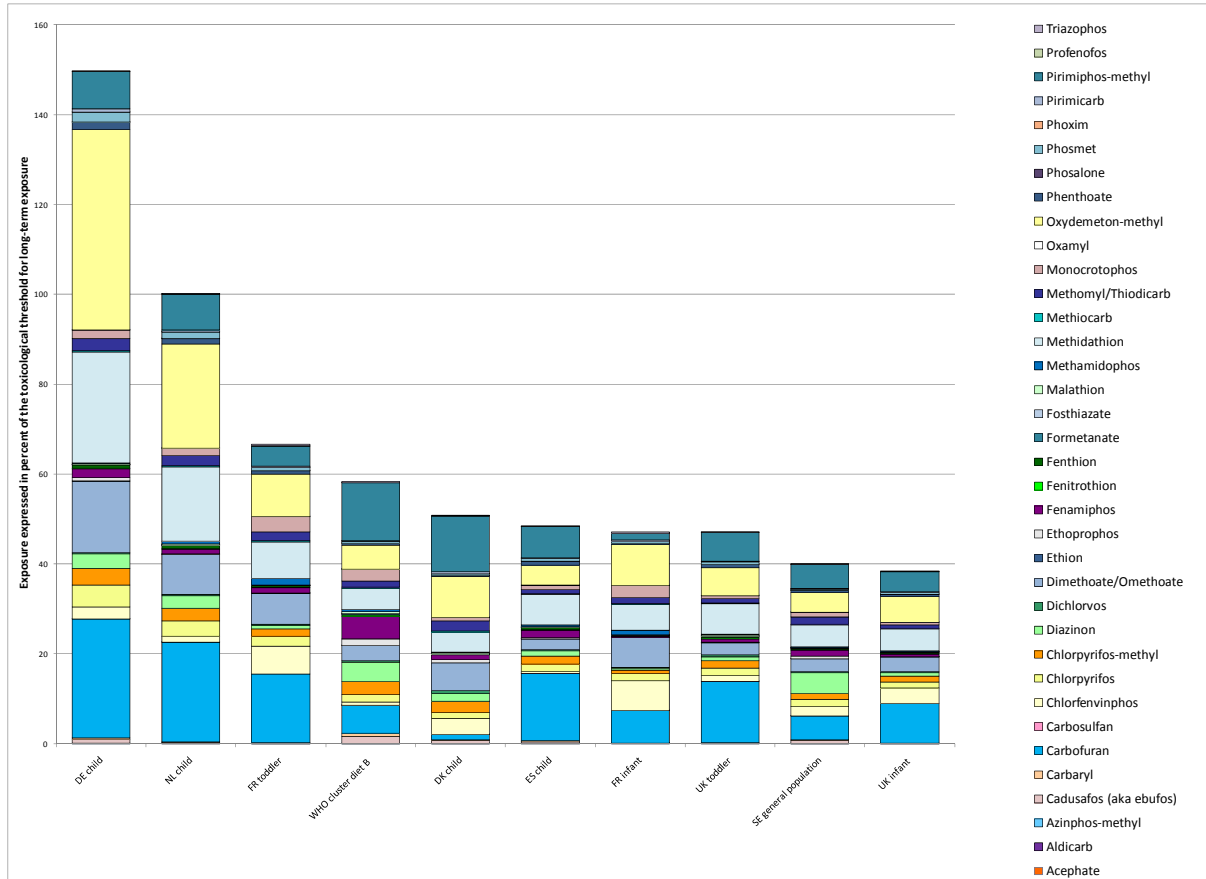
of the results obtained in scenario 3 and the more conservative calculations under scenario 1 and 2 demonstrates that the non-detects (results reported as LOQ) are the main “drivers” for the overall cumulative exposure under the less conservative scenarios.



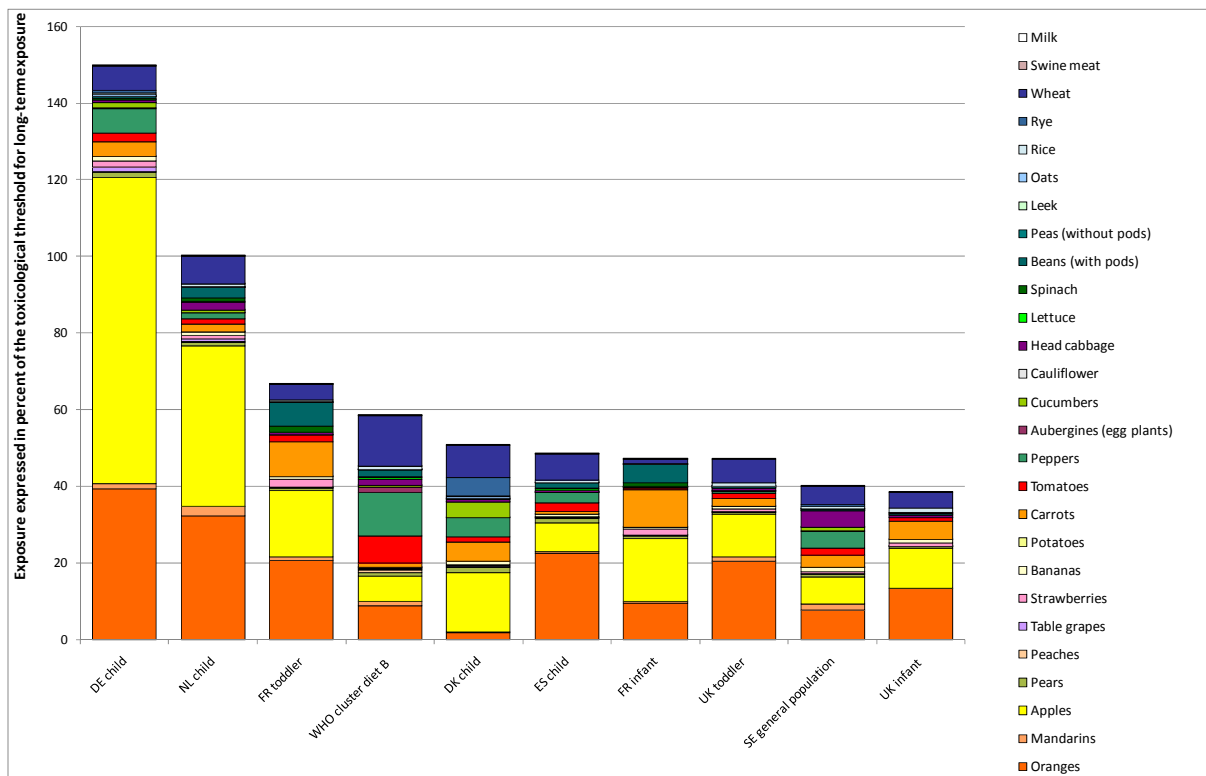
**Figure 5-5:** Results of chronic cumulative exposure assessment (results broken down by active substances), scenario 1.



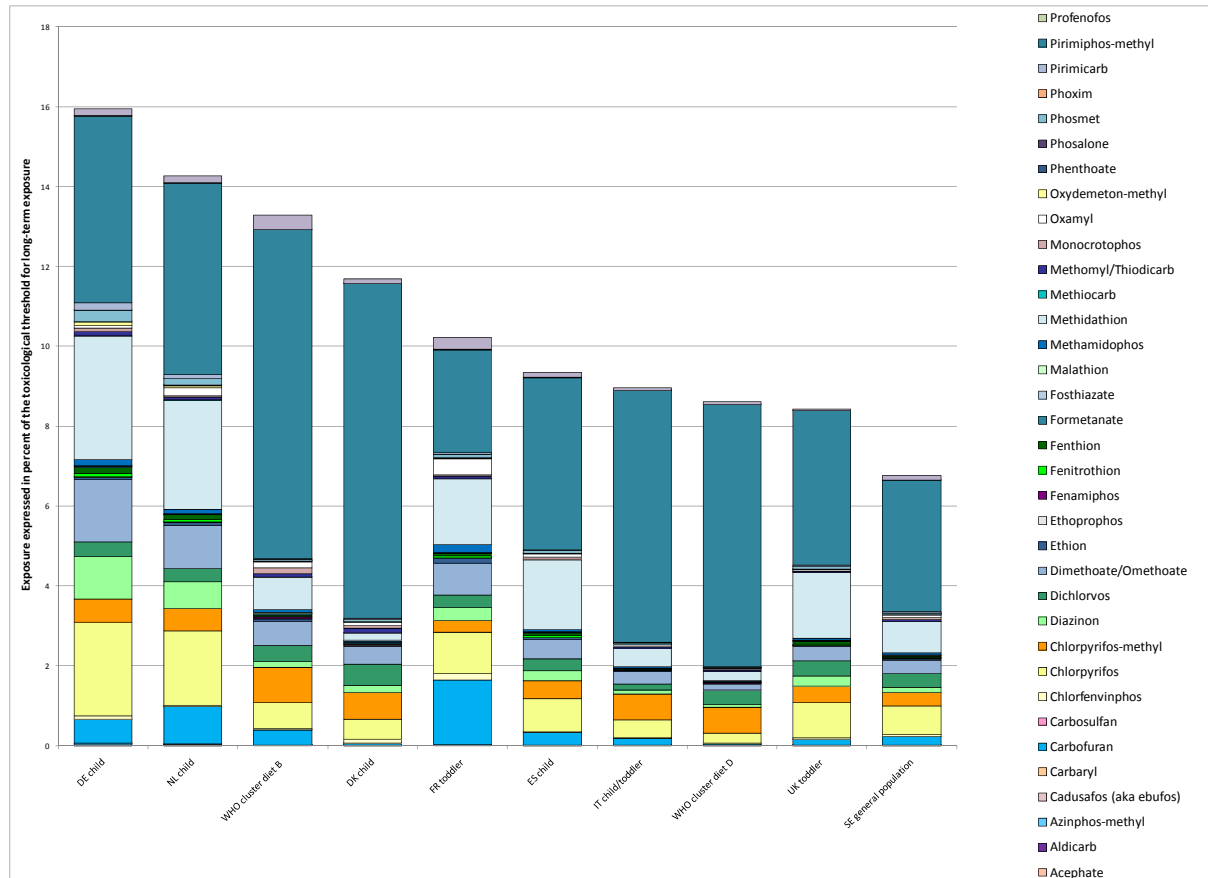
**Figure 5-6:** Results of chronic cumulative exposure assessment (results broken down by commodities), scenario 1.



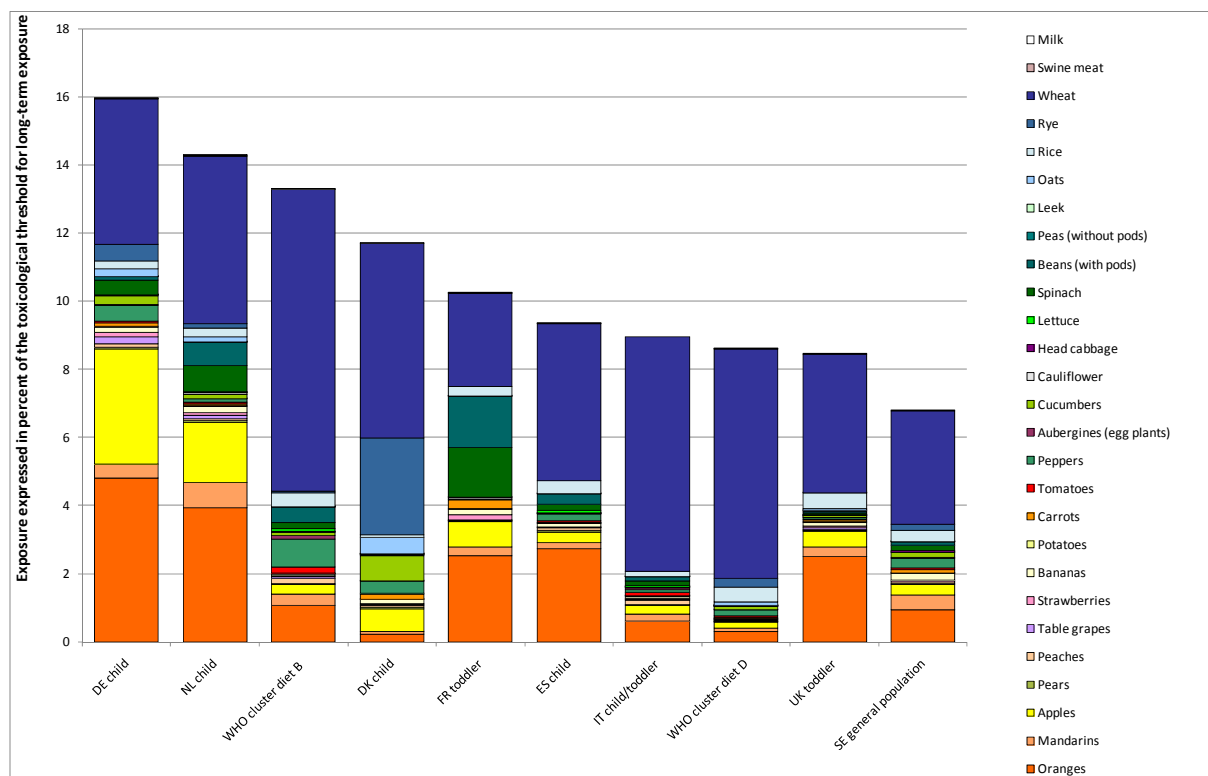
**Figure 5-7:** Results of chronic cumulative exposure assessment (results broken down by active substances), scenario 2.



**Figure 5-8:** Results of chronic cumulative exposure assessment (results broken down by commodities), scenario 2.



**Figure 5-9:** Results of chronic cumulative exposure assessment (results broken down by active substances), scenario 3.



**Figure 5-10:** Results of chronic cumulative exposure assessment (results broken down by commodities), scenario 3.

The high number of non-detects introduces a high uncertainty in the exposure calculations. The exercise described in this report demonstrated that comparing the provisional results of the “optimistic” and the “pessimistic” scenario differed by a factor of ca. 20. EFSA is of the opinion that it is of importance to find suitable options for refining the calculations and to reduce the uncertainties in the exposure calculations.

In simplified terms, there are different reasons why samples are found to be free of measurable residues<sup>78</sup>:

- (a) The pesticide was not used on the crop because the use is not authorised;
- (b) The pesticide is authorised for the use on the concerned crop, but was not used on the sample analysed because the crop disease or the pest did not occur or because alternative products were used;
- (c) The pesticide was used, but due to its degradation the residue concentration declined to a concentration which could not be quantified with the analytical method used in the control laboratory.

While in case (a) and (b) the sample should be considered as free of the respective residue, in case (c) traces of the pesticide may be present on the crop which should be considered in the consumer risk assessment. In its scientific opinion on risk assessment for the triazole pesticides, the EFSA PPR Panel highlighted that the methods for handling non-detects (ND) can have a great impact on the extent of the estimated exposure, in particular when using deterministic models. The Panel made several proposals how to handle non-detects (assume ND samples as being zero, treat them as containing the full LOQ or treat them as containing a concentration between zero and the LOQ) and recommended to perform sensitivity analysis to assess the impact of the different assumptions. In its guidance on the use of probabilistic methodology for modelling dietary exposure to pesticide residues (EFSA, 2012b), the Panel proposes to treat all samples with residues below the limit of reporting as true zeroes or as containing residues at the level of the limit of reporting in the optimistic and pessimistic runs of the basic assessments respectively. The same assumptions could be considered in the deterministic assessments. A refined approach is to take into account the percentage of crops non-treated as being a true zero. However, as reliable data on the use pattern of the individual chemicals are not available, this option is not easy to be implemented in practice (EFSA, 2009).

In these indicative exposure calculations EFSA followed the recommendations given by the PPR Panel by calculating the pessimistic and the optimistic scenario (scenario 1 and 3). In Scenario 2 EFSA tried to overcome the lack of information on the use patterns by linking the residue results with the MRL database which indirectly provides information on authorisations. However, more suitable databases should be developed which provide the information on authorised uses of pesticides for the individual crops. In the framework of the MRL review of pesticides under Article 12 of Regulation (EC) No 396/2005 the information on authorised uses will be compiled for all pesticides covered by the review programme. With this information it will be possible to identify the cases described above as case a) (no-authorisation/no-use situation). For food originating from the EU, the LOQ results could be replaced by zero in a refined exposure calculation.

The use of a database on the authorised uses would be only a first step of the refinement. In addition, it would be desirable to collect information on the actual use of the pesticides belonging to the common assessment groups to estimate the percentage of crops treated (case (b) above mentioned). The more detailed information is available, preferably at Member State level, the more refined calculations will be possible, reducing the overall uncertainty of the calculations.

Another strategy to refine the exposure assessment is to improve the sensitivity of analytical methods which would allow lowering the LOQs. Thus, this measure would have an influence on the mean residue concentrations calculated. Since the costs for analysis usually increase with decreased LOQs, a careful impact assessment needs to be performed. However, for pesticides with very low

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<sup>78</sup> This enumeration is not exhaustive, and focuses only on the use of pesticides on primary crops.

toxicological reference values the increasing of the sensitivity of the analytical methods would be a benefit.

Finally, the reporting of monitoring results could be revised with view on reducing the uncertainties for exposure assessments resulting from non-detects (results below the limit of quantification, <LOQ). In addition to the mandatory information whether a residue was measured below or above the LOQ, Member States report only on a voluntary basis the limit of detection (LOD)<sup>79</sup> and if the residues analysed were found to be below the limit of detection (<LOD). However, in order to calculate more accurate input values for the exposure assessment, this would be valuable additional information to decide whether the LOQ should be replaced by zero. Therefore it is recommended to explore with Member State experts the possibility to report the results differently for samples where the residues were between the LOD and the LOQ.

Other limitations regarding the implementation of cumulative risk assessment were identified regarding the availability of processing and consumption data for processed commodities.

Finally, the risk assessment screening was performed with a simple deterministic tool taking into account the food commodities covered by the EU-coordinated programme and restricted to the results reported for the pesticides covered by the EU-coordinated programme. The approach to use a simple deterministic screening tool for a lower tier approach would be very useful. Deterministic methods based on the hazard index are normally considered as highly conservative. However, EFSA is of the opinion that before using deterministic models as screening tool, the conservatism of these methods should be confirmed by validating them by performing calculation of comparable scenarios with a probabilistic approach and comparing the results.

### **5.5.3. Methodology for acute cumulative exposure assessment**

Exposure to more than one pesticide within a short period of time is related to the consumption of a single food item containing residues of multiple pesticides or to the consumption of different food items in a single meal containing different pesticides. While in the first case a simple deterministic tool could be used as a first tier for the estimation of the consumer exposure, the estimation of the acute cumulative exposure related to the latter case requires the use of more sophisticated probabilistic models which take into account the probability of a consumer eating more than one food containing residues, the distribution of the residue concentrations found for the pertinent food items and the distribution of the food consumption.

As mentioned before, one of the main purposes of the cumulative exposure assessment in the framework of this exercise is to test the suitability of the reported monitoring data to perform cumulative exposure assessments. EFSA therefore used a simple deterministic approach which allows estimating the exposure resulting from a single food during a single meal. The modelling approach applied for this exercise is described in Table 5-9. This example is intended mainly to gain more practical experience regarding the suitability of the monitoring data to perform this task in the future, and does not prejudice the final decision on the methodology that will be used in the future.

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<sup>79</sup> See "Limit of Quantification/Limit of Detection" in the Glossary.

**Table 5-9:** Description of the modelling approach used for the acute (short-term) cumulative exposure assessment.

Reference to paragraph in scientific opinion (EFSA, 2008)	Approach used	Justification
1.1. Sources and pathways of exposure	<b>Exposure to multiple residues present on lettuce</b>	Since lettuce was the food item which was discussed in details regarding multiple residues in Section 4.6.5.1, the cumulative exposure focussed on this commodity. ( <b>1,041 unprocessed lettuce</b> samples which contained multiple residues).
1.2. Types of combined action	<b>Dose addition</b> applied by default for all pesticides found on individual lettuce samples. It is noted that in this exercise all substances are grouped together even in the absence of any indication that in practice their effects are additive.	As a worst case scenario it is assumed that all pesticides found on a single food item would contribute to the same toxicological effect. It is without prejudice to the final decision on common assessment groups which is currently under discussion (EFSA-Q-2009-00860).
1.3 Types of exposure scenario	Assessment of the <b>acute (short-term) actual exposure</b>	Relevant scenario for this exercise.
2.2. Methods for the assessment of the combined risk	<b>Hazard index (HI)</b> (expressed in percent of the reference value).	The HI is considered as a transparent and understandable approach (EFSA, 2009) which does not require further toxicological assessments. Thus, as it can be implemented without any further toxicological data analysis it is the approach most suitable for this exercise.  The exposure is expressed in percent of the toxicological threshold for short-term exposure: thus, an exposure equal or below 100% of toxicological threshold means that the exposure is not likely to pose a consumer health risk. This presentation of the results allows a direct comparison with the results derived for the individual exposure assessments where the results are expressed in % of the ARfD.
2.2.1. Toxicological reference value	<b>ARfD</b> as reported in Table 5-1 (for the substances covered by the EU-coordinated programme). Lacking an ARfD, the ADI is used as a surrogate, unless from the toxicological evaluation it was concluded that no ARfD is necessary. For the additional pesticides found on lettuce, which were not covered by the coordinated programme, the ARfD values reported in Table 5-10 were used.  Parent compound and metabolites included in the residue definition are considered as having comparable toxicity.	Conservative approach which does not require further toxicological evaluations.  Pesticides for which the toxicological assessment concluded that no ARfD is necessary because of the low acute toxicity, were excluded from this exercise.
3.2. Residues data; 3.2.1.2. Monitoring data	<b>Results</b> reported in the framework of the <b>EU-coordinated monitoring and national programme for lettuce</b> . <b>Results which were compliant with the legal enforcement</b>	The screening of results not fully compliant with the residue definition was made in order not to omit results for compounds included in the residue definition which are of toxicological

Reference to paragraph in scientific opinion (EFSA, 2008)	Approach used	Justification
	<p><b>residue definition</b> were included. Results that were not fully compliant with the legal enforcement residue definition were screened and a case-by-case decision was taken whether they need to be considered for cumulative exposure assessment.</p> <p><b>No processing data</b> (e.g. washing of lettuce, removal of outer leaves) are considered.</p> <p>In compliance with the IESTI calculation, it is assumed that the lettuce eaten contains <b>5 times the residue concentration measured in the sample</b> (composite sample).</p>	<p>relevance. E.g. if a sample was analysed only for the parent compound, but not for a metabolite included in the residue definition which is of lower acute toxicological relevance, the result was included in the exposure calculation for this sample.</p> <p>The PPR Panel noted that for acute risk assessment it is desirable to use residue data present on single items rather than for composite samples. However, since such data are not available the variability of concentrations in individual units needs to be considered. Using the default variability factor of 5 as used for lettuce is a very conservative assumption which means that the model assumptions are that a consumer eats a large portion of lettuce containing the 5-fold pesticide concentration reported by the reporting country.</p>
3.2.1.3. Using censored data	Only <b>results greater than the LOQ</b> were considered.	On average ca. 300 different compounds were analysed on the individual lettuce sample (in total more than 30.000 individual determinations were reported). All results below the LOQ were disregarded to avoid overly conservative assumptions which would lead to a gross overestimation. Alternative approaches may be further explored.
3.3.3. Food consumption data in acute intake assessments	<b>Large portion consumption</b> data represented in the acute risk assessment of EFSA <b>PRIMo revision 2</b> .	To be consistent with the risk assessment performed for the single substances, the consumption data of the standard risk assessment model were used. <p>The German children had compared with other diets the highest large portion normalised by body weight (large portion 5.38 g consumption of lettuce per kg body weight).</p>
3.4 Determination of the exposure to each pesticide	<b>Deterministic approach</b> using the IESTI equation. The unit weight and the variability factor used in the standard setting of the EFSA PRIMo were applied.	First tier calculation suitable to get indicative results. This approach is considered to be sufficiently conservative because it is assumed that the consumer eats a large portion of lettuce containing five times the measured residue concentration (variability factor of 5). The calculation with the deterministic model is less resources intensive compared to probabilistic methodology and therefore suitable as a screening tool.



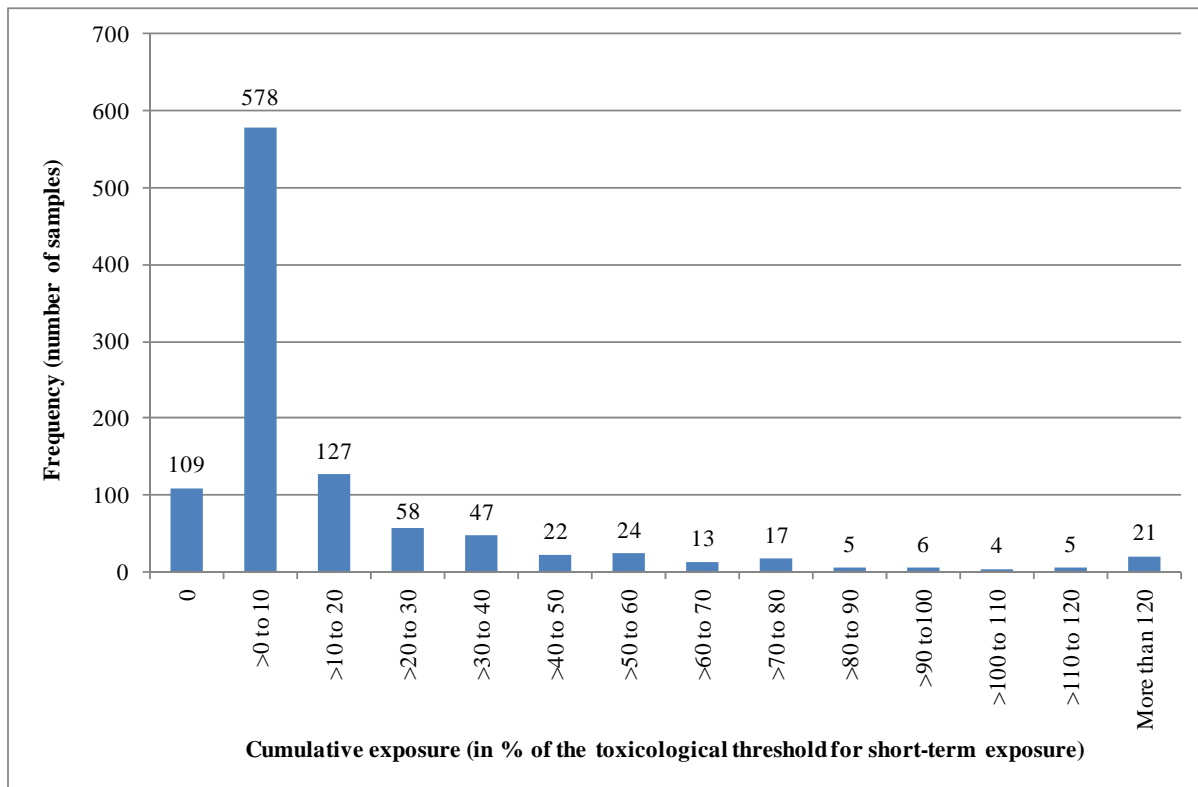
**Table 5-10:** ARfD for pesticides found on lettuce but not covered by EU-coordinated monitoring programme.

Pesticide	ARfD (mg/kg bw)	ARfD evaluation year	ARfD source
Benalaxyl	ARfD not necessary	2004	COM
Benfluralin	ARfD not necessary	2011	COM
Carbetamide	0.3	2011	COM
Chlorantraniliprole	ARfD not necessary	2008	DAR (Ireland)
Chlorthal-dimethyl	0.5	2007	DAR (Greece)
Cyromazine	0.1	2009	COM
Dodine	0.1	2010	EFSA
Ethiofencarb	0.1	1982	JMPR
Famoxadone	0.2	2002	COM
Fenamidone	ARfD not necessary	2003	COM
Fenpropidin	0.02	2008	COM
Fenpyroximate	0.02	2008	COM
Mandipropamid	ARfD not necessary	2012	EFSA
Metobromuron	0.03	1987	Belgium
Promecarb	No toxicological reference values available		
Proquinazid	0.2	2009	EFSA
Pymetrozine	0.1	2001	COM
Pyridate (sum)	ARfD not necessary	2001	COM
Quizalofop	0.1	2008	EFSA
Quizalofop-P-ethyl	ARfD not necessary	2008	EFSA
Quizalofop-P-tefuryl	0.1	2008	EFSA
Spinetoram	0.3	2009	EFSA
Sulphur	ARfD not necessary	2008	EFSA
Terbuthylazine	0.008	2011	EFSA

#### 5.5.4. Results for acute cumulative exposure assessment

In total 1,041 lettuce samples containing multiple residues were identified according to the above mentioned criteria; 106 different pesticides were found in concentrations above the LOQ.

109 samples contained exclusively pesticides which were not qualified as acutely toxic and for which therefore no ARfD was considered necessary. For these samples the cumulative acute exposure is considered as not relevant. For the majority of the samples (578 samples) the cumulative exposure expressed in % of the toxicological threshold accounted for less than 10%. The toxicological threshold was exceeded for 30 samples (2.8% of the samples with multiple residues). The overall distribution of the calculated exposure, grouped in exposure classes, is presented in the histogram in Figure 5-11.

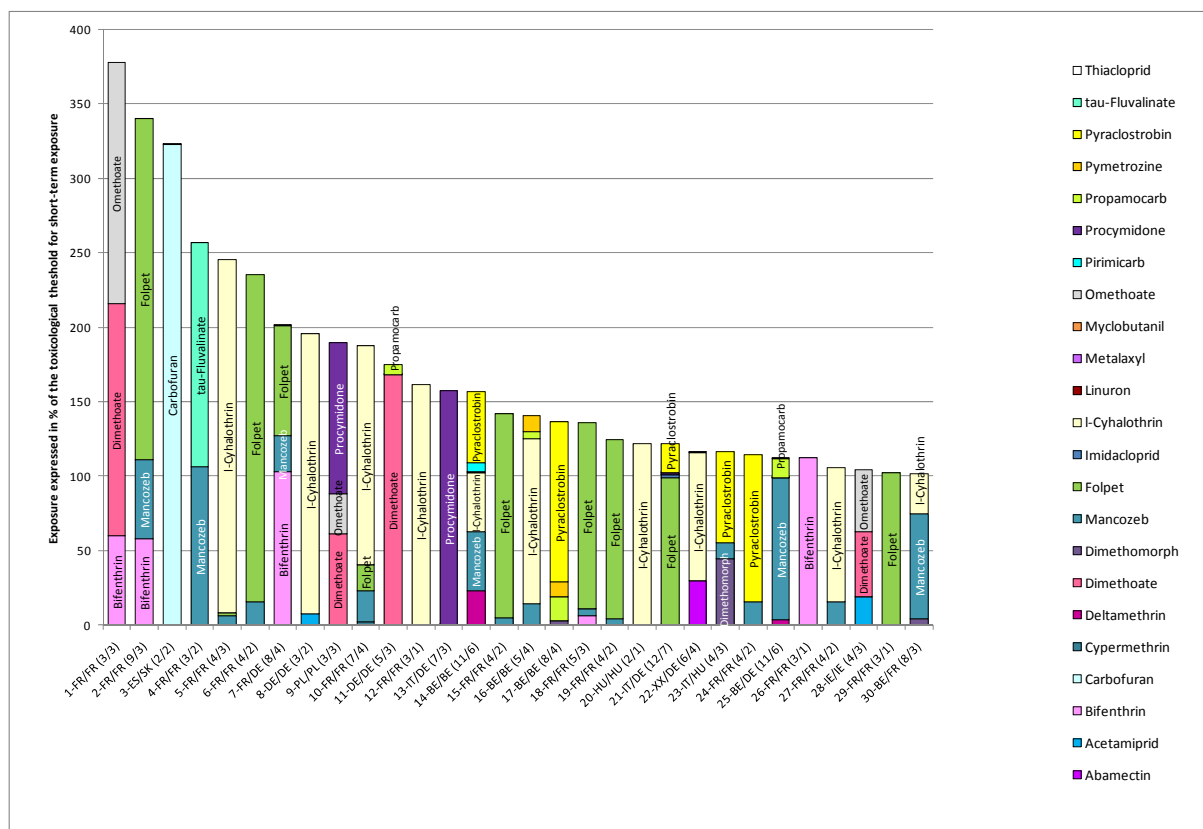


**Figure 5-11:** Short-term cumulative risk assessment for lettuce: frequency of number of samples according to exposure classes (expressed in % of the toxicological threshold for short-term exposure).

Figure 5-12 presents a further analysis of the 30 samples exceeding the 100% threshold. For each sample the contribution of the individual pesticides found to the overall cumulative exposure is presented. The labels on the x-axis of the chart refer to the following information:

- the ranking of the sample with regard to the calculated cumulative exposure,
- the country of origin of the sample;
- the country where the sample was taken;
- the number of different pesticides found in concentrations greater than the LOQ;
- the number of acutely toxic pesticides (pesticides with ARfD) found in concentrations greater than the LOQ.

From this analysis it becomes evident that for 21 out of the 30 samples the toxicological threshold for short-term exposure was exceeded not because of the cumulative exposure but because of the high concentrations related to a single pesticide (i.e. MRL was exceeded for at least one pesticide). The remaining nine samples contained combinations of fungicides and insecticides where a further toxicological assessment is needed to identify whether the individual pesticides belong to common assessment groups.



**Figure 5-12:** Short-term cumulative risk assessment for lettuce: results for individual samples (only samples with cumulative exposure exceeding the toxicological threshold for acute exposure).

The exercise for the acute cumulative exposure assessment with the methodology described above revealed that the way how results are reported for so-called complex residue definitions, i.e. residue definitions which comprise more than one compound (like parent compound and metabolites) causes some difficulties for the exposure calculation. In particular, the following problems were encountered:

- a) The residue definition comprises compounds with different toxicity (e.g. dimethoate and omethoate, expressed as dimethoate):
  - For some samples only the total residue concentration was reported, without providing the results for the individual compounds. Without discrimination of the nature of the individual compounds an accurate risk assessment cannot be performed. For these samples risk assessment can be calculated in two scenarios: the pessimistic scenario assuming the total residue comprises only the more toxic component and the optimistic scenario assuming the residue concentration refers to the less toxic compound. However, both results are affected with high uncertainties and are therefore not reliable.
  - Reporting mistakes were also identified for samples which were analyzed for the individual compounds but for which the total residue was not reported or was not reported correctly.
- b) Common moiety residue definitions (e.g. dithiocarbamates) which comprise active substances with different toxicological properties.
  - For these residue definitions no unequivocal risk assessment can be performed.
- c) The complex residue definition comprises compounds with the same toxicity (e.g. sum of pirimicarb and desmethyl-pirimicarb, expressed as pirimicarb):

- Samples which were analysed only for a part of the compounds included in the residue definition (e.g. pirimicarb) were reported as being not compliant with the residue definition. Because of this deficiency it cannot be concluded whether the sample was compliant with the MRL. However for risk assessment it is inappropriate to omit this result completely.

To overcome these deficiencies related to the reporting of results for complex residue definitions EFSA identified the need to give further guidance how the monitoring results should be reported to EFSA. In addition, validation rules should be implemented that force the Member States for case a) to report the individual compounds separately. An alternative option would be to establish separate MRLs for the individual components currently covered by the complex residue definition. For case c) it should be obligatory to report the total residue concentration which needs to be considered for the exposure assessment, regardless whether it is fully compliant with the legal residue definition. For common moiety residue definitions (case b) EFSA would recommend to calculate the exposure for the most likely scenario, considering which pesticide is actually used on the different crops. In case of the dithiocarbamates the footnotes to the MRLs indicate the active substance which was the basis for the MRL setting. A similar approach should be taken for other common moiety residue definitions.

### 5.5.5. Overall conclusions on cumulative risk assessment

Taking into account the experience gained with the first exercise on chronic and acute cumulative risk assessment, the following steps are to be taken for implementing cumulative risk assessment on a routine base in the actual exposure assessment with monitoring data:

- **Definition of common assessment groups** and establishment of adjusted **hazard indices** or **relative potency factors**. Since the total number of pesticides that could be present of food is very high, priorities need to be defined for assessing pesticides with regard to the common assessment groups. The following criteria for prioritisation should be considered:
  - Approval of a pesticide in the EU;
  - Non-approved pesticides that are regularly found in imported crops;
  - Non-approved pesticides that are persistent in the environment and are therefore found on food (EU origin and imported food);
  - Assessment of metabolites included in the residue definition with regard to their toxicological potencies;
  - If necessary, revision of the EU-coordinated monitoring programme with view of including the pesticides which are to be considered for cumulative exposure assessment;
  - The nature of the effects caused by combined toxicity of pesticides and the severity of those effects.
- **Agreement on the risk assessment tools** for screening and for refined cumulative exposure calculations:
  - For acute and chronic effects, agreement and definition of the parameterisation and assumptions applicable to the assessment of the cumulative risk. E.g. deterministic calculation of adjusted **hazard indexes** and probabilistic modelling after derivation of **relative potency factors**;
  - Validation of the deterministic methodology described in section 5.5.1 to assess whether this approach is conservative enough for screening of chronic cumulative exposure. Development of a revised methodology if validation fails;

- Assessment whether the food commodities currently included in the EU-coordinated monitoring programme and the number of samples taken for each crop are sufficient to estimate the overall cumulative dietary exposure. If necessary, include additional food commodities in the EU-coordinated monitoring programme;
  - Compilation of processing/peeling data to be used for refined exposure calculations;
  - Compilation of food consumption data for the relevant subgroups of the population to be used in probabilistic calculations for chronic and acute cumulative exposure assessments, respectively.
- **Development of an approach how to deal with censored data (“non-detects”):**
    - Set up of a database on the authorised uses of pesticides for crops which are of relevance for exposure calculations.
    - Collection of pesticide use statistics for the EU to derive an estimate of the percentage of treated crops.
- **Improvements of monitoring data/ data reporting:**
    - Exploring the possibility to lower LOQs, in particular for very toxic pesticides;
    - Exploring the possibility to report more details for censored results, i.e. reporting whether a pesticide was not detected on a sample - samples below limit of detection - or whether the pesticide was detected, but in concentrations below the limit of quantification.

## SUMMARY CHAPTER 5

The **acute (short-term) consumer exposure** assessment was performed for the 134 pesticides covered by the EU-coordinated monitoring programme that were considered relevant for acute risk assessment. The assessment focussed on the 12 target food commodities of the 2010 monitoring programme. For 20 of these pesticides no residues were detected in quantifiable concentrations in any of the samples taken, i.e.: aldrin and dieldrin, benfuracarb, bromuconazole, cadusafos, carbosulfan, chlordane, chlorbenzilate, dinocap, fipronil, fosthiazate, metconazole, methoxychlor, parathion, phenthoate, phoxim, prothioconazole, pyrazophos, resmethrin, tecnazene and triticonazole. Thus, for these substances the dietary exposure resulting from the food commodities covered by the EU-coordinated monitoring programme was negligible.

Considering the remaining pesticides covered by the programme, a potential acute risk could not be excluded for 79 samples (out of the 18,243 samples considered) concerning 30 different pesticides. However, for two pesticides included in the EU-coordinated programme the residue definition contains two or more compounds with different toxicological properties. Thus, for these substances two scenarios were calculated, an optimistic scenario, assuming the residue concentrations measured refer to the less toxic substance and a pessimistic scenario, which is considered as the less likely, using the ARfD for the more toxic substance. Under the pessimistic scenario, the number of samples which exceeded the respective toxicological reference value increased from 79 to 200. The commodities for which no risk was identified were milk, oats, rye and swine meat. The commodities with the most frequent exceedance of the ARfD were apples, lettuce and tomatoes (23, 22 and 21 samples, respectively) in the optimistic scenario; also in the pessimistic scenario these commodities exceeded most frequently the toxicological threshold (45, 87 and 29 samples, respectively). Of the samples posing a potential acute consumer risk none concerned organically produced food.

The **long-term (chronic) exposure assessment** was performed for 171 of the 178 substances covered by the EU-coordinated monitoring programme and for which toxicological reference values were available, and it was based on the residue findings for the 28 most prominent food commodities in the human diet. For none of the pesticides included in the 2010 EU-coordinated control programme the exposure exceeded the toxicologically acceptable limits. Based on the current scientific knowledge, it is therefore concluded that the food commodities covered by the EU monitoring programme did not pose a long-term consumer health risk. For more than half of the substances assessed (105 substances), the estimated exposure accounted for less than 2% of the ADI; only for 3 substances the estimated exposure accounted for more than 50% of the ADI (the maximum calculated exposure accounted for 93.2% of the ADI).

### Cumulative exposure assessment

For the first time EFSA performed an indicative cumulative risk assessment on the basis of the analytical results of the EU-coordinated monitoring programme with the purpose of exploring possible deficiencies in the monitoring data (e.g. if the level of detail of the data reported was sufficient) and other limitations, which may impede the practical implementation of the cumulative assessment methodologies currently under development. Since the work on the establishment of common assessment groups (i.e. pesticides which are expected to share the same toxicological effects) and the methodology is not yet completed, the results of the exposure assessments should be regarded as indicative only.

In the **chronic cumulative exposure assessment** the overall exposure resulting from 42 organophosphates and carbamates pesticides was calculated; these are pesticides that are likely to share a common mode of action. As a high percentage of the samples did not contain measurable residues above the limit of quantification, EFSA considered three different scenarios to assess the impact of non-detects on the exposure estimates. In a “pessimistic” scenario, samples without detectable residues were considered as containing residues at the full limit of quantification. In a

second, less conservative scenario, a refinement was introduced by replacing the limit of quantification for non-detects with zero where the MRL gave an indication that the pesticide was actually not authorised (i.e. for pesticide/crop combinations where the MRL is set at the LOQ). The third “optimistic” scenario was based on the assumption that all the samples where no measurable residues were detected are completely free of pesticides. Since the results of the three scenarios showed a high variation in terms of consumer exposure, the calculations using the simple deterministic calculation methodology do not allow to draw a conclusion whether the exposure to the group of organophosphates pesticides and carbamates represented a potential long-term consumer health risk. The calculations are affected by uncertainties, which are mainly related to the high number of non-detects among the residue results. It is therefore considered necessary to reduce the uncertainties by refining the exposure calculations. For this purpose, it is essential to retrieve more information about the “real” residue levels in samples which are reported as non-detects to perform more accurate cumulative exposure assessment. A number of recommendations were derived how this data gap could be addressed.

The scenario to assess **acute cumulative exposure** focussed on lettuce samples containing multiple residues. The exposure resulting from the individual compounds present on a single sample was summed up, assuming by default dose addition for all pesticides present on lettuce samples. The toxicological potency of the individual pesticide was derived from its ARfD. It is noted that in this exercise all substances are grouped together even in the absence of any indication that in practice their effects are additive. The exposure was calculated under the assumption that a consumer eats a large portion of lettuce containing the 5-fold pesticide concentrations reported for the sample. Under these very conservative assumptions, the acute cumulative exposure accounted for less than 10% of the toxicological threshold for the majority of the samples (687 samples out of 1041 lettuce samples containing multiple residues). The toxicological threshold was exceeded for 30 samples (2.8% of the samples considered). In addition, it was noted that for 21 out of the 30 samples the toxicological threshold for short-term exposure was exceeded not because of the cumulative exposure but because of the high concentrations related to a single pesticide. The remaining nine samples contained combinations of fungicides and insecticides; further toxicological assessment is needed to identify whether these individual pesticides belong to a common assessment group.

The cumulative exposure assessment carried out with the 2010 pesticide monitoring data highlighted that the available monitoring data have some limitations regarding the suitability to perform cumulative risk assessments. The deficiencies are not related to the quality of the analytical results as such, but rather to the lack of knowledge on the actual use of pesticides on samples which were found to be free of detectable residues.

### Recommendations

On the basis of the results of the risk assessment, EFSA recommends:

- To continue monitoring of food covered by the EU-coordinated monitoring programmes for the pesticides for which a potential consumer risk could not be excluded;
- The current methodology used by EFSA was derived from a methodology which was originally developed for enforcement purposes. It is therefore recommended to have a general discussion in the framework of a workshop of the appropriateness of the methodology for actual consumer assessment;
- For pesticides with residue definitions which contain compounds with different toxicological potencies (e.g. dimethoate/omethoate) Member States should report the results for the individual compounds separately, otherwise an accurate consumer risk assessment cannot be performed;

- To review the existing EU MRLs for certain pesticide/crop combinations for which an acute risk could not be excluded and for which the MRLs were not exceeded (i.e. bifenthrin/lettuce, bitertanol/peaches and tomatoes, imazalil/apples and tomatoes, endosulfan/tomatoes, lambda-cyhalothrin/apples and peaches, pyraclostrobin/lettuce, tebuconazole/apples and peaches);
- To explore the possibility of lowering LOQ-MRLs for substances with extremely low ARfD values, like carbofuran and chlorfenvinphos;
- To request Member States to report whether a lot which was found to exceed the legal limit was placed on the market and therefore reached the consumers or whether it was destroyed/rejected at the border and therefore was not relevant for consumer risk assessment;
- To give more guidance to the reporting countries on how to report residue findings for pesticides with complex residue definitions;
- To develop a database containing conversion factors for residue definitions;
- To develop a database compiling the authorised uses of pesticides on crops relevant for consumer risk assessment;
- To develop pesticide use statistics (e.g. on the percentage of crop treated with a pertinent pesticide);
- To discuss the feasibility to provide more information for samples with non-detectable residues (residue concentration <LOQ). In particular the reporting of the LOD should be considered (residue below or above LOD).







**REFERENCES**

- Council Decision of 14 October 2004 concerning the conclusion, on behalf of the European Community, of the Stockholm Convention on Persistent Organic Pollutants; OJ L 209, 31.7.2006, p. 1–2 and Regulation (EC) No 850/2004 of the European parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC; OJ L158, 30.4.2004, p. 7-48.
- EC (European Commission), 2009. Method validation and quality control procedures for pesticide residues analysis in food and feed. Document SANCO/10684/2009, [http://ec.europa.eu/food/plant/protection/resources/qualcontrol\\_en.pdf](http://ec.europa.eu/food/plant/protection/resources/qualcontrol_en.pdf) and <http://www.eurl-pesticides.eu/docs/public/tmpl Article.asp?CntID=727&LabID=100&Lang=EN>.
- EFSA (European Food Safety Authority), 2007. Reasoned opinion on the potential chronic and acute risk to consumers' health arising from proposed temporary EU MRLs, 15 March 2007. Available online: <http://www.efsa.europa.eu/en/efsajournal/pub/32r.htm>.
- EFSA(European Food Safety Authority), 2008. Scientific Opinion of the Panel on Plant Protection Products and their Residues (PPR Panel) to evaluate the suitability of existing methodologies and, if appropriate, the identification of new approaches to assess cumulative and synergistic risks from pesticides to human health with a view to set MRLs for those pesticides in the frame of Regulation (EC) 396/2005. The EFSA Journal (2008) 704, 1-85.
- EFSA (European Food Safety Authority), 2009. Scientific Opinion on Risk Assessment for a Selected Group of Pesticides from the Triazole Group to Test Possible Methodologies to Assess Cumulative Effects from Exposure through Food from these Pesticides on Human Health. EFSA Journal 2009;7(9)1167.
- EFSA (European Food Safety Authority), 2010. Standard sample description for food and feed. EFSA Journal 2010;8(1):1457 [54 pp.]. doi:10.2903/j.efsa.2010.1457.
- EFSA (European Food Safety Authority), 2011. The 2009 European Union Report on Pesticide Residues in Food. EFSA Journal 2011;9(11):2430 [225 pp.]. doi:10.2903/j.efsa.2011.2430.
- EFSA (European Food Safety Authority), 2012a. Report for 2010 on the results from the monitoring of veterinary medicinal product residues and other substances in live animals and animal products. Supporting Publications 2012:212. [65pp.].
- EFSA (European Food Safety Authority), 2012b. Guidance on the Use of Probabilistic Methodology for Modelling Dietary Exposure to Pesticide Residues. EFSA Journal 2012;(10):2839.
- EFSA (European Food Safety Authority) 2012c. Use of the EFSA Standard Sample Description for the reporting of data on the control of pesticide residues in food and feed according to Regulation (EC) No 396/2005. EFSA Journal 2012; 10(3):2628[52 pp.]. doi:10.2903/j.efsa.2012.2628.
- Eurostat: Source of population per country 2010; <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=tps00001> (Download: 30-01-2012 13:54:49).
- Eurostat: Source of infant population per country 2010, [http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo\\_pjan&lang=en](http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo_pjan&lang=en) (Download: 02-02-2012 15:50:24).
- FAO 2009. Submission and evaluation of pesticide residues data for the estimation of Maximum Residue Levels in food and feed. Pesticide Residues. 2nd Ed. FAO Plant Production and Protection Paper 197, 2009; [http://www.fao.org/fileadmin/templates/agphome/documents/Pests\\_Pesticides/JMPR/FAO\\_manual2nded\\_Oct07.pdf](http://www.fao.org/fileadmin/templates/agphome/documents/Pests_Pesticides/JMPR/FAO_manual2nded_Oct07.pdf)
- ISO 2005. General requirements for the competence of testing and calibration laboratories, ISO/IEC 17025:2005.

Perz RC, van Lishaut H, Schwack W. CS<sub>2</sub> blinds in Brassica crops: false positive results in the dithiocarbamate residue analysis by the acid digestion method. *J Agric Food Chem.* 2000 Mar;48(3):792-6.

## GLOSSARY

This section provides explanations of terms frequently used in this report.

### Authorisation of pesticides/plant protection products

The quality and yield of agricultural and horticultural crops is jeopardised by plant diseases and infestation by pests. In order to protect crops before and after harvest, pesticides<sup>80</sup> are used. Since the active substances used in pesticides can have harmful effects on human health, wildlife and the environment, a strict system of pesticide authorisation and control of use has been established at EU level (Directive 91/414/EEC<sup>81</sup> and Regulation (EC) No 1107/2009<sup>82</sup>). In the framework of the authorisation procedure, companies asking for the authorisation of plant protection products have to demonstrate that food treated with these products will not pose a risk to consumer health.

### Pesticide residues

Pesticide residues are the measurable amounts of the active substances used in plant protection products, their metabolites and/or breakdown or reaction products resulting from current or formerly used plant protection products that can be found on harvested crops or in food of animal origin.

According to the timing of application or the direction of use of an active substance, pesticide residues can be considered<sup>83</sup>:

- 'Systemic pesticides' that are active substances and/or relevant metabolites that are transported in the plant.
- 'Non-systemic pesticides' that are active substances and/or relevant metabolites that are not transported in the plant.

### Pesticide use

The national authorised or registered use of a plant protection product reflects the *safe* use of a pesticide under *actual* agricultural conditions and implies the use of the minimum quantity of pesticides which allows the desired effect to be obtained (referred to as Good Agricultural Practice - GAP). Authorisations are granted on national level, taking into account the local and environmental conditions and the occurrence of pests. MRLs are derived from studies reflecting the most critical authorised GAPs, provided that a consumer health risk can be excluded for these uses.

### Good Agricultural Practice - GAP

In Regulation (EC) No 396/2005 GAP is defined as follows:

"'Good agricultural practice' (GAP) means the nationally recommended, authorised or registered safe use of plant protection products under actual conditions at any stage of production, storage, transport, distribution and processing of food and feed. It also implies the application, in conformity with Directive 91/414/EEC, of the principles of integrated pest control in a given climate zone, as well as using the minimum quantity of pesticides and setting MRLs/temporary MRLs at the lowest level which allows the desired effect to be obtained [...]"

### Food commodities

Annex I of Regulation (EC) No 396/2005 defines the food commodities for which the MRLs are applicable. The description of the commodities and the parts of the products to which the MRLs apply

<sup>80</sup> In the report the term "pesticide" is used as a synonym of "plant protection product".

<sup>81</sup> Council Directive 91/414/EEC of 15 July 1991 concerning the placing of plant protection products on the market. OJ L 230, 19.8.1991, p. 1–32.

<sup>82</sup> Regulation (EC) No 1107/2009 has repealed Directive 91/414/EEC. This regulation entered into force on 15.12.2009, but applied from 14 June 2011 on.

<sup>83</sup> SANCO 7525/VI/95 – Rev. 9, March 2011. <http://ec.europa.eu/food/plant/protection/resources/app-d.pdf>

can be found in Annex I to Regulation (EC) No 396/2005, published by Regulation (EC) No 178/2006<sup>84</sup>, and amended by Regulation (EU) No 600/2010<sup>85</sup>.

Raw commodities of plant and animal origin are listed in Annex I, subdivided into 12 subgroups. In total, *ca.* 400 different food commodities are covered by the Regulation.

The main food classification groups are:

1. Fruit fresh or frozen, nuts
2. Vegetables fresh or frozen
3. Pulses, dry
4. Oilseeds and oil fruits
5. Cereals
6. Tea, coffee, herbal infusions and cocoa
7. Hops (dried), including hop pellets and unconcentrated powder
8. Spices
9. Sugar plants
10. Products of animal origin - terrestrial animals
11. Fish, fish products, molluscs and other marine and freshwater products<sup>86</sup>
12. Crops or parts of crops exclusively used for animal feed<sup>87</sup>

With a few exceptions, processed foods are not listed in Annex I of Regulation (EC) No 396/2005. In this report, “processed food” refers to products derived from commodities as specified in Annex I of Regulation (EC) No 396/2005 by food processing technologies. Typical examples are juices from fruit and vegetables, other beverages (wine, beer) or flour from cereals.

In some sections of this report the results for individual crops are aggregated and reported for the following categories:

- Fruits and nuts (covering classification group 1, including processed food derived thereof)
- Vegetables (covering classification group 2, including processed food derived thereof)
- Cereals (covering classification group 5, including processed food derived thereof)
- Other plant products (covering classification groups 3, 4, 6, 7, 8 and 9)
- Animal products (covering classification group 10)
- Fish products (covering classification group 11)
- Baby food (as defined in baby food legislation, see “MRL” in the this section)
- Other products (products which could not be assigned to a certain raw commodity or a specific processed food are summarised under this subcategory)

<sup>84</sup> Commission Regulation (EC) No 178/2006 of 1 February 2006 amending Regulation (EC) No 396/2005 of the European Parliament and of the Council to establish Annex I listing the food and feed products to which maximum levels for pesticide residues apply. OJ L 29, 2.2.2006, p. 3-25.

<sup>85</sup> Commission Regulation (EU) No 600/2010 of 8 July 2010 amending Annex I to Regulation (EC) No 396/2005 of the European Parliament and of the Council as regards additions and modification of the examples of related varieties or other products to which the same MRL applies. OJ L 174, 9.7.2010, p. 18-39.

<sup>86</sup> For this category the detailed food classification is not yet established. Thus, currently MRLs are not yet applicable.

<sup>87</sup> For this category the detailed food classification is not yet established. Thus, currently MRLs are not yet applicable.

## Residue definition

Active substances applied on a crop are often not stable, but the applied molecule undergoes to a certain extent a degradation induced by plant enzymes, light, humidity and/or other environmental factors. Thus, on the harvested food commodity, also other chemical substances (usually referred to as metabolites) than the active substances originally applied may be present. Since not all of these degradation products are harmless, they have to be taken into account in the consumer risk assessment. In certain cases, the parent compound (i.e. the substance originally applied on the crop) is not found at all in the harvested crops, but only one or several typical metabolites, which are an indicator of the use of this parent compound. The concept of residue definition is used to define the active substance used in plant protection products and its metabolites, degradates and other transformation products relevant for consumer exposure<sup>88</sup>. For each pesticide, two residue definitions are set:

The *residue definition for dietary risk assessment* (or briefly residue definition for risk assessment) includes the parent compound, its metabolites, derivatives and related compounds which are relevant for consumer exposure.

The *residue definition for MRL setting* (also referred as residue definition for MRL enforcement purposes, or briefly enforcement residue definition) comprises those compounds which are indicators for the use of the pesticide and which can be analysed in routine monitoring, ideally by a multi-residue method.

In many cases, these two residue definitions are identical. However, if the residue definition for risk assessment covers more components than the enforcement residue definition, the residue concentrations measured in monitoring programmes and reported according to the enforcement residue definition may not be directly used for calculating the actual consumer exposure. A conversion factor, which is normally derived from supervised field trials or metabolism studies, has to be applied to derive the concentration that is relevant for consumer exposure (e.g. fluazinam: residue definition for monitoring: fluazinam; residue definition for risk assessment: fluazinam, AMPA-Fluazinam and AMGT; conversion factor 3). Conversion factors are reported in different sources (e.g. EFSA conclusions, JMPR Reports). A comprehensive list of conversion factors is currently not yet established, but would be needed to reduce the uncertainties in dietary exposure assessments performed with monitoring data.

## MRL

Maximum Residue Levels (MRLs) for pesticides are defined as the upper legal levels of a concentration for a pesticide residue (expressed in mg/kg) in or on food or feed in accordance to Regulation (EC) No 396/2005, based on authorised Good Agricultural Practice (GAP) and the lowest possible consumer exposure to protect vulnerable consumers. Food of plant or animal origin with pesticide residues above the MRL shall not be placed on the market. MRLs are derived by statistical calculation methods from supervised field trials which reflect the intended GAPs. The MRLs are set at a level which should ensure that normally the harvested crop does not exceed the legal limit if the crop was produced according to GAP<sup>89</sup>.

Before an MRL is established, a risk assessment has to prove that the limit is safe for consumer health. In the past, responsibility for risk assessment in the MRL setting procedure was shared between Member States and the European Commission. Since Regulation (EC) No 396/2005 became fully applicable on 1 September 2008, EFSA is involved in all MRL setting procedures as independent body responsible for the risk assessment of new or revised MRLs.

<sup>88</sup> In cases of complex residue definitions have been established (i.e. residue definitions which contain more than one chemical element) the results reported in the Tables and Figures in the present report are labelled with the name of the pesticide and the term “sum”. For example, when “endosulfan (sum)” is reported, this refers to the following complex residue definition: sum of alpha- and beta-isomers and endosulfan-sulfate expressed as endosulfan.

<sup>89</sup> The statistical concept for MRL setting implies that a minor percentage of the crops treated according to the GAP will nevertheless exceed the MRL.

MRLs are fixed by the European Commission. The MRL applicable in Europe can be consulted on the database developed and maintained by the European Commission<sup>90</sup>.

MRLs are not primarily toxicological safety limits, but reflect the use of minimum quantities of pesticides to achieve effective plant protection, applied in such a manner that the amount of residue is the smallest practicable and are set at levels which are safe for consumers. In most cases the MRLs are well below the concentrations which are expected to lead to adverse effects on the health of consumers.

If a pesticide residue is found on a given crop at or below the MRL, then the crop can be considered safe for consumer health. On the other hand, if a residue exceeds the MRL, it is not necessarily true that the consumer is at risk: a specific assessment has to be performed, comparing the expected exposure with the toxicological reference values (ADI, ARfD; see below). If the exposure exceeds the toxicological reference values, a potential consumer health risk is identified.

MRLs are established for Raw Agricultural Commodities (RAC) of plant or animal origin placed on the market as described in Annex I of Regulation (EC) No 396/2005, i.e. fresh or frozen products without processing. In most cases the MRLs refer not only to the edible parts of the plant, but also comprise inedible parts (e.g. bananas with peel, peaches including the stones).

In September 2008, harmonised EU MRLs were established in Annexes II and III of Regulation (EC) No 396/2005, repealing the previously set EU and national MRLs. This regulation provides a harmonised system for the setting of the MRL, which applies to all food commodities available in all EU Member States. This regulation covers about 510 pesticides. For pesticides not explicitly mentioned in Annexes II, III or IV<sup>91</sup> of the Regulation, a default MRL of 0.01 mg/kg is applicable. MRLs are established at the limit of quantification (LOQ) if a pesticide is not authorised for use on a specific crop.

For processed or composite food commodities, the MRLs established in the MRL legislation for raw commodities are applied by taking into account changes in the levels of pesticide residues caused by processing or mixing (processing factors).

It should also be mentioned that for organic products no specific MRLs have been established at EU level. For these products the same MRLs as for conventional products apply, but additional production and labelling rules have to be respected (Regulation (EC) No 834/2007, Regulation (EC) No 889/2008).

For infant formulae, follow-on formulae and for processed cereal-based foods and baby foods for infants and young children, a default MRL of 0.01 mg/kg is applicable, unless a specific lower MRL has been set in Directives 2006/125/EC and 2006/141/EC.

Food business operators as defined in the Regulation (EC) No 178/2002<sup>92</sup> (“European food law”) have to ensure at all stages of production, processing and distribution that food or feed satisfies the requirements of the food law which are relevant to their activities and shall verify that such requirements are met. Member States shall monitor and verify that the relevant requirements of the European food law are fulfilled by food and feed business operators at all stages of production, processing and distribution. Therefore, the control of pesticide residues by the competent authorities in

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<sup>90</sup> The MRL database of the European Commission is available at: [http://ec.europa.eu/food/plant/protection/pesticides/database\\_pesticide\\_en.htm](http://ec.europa.eu/food/plant/protection/pesticides/database_pesticide_en.htm)

<sup>91</sup> Annex IV of Regulation (EC) No 396/2005 contains those pesticides which are exempted from the setting of MRLs because of their low risk profile.

<sup>92</sup> Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety. Official Journal L 31, 1.2.2002, P. 1 – 21.



Member States is only one element of control activities striving to ensure food safety at European level.

### **MRL exceedance**

In the context of this report the term “MRL exceedance” refers to a situation where the legal limit is exceeded numerically, without considering measurement uncertainty. Thus, this term should not be understood as MRL non-compliance that triggers legal consequences.

### **MRL compliance/non-compliance**

If the residue level measured in a sample taking into account the measurement uncertainty exceeds the legal MRL, the sample is considered as non-compliant and the competent national authorities shall apply the sanctions applicable to the infringements. The sanctions must be effective, proportionate and dissuasive. A sample is compliant with the MRL if the measured value does not exceed the MRL taking into account the measurement uncertainty.

### **Threshold residue level/threshold MRL**

As explained, the MRL is not a toxicological limit, but it is based on GAP. For the purpose of the risk assessment, EFSA introduced two new concepts: the “threshold residue level (edible portion)” and the “threshold residue level (raw agricultural commodity)”.

A *threshold residue level (edible portion)* ( $TRL_{ep}$ ) is the theoretical, calculated maximum residue in the edible part of the crop which would be acceptable from a consumer safety point of view. The threshold residue gives an intake corresponding to 100% of the ARfD and it is calculated on the basis of the consumer group with the highest consumption per unit body weight (i.e. the most critical consumer) identified among all the national consumer groups for which consumption data are available to EFSA.

The *threshold residue level (raw agricultural commodity)* ( $TRL_{rac}$ ) is the threshold residue level that refers to the whole commodity, e.g. the unpeeled orange, and which gives an intake corresponding to 100% of the ARfD. For crops that are consumed in peeled and/or processed form, a peeling factor and/or processing factor has to be considered to derive the  $TRL_{rac}$ . If the crop of concern can be consumed as a whole without any processing/peeling, the calculated  $TRL_{ep}$  and the  $TRL_{rac}$  have the same value.

### **Import Tolerance**

In Commission Regulation (EC) No 396/2008 the term “import tolerance” is defined as follows:

“Import tolerance” means an MRL set for imported products to meet the needs of international trade where:

- the use of the active substance in a plant protection product on a given product is not authorised in the Union for reasons other than public health reasons for the specific product and specific use; or
- a different level is appropriate because the existing Community MRL was set for reasons other than public health reasons for the specific product and specific use.

### **Dietary exposure assessment and risk assessment**

Dietary exposure assessment is the quantitative evaluation of the intake of pesticides via food. In the chronic and acute risk assessment, the estimated long-term and short-term dietary exposure, calculated per kg body weight, is compared with the relevant toxicological reference values, i.e. the acceptable daily intake (ADI) and the Acute Reference Dose (ARfD), respectively, (see “ADI” and “ARfD” below). A consumer exposure is of concern if the estimated dietary exposure to a pesticide exceeds the ADI and/or the ARfD. In case an ADI or ARfD is revised due to new scientific findings, the consumer risk assessment has to be updated to guarantee the safety of the legal limits.

### Acceptable Daily Intake (ADI)

The Acceptable Daily Intake (ADI) is the estimated amount of a substance in food, usually expressed in mg/kg on a body weight basis that can be ingested daily over a lifetime without appreciable chronic long-term risk to any consumer. The ADI is set on the basis of all known facts at the time of evaluation, taking into account sensitive groups within the population (e.g. children).

### Acute Reference Dose (ARfD)

The Acute Reference Dose (ARfD) is the estimated amount of substance in food, usually expressed in mg/kg on a body weight basis, which can be ingested over a short period of time, usually during one day, without appreciable risk to the consumer. The ARfD is set on the basis of the data produced by appropriate toxicological studies and taking into account sensitive groups within the population (e.g. children). An ARfD is set only for active substances which have a potential acute toxicity.

### Analytical methods

The results of monitoring analyses are strongly influenced by the analytical methods used to analyse the samples. The analytical methods used in pesticide residue analyses have to fulfil certain criteria regarding specificity, sensitivity, precision accuracy, robustness and linearity which are defined in guidance documents<sup>93</sup>. The sensitivity and selectivity of the analytical methods has an impact on the number of positive findings in samples analysed. If the analytical method applied is not capable of detecting a certain pesticide applied to the crop – or its toxicologically relevant metabolites or breakdown products – the sample may be mistakenly considered to be free of pesticide residues. Additionally, if the analytical method is not sensitive enough, the pesticide will not be detected. Therefore, the results have to be considered in connection with the performance analytical methods used.

The analytical methods used to detect and quantify pesticide residues in food commodities fall into two general types of methods: *multi-residue* and *single-residue* methods.

*Multi-residue methods* are able to analyse a high number of different pesticide residues in the same sample in the course of the same analysis. However, certain pesticides and metabolites cannot be included in multi-residue methods because of their physical-chemical properties (e.g. acidic or polar chemicals). In these cases, single-residue methods have to be applied.

*Single-residue methods* allow the identification and quantification of only one or a few pesticide residues in one sample.

Multi-residue methods are usually preferred, as they are generally more cost efficient, but in order to fulfil the general control obligations for pesticides which cannot be detected with multi-residue methods, also single-residue methods have to be used.

### European Reference Laboratory (EURL)

The European Reference Laboratories (EURLs)<sup>94</sup> are appointed by the European Commission to coordinate, to train staff, to develop methods of analysis and to organise tests to evaluate the skills of the different national control laboratories. The overall objective of the EURLs is to improve the quality, accuracy and comparability of the results from national control laboratories. The EURLs have the responsibility to network closely with the National Reference Laboratories (NRLs) in the Member States, which have the same liability on national level.

The nominated EURLs (Annex VII of Regulation (EC) No 882/2004) for residues of pesticides are:

<sup>93</sup> Method validation and quality control procedures for pesticide residues analysis in food and feed. In 2010 the valid revision of the guidance document was Document No. SANCO/10684/2009. The newest Version No. SANCO/12495/2011 is available on the web under [http://ec.europa.eu/food/plant/protection/pesticides/docs/qualcontrol\\_en.pdf](http://ec.europa.eu/food/plant/protection/pesticides/docs/qualcontrol_en.pdf) or <http://www.eurl-pesticides.eu/library/docs/fv/SANCO12495-2011.pdf>.

<sup>94</sup> Before 2010 the EURLs were called Community Reference Laboratories (CRLs).

Fødevareinstituttet Danmarks Tekniske Universitet København, Denmark	Cereals and feeding stuffs
Chemisches und Veterinäruntersuchungsamt (CVUA) Freiburg Freiburg, Germany	Food of animal origin and commodities with high fat content
Laboratorio Agrario de la Generalitat Valenciana (LAGV) Valencia, Spain Grupo de Residuos de Plaguicidas de la Universidad de Almería (PRRG) Almería, Spain	Fruits and vegetables, including commodities with high water and high acid content
Chemisches und Veterinäruntersuchungsamt (CVUA) Stuttgart Fellbach, Germany	Single residue methods

### Limit of Quantification (LOQ)/ Limit of Detection (LOD)

The Limit of Quantification (LOQ) is the lowest residue concentration, which can be quantified and reported in routine monitoring with validated methods. In the context of this report, samples reported as having residues below the LOQ are considered to be free of the pertinent residue or to contain very low concentrations at a level that cannot be quantified with acceptable certainty. The Limit of Detection (LOD) is the lowest residue concentration, which can be detected with acceptable certainty, but not quantifiable with validated method.

In the present report, the term Reporting Level (see “Reporting Level” below) is also used as a synonym of the LOQ<sup>95</sup>.

### Reporting Level (RL)

The Reporting Level is the lowest level at which residues will be reported as absolute numbers. It may coincide with the LOQ, or, for reasons of limiting the cost of the analysis, it may be above that level, but it has to be at or below the MRL. For those pesticides for which a complex residue definition (e.g. a residue definition which contains more than one compounds) is set the RL may be set at the highest LOQ used for those components in the residue definition.

### Confidence interval (CI)

Several tables show information on the percentage of samples with residues above the MRL. As the percentages calculated from samples have an inherent statistical uncertainty, an estimate for the true proportion in the sampling population is given by the CI. It shows the most probable (95%) range of percentage values. The mathematical calculation in this report is done with a Bayesian approach.

### Control programmes

According to Regulation (EC) No 396/2005, Member States shall carry out official controls on pesticide residues in order to enforce compliance with the regulation, in accordance with the relevant provisions of Community law relating to official controls for food and feed (Regulation (EC) No 882/2004). In this report, the term “monitoring programme” is used as a synonym of “control programme”.

Typically, two control programmes are in place:

*Coordinated multiannual Community control programme (EUCP)*: On a yearly basis, the European Commission prepares a specific control programme describing the pesticide/crop combinations that

<sup>95</sup> In the EU MRL legislation, the term LOD (Limit of Detection) is used but refers to the term of LOQ. However, EFSA prefers using the term LOQ in order to avoid possible confusion with the term LOD that indicates the Limit of Detection.

have to be analysed. The programme takes into account food items which are of relevance for human consumption and pesticides which are of relevance for dietary exposure because of their toxicological profile or the specific problems identified in previous years. The EU-coordinated programme aims to provide statistically representative data regarding pesticide residues in food available to European consumers.

*National control programmes for pesticide residues (NCP):* Member States set up national control programmes for pesticide residues. Those programmes are often risk-based and focus on commodities and/or pesticides which are considered of particular relevance for consumer safety or MRL compliance. The national control programmes are defined in advance in multiannual programmes which are updated every year.

### **Reporting countries**

All 27 Member States of the European Union have to report their results regarding the coordinated programme and the national control programmes. In addition, the EFTA countries Iceland and Norway report their results according to the EEA-agreement. Therefore, 29 reporting countries are contributing to the current report. Throughout the report, these countries are referred to as EU or reporting countries.

### **Sampling methodology**

To ensure that a sample is representative of a given food lot/consignment, the sampling has to be performed according to the sampling methodology for the official control of pesticide residues as established by Commission Directive 2002/63/EC<sup>96</sup>. For most plant products the minimum size of a laboratory sample lies between one and two kilograms of the food item which have to be selected randomly from the lot or consignment subject to the sampling.

### **Sampling strategy**

The sampling strategy is the approach used to select the units of the target population subject to control. Implementation of an efficient, targeted sampling strategy would result in a higher percentage of positive findings and non-compliant results. Thus, for a correct interpretation of the results obtained in control programmes information about the sampling strategy applied is indispensable. In the report, the following terminology was used to distinguish between more or less targeted sampling.

*Surveillance sampling:* samples are collected without any particular suspicion towards a particular producer, consignment, etc. Surveillance samples may be targeted at specific food products and countries, but the selection of consignment/lot is randomised. The samples taken in the framework of the EU-coordinated programme are considered to be surveillance samples.

*Enforcement sampling:* samples are taken if there is suspicion about the safety or non-compliance of a product and/or as a follow-up of violations found previously. The selection of the consignment/lot is not randomised and therefore cannot be considered representative of the food available on the European market. Follow-up or enforcement sampling is directed to a specific grower/producer or to a specific consignment. In enforcement programmes, the probability of finding samples with positive results or samples exceeding the legal limits is higher than in surveillance programmes in which, by definition, the selection of samples is randomised and not directed towards a specific food sample/consignment of a defined population of a given crop. In enforcement sampling the samples are not taken randomly and therefore cannot be considered representative of the food item available in the market place. Typically, enforcement samples are collected if there is a suspicion about the safety of a product and/or as follow-up of violations found previously.

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<sup>96</sup> Commission Directive 2002/63/EC of 11 July 2002 establishing Community methods of sampling for the official control of pesticide residues in and on products of plant and animal origin and repealing Directive 79/700/EEC. Official Journal L 187, 16.7.2002, p. 30 – 43.

In Appendix II to the present report, more details on the general sampling strategies applied at national level are reported.

### **Import control**

Article 15 of Regulation (EC) No 882/2004 lays down that the national competent authority shall carry out regular official controls on feed and food of non-animal origin imported into the territories. They shall organise these controls on the basis of the multiannual national control plan. These controls shall be carried out at appropriate places, including the point of entry of the goods into one of the territories of the Community.

In addition, for some specific commodities imported from third countries, Commission Regulation (EC) No 669/2009 amended by Commission Regulation (EC) No 878/2010<sup>97</sup> lay down rules concerning the increased level of official controls to be carried out at the points of entry into the territories on imports of the food of non-animal origin. These regulations specify pesticide/commodity/country combinations and the frequencies of controls.

### **Data collection**

With the full implementation of Regulation (EC) No 396/2005, in 2006 EFSA took over from the European Commission the responsibility to collect the pesticide monitoring data and the preparation of the Annual Report on pesticide residues. In 2009, EFSA developed the Standard Sample Description (SSD), which is a standardised model for the reporting of harmonised data on analytical measurements of chemical substances (including pesticide residues) occurring in food, feed and water (EFSA, 2010; EFSA, 2012c).

The SSD includes a list of standardised data elements, controlled terminologies and validation rules (such as country of origin, product, analytical method, limit of detection, results reported, etc.) that aims to facilitate and harmonised the reporting of the data, enhancing its quality. The collection of these data is supported by a Data Collection Framework (DCF), which is a web platform conceived for the efficiency of data submission and exchange between Member States and EFSA. Data providers can submit their files through the DCF taking care of selecting using specific file formats for data transmission (i.e. XML) and specific data protocols to support specific for electronic data exchange. Once the data are transmitted to EFSA, these are cleaned and eventually recoded – if appropriate – to make them comparable and enable their suitable for statistical analysis.

### **Quality assurance**

In accordance with Regulation (EC) No 882/2004 all laboratories performing analysis of pesticide residues in food have to be accredited to certain standards such as ISO 17025. This standard is on the one hand ISO 17025 (General requirements for the competence of testing and calibration laboratories) and on the other hand the laboratories take into account the AQC Guidance Document of the EURLs (Method Validation and Quality Control Procedures for Pesticide Residues Analysis in Food and Feed).

Commission Regulation (EC) No 901/2009 requires Member States to provide information about the details of accreditation of the laboratories which carry out the analysis for the control programme, about the application of the EU Quality Control Procedures for Pesticide Residue Analysis and about their participation in proficiency and ring tests. It also requires the reporting countries contributing to the control programme to provide the accreditation certificates. These provisions should ensure that controls are of consistently high quality.

### **Rapid Alert System for Food and Feed (RASFF)**

If control activities identify samples with pesticide concentrations which are of concern for consumer health (e.g. the estimated short-term intake is higher than the acute reference dose (ARfD) for the

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<sup>97</sup> Commission Regulation (EU) No 878/2010 of 6 October 2010 amending Annex I to Regulation (EC) No 669/2009 implementing Regulation (EC) No 882/2004 of the European Parliament and of the Council as regards the increased level of official controls on imports of certain feed and food of non-animal origin. Official Journal L 264, 7.10.2010, p. 1 – 6.

substance found), Member States have to inform the other Member States and the European Commission via the Rapid Alert System for Food and Feed (RASFF).

The RASFF ensures that relevant information is shared among all members of the RASFF (EU Member States, Commission, EFSA and Norway, Liechtenstein and Iceland) without delays to allow Member States to take timely appropriate risk management actions. The European Commission has provided the RASSF portal database as a search tool, where information of RASFF-notifications is published<sup>98</sup>.

**Third countries**

Any country that is neither a Member State nor a country from the EEA area.

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<sup>98</sup> [http://ec.europa.eu/food/food/rapidalert/rasff\\_portal\\_database\\_en.htm](http://ec.europa.eu/food/food/rapidalert/rasff_portal_database_en.htm)

## ABBREVIATIONS

<b>ADI</b>	Acceptable Daily Intake
<b>ARfD</b>	Acute Reference Dose
<b>AT</b>	Austria
<b>BE</b>	Belgium
<b>BG</b>	Bulgaria
<b>CI</b>	Confidence Interval
<b>COM</b>	European Commission
<b>CRA</b>	Cumulative Risk Assessment
<b>CY</b>	Cyprus
<b>CZ</b>	Czech Republic
<b>DAR</b>	Draft Assessment Report
<b>DE</b>	Germany
<b>DK</b>	Denmark
<b>EC</b>	European Commission
<b>EE</b>	Estonia
<b>EEA</b>	European Economic Area
<b>EEC</b>	European Economic Community
<b>EFSA</b>	European Food Safety Authority
<b>EFTA</b>	European Free Trade Association
<b>ES</b>	Spain
<b>EU</b>	European Union
<b>EUCP</b>	EU-coordinated programme
<b>EURL</b>	European Reference Laboratory
<b>FAO</b>	Food and Agricultural Organization
<b>FI</b>	Finland
<b>FR</b>	France
<b>GAP</b>	Good Agricultural Practice
<b>GR</b>	Greece

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<b>HRM</b>	Highest Residue Measured in monitoring samples
<b>HU</b>	Hungary
<b>IE</b>	Ireland
<b>IESTI</b>	International Estimated Short Term Intake
<b>IS</b>	Island
<b>ISO/IEC</b>	The International Organization for Standardization/ International Electrotechnical Commission
<b>IT</b>	Italy
<b>JMPR</b>	Joint FAO/WHO Meeting on Pesticide Residues
<b>LCL</b>	Lower Confidence Limit
<b>LOQ</b>	Analytical Limit Of Quantification
<b>LT</b>	Lithuania
<b>LU</b>	Luxembourg
<b>LV</b>	Latvia
<b>MRL</b>	Maximum Residue Level
<b>MT</b>	Malta
<b>NCP</b>	National control programmes for pesticide residues
<b>NL</b>	the Netherlands
<b>NO</b>	Norway
<b>NRL</b>	National Reference Laboratory
<b>PL</b>	Poland
<b>POP</b>	Persistent Organic Pollutant
<b>PRIMo</b>	Pesticide Residue Intake Model
<b>PT</b>	Portugal
<b>RAC</b>	Raw Agricultural Commodity
<b>RASFF</b>	Rapid Alert System for Food and Feed
<b>RO</b>	Romania
<b>SANCO</b>	Directorate General for Health & Consumers
<b>SE</b>	Sweden
<b>SI</b>	Slovenia



<b>SK</b>	Slovakia
<b>SSD</b>	Standard Sample Description
<b>TMDI</b>	Theoretical Maximum Daily Intake
<b>TRL<sub>ep</sub></b>	threshold residue level (edible portion)
<b>TRL<sub>rac</sub></b>	threshold MRL or threshold residue level (raw agricultural commodity)
<b>UCL</b>	Upper Confidence Limit
<b>UK</b>	the United Kingdom
<b>WHO</b>	World Health Organization

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**APPENDIX I - NATIONAL AUTHORITIES AND INSTITUTES IN EEA AND EU MEMBER STATES RESPONSIBLE FOR PESTICIDE RESIDUE MONITORING**

Country	National authority/institution	Web addresses for published national monitoring reports
AT	Bundesministerium für Gesundheit	<a href="http://bmg.gv.at/home/Schwerpunkte/VerbraucherInnengesundheits/Lebensmittel/Lebensmittelkontrolle/Monitoringprogramme/Nationales_Rueckstandsmonitoring_Obst_und_Gemues_e">http://bmg.gv.at/home/Schwerpunkte/VerbraucherInnengesundheits/Lebensmittel/Lebensmittelkontrolle/Monitoringprogramme/Nationales_Rueckstandsmonitoring_Obst_und_Gemues_e</a>
AT	Österreichische Agentur für Gesundheit und Ernährungssicherheit GmbH	<a href="http://www.ages.at/risikobewertung/ernaehrungssicherheit/ru_eckstaende-kontaminanten/pflanzenschutzmittel-rueckstaende-in-lebensmittel/pestizidmonitoring/">http://www.ages.at/risikobewertung/ernaehrungssicherheit/ru_eckstaende-kontaminanten/pflanzenschutzmittel-rueckstaende-in-lebensmittel/pestizidmonitoring/</a>
BE	Federal Agency for the Safety of the Food Chain	<a href="http://www.afsca.be">http://www.afsca.be</a>
BG	Bulgarian Food Safety Agency	<a href="http://www.babh.government.bg">http://www.babh.government.bg</a>
CY	Pesticides Residues Laboratory of the State General Laboratory of Ministry of Health	<a href="http://www.moh.gov.cy/sgl">www.moh.gov.cy/sgl</a>
CZ	Czech Agriculture and Food Inspection Authority	<a href="http://www.szpi.gov.cz/lstDoc.aspx?nid=11386">http://www.szpi.gov.cz/lstDoc.aspx?nid=11386</a>
CZ	State Veterinary Administration	<a href="http://www.svscr.cz">www.svscr.cz</a>
DE	Federal Office of Consumer Protection and Food Safety (BVL) Department Food, Feed and Commodities Unit Data Management and Data Analysis	<a href="http://www.bvl.bund.de/berichtpsm">http://www.bvl.bund.de/berichtpsm</a>
DK	Danish Veterinary and Food Administration National Food Institute, Technical University of Denmark	<a href="http://www.foedevarestyrelsen.dk/Foedevarerer/Kemi_og_emballage/Pesticider/Sider/forside.aspx">http://www.foedevarestyrelsen.dk/Foedevarerer/Kemi_og_emballage/Pesticider/Sider/forside.aspx</a>
EE	Veterinary and Food Board and Agricultural Board	<a href="http://www.vet.agri.ee">www.vet.agri.ee</a>
ES	Spanish Nutrition and Food Safety Agency	<a href="http://www.aesan.msps.es/AESAN/docs/docs/control_oficial/planes_nacionales_especificos/Programa_general_plaguicidas.pdf">http://www.aesan.msps.es/AESAN/docs/docs/control_oficial/planes_nacionales_especificos/Programa_general_plaguicidas.pdf</a>
FI	Finnish Food Safety Authority Evira and Finnish Customs	<a href="http://www.evira.fi/portal/fi/evira/asiakokonaisuudet/vierasainet/kasvinsuojeluainejaamat/valvonta/">http://www.evira.fi/portal/fi/evira/asiakokonaisuudet/vierasainet/kasvinsuojeluainejaamat/valvonta/</a>
FR	Ministère de l'Économie, des finances et de l'industrie Direction générale de la concurrence, de la consommation et de la répression des fraudes (DGCCRF)	<a href="http://www.economie.gouv.fr/dgccrf/Surveillance-et-controle-des-residus-de-pesticides-552">http://www.economie.gouv.fr/dgccrf/Surveillance-et-controle-des-residus-de-pesticides-552</a>

Country	National authority/institution	Web addresses for published national monitoring reports
GR	Hellenic Ministry of Rural Development and Food, General Directorate of Plant Produce Directorate of Plant Produce Protection Department of Pesticides	<a href="http://www.minagric.gr/greek/2.2.5.8.1b.html">http://www.minagric.gr/greek/2.2.5.8.1b.html</a>
HU	Hungarian Food Safety Office	<a href="http://www.mgszh.gov.hu">www.mgszh.gov.hu</a>
IE	Pesticide Registration and Control Division, Department of Agriculture, Fisheries and Food	<a href="http://www.pcs.agriculture.gov.ie">www.pcs.agriculture.gov.ie</a>
IS	The Food and veterinary Authority	<a href="http://www.mast.is">http://www.mast.is</a>
IT	Ministro del Lavoro, della Salute e delle Politiche Sociali Dipartimento per la Sanità Pubblica Veterinaria, la Nutrizione e la Sicurezza degli Alimenti Direzione Generale della Sicurezza degli Alimenti e della Nutrizione	<a href="http://www.salute.gov.it">www.salute.gov.it</a>
LT	National Food and Veterinary Risk Assessment Institute	<a href="http://www.nmvrvi.lt">www.nmvrvi.lt</a>
LU	Food Safety Service	<a href="http://www.securite-alimentaire.public.lu/organisme/pcnp/sc/cs9_prod_phyto/index.html?highlight=pesticides">http://www.securite-alimentaire.public.lu/organisme/pcnp/sc/cs9_prod_phyto/index.html?highlight=pesticides</a>
LU	Administration of Veterinary Service	<a href="http://www.securite-alimentaire.public.lu/organisme/pcnp/sc/cs9_prod_phyto/index.html?highlight=pesticides">http://www.securite-alimentaire.public.lu/organisme/pcnp/sc/cs9_prod_phyto/index.html?highlight=pesticides</a>
LV	Ministry of Agriculture Food and Veterinary Service of Latvia	<a href="http://www.zm.gov.lv/">http://www.zm.gov.lv/</a>
MT	Malta Standards Authority	<a href="http://www.msa.org.mt">www.msa.org.mt</a>
NL	Food and Consumer Product Safety Authority (VWA)	<a href="http://www.vwa.nl">www.vwa.nl</a>
NO	The Norwegian Food Safety Authority	<a href="http://mattilsynet.no/mat_og_vann/uonskede_stofferimaten/relater_ester_av_plantevernmidler_i_mat/#overvakings_og_kartleggingsprogrammer">http://mattilsynet.no/mat_og_vann/uonskede_stofferimaten/relater_ester_av_plantevernmidler_i_mat/#overvakings_og_kartleggingsprogrammer</a>
PL	Chief Sanitary Inspectorate	<a href="http://www.gis.gov.pl">http://www.gis.gov.pl</a>
PT	Directorate-General of Agriculture and Rural Development (DGADR)	<a href="http://www.dgadr.pt">www.dgadr.pt</a> following the next links: Produtos fitofarmacêuticos » Divulgação » Relatórios de controlo - resíduos de pesticidas.

Country	National authority/institution	Web addresses for published national monitoring reports
RO	Agriculture and Rural Development Ministry – Central Laboratory for Pesticides Residues Control in Plants and Vegetable Products National Sanitary Veterinary and Food Safety Authority Ministry of Health	<a href="http://www.madr.ro">www.madr.ro</a> <a href="http://www.ansvsa.ro">www.ansvsa.ro</a> <a href="http://www.ms.ro">www.ms.ro</a>
SE	National Food Administration	<a href="http://www.slv.se">www.slv.se</a>
SI	Inspectorate for Agriculture, Forestry and Food (IRSAFF) Health Inspectorate of the Republic of Slovenia (HIRS) Veterinary Administration of Republic of Slovenia (VARs) Phytosanitary Administration of the Republic of Slovenia (PARs)	<a href="http://www.furs.si/svn/ffs/">http://www.furs.si/svn/ffs/</a>
SK	State Veterinary and Food Administration of the Slovak Republic Public Health Authority of the Slovak republic	<a href="http://www.svssr.sk/">http://www.svssr.sk/</a>
UK	Chemical Regulation Directorate, Health and Safety Executive	<a href="http://www.pesticides.gov.uk/prc.asp?id=2937">http://www.pesticides.gov.uk/prc.asp?id=2937</a> (Reports of the UK's Pesticide Residues Committee)

**APPENDIX II – INFORMATION ON THE NATIONAL MONITORING PROGRAMMES**

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## 1. Introduction

In addition to analytical results, data providers were asked to write a textual summary as described in the document “Use of the EFSA Standard Sample Description for the reporting of data on the control of pesticide residues in food and feed according to Regulation (EC) No 396/2005”.

The text should contain – among other - a summary of the results, a description of the national control programme design, along with the sampling procedures and of the quality assurance, as well as any other relevant information, structured under the following headings:

1. Country
  - 1.1. Objective and design of the national monitoring programme
    - 1.1.1. Responsibilities
    - 1.1.2. Design of Programmes (priorities, targeting, criteria for the percentage of samples to be taken from the organic sector)
    - 1.1.3. Sampling: personnel, procedures, sampling points
    - 1.1.4. Analytical methods used
  - 1.2. Key findings, interpretation of the results and comparability with the previous year results
  - 1.3. Non-compliant samples: possible reasons and actions taken
  - 1.4. Quality assurance
    - 1.4.1. Status of accreditation of laboratories, number of laboratories
  - 1.5. Additional Information

The information in the following paragraphs is published as reported by the contributing countries to EFSA. EFSA therefore takes no responsibility for the accuracy of this information and for the potential discrepancy between the information provided here in Appendix II and that published in Section 2 of the Report.

The information provided in this section should reflect the information published by the individual competent national authorities on the Internet. The list of web addresses, where the results of national monitoring plans have been published, can be found in Appendix I. It should be noted that upon transmission of the monitoring data, EFSA validated and cleaned the data transmitted. In addition EFSA recoded the names of pesticides and food used by the reporting countries to make them comparable, where necessary. In case of data inconsistencies the reporting countries were asked for corrections. Therefore, small differences in the data published separately by the national authorities (and here in Appendix II) and the data reported in Section 2 of the Annual Report may occur.

A direct comparability of the MRL compliance rates between reporting countries is not possible for several reasons. In particular, the scope and sampling strategies of the national control plans and the analytical performance vary among reporting countries. Especially Iceland had an agreed reduced scope in the coordinated multiannual Community control (EEA Decision 127/2009).

In the reference monitoring period 2010 the pesticide MRLs were fully harmonised among the EU Member States. Thus the same MRLs were applicable at the same time in all the Member States.

The two EEA reporting countries (Norway and Iceland) have also implemented in their national legislations the legal limits applicable in the European Union. However, it should be noted that the date of entry into force of the EU MRLs in these two countries is delayed in comparison to the application data in the Member States.

## 2. Austria

### 2.1. Objective and design of the national monitoring programme

#### 2.1.1. Responsibilities

The national pesticide monitoring is done according to a nation-wide sampling plan designed by the Austrian Agency for Health and Food Safety, Area Data, Statistics and Risk Assessment in co-operation with the Federal Minister of Health. The plan was based on data concerning dietary consumption, production and import of fruits and vegetables and results of former measurements. Furthermore the results of earlier monitoring-programmes and the analytical possibilities were taken into account too. The co-ordinated programme of the European Commission was of course also done. In addition routine samples were taken from the Austrian market by the responsible staff.

#### 2.1.2. Design of Programmes (priorities, targeting, criteria for the percentage of samples to be taken from the organic sector)

Due to the fact, that there were some commodities for the national programme isolated, of which higher risk for residues was identified in the last years, these specific data are representative for the Austrian market, but the monitoring has to be seen partially as „targeted monitoring“. It was the aim, to reflect to the results of the last years and to choose special commodities of interest for further examination. This type of monitoring is foreseen for the next years. One special part of the national programme was sampling of fruits and vegetables from organic farming.

#### 2.1.3. Sampling: personnel, procedures, sampling points

The samples were taken by trained officials from the local Food Inspection Service („Lebensmittelaufsicht“) in accordance to the Commission Directive 2002/63/EC, which is implemented in the internal quality assurance system of the officials. The samples were predominantly taken at the retail or wholesale level.

#### 2.1.4. Analytical methods used

The analytical methods were adopted from published methods of the Dutch federal laboratories (‘Analytical Methods for Pesticide Residues in Foodstuffs’, 6th Ed., General Inspectorate for Health Protection, Ministry of Public Health, Welfare and Sport, The Netherlands) and validated in the laboratories. The samples were analysed up to a maximum of 510 substances. The methods used were a GC multimethod with ECD-, NPD- and FPD-detection. GC/MS-methods are primarily applied for confirmation purposes of the other GC methods. In addition the methodology of LC/MS was established 2006 and is used more frequently since that time.

### 2.2. Key findings, interpretation of the results and comparability with the previous year results

In 2010 a total of 1248 samples of fresh fruits and vegetables were analysed under the coordinated programme, the national pesticide monitoring programme and as routine samples. Beside that other products like cereals (76 samples), processed products (538 samples), animal products (508 samples) and baby food (107 samples) were analyzed. In sum 2510 samples were examined for pesticide residues.

46,2 % of all samples were from Austria, 33,8 % from the European market, 17,5 % from third countries and the rest from unknown origin. The percentage of surveillance samples with residues above the MRL were 0,5 %, 1,8 %, 7,7 % and 1,6 % respectively (without taking into account the measurement uncertainty).

In 46 % of the samples (surveillance and enforcement) of fruits and vegetables including not separately in the validation report mentioned plant products no pesticide-residues could be detected. 50 % of the samples had residues under or at the Maximum Residue Limits (MRL). 4,4 % of the samples of fruits and vegetables contained one or more pesticide(s) above MRL (55 samples) (without taking into account the measurement uncertainty). Taking into account the measurement uncertainty, only 27 samples of fruits and vegetables contained pesticide residues above the MRL and were non-compliant (surveillance 1,8 %, enforcement 10,6 %).

In 487 samples (19,4 %) more than one pesticide was analysed. Up to 10 pesticides were found (10 different pesticide residues in three samples table grapes and one sample peppers).

89 samples were taken as enforcement samples, of which 8 samples contained pesticide residues above the MRL and were non-compliant.

Even if an increased number of substances was analysed in the samples, the number of non-compliances clearly decreased in comparison to the last years. This seems to be an effect because of the harmonized MRLs laid down by the European legislative in the year 2008.

### 2.3. Non-compliant samples: possible reasons and actions taken

In 2010 in sum 32 samples were non-compliant with the EU-MRLs taking into account the measurement uncertainty. For these administrative actions were set by the responsible officials from the local Food Inspection Service.

Number of non-compliant samples	Action taken	Note
24	Administrative Actions	
8	Administrative Actions and RASFF notification	RASFF-ref: 2010.0223 (Sample code 10014619) RASFF-ref: 2010.0225 (Sample Code 10004629) RASFF-ref: 2010.0231 (Sample code 10014617) RASFF-ref : 2010.0309 (Sample code 10014703) RASFF-ref: 2010.0406 (Sample Code 10017944) RASFF-ref: 2010.0553 (Sample Code 10039550) RASFF-ref: 2010.0733 (Sample code 10042066) RASFF-ref: 2010.1576 (Sample code 10106735)

### 2.4. Quality assurance

#### 2.4.1. Status of accreditation of laboratories, number of laboratories

The analysis of the co-ordinated programme, the national monitoring programme and routine samples were made by two laboratories for food control (Austrian Agency for Health and Food Safety, Institute for Food Control, Vienna and Institute for Food Control, Innsbruck together with the there located competence-centres for pesticide-analyses (CC-RANA, CC-PSRM)). One additional Laboratory in Vienna (Regional Institute for Food Control in Vienna (LUA3)) analysed routine samples. All



laboratories got the accreditation in the year 1998 and the methods for pesticide analyses are still accredited.

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
AT	Austrian Agency for Health and Food Safety (Institutes and Competence centres)	CC BIOC CC PSMR CC RANA ILMU-GRZ ILMU-IBK ILMU-LNZ ILMU-SBG ILMU-VIE	01.11.1998	BMWA	IFA Tulln (BOKU), Serie H76 (Herbizide) in water  EURL-CF, (Denmark), EUPT-C4 (EU Proficiency test for Cereals) EURL FV (Almeria), EUPT-FV12 (EU Proficiency test for Pesticides in Fruits and Vegetables) EURL FV (Almeria), EUPT-FV-SM-02 (EU Proficiency test for Pesticides in Fruits and Vegetables, Screening Methods) EURL SRM (CVUA Stuttgart), EUPT SRM5 (EU Proficiency test for Single Residue Methods) EUPT-C4 (rye flour) EUPT-AO05 (meat paste spig) FAPAS 0570 (hardened vegetable oil) AFSSA ACA-CF-MI-10-04 (honey)
AT	Regional Institute for Food Control in Vienna	LUA3	01.11.1998	BMWA	FAPAS Proficiency Test 19104 FAPAS Proficiency Test 19110

### 3. Belgium

#### 3.1. Objective and design of the national control programme

The approach used by the Federal Agency for the Safety of the Food Chain (FASFC) for the programming of analyses is risk based. The programme is drawn up following the general statistical approach employed within the FASFC<sup>1</sup>. Several factors are taken into account: the toxicity of the active substances, food consumption figures, food commodities with high residues/non-compliance rate in previous monitoring years, origin of food (domestic, EU or third country), RASFF notifications and other useful information.

All groups of fruits and vegetables are included in the programme and a rolling programme is applied for less important commodities. The coordinated control programme of the European Commission and some targeted sampling (mainly targeted sampling at border controls according to Regulation 669/2009) are also included in the national programme.

Adjustments of the programme can be made during the course of the year in order to take into account emerging problem. As example, in 2010, samples of table grapes from India were add to the program due to the problematic of chlormequat.

The FASFC stipulates the target pesticides for each sample type. They are determined on a risk based approach taking into account the active substances authorised in Belgium, the result of previous control programmes in Belgium and other Member States, the RASFF and the analytical possibilities.

Sampling was done according to directive 2002/63/EC<sup>2</sup> implemented in the Belgian legislation. Samples were analysed in five different laboratories by means of multi-residues and single-residues methods.

#### 3.2. Key findings, interpretation of the results and comparability with the previous year results

In 2010, a total number of 2932 samples of fruits, vegetables, cereals, animal products and processed products (including baby food) were taken by the Federal Agency for the Safety of the Food Chain (FASFC) and analysed for the presence of pesticide residues in application of Regulation (CE) N° 396/2005. 35 % of these samples were produced in Belgium, 14,5 % in EU, 48 % outside the EU and 2,5 % were of unknown origin.

Table 1 summarises the results with respect to the sampling strategy.

---

1 Maudoux J-P., Saegerman C., Rettigner C., Houins G., Van Huffel X. & Berkvens D., Food safety surveillance by a risk based control programming: approach applied by the Belgian federal agency for the safety of the food chain (FASFC), *Vet. Quart.* 2006, 28(4): 140-154. <http://www.favv-afsa.fgov.be/publicationsthematiques/food-safety.asp>

2 Commission Directive 2002/63/EC of 11 July 2002 establishing Community methods of sampling for the official control of pesticide residues in and on products of plant and animal origin and repealing Directive 79/700/EEC

Table 1 : Products analysed for pesticide residues in 2010 with respect to the sampling strategy

Sampling strategy	Samples	Analysed	without residues	with residues at or below MRL	> MRL <sup>3</sup>	>MRL <sup>4</sup> (Non compliant)
Surveillance	Fruit & vegetables	1854	31,2 %	64 %	4,8 %	2,4 %
	Cereals	22	22,7 %	72,8 %	4,5 %	0 %
	Processed products (food)	89	62,9 %	34,8 %	2,3 %	0 %
	Animal products	30	100 %	0 %	0 %	0 %
	Baby food	91	98,9 %	1,1 %	0 %	0 %
	Feed	102	55,9 %	42,1 %	2 %	1 %
		<b>2188</b>	<b>37,3 %</b>	<b>58,4 %</b>	<b>4,3 %</b>	<b>2,1 %</b>
Enforcement	Fruit, vegetables & cereals	744	50,1 %	35,8 %	14,1 %	10,6 %
	<b>TOTAL</b>	<b>2932</b>	<b>40,5 %</b>	<b>52,7 %</b>	<b>6,8 %</b>	<b>4,3 %</b>

### A. Surveillance sampling

**2188** surveillance samples were analysed in the framework of the control programme. 97,9 % were compliant with the legislation.

Like previous years, products imported from third countries showed proportionally more MRL violations than products grown in BE or EU (see table A0 of the summary report).

Main MRL violations in fruit were observed in strawberries (from Egypt and Israël) and table grapes (from India). In vegetables, MRL violations were observed in chilipeppers (from Thailand and Ouganda), beans and peas (from Egypt and Kenya), tea and infusions (from China), celery and parsley (from Belgium).

### B. Enforcement sampling

**744** enforcement samples were analysed in the case of suspicion about the non compliance of a product to EU MRLs. These products were mainly targeted products analysed according to Regulation 669/2009 (products from Thailand, the Dominican Republic, Egypt, ...) and products analysed as follow-up of violations found previously. 89,4 % were compliant with the legislation.

MRL violations were mainly observed in products from Thailand (chilipeppers, aubergines and basilic), the Dominican Republic (beans and bitter meloen) and Ouganda (chilipeppers).

Regarding to the scope of the pesticides analysed, more than 500 different pesticides were analysed for. The scope of the pesticide analysed was increased in 2010 (+30 % in comparison with 2009).

When non-compliant samples are identified, the batch is seized, if available, and prevented from entering the market. An assessment of risk to the consumer is performed on all non-compliant samples and the appropriate measures such as recall and RASFF notification are taken<sup>5</sup>. Follow-up action is taken to verify the violation and to identify its cause. When non-compliant samples are

<sup>3</sup> Measurement uncertainty is not taken into account (numerical MRL exceedances)

<sup>4</sup> Measurement uncertainty is taken into account (samples non compliant)

<sup>5</sup> The actions to be taken in case a MRL is exceeded are described in a procedure available on the website of the FASFC (<http://www.afsca.be/publicationsthematiques/inventaire-actions.asp>).

identified, the producer or importer is subject to enhanced control and an official report is made and sent to the legal department of the FASFC which proposes a fine. If the fine is not paid or in case of repeated offences the matter is taken to court.

10 RASFF messages were issued in 2010. These products were not put on the market or recalled from the consumers.

### 3.3. Non-compliant samples: possible reasons and actions taken

In 2010, 2,1 % of the 2188 surveillance samples analysed (46 samples in total) were found non-compliant with the EU MRL. Figures 1 and 2 give an overview of the non compliant products with the importance of the non compliance with the MRL set in the EU legislation.

#### BE products

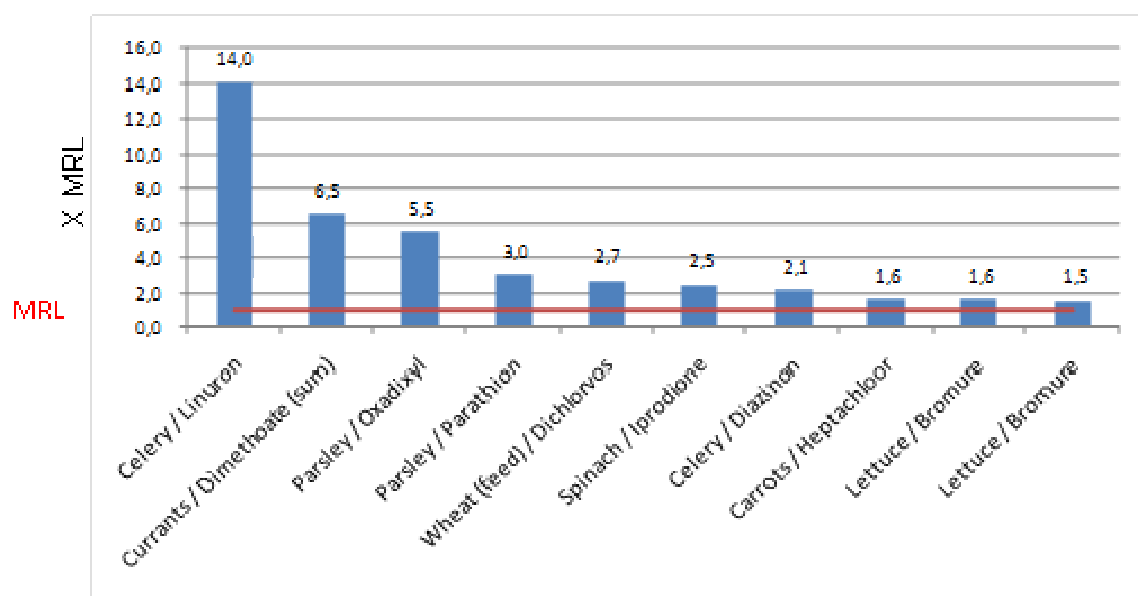


Figure 1 : Non compliant products originating from Belgium with information about the importance of the non compliances. The sample of celery containing linuron exceeded 14 times the MRL.

Products from third countries

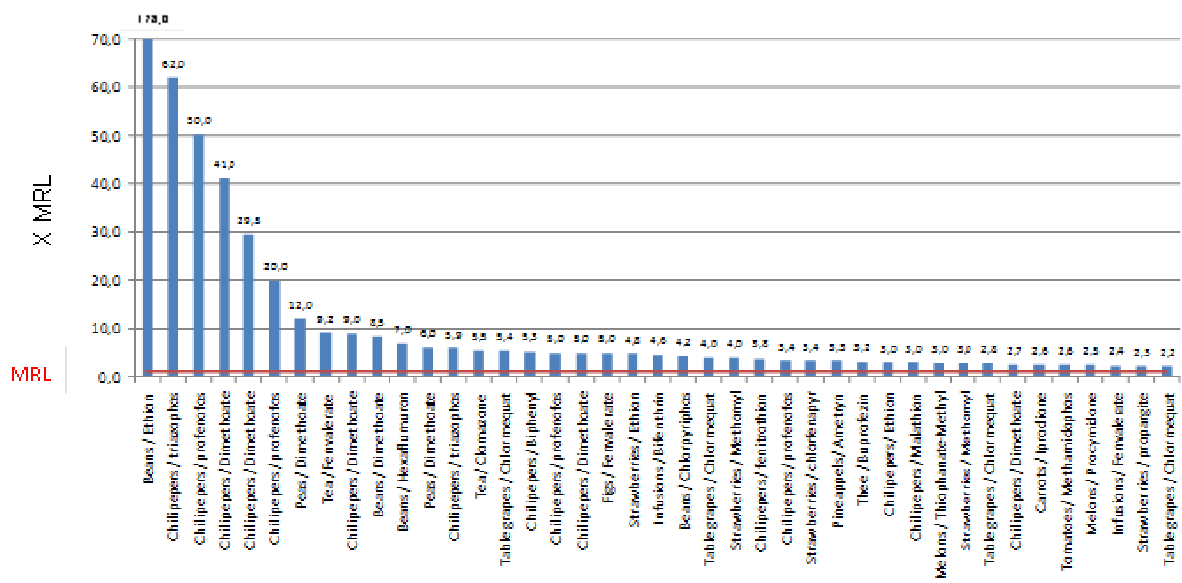


Figure 2: Non compliant products originating from third countries. The sample of beans with ethion exceeded 178 times the MRL.

Reasons for MRL non-compliances for products originating from EU are described in table 2 below. Regarding the products originating from third countries, the reasons of MRL non-compliances are not known but non compliances are probably due to the use of authorised active substances in the exporting country but not in the EU.

Product	Residue	Reason for MRL non compliance	Note
<b>EU products</b>			
Carrots	Heptachlor (sum)	Contamination: residues resulting from previous use of a pesticide (e.g. persistent pesticides no longer authorised, soil residues taken up in succeeding crops)	RASFF message was issued
Celery	Linuron	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Celery	Diazinon	GAP not respected: use of non-authorised pesticide on all crops	
Currants	Dimethoate (sum)	GAP not respected: use of pesticide non-authorised on the specific crop	
Lettuce	Bromide ion	Contamination: residues resulting from previous use of a pesticide (e.g. persistent pesticides no longer authorised, soil residues taken up in succeeding crops)	
Parsley	Oxadixyl	Contamination: residues resulting from previous use of a pesticide (e.g. persistent pesticides no longer authorised, soil residues taken up in succeeding crops)	

Product	Residue	Reason for MRL non compliance	Note
Parsley	Parathion	GAP not respected: use of non-authorised pesticide on all crops	
Spinach	Iprodione	GAP not respected: use of pesticide non-authorised on the specific crop	
Wheat (feed)	Dichlorvos	GAP not respected: use of non-authorised pesticide on all crops	

Table 2: Reasons for MRL non compliances for products originating from EU (all from Belgium).

### 3.4. Quality assurance

Five accredited laboratories take part to the national control programme in 2010.

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
BE	Fytolab C.V.B.A	FYTOLAB	YES; latest version of accreditation certificate: 21/06/2011	BELAC	4. EUPT-C4 rye (lab 84) 5. EUPT-AO 05 pork (lab 25) 6. EUPT-FV SM 02 leeks (lab 24) 7. EUPT-FV 12 leeks (lab 36) 8. QS-autumn red currant puree (lab 37) EUPT SRM5 apple puree (lab 22) Fapas PT0573 hydrogenated vegetable oil (lab 11) Relana grapes undercover sample (lab 8)
BE	9. Wetenschappelijk Instituut Volksgezondheid (WIV) – Institut Scientifique de Santé Publique (ISP)	WIV-PEST	YES; latest version of accreditation certificate: 22/06/2010	BELAC	10. EUPT AO 05 (lab 30) 11. EUPT-SRM5 (lab 14) 12. EUPT-C4 (lab 6) 13. EUPT-FV12 (lab 148) ANSES 2010 (study ACA-CF-MI-10-04) (lab 11) FAPAS 19106 (lab 27)

BE	Centre d'Economie Rurale - Laboratoire d'hormonologie animale	CER	YES; latest version of accreditation certificate: 18/05/2011	BELAC	EUPT AO 05 (lab 39)
DE	LUFA-ITL GmbH	LUFA	YES; latest version of accreditation certificate: 18/06/2010	DAkkS	EUPT-SRM5 - apple purree (lab Nr. 50)  14. Pesticide PT EUPT-FV12 Leek, (lab Nr. 067)  Pesticide EUPT-C4 Rice (lab Nr. 24) LVU 163-17a-Pesticide-2010 - Pesticides in low-fat food (lab Nr. 08) CRL EUPT AO 04 Pesticides in butter (lab Nr. 061)
Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
NL	Grond-, Gewas- en Milieu-laboratorium "Zeeuws-Vlaanderen" BV	ZEEUWS	YES; latest version of accreditation certificate: 08/06/2011	RvA	15. FAPAS 19101 (lab 99) 16. FAPAS 19103 (lab 82) 17. FAPAS 19105 (lab 69) 18. FAPAS 19106 (lab 86) 19. FAPAS 19108 (lab 53) 20. FAPAS 19110 (lab 154) 21. FAPAS 19111 (lab 49) 22. FAPAS 19113 (lab 36) 23. QS- spring (lab 67) QS-autumn (lab 23)

### 23.1. Additional Information

- Only products of animal origin analysed in the frame of the EU coordinated

- programme are part of this report. Additional controls on products of animal origin are carried out in application of directive 96/23/CE<sup>6</sup> and are reported separately to the European Commission.
- Only organic food analysed in the frame of the EU coordinated programme are part of this report. Additional controls on organic food are carried out by the Belgian Regional Authorities which are in charge of organic production. The results of these controls are reported separately to the European Commission.
- More information regarding pesticide residues in Belgium and their control can be found on <http://www.afsca.be> and <http://www.fytoweb.fgov.be> .

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<sup>6</sup> Council Directive 96/23/EC of 29 April 1996 on measures to monitor certain substances and residues thereof in live animals and animal products and repealing Directives 85/358/EEC and 86/469/EEC and Decisions 89/187/EEC and 91/664/EEC



## 24. Bulgaria

### 24.1. Objective and design of the national control program

Since March, 2011 the Ministry of Agriculture and Food /MAF/ has assigned the Bulgarian Food Safety Agency /BFSA/ to be responsible for preparing and implementing the monitoring program for pesticide residues in products of animal and plant origin. Prior to 2011 the Ministry of Health /MH/ was the competent authority for control of pesticide residues in foodstuffs and provided the national and EU co-ordinated monitoring programs. Six Regional Inspectorates for Protection and Control of Public Health /RIPCPh/ - Burgas, Varna, Pleven, Plovdiv, Veliko Turnovo and Sofia, and one additional laboratory – Central Laboratory for Chemical Testing and Control /CLCTC/ within MAF were responsible for sampling, analysis and control of pesticide residues in 2010.

The National pesticide residues monitoring program in fruits, vegetables, cereals, processed products and baby foods is prepared by the Ministry of Health /MH/ and the Ministry of Agriculture and Food /MAF/.

The choice of the type of food products and the number of samples to be taken from each is based on the following criteria according to Regulation 901/2009:

- Food consumption of the Bulgarian population /relative share in average Bulgarian's diet;
- Volume of production or imports;
- Analysis of results from previous years;
- Applicability of multi-component methods of analysis;
- Technological and budgetary capacity of the official laboratories.

This report summarizes the results of the co-ordinated with the EU national pesticide monitoring program in fruits, vegetables, cereals and baby food products on the Bulgarian market in 2010. This report has been prepared according to the recommendation of the EC.

### 24.2. Key findings, interpretation of the results and comparability with the previous year results

In 2010, a total number of 2417 samples were analysed: 2313 of fruits, vegetables and other plant origin; 16 processed products; 60 cereals and 28 baby food – products of domestic and non-domestic origin in the national and co-ordinated monitoring programs. 241 samples were with residues below MRL. 31 samples were exceeding MRL.

Of the total number of analysed samples:

1679 samples were taken as enforcement samples, of which 24 samples contained pesticide residues above the MRL (1,43 %);

738 samples were taken as surveillance samples, of which 7 samples contained pesticide residues above the MRL (0,95 %).

### 24.3. Non-compliant samples: possible reasons and actions taken

In 2010, 0,8 % of the 738 surveillance samples analysed (6 samples in total) were found non-compliant with the EU MRL.

Also 1,4 % of the 1679 enforcement samples analysed (24 samples in total) were found non-compliant with the EU MRL.

## Enforcement action

The laboratories do not compare the results of analysis with the MRL, only submit the laboratory protocol to the inspector in charge. The evaluation of the analysis results is the responsibility of the inspector. Where MRLs are exceeded, enforcement action shall be taken by the inspector of the Regional Inspectorate for Protection and Control of Public Health /RIPCPH/ – the marketing of the product is prohibited, retailers and consumers are informed and procedures are put in place for product recall.

### 24.4. Quality assurance in 2010

Seven laboratories take part to the national control program in 2010. They are: RIPCPH – Burgas, RIPCPH – Varna, RIPCPH – Pleven, RIPCPH – Plovdiv, RIPCPH – Veliko Turnovo and RIPCPH – Sofia within MH, and the Central Laboratory for Chemical Testing and Control /CLCTC/ within MAF.

All laboratories have an Accreditation Certificate according to BSS EN ISO/IEC 17025 by the Executive Agency “Bulgarian Accreditation Service” (EA BAS).

The laboratories used the multi-residue methods of analysis for pesticide residues in fruits, vegetables, cereals, processed products and baby food:

- BSS EN 12393:2001 “Non-fatty foods. Multi-residue methods for the gas chromatographic determination of pesticide residues” with GC-MS and GC-ECD determination of main part of pesticides.
- BSS EN 15662 Foods of plant origin – Determination of pesticide residues using GC-MS and/or LC-MS/MS following acetonitrile extraction/partitioning and clean-up by dispersive SPE-QuEChERS – method.

The methodology used in the analysis includes:

- sample homogenization;
- pesticide extraction using a suitable organic solvent;
- purification of the extract by means of chromatographic techniques; the stage of extract purification / concentration involves the application of solid phase extraction, in some cases also gel permeation chromatography;
- instrumental analysis of the purified extract by means of capillary gas chromatography /GC-MSD and GC-ECD/ or high performance liquid chromatography /LC-MS/MS/.

### Participation in proficiency tests

In 2010 the laboratories participated in proficiency tests organized by the Community Reference Laboratories: the Community Reference Laboratory – Cereals and Feeding Stuff (CRL-CF) in Denmark, the Community Reference Laboratory – Single Residue Methods (CRL-SRM) in Germany and the Community Reference Laboratory – Fruits and Vegetables (CRL-FV) in Spain:

- EUPT-FV 12
- EUPT-C5/SRM6

### Implementation of EU quality control procedures

The EC guidelines SANCO/10684/2009 “Method validation and quality control procedures for pesticide residues analysis in food and feed”, have been implemented as far as practicable.

### **Analytical uncertainty**

The analytical uncertainty of the results is calculated based on relative standard deviation of recovery rates and results of proficiency testing if available. If the analytical results, without a correction were mathematically above the MRL, the sample was defined as an exceeding. However, before any enforcement actions were taken the analytical uncertainty was subtracted from the measured value. If the corrected analytical results still exceed the MRL enforcement actions could be taken.

### **24.5. Additional Information**

More information regarding pesticide residues in Bulgaria and their control can be found on <http://www.babh.government.bg>.

## 25. Cyprus

### 25.1. Objective and design of the National Control Programme

The Ministry of Health is the competent authority for the enforcement of the Pesticide Residues (PR) Legislation and the execution of the national monitoring and surveillance programs. The enforcement of Legislation and sampling is allocated to the Department of Medical and Public Health Services (MPHS). The Pesticide Residue Lab (PR-SGL) of the State General Laboratory is the Official Laboratory for the Monitoring & Surveillance of PR in Food of Plant and Animal Origin. The PR-SGL Lab and the MPHS design and implement the monitoring program for both local market and imports. The PR-SGL Lab in cooperation with the Department of Agriculture (DA) of Ministry of Agriculture, Natural resources and Environment (MANRE) design the control plan for the exports.

The sampling is focused at the key points of food chain: market, import, processing, primary storage producers, etc.

The sampling regime is based on a combination of “at random” sampling and target oriented sampling focusing towards problematic pesticides/food combination. This combination is, in a way, bias towards problematic products and might end up with higher violation rates. Nevertheless it can provide higher degree of consumer protection and cost-effectiveness. Main criteria used in the sampling design are: EU coordinated program, violations from previous years, information from RASFF, consumption rate especially for children and the needs of exports control.

The increase of the number of compounds monitored is a continuous process. The number of compounds of the MRM method for the plant origin products increased within 2010, from 247 to 275 and the validation of the single method for the determination of bromide ions for leafy vegetables and tomatoes has been completed. A new LCMSMS system has been introduced in the laboratory within the 2010 which led to the increase of the parameters examined for the majority of the combinations food item/pesticides. The increase of the pesticides included in the monitoring programme is mainly defined by the requirements of the EU coordinated programme. It should be noted though that the laboratory capacity and the costs of the analysis are the main factors which influence the inclusion of new pesticides in the national monitoring. Therefore the requirements of the community programme in relation to the analysis of bromide ions for tomatoes and lettuce has been completed only partially whereas the analysis of glyphosate in cereals could not be performed. Efforts have been made for the implementation of the single method for the determination of glyphosate but no sufficient results have been achieved.

### 25.2. Key findings, interpretation of the results and comparability with the previous years results

In **2010** a total of **690** samples were analysed, **528** were samples of plant origin and **162** were samples of animal origin. Sampling rate was **86** samples/100 000 inhabitants.

#### Plant Origin samples

In **59.1 %** of plant origin samples residues were detected. The number of plant origin products (fresh and dry) other than processed was **492** out of which the number of fruits, vegetables and cereals tested were 185, 250 and 52 respectively. **31.9 %** out of the 492 samples were imported ones (63,1 % of them were from Third Countries) and **14** samples were of organic farming. The percentage of the 492 samples above MRLs was **8,7 %** and the **4,9 %** were considered as real legal violations.

Ten (10) samples of baby food based on fruits and vegetables and six (6) samples of orange juices were also analysed under the national monitoring programme. No pesticides were detected in these samples.

In order to enhance the monitoring of pesticides residues in food, a survey has been carried out for the analysis of seed oils. Twenty samples have been analysed, 10 samples for organochlorine pesticides and 10 samples for organophosphorous, pyrethroids and endosulphan. Only 2 samples found to be positive with traces of DDT at levels lower than 0.01 mg/kg.

The most frequently found pesticides in plant origin samples were **Cypermethrin** in **14 %** and **Chlorpyrifos** in **12 %** of the samples.

#### Animal Origin Samples

Within 2010, 162 samples of animal origin have been analysed for pesticides residues: 50 eggs samples, 55 milk samples and 57 samples of meat. 93 samples have been analysed for organochlorines and 69 samples were analysed for various pesticides covering the requirements of the Community Monitoring Plan. In 19,8 % of the samples, traces of organochlorine pesticides, mostly DDT, were detected at levels less than 0.01mg/kg.

### 25.3. Non-compliant samples: possible reasons and actions taken

In 2010, 8,7 % of the samples of plant origin (43 samples in total out of 492 samples fresh and dry other than processed) were found non-compliant with the EU MRL whereas the 4,9 % of the samples (24 samples in total) were considered as legal violations (meaning that they were found non-compliant with the legal limits taking into account the measurement uncertainty). The following follow-up actions were taken in cases of non-compliant samples.

Number of non-compliant samples	Action taken	Note
19	Warnings	
18	Warnings and administrative sanctions	
6	RASFF notification	Sample code: Border rejection notification:2010-AEB (no distribution of the sample) Border rejection notification:2010-AGJ (no distribution of the sample) Border rejection notification:2010.CER (no distribution of the sample) Information notification: 2010.0280 (sample withdrawal from the market) Information notification: 2010.0435 (sample withdrawal from the market) Information notification: 2010.0403 (sample withdrawal from the market)

Product	Residue	Reason for MRL non compliance (legal violations)	Note
Pomegranates	Prochloraz	Other (please specify in the "Note" column)	Import product from TC, EU GAP not respected, RASFF notification 2010.AEB
Lettuce	Chorothalonil	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	

Product	Residue	Reason for MRL non compliance (legal violations)	Note
Basil	Chorothalonil	GAP not respected: use of pesticide non- authorised on the specific crop	
Red Peppers	Carbendazim	Other (please specify in the "Note" column)	Import product from TC, EU GAP not respected, RASFF notification 2010.0280
Green Peppers	Carbendazim	Other (please specify in the "Note" column)	Import product from TC, EU GAP not respected, RASFF notification 2010.0435
Red Peppers	Methamidophos	Other (please specify in the "Note" column)	Import product from TC, EU GAP not respected, RASFF notification 2010.0403
Strawberries	Cypermethrin	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Table Grapes	Captan	GAP not respected: use of pesticide non- authorised on the specific crop	
Wheat	Diazinon	GAP not respected: use of non- authorised pesticide on all crops	
Apples	Fenthion	GAP not respected: use of non- authorised pesticide on all crops	
Beans with pods	Indoxacarb	GAP not respected: use of pesticide non- authorised on the specific crop	
Cucumber	Methomyl	GAP not respected: use of non- authorised pesticide on all crops	
Spinach	Carbofuran	GAP not respected: use of non- authorised pesticide on all crops	
Spinach	Cypermethrin	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Spinach	Chlorpyrifos	GAP not respected: use of pesticide non- authorised on the specific crop	
Corriander	Parathion methyl	GAP not respected: use of non- authorised pesticide on all crops	
Table Grapes	Cypermethrin	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Vine Leaves	Azoxystrobin	Other (please specify in the "Note" column)	Import product from TC, EU GAP not respected, RASFF notification 2010.CER
Vine Leaves	Chlorpyrifos		
Vine Leaves	Flufenoxuron		
Vine Leaves	Krweoxim methyl		
Vine Leaves	Methoxifenozone		
Vine Leaves	Myclobutanil		
Vine Leaves	Trifloxystrobin		
Oranges	Malathion	GAP not respected: use of non- authorised pesticide on all crops	
Cucumbers	Bromopropylate	GAP not respected: use of non- authorised pesticide on all crops	

Product	Residue	Reason for MRL non compliance (legal violations)	Note
Parsley	Chlorpyrifos	GAP not respected: use of pesticide non-authorized on the specific crop	
Corriander	Chlorpyrifos	GAP not respected: use of pesticide non-authorized on the specific crop	
Corriander	Fluvalinate	GAP not respected: use of pesticide non-authorized on the specific crop	
Spinach	Chlorpyrifos	GAP not respected: use of pesticide non-authorized on the specific crop	

#### 25.4. Quality assurance

The PR Lab of the SGL is accredited by the Greek Accreditation body ESYD since 2002 according to EN 45001, from June 2003 according to ISO/IEC 17025 and from July 2006 according to ISO/IEC 17025/2005. The PR-Lab applies Quality Control procedures, which are in line with provisions of "Method validation and Quality Control Procedures for Pesticides Residues Analysis in Food and Feed"

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
CY	State General Laboratory of Ministry of Health	SGL_CYPRUS_FP	2002	ESYD-Greece	PT2010: C4, SRM 5, A05, FV12

## 26. Czech Republic

### 26.1. Objective and design of the national control programme

Pesticide residues monitoring in foodstuffs in the Czech Republic is guided by the Multi-Annual Control Plan for the Control of Pesticide Residues in CZ submitted by the Ministry of Health Care, in cooperation with the Ministry of Agriculture and other supervisory bodies (CAFIA, SVA). A coordinated multi-Community monitoring program is included in the plan as required by the European Parliament and Regulation (EC) No. 396/2005.

The requirements of a multi-annual control plan are included in the control plans of supervisory authorities (CAFIA and SVA), competent to monitor pesticide residues in foodstuffs of plant and animal origin.

The sampling plan for pesticide residues monitoring is always drawn up for one calendar year. The plan is elaborated by the Headquarters of CAFIA/SVA as internal provision and it is distributed to the CAFIA/SVA regional inspectorates which are responsible for its implementation.

#### 26.1.1. Criteria Used for Drawing up the Programme

##### Selection of Commodities

The following criteria have been used for the selection of commodities being listed in the national programme on pesticide residues control:

- the overall food consumption in the Czech Republic ([http://www.czso.cz/csu/tz.nsf/i/vychazi\\_spotreba\\_potravin\\_v\\_roce\\_2007](http://www.czso.cz/csu/tz.nsf/i/vychazi_spotreba_potravin_v_roce_2007));
- the consumption food basket (<http://www.szu.cz/tema/bezpecnost-potravin>; <http://www.chpr.szu.cz/spotreba-potravin.htm>);
- the results of official controls and monitoring of pesticide residues in previous years (<http://www.svsr.cz>; <http://www.szpi.gov.cz>; [www.ukzuz.cz](http://www.ukzuz.cz));
- the foodstuffs intended for risk groups of population (namely infant formula and foods for young children);
- the products having specific stricter rules on the use of pesticides (organic products);
- the reports in RASFF system;
- the annual report of the European Commission ([http://ec.europa.eu/food/food/rapidalert/index\\_en.htm](http://ec.europa.eu/food/food/rapidalert/index_en.htm));
- Commission Regulation (EC) No 901/2009 of 28 September 2009 concerning the coordinated multiannual Community control programme for 2010, 2011 and 2012 to ensure compliance with maximum levels of and to assess the consumer exposure to pesticide residues in and on food of plant and animal origin;
- the final reports on results of monitoring at the Community level ([http://ec.europa.eu/food/fvo/specialreports/pesticides\\_index\\_en.htm](http://ec.europa.eu/food/fvo/specialreports/pesticides_index_en.htm); <http://www.efsa.europa.eu/en/publications/efsajournal.htm>).

##### Number of Samples

The number of samples is set so as to determine characteristic profiles of pesticide residues content in selected commodities and to map trends in pesticide residues presence and their levels in analyzed



commodities with respect to statistical evaluation. The multiannual Community programme laid down in the Regulation (EC) No 901/2009 forms a part of this control programme.

The number of samples is set as a minimum. It is possible to change and update the number of samples according to the current situation. It can be expected that the number of samples of some commodities will have to be increased.

### Pesticide Residues to be Analysed

The following factors have been considered in the selection of pesticide residues to be analysed:

- the most frequently used pesticides (the source – the database of SPA CZ) The database of used plant protection preparations is managed by the State Plant Administration. The database contains active substances and their used amounts as both the total amount and the amounts used for main agricultural crops.
- the results of official controls and monitoring of pesticide residues in previous years (<http://www.svs-cr.cz>; <http://www.szpi.gov.cz>)
- information in RASFF system – EC annual reports ([http://ec.europa.eu/food/food/rapidalert/index\\_en.htm](http://ec.europa.eu/food/food/rapidalert/index_en.htm))
- Commission Regulation (EC) No 901/2009 of 28 September 2009 concerning the coordinated multiannual Community control programme for 2010, 2011 and 2012 to ensure compliance with maximum levels of and to assess the consumer exposure to pesticide residues in and on food of plant and animal origin
- the final report on EC monitoring results ([http://ec.europa.eu/food/fvo/specialreports/pesticides\\_index\\_en.htm](http://ec.europa.eu/food/fvo/specialreports/pesticides_index_en.htm), <http://www.efsa.europa.eu/en/publications/efsajournal.htm>)
- the consumer food basket (<http://www.szu.cz/tema/bezpecnost-potravin>; <http://www.chhpr.szu.cz/spotreba-potravin.htm>)
- toxicological profiles of pesticides (National Institute of Public Health, Prague)
- scope of analysis and capacity of the laboratories

## **26.2. Key findings, interpretation of the results and comparability with the previous year results**

### Plant products

In 2010, a total of 1076 samples were collected, of which 1.5 % (16 samples) were found to exceed MRLs. Out of the total number, samples sorted by country of origin accounted for: 4.4 % of samples from the Czech Republic, 50.2 % samples originated from EU countries and 13.0 % samples were from third countries, in 2.4 % of the samples the country of origin was not identified. In terms of proportion of various commodities, samples of fresh fruits and vegetables represented 67.8% of the total number of samples, cereals 12.3 % and baby food 5.3 %. The rest of products were mostly processed samples.

### Vegetables

A major proportion of vegetable samples consisted of products originating from EU countries 64.1 %, 26.6 % from the Czech Republic (CZ) and 8.1 % from the third countries. The maximum residual limits were exceeded in 10 samples of vegetables. In terms of country representation in the total number of samples of vegetables, samples from CZ (26.6 %) accounted for the largest proportion, followed by the

Netherlands (14.9 %), Spain (14.7 %), Belgium (8.7 %), Italy (6.9 %), Germany (4.4 %), Poland (3.8 %) and France (3.2 %).

Active substances, which scored for the highest percentage of positive findings in vegetable samples, were: dithiocarbamates (62.9 %), propamocarb (17.3 %), boscalid (15.0 %), bromides (14.0 %), azoxystrobin (10.4 %) and cyprodinil (9.5 %).

### Fruits

A total number of 226 samples of fresh fruits were analysed for the presence of pesticide residue. The largest proportion of the total number of fruit samples were from EU countries (52.7 %), followed by samples from third countries and 30.5 % of samples from CZ 16.8 %. 6 samples with exceeded MRL, were reported. The largest proportion of fruit samples represented samples from Italy (18.6 %), the Czech Republic (16.8 %), Spain (15.9 %), South Africa (4.9 %) and Belgium (4.4 %). Active substances, which appeared in the highest percentage of positive findings in fruits samples were: chlormequat (26.7 %) – analysed only in pears and table grapes, chlorpyrifos (25.8 %), dithiocarbamates (23.7 %), imazalil (22.5 %) and boscalid (12.9 %).

### Cereals and Cereal Products

There were 132 cereal samples (including rice) analysed for presence of pesticide residue and, in addition, 12 samples of grain mill products. The total number of samples of grain and grain-mill products with positive findings reached 35.4% samples.

Out of the total number of samples of cereals, samples from the CZ represented 77.3%, 15.9% from EU countries and 4,5% from third countries. For 3 samples, the country of origin was not given.

In terms of representation of individual types of cereals, the analyses showed following results: 20 samples of wheat where pesticides were detected in 10 cases (50.0%); 46 samples of rye with 13 identified positive findings (28.3%); 20 samples of oat with 4 positive samples (20.0%), 19 samples of barley with 13 positive findings (68.4%), 12 corn samples with 2 positive samples (16.7%) and 10 samples of rice with 4 positive cases (40.0%).

The most commonly detected active substances in cereals were chlormequat, chlorpyrifos-methyl, chlorpyrifos and primiphos-methyl.

### Baby food

The total number of samples included 58 baby food samples, apart from cereals and other foods, of infant and follow-on formulae for infants and young children. From the 58 evaluated samples, positive findings of pesticide residues were detected in 7 samples. The maximum residue limits were not exceeded.

### Animal products

In 2010 State Veterinary Administration was collected a total of 72 samples of the animal origin, of which 31.9 % (23 samples) were found positive results below the MRL. In animal products were detected DDT and hexachlorbenzene only (situation is similar to 2009). The MRLs were not exceeded in animal origin samples (as well as in the year 2009). Overview of analysed samples is in following table:

Commodity	No of samples	positive samples	non-compliant samples
poultry meat	6	0	0
pork meat	15	9	0
pork liver	2	1	0
bovine meat	4	0	0
bovine liver	2	1	0
sheep liver	1	0	0
poultry liver	7	0	0
milk	15	0	0
milk products	4	4	0
butter	6	6	0
carp	5	2	0
honey	5	0	0
<b>Total</b>	72	23	0

### 26.3. Non-compliant samples: possible reasons and actions taken

In 2010, 16 samples exceeding the MRLs were found. The information on findings of active substances were forwarded to RASFF in the following cases: formetanate in salad cucumbers from Greece (2010.1778) and in green pepper from Turkey (2010.0632, 2010.0791), oxamyl as an active substance in green pepper originating from Hungary (2010.1370) and Turkey (2010.0366), an active substance of captan in peaches from Turkey (2010.1002) and an active substance chlormequat in grapes from India (2010.0943, 2010.0909, 2010.0910).

Furthermore, there were over-the-limit findings of thiabendazol (D012-70154/10/A01) in leek; lambda cyhalothrin in pomegranate (D060-40464/10/A02) and thiabendazol in Brussels sprout (D035-30514/10/A03), however based on a risk assessment conducted by the National Institute of Public Health, these cases were not reported to RASFF.

In the case of green peas (D036-40464/10/A01), kale (D027-60202/10/A04) and apples (D001-60599/10/A05) originating from the CZ, which were found to exceed MRLs, the subject lots were neither distributed outside the Czech Republic nor delivered to public catering establishments. For this reason, findings were not notified to the RASFF.

Number of non-compliant samples	Action taken	Note
6	Warnings and administrative sanctions	<p>D012-70154/10/A01 – within administrative proceedings a fine was imposed on a food business operator. The lot was not distributed outside CZ.</p> <p>D060-40464/10/A02 -.No withdrawal was issued as the commodity had been sold out. A fine was dropped.</p> <p>D035-30514/10/A03- .No withdrawal was issued as the commodity had been sold out. A fine was imposed upon administrative proceedings.</p> <p>D036-40464/10/A01- No withdrawal was issued as the commodity had been sold out. A fine was imposed upon administrative proceedings.</p> <p>D027-60202/10/A04– A fine was imposed upon administrative proceedings. The lot was not distributed outside the Czech Republic. The lot did not remain in a warehouse at the time of proceedings.</p> <p>D001-60599/10/A05 - The commodity was not supplied to any public catering business, it was also not exported from the Czech Republic. A part of the lot was destroyed. A fine was imposed upon administrative proceedings.</p>
10	RASFF notification	<p>Sample code:</p> <p>D016-60559/10/A06 RASFF ref: 2010.1778 Measures were not imposed, at the time of inspection the lot already sold out. A fine was imposed upon administrative proceedings.</p> <p>Sample code: D005-30391/10/A05 RASFF ref: 2010.0632 A measure was imposed to inform customers and withdraw non-complying lot from the market. At the time of inspection, the lot was already sold out. A fine was imposed upon administrative proceedings.</p> <p>Sample code: D022-50374/10/A02 D004-50970/10/A04 RASFF ref: 2010.0791 A request for withdrawal was not issued as the lot was already dispatched from the warehouse. A fine was imposed upon administrative proceedings.</p> <p>Sample code: D006-50970/10/A01 RASFF ref: 2010.1370 The FBO was requested to provide relevant documents to prove that the commodity was neither sold to public catering FBOs, nor exported. At the time of inspection the lot was already sold out. A fine was imposed upon administrative proceedings.</p> <p>Sample code: D003-30087/10/A05 RASFF ref: 2010.0366 A measure was imposed to inform consumers about a non-complying lot. A part of the lot was destroyed. A fine was imposed upon administrative proceedings.</p> <p>Sample code: D010-30391/10/A01</p>

Number of non-compliant samples	Action taken	Note
		<p>RASFF ref: 2010.1002            A measure imposed to inform consumers; at the time of inspection the lot already sold out.            Sample code:            D025-40347/10/A01</p> <p>RASFF ref: 2010.0943            A measure imposed to inform consumers; at the time of inspection the lot already sold out.            Sample code:            D008-30391/10/A01</p> <p>RASFF ref: 2010.0909            A measure imposed to inform consumers; at the time of inspection the lot already sold out.            Sample code:            D012-30087/10/A01</p> <p>RASFF ref: 2010.0910            A measure imposed to inform consumers; at the time of inspection the lot already sold out.</p>

Product	Residue	Reason for MRL non compliance	Note
Table grapes	Chlormequat	Reason of the contamination not known	----
Table grapes	Chlormequat	Reason of the contamination not known	----
Table grapes	Chlormequat	Reason of the contamination not known	----
Peaches	Captan	Reason of the contamination not known	----
Peas	Propamocarb	Reason of the contamination not known	----
Brussels sprouts	Thiabendazol	Reason of the contamination not known	----
Kale	Cyproconazol Methoxyfenozide	Reason of the contamination not known	----
Cucumbers	Formetanate	Reason of the contamination not known	----
Peppers	2 xOxamyl	Reason of the contamination not known	----
Peppers	3xFormetanate	Reason of the contamination not known	----
Leek	Thiabendazol	Reason of the contamination not known	----
Apples	Fenitrothion	Reason of the contamination not known	----
Pomegranate	Lambda cyhalotrin	Reason of the contamination not known	----

#### 26.4. Quality assurance

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
CZ	Czech Agriculture and Food Inspection Authority	Praha 5	First accreditation since 1993 (EN 45001); last valid re-accreditation since 30/10/2008 (EN ISO/IEC 17025)	CAI – Prague, Czech Republic	PT 2010: EUPT SRM5, EUPT C4, EUPT FV12
CZ	State Veterinary Institute Prague	V01	First accreditation since 1997 (EN 45001); last valid re-accreditation since 21/03/2011 (EN ISO/IEC 17025)	CIA – Prague, Czech Republic	PT 2010: EUPT AO-05; FAPAS 0569; FAPAS 0967

## 27. Denmark

### 27.1. Objective and design of the national control programme

The National Food Institute, Technical University of Denmark, designed the monitoring programme in cooperation with the Danish Veterinary and Food Administration. Since 2006 the sampling plan has been based on dietary consumption pattern with regard to pesticide intake from a previous report [7], which analysed monitoring data from 1998-2003. This report showed that 25 commodities were responsible for more than 95% of the intake of pesticide residues (Top25 commodities). These commodities were included in the sampling plan along with commodities included in the EU coordinated control programme. The focus on the Top25 commodities will provide a better basis for comparison between years, so that trends in pesticide residues found may be analysed. In addition to these samples, a broad range of commodities common on the Danish market was analysed, including processed foods, food for infants and organically grown products. Most sampling projects were designed to cover surveillance as well as control in combination and the sampling strategy for these samples is listed as objective or selective sampling. A special project was set up to cover sampling and analysis according to Regulation (EC) No 669/2009. Another was set up to follow up on RASFF alerts on chlormequat on grapes from India. Sampling strategy for these two projects is listed as suspect sampling.

Samples of animal origin were not analysed for all pesticides included in the coordinated programme due to lack of validated analytical methods for all relevant pesticides.

Sampling was performed by authorised personnel from the 10 Danish Regional Veterinary and Food Control Authorities. Directive 2002/63/EC on sampling procedures for control of pesticide residues is implemented in Danish legislation. All samples for control of the MRL were sampled on the market, primarily at wholesalers or importers. A few (53 samples of fruit and vegetables) were taken as raw materials at food processing plants. Meat was sampled at slaughterhouses.

Reporting includes samples analysed for pesticides from projects, based on Directive 96/23.

### 27.2. Key findings, interpretation of the results and comparability with the previous year results

In 2010 a total of 2236 surveillance samples of fruit, vegetables, cereals, processed products (including baby food) and animal products were analysed. Of these samples, 764 were produced in Denmark, 855 samples were produced in EU, 559 samples were produced outside the EU and 58 of the samples were of unknown origin (non-domestic). The samples included 1594 samples of fruit and vegetables, 309 samples of cereals, 66 samples of processed foods including 18 samples of baby foods and 267 samples of animal origin.

97 (6 %) of the fruit and vegetable samples and 40 (13 %) of the cereal samples were organically produced.

All samples of fruit and vegetables were analysed for about 255 pesticides including isomers and metabolites. In addition, part of the samples (1048) were analysed for dithiocarbamates and others for bromide ion (23 samples). Due to the methodology applied it was not possible to distinguish between the specific dithiocarbamates included in the MRL definition. Most cereal samples were analysed for 195 pesticides, including isomers and metabolites. As part of a programme to assess the declaration “produced without straw-shortener” 65 cereal samples were tested for chlormequat and mepiquat only.

Pesticide residues were found in 55 % of the conventionally grown fruit and vegetables (2009: 53%) and in 26 % of the conventionally grown cereal samples (2009: 30 %). Residues exceeding the MRL were

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<sup>7</sup> M.E. Poulsen, J.H. Andersen, A. Petersen, H. Hartkopp (2005). Pesticide Food Monitoring, 1998-2003 Part2. ISBN 87-91569-54-0. [http://www.fodevarestyrelsen.dk/Publikationer/Alle\\_publicationer/2005/002.htm](http://www.fodevarestyrelsen.dk/Publikationer/Alle_publicationer/2005/002.htm)

found in 2.7 % of the conventionally grown fruit and vegetables samples (41 samples) (2009: 2.5 %). Of these, 23 samples (1.4 %) had non-compliant residues. In cereals, one residue exceeding the MRL was found (0.4 %) (2009: None). As in 2009, no exceedings of the MRLs were found in baby food or processed commodities.

The frequency of residues was higher in samples of fruits (73 %) compared to samples of vegetables (28 %). For fruits, pesticide residues were found in 75 % of the samples produced in EU or outside EU, whereas pesticide residues only was found in 52 % of the samples from Denmark (2009: 39 %). For vegetables, residues were found in 41 % and 34 % of the samples produced in EU and outside EU, respectively, while residues were found in 12 % of the samples from Denmark. Except for Danish produced fruits, the frequencies found were close to values in 2009. No explanation has been found for the increase in residues in Danish grown fruits.

The frequency of conventionally grown samples exceeding the MRLs was 1.2 %, 2.3 % and 4.1 % for fruit produced in Denmark, EU and outside the EU, respectively. For vegetables the frequency of samples exceeding the MRL was 0.4 %, 1.2 % and 11 % for vegetables originating from Denmark, EU and outside the EU8, respectively.

Residues were found in four organically produced samples. Chlormequat (0.03 mg/kg) was found in one sample of pear from Holland and imazalil (0.04 mg/kg) was found in one sample of lime from Mexico. The residues of chlormequat might be carry-over from previous use on the pear tree; the residue of imazalil is low and might be contamination from conventionally grown fruits. Bifenthrin was found in two samples of tea, one from China (0.1 mg/kg), one of unknown origin (0.24 mg/kg). The source of these residues is unknown.

A total of 62 samples were taken using sampling strategy “suspect”. Chlormequat was sought in 42 samples of grapes from India; 12 samples were found with non-compliant residues. In the remaining 20 samples (aubergines, basil, beans with pod, coriander leaves), non-compliant residues were found in two samples (basil and coriander leaves from Thailand).

### 27.3. Non-compliant samples: possible reasons and actions taken

In 2010, residues were found to exceed the EU MRL in 1.9 % of the samples (42 samples, 54 residues) taken by objective or selective sample strategy. Of these samples 1.1 % (24 samples, 28 residues) was found non-compliant with the EU MRL.

For samples taken by suspect sampling strategy, residues in 23 samples were found to exceed the EU MRL. Of these, 14 samples were found non-compliant with the EU MRL.

The following follow-up actions were taken in case of samples non-compliant with the EC MRL (measurement uncertainty taken into consideration):

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<sup>8</sup> Fresh legumes(5)(Kenya, Senegal, China); peppers(2)(Turkey); fresh ginger(China), basil(Thailand), cucumber(Turkey)



Number of MRL non-compliant samples	Action taken	Note
(1 suspect <sup>a)</sup> )	RASFF notification	Product discarded: Prothiofos in coriander leaves from Thailand (SampleID 0910050112)
8 (+4 suspect)	Administrative consequences	Product discarded: Carbendazim in basil leaves from Thailand (1 sample)
1	Administrative consequences and other sanctions	
5 (+4 suspect)	Warnings	Product recall: Quintozen in peppers from Turkey (1 sample); Chlormequat in oats from Denmark (1 sample); Chlormequat in grapes from India (3 suspect samples).
(4 suspect)	Warnings and administrative consequences	
1	Warnings and other sanctions	
2	Other sanctions	Product discarded at manufacturer (raw and processed fruit; no recall of sold product (jam): Dimethoat/omethoat in black currants from Poland; Cypermethrin in gooseberry from Poland.
7 (+1 suspect)	None at present	Product discarded: Carbendazim in rambutan from Thailand (1 sample)

<sup>a)</sup> Sampling strategy: Suspect

The table below includes samples that are non-compliant with Danish legislation even where measured pesticide residues did not exceed the EU-MRL.

Number of non-compliant samples (measured residue do not exceed the MRL)	Action taken	Note
2	Administrative consequences	Residues in organic crop
1	Other sanctions	Use not in agreement with declaration.
2	None at present	Residues in organic crop (2 samples).

In case of imported samples, reasons for MRL non-compliances are unknown and outside the jurisdiction of the National Food Authority.

Residues exceeding the MRL were found in two Danish conventionally grown samples (Chlormequat in pears (6 mg/kg) and in oats (10.1 mg/kg)). The reasons for these residue levels are not known.

#### 27.4. Quality assurance

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
DK	Danish Veterinary and Food Administration, Region East	FVST Region East	30. September 2008 (DANAK #405)	DANAK, Denmark	FAPAS 0963 FAPAS 0967 FAPAS 0968 FAPAS 0969 FAPAS 19103 FAPAS 19104 FAPAS 19107 FAPAS 19109 FAPAS 19110 FAPAS 19111 FAPAS 19112 FAPAS 19113 EUPT C4 EUPT FV12 EUPT SRM5 EUPT FV SM02 EUPT AO05
DK	National Food Institute, Technical University of Denmark	DTU Food	20 April 1995 (DANAK #350)	DANAK, Denmark	EUPT-AO5 EUPT-SM02 EUPT-FV12 EUPT-SRM05 FAPAS 0967 EUPT-C4 (as provider)

#### 27.5. Additional Information

The analytical methods have been developed and validated by the National Food Institute, Technical University of Denmark. All samples were analysed at the laboratory of the Regional Veterinary and Food Control in Ringsted. The laboratory is accredited to pesticide analysis in compliance with EN45001/ISO17025 by the Danish Accreditation body, DANAK. Furthermore, the laboratory participated in the relevant FAPAS proficiency test scheme and in the EU-proficiency tests.

"Guidelines concerning Quality Control Procedures for Pesticide Residue Analysis" has been applied for all methods. Mass selective confirmation was performed for part of the GC multi methods and for the LC/MS-MS methods for fruit and vegetables. Analytical uncertainty is not applied in monitoring reports, but is always applied in case of enforcement actions.

All findings above MRL were evaluated by toxicologists at the National Food Institute. It was concluded that there was no risk for the consumer, even though the ARfD was exceeded up to 250% in two cases. In addition, all samples, where more than one pesticide residue were found, were evaluated by using a Hazard Index type of calculation using the sum of each residue in relation to the ADI and ARfD, respectively, taken into account the estimated consumption of the sample commodity for an adult and a child. For all samples in 2010 it was concluded that the residues were not expected to result in any risk for the consumer.

## 28. Estonia

### 28.1. Objective and design of the national control programme

Since the year 2007 Veterinary and Food Board (VFB) is responsible for drawing up the coordinated multiannual monitoring programme and it provides a sampling plan including the commodities and pesticides required. Analytical results of samples taken for pesticide use surveillance by Agricultural Board (AB) at primary production level are also included. In year 2010 VFB took 177 and AB 109 samples, all together 286 samples.

The VFB part of the coordinated multiannual monitoring programme was based on the Commission Regulation No 901/2009 concerning the year 2010 coordinated multiannual Community control programme and on the results of the previous year sampling activities (specially violations) and on the RASFF information. The regulation set up the residues, the minimum number of samples and the commodities to be analysed during that year. The results of previous year's sampling were taken into account; also the commodities where the MRL-s were exceeded in previous year were included and the commodities which the Regulation No 901/2009 did not contain, but are relevant for Estonia (for example beetroot, radish, turnip etc) were included. All together 32 different food commodities were analyzed.

For AB taking samples is part of the supervision of compliance of using plant protection products at primary production level. AB's sampling plan is based on evaluated risks and results of previous year's sampling, attached in annual control plan.

In 2009 there was MRL exceedances in broccoli and radish samples (all cases dithiocarbamates). In year 2010 these commodities were also included and again there was non-compliance with dithiocarbamates in broccoli. Two RASFF information notifications were issued in year 2010. One notification was about broccoli from Spain and the other one about apricots from Turkey.

The distribution of samples by its origin in year 2010 was divided into three groups: domestic products 66 %, EU origin 30 % and third countries 4 % of all samples taken. The proportion of organic samples was 3,5 %.

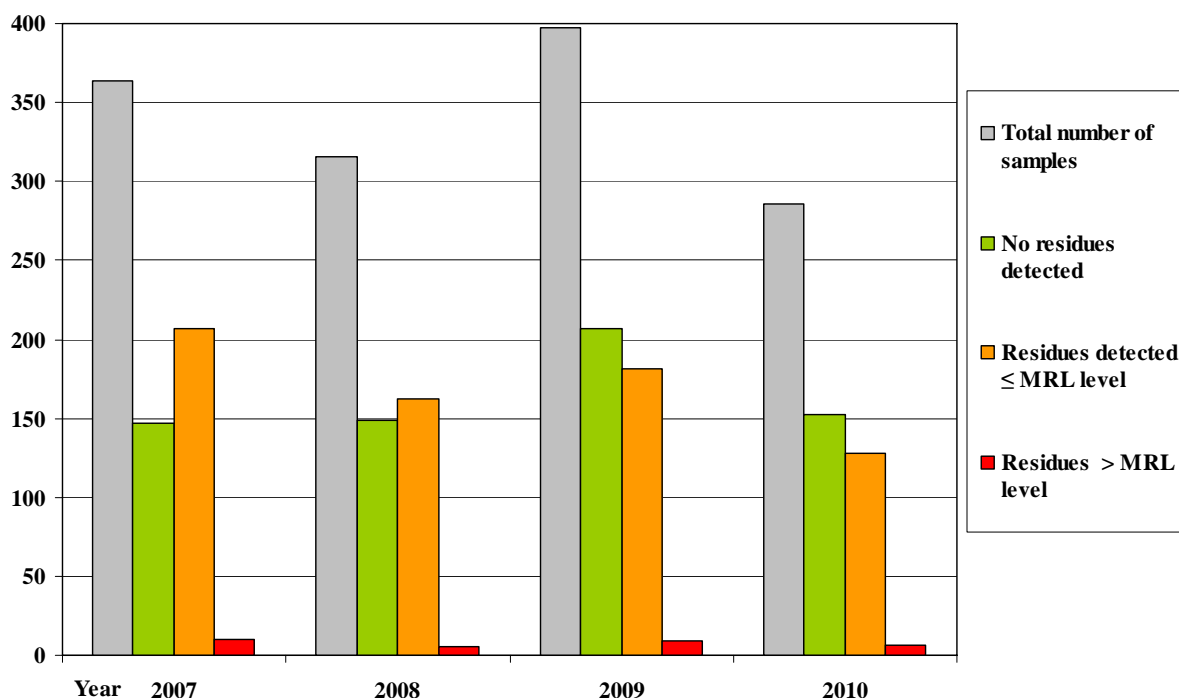
Sampling at different marketing levels is represented in the Table below.

Level of sampling	% of samples taken at that level
Primary production	40
Storage	39
Retail	9
Meat establishments	5
Milk and dairy products establishments	4
Non-animal origin food processing establishments	3

### 28.2. Key findings, interpretation of the results and comparability with the previous year results

Broccoli, radish and apricots were included into 2010 programme because there has been MRL exceedances previous years and/or RASFF notifications issued. Also samples were taken from Indian grapes. The level of non-compliant samples was about the same, in year 2009 2,3 % of samples were non-compliant and in 2010 this number was 2,1%. The overall percentage of samples with no residues detected maintains in the same level. In year 2009 207 (52,1 %) samples out of 397 had no detectable residues and in 2010 this number was 152 samples (53,1 %) out of 286.

The total number of samples analyzed, number of samples with no detected residues, number of samples with detected residues and the number of samples with residues above MRL since year 2007 is represented in the Chart below.



The main difference between the results of years 2009 and 2010 was the distribution of samples which originated from Third countries. In 2009 there was an opportunity to analyze many Third countries origin commodities (e.g. table grapes, oranges and bananas) which were obligatory to analyse according to Regulation No 1213/2008. But in year 2010 the commodities were suitable to take the largest number of samples from domestic production. For comparison, see the Table Summary of samples taken in 2009 and 2010 by region of origin.

Region of origin	2009 (% of samples)	2010 (% of samples)
Domestic products	50	66
EU origin products	32	30
Products from Third countries	18	4

In 2009 the number of residues measured was 326 and in year 2010 it increased to 383.

### 28.3. Non-compliant samples: possible reasons and actions taken

In 2010 total 286 samples were taken, from which 6 were non-compliant (2,1 % of all). Two samples of Indian grapes, two samples of Estonian broccoli, one sample of Spanish broccoli and one sample of Turkish apricots analytical results turned out to be above MRL. Two RASFF information notifications were issued (Spanish broccoli and Turkish apricots).

Number of non-compliant samples	Action taken	Note
3	Administrative sanctions and the product was withdrawn from the market.	Sample codes: 10-021219JSL/TK, 10-020263JSL/TK, 10-012500JSL/TK
1	Administrative sanctions. Product was sold out, nothing to withdraw.	Sample code: 10-012502JSL/TK
2	Administrative sanctions. Product was sold out, nothing to withdraw. RASFF notification.	28.4. Sample code:  28.5. 10-012092JSL/TK 28.6. RASFF ref: 2010.0738 28.7. Sample code: 28.8. 10-010049JSL/TK 28.9. RASFF ref: 2010.0738

Product	Residue	Reason for MRL non compliance	Note
Broccoli	Dithiocarbamates	Other (please specify in the "Note" column)	There were problems with traceability, it was not possible to make sure who was the producer of the product. Sample of Estonian origin. Administrative sanctions carried out and the product was withdrawn from the market.
Broccoli	Dithiocarbamates	Other (please specify in the "Note" column)	There were problems with traceability, it was not possible to make sure who was the producer of the product. Sample of Estonian origin. Administrative sanctions carried out and the product was withdrawn from the market.
Broccoli	Dithiocarbamates	Other (please specify in the "Note" column)	Sample of Spanish origin. No reason possible to determine.
Grapes	Chlormequat	GAP not respected: use of pesticide non-authorized on the specific crop	Sample of Indian origin.
Grapes	Chlormequat	GAP not respected: use of pesticide non-authorized on the specific crop	Sample of Indian origin.
Apricots	Dithiocarbamates	Other (please specify in the "Note" column)	Sample of Turkish origin. No reason possible to determine.

### 28.10. Quality assurance

Two accredited laboratories analyze the samples: Health Board Tartu laboratory in Tartu (HB) and Agricultural Research Centre Laboratory for Residues and Contaminants in Saku (ARC). HB analyses samples of animal origin and non-animal origin. ARC analyses samples of non-animal origin.

The laboratories are accredited by the Estonian Accreditation Centre (EAK) for all analytical methods used for official control of pesticide residues in food.

The EC guidelines SANCO/2007/3131 “Method Validation and Quality Control procedures for Pesticide Residues” have been implemented as far as practicable.



Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
EE	Laboratory for Residues and Contaminants, Agricultural Research Centre	L003	28.08.1996	EAC – Estonian Accreditation Centre	28.11. PT2010: EUPT-C4, EUPT-FV-SM-02,EUPT-FV-12, EUPT-SRM5
EE	Tartu Laboratory of Health Board	L019	28.12.1999	EAC – Estonian Accreditation Centre	PT2010: C4, AO5, FV12, SRM5

## 29. Finland

### 29.1. Objective and design of the national control programme

In the design of the monitoring plan in Finland, the following factors have been considered:

- EU-commissions Regulation concerning a coordinated multiannual control programme of the Union
- Importance of a commodity in national food consumption
- Food commodities with high residues/non-compliance rate in previous years
- Number of organic/conventional production reflects the market shares
- Origin of food: domestic, EU or third country
- RASFF notifications
- Co-operation possibilities in sampling with different contaminant projects
- Needs of the national risk assessment projects

The selection criteria for pesticide residues and metabolites included into the control program are the following:

- Those pesticides which are commonly used and which are known to leave residues in foods are included. Frequency of pesticide findings in the EU-monitoring reports is used as selection criteria.
- Pesticides listed in the Regulation concerning a coordinated multiannual control programme are included as far as possible.
- Toxicity of the active substances is considered. Eg. many toxic OP-compounds which are not commonly used anymore are still included (they may occur in samples originating from the developing countries )
- Pesticides that are authorized for use in Finland are included into the program when relevant
- Multiresidue analyses are preferred, as the cost of analysis in case of single residue methods is higher. If many single residue analyses are performed the total number of samples to be analysed is decreased.
- Only limited numbers of single residue methods are run as there is not enough worker capacity and there is also lack of LCMSMS capacity.

### 29.2. Key findings, interpretation of the results and comparability with the previous year results

Main findings of the Finnish monitoring program:

- Total number of samples was decreased around 9 % compared to the previous year
- Overall number of non-compliances was decreased from 6,9 % to 4,5 % compared to the year 2009
- Number of non-compliant samples was much higher in enforcement samples than in surveillance samples (16.4 % vs. 3.2 %)
- Number of non-compliant samples in enforcement samples decreased from 29 % to 16 % compared to the year 2009



- All domestic samples were compliant. However, two samples (strawberry and salad) contained traces of pesticides which are not authorized in Finland to be used for these plants. MRL was not exceeded. This information was forwarded to the authorities responsible for the control of the usage of pesticides in Finland.
- Most of the non-compliant samples (47 %) originated from Thailand. Basil, aubergines, parsley, beans, guava, broccoli, and celery leaves formed the majority of the rejected Thai products.
- 20 % of the non-compliant samples were oranges from Egypt
- Exceptional amount of non-compliances was found in Italian products (9 cases), mainly in spinach, lettuce and beat leaves
- Ten or more (up to 14) residues were found in strawberries (14), wine leaves (13), peas (12), and 10 for oranges, raspberries, table grapes, celery leaves and tomatoes.
- Most common non-compliant product/pesticide combinations were carbofuran in celery leaves (3 cases) and acetamiprid in other small fruit and berries (3 cases)
- The number of multiresidue compounds analysed increased from 264 (in 2009) to 295 active ingredients and metabolites (in 2010).
- Single residue method for ethephon was added first time in the control program by analysing few cereal samples for ethephon.

### 29.3. Non-compliant samples: possible reasons and actions taken

The total number of samples which were found to be non-compliant<sup>9</sup> with the MRLs should be reported in this section.

- In 2010, 4.5 % of the samples (96 samples in total) were found to be non-compliant with the EU MRLs.
- For 7 samples RASSF notifications were issued.
- The following follow-up actions were taken in case of sample non-compliant with the EU MRL (measurement uncertainty taken into consideration).

Number of non-compliant samples	Action taken	Note
32	Administrative sanctions	Enforcement samples, The lots were detained and destroyed under Customs control or sent back to the seller by permission of authorities in the country of origin.
64	Administrative sanctions	The lot partly or totally consumed. The remaining part detained and destroyed or sent back to the seller by permission of authorities in the country of origin.
7	RASFF notifications	Sample code: 10-00382-03, ref. 2010.AIX, not released on the market, 10-00747-01, ref. 2010.0438 withdrawal from the market, 10-00800-02, ref. 2010.ANQ, withdrawal

		<p>from the market,  10-002265-05, ref.2010.BDK, product already consumed  10-02286-06, ref.2010.0790, product already consumed  10-02370-01, ref. 2010.BDN, not released on the market  10-03457-01, ref. 2010.BOJ, marketing as organic product prohibited</p>
3	withdrawal from the market	Products were on the market and based on the risk assessment, products were a health concern

Product	Residue	Reason for MRL non compliance	Note
Oranges	Fenitrothion	GAP not respected: use of non-authorized pesticide on all crops	10 samples, Egypt
Oranges	Malathion	GAP not respected: use of pesticide non-authorized on the specific crop	9 samples, Egypt.
Oranges	Dimethoate	GAP not respected: use of pesticide non-authorized on the specific crop	5 samples, Egypt
Oranges	Methamidophos	GAP not respected: use of non-authorized pesticide on all crops	1 sample, Egypt
Basil, fresh	Dichlorvos	GAP not respected: use of non-authorized pesticide on all crops	3 samples, Thailand
Basil, fresh	Chlorpyrifos	GAP not respected: use of pesticide non-authorized on the specific crop	2 samples, Thailand.
Basil, fresh	Dimethoate	GAP not respected: use of pesticide non-authorized on the specific crop	2 samples, Thailand
Basil, fresh	Tetradifon	GAP not respected: use of non-authorized pesticide on all crops	1 sample, Thailand
Basil, fresh	Quinalphos	GAP not respected: use of non-authorized pesticide on all crops	1 sample, Thailand
Coriander, fresh	Carbofuran	GAP not respected: use of non-authorized pesticide on all crops	3 samples, Thailand
Coriander, fresh	Quintozene	GAP not respected: use of non-authorized pesticide on all crops	2 samples Thailand
Coriander, fresh	Dimethoate	GAP not respected: use of pesticide non-authorized on the specific crop	2 sample, Thailand
Coriander, fresh	EPN	GAP not respected: use of non-authorized pesticide on all crops	1 sample, Thailand
Coriander, fresh	Dicrotophos	GAP not respected: use of non-authorized pesticide on all crops	1 sample, Thailand
Coriander, fresh	Amitraz	GAP not respected: use of non-authorized pesticide on all crops	1 sample, Thailand
Dill, fresh	Chlorpyrifos	GAP not respected: use of pesticide non-authorized on the specific crop	2 samples, Spain
Dill, fresh	Dimethoate	GAP not respected: use of pesticide non-authorized on the specific crop	1 sample, Spain
Dill, fresh	Cyfluthrin	GAP not respected: use of pesticide non-authorized on the specific crop	1 sample, Spain
Dill, fresh	Tebuconazol	GAP not respected: use of pesticide non-authorized on the specific crop	1, sample, Italy

Product	Residue	Reason for MRL non compliance	Note
Oranges	Fenitrothion	GAP not respected: use of non-authorised pesticide on all crops	10 samples, Egypt
Oranges	Malathion	GAP not respected: use of pesticide non-authorised on the specific crop	9 samples, Egypt.
Oranges	Dimethoate	GAP not respected: use of pesticide non-authorised on the specific crop	5 samples, Egypt
Lettuce	Bifenthrin	GAP not respected: use of non-authorised pesticide on all crops	1 sample, Italy
Guava	Prothiofos	GAP not respected: use of non-authorised pesticide on all crops	2 samples, Thailand
Guava	Azoxystrobin	GAP not respected: use of pesticide non-authorised on the specific crop	2 samples, Thailand
Pepper, chili	Profenofos	GAP not respected: use of non-authorised pesticide on all crops	1 sample, Thailand
Pepper, chili	Ethion	GAP not respected: use of non-authorised pesticide on all crops	1 sample, Thailand
Pepper, chili	Dicofol	GAP not respected: use of non-authorised pesticide on all crops	1 sample, Thailand
Pepper, chili	Amitraz	GAP not respected: use of non-authorised pesticide on all crops	1 sample, Thailand
Pepper, chili	Carbofuran	GAP not respected: use of non-authorised pesticide on all crops	1 sample, Thailand
Tea	Bifenthrin	GAP not respected: use of non-authorised pesticide on all crops	1 sample, China
Tea	Hexachlorobenzene	GAP not respected: use of non-authorised pesticide on all crops	1 sample, China
Tea	Fenvalerate	GAP not respected: use of non-authorised pesticide on all crops	1 sample, China
Tea	Phosalone	GAP not respected: use of non-authorised pesticide on all crops	1 sample, India

#### 29.4. Quality assurance

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
FI	Finnish Customs Laboratory	FI01	24/03/2011	FINAS – Espoo, Finland	PT:2010: FV12, C4, SRM5, SM02, FAPAS 19102, Bipea 19E-322 and 19E-323
FI	MetropoliLab	FI02	17/9/2010	FINAS – Espoo, Finland	EU-PT FV12
FI	Evira Laboratory	FI03	21.6.2010	FINAS – Espoo, Finland	CRL: EUPT AO-05, FAPAS: Test 0574, Afssa: ACA-CF-MI-10-04

## 30. France

### 30.1. Objective and design of the national control programme

Le programme de surveillance et de contrôle des résidus de pesticides dans les produits végétaux est planifié et mis en œuvre par la Direction Générale de la Concurrence, de la Consommation et de la Répression des Fraudes (DGCCRF). Sept laboratoires, appartenant au Service Commun des Laboratoires pour la DGCCRF et la Douane (SCL), analysent les échantillons. Deux de ces laboratoires sont situés outre-mer et se concentrent principalement sur les productions locales. Les cinq autres analysent tous les types de denrées végétales présentes sur le marché français, incluant tant des produits bruts que des produits transformés.

Les programmes distinguent deux stratégies d'échantillonnage dénommées « surveillance » pour les prélèvements aléatoires (incluant le programme coordonné européen) et « contrôle » pour les prélèvements ciblés (basés sur une forte probabilité de non-conformité, tels que les salades d'hiver, ou sur des problèmes spécifiques, tels que la nicotine dans les champignons ou le chlordécone dans les légumes-racines).

Les prélèvements sont effectués par des inspecteurs expérimentés des services locaux de la DGCCRF, selon des procédures conformes à la réglementation européenne.

1) Le plan d'échantillonnage est élaboré avec l'assistance de l'ANSES (Agence nationale de sécurité sanitaire de l'alimentation, de l'environnement et du travail). Il prend en compte, outre les exigences du **programme coordonné européen** :

- le **calcul d'exposition au risque** (fréquence de détection des différentes substances actives, pondérée par l'importance de leurs matrices dans la consommation des Français et les risques chronique et aigu associés pour différents segments de la population) ;
- les dépassements des limites maximales résiduelles constatés les années antérieures.

Un programme spécifique est établi pour les échantillons d'agriculture biologique (AB), représentant environ 8,6% du nombre total d'échantillons.

Au-delà des prélèvements prévus dans les plans initiaux, des analyses complémentaires peuvent être effectuées sur des produits ayant fait l'objet d'une alerte au RASFF, ou pour lesquels une non-conformité a été constatée lors d'un précédent prélèvement.

2) En outre, les prélèvements peuvent être effectués à tous les stades de la commercialisation, mais ils sont de préférence concentrés sur les niveaux les plus proches de **leur première mise sur le marché** (grossiste, importateur).

3) Enfin, **les laboratoires mettent en œuvre des méthodes normalisées**. Grâce à l'acquisition de nouveaux appareils type LC-MS, les laboratoires du SCL ont élargi l'éventail de leurs possibilités analytiques et ont ainsi pu mettre en œuvre des méthodes mono résidus courantes (ammonium quaternaire, phénoxy acides, glyphosate, etc.).

Pour les analyses multi résidus, les méthodes utilisées au sein des laboratoires du SCL ( EN 12393-1,2,3 essentiellement ) ont petit à petit été remplacées par la méthode Quechers ( NF 15662 ).

Cependant, pour des analyses très spécifiques ou ponctuelles (cas des alertes), les laboratoires du SCL désignent généralement un laboratoire pilote, le LNR, pour effectuer les analyses et le cas échéant une mise au point de méthode en l'absence de protocole normalisé.

Les cinq laboratoires métropolitains sont accrédités par le Comité Français d'Accréditation (COFRAC), mais pour une part de leur activité seulement. Il est évident que l'accréditation des méthodes multirésidus est particulièrement difficile et coûteuse, parce qu'elle nécessite une validation pour chaque pesticide et

chaque catégorie de matrice. La portée d'accréditation est donc dirigée sur les résidus les plus fréquemment trouvés.

Les laboratoires d'outremer ne sont pas accrédités pour les raisons mentionnées ci-dessus et en raison de leur faible participation au programme.

### 30.2. Key findings, interpretation of the results and comparability with the previous year results

Le nombre de prélèvements effectués en 2010 est en hausse sensible par rapport à 2009 (5.182 contre 4.953, soit + 4,6 %).

Les principaux résultats sont retracés dans le tableau ci-dessous :

Groupes de produits	TOTAL	Sans résidus	Résidus supérieurs aux LMR	Non conformités
Fruits, légumes et autres produits d'origine végétale	4 207	2 573 (61 %)	164 (3,9 %)	89 (2,1 %)
Produits transformés	692	455 (66 %)	25 (3,6 %)	13 (1,9 %)
Céréales	270	143 (53 %)	1 (0,4 %)	1 (0,4 %)
Autres	13	13 (100 %)	0 (0 %)	0 (0 %)
<b>TOTAL</b>	<b>5 182</b>	<b>3 184 (61 %)</b>	<b>190 (3,7 %)</b>	<b>103 (2 %)</b>

Pour mémoire, les taux de non-conformités s'élevaient, en 2008 et 2009, respectivement à **4,40 %** et **3,45 %**. Ces chiffres doivent être comparés au pourcentage d'échantillons contenant des taux de résidus supérieurs aux LMR (**3,7 %**). En effet, la marge d'incertitude permettant de déclarer un produit non conforme a été conventionnellement augmentée, au niveau européen, à 50 % du niveau de pesticides constaté. La forte baisse du nombre de non-conformités est donc essentiellement due à un changement de base.

Les données fournies ici sont celles qui ressortent des tableaux fournis par l'AESA. Or ces tableaux classent tous les prélèvements effectués en France dans la catégorie « Surveillance », alors qu'un nombre important de ces prélèvements ont été effectués dans le cadre du plan de contrôle. Pour les isoler, il conviendrait de retraiter les données à partir des tableaux nationaux ce qui n'est pas possible dans les délais impartis. Des statistiques séparées pour les données relevant de la « Surveillance » et du « Contrôle » devraient toutefois être disponibles avant la fin de l'année 2011.

### 30.3. Non-compliant samples: possible reasons and actions taken

Sur les 103 non conformités constatées en 2010, 15 ont donné lieu à signalement au RASFF.

Toutefois, le nombre des non-conformités liées à des dépassements de LMR européennes est sensiblement inférieur : 92, soit 1,8 %. Cet écart est essentiellement dû aux échantillons contenant du pipéronyl butoxide (PBO), puisque cette substance n'est pas couverte par la réglementation européenne.

Les actions menées suite au constat de ces 92 non-conformités sont récapitulées dans le tableau suivant :

Number of non-compliant samples	Action taken	Note
11	Information au responsable local	
42	Complément d'enquête et, éventuellement, nouveaux prélèvements	
9	Rappel de réglementation	
10	Transmission au Parquet	
7	Destruction aux frontières	
15	Signalement au RASFF	

Note : le total n'est pas égal à 92, car plusieurs actions ont pu être menées pour un même échantillon.

Le tableau joint présente toutes les non-conformités constatées. Certains échantillons présentent plusieurs non-conformités.

N° d'échantillon	Denrée	Substance active	Conclusion
6539	CLEMENTINES	IMAZALIL	MRL overrun
5853	FARINE DE BLE T150 AGRICULTURE BIOLOGIQUE	PIPERONYL BUTOXYDE	not covered by R 396-2005 § organic labelling and MRL overrun
5629	ABRICOTS	CHLORPYRIPHOS ETHYL	MRL overrun
5508	CERISES	THIOPHANATE METHYL	MRL overrun
5808	CITRONS	IMAZALIL	MRL overrun
7171	AUBERGINES	DIMETHOMORPHE	MRL overrun
5237	PERSIL FRISE	BIFENTHRINE	MRL overrun
3179	LAITUES BATAVIA	DIMETHOATE ET OMETHOATE [SOMME, EXPRIMEE EN DIMETHOATE]	MRL overrun
1376	BETTES	ACETAMIPRIDE	MRL overrun
1376	BETTES	AZOXYSTROBINE	MRL overrun
2036	HARICOTS VERTS	HEXACONAZOLE	MRL overrun
277	LAITUES SOUS ABRI	TAU-FLUVALINATE	MRL overrun
2868	BAIES DE GOJI SECHEES	ACETAMIPRIDE	MRL overrun - MRL recalculated with drying factor of 5
3390	BAIES DE GOJI SECHEES	ACETAMIPRIDE	MRL overrun (with drying factor of 5) - RASFF Information
3392	BAIES DE GOJI SECHEES	ACETAMIPRIDE	MRL overrun (with drying factor of 5) - RASFF Information
3393	BAIES DE GOJI SECHEES	ACETAMIPRIDE	MRL overrun (with drying factor of 5) - RASEF Information
4385	FRAISES	OXAMYL	illegal use in France and MRL overrun

N° d'échantillon	Denrée	Substance active	Conclusion
7081	POMMES	OXYDEMETON-METHYL [SOMME, INCLUANT DEMETON-S-METHYL SULFONE, EXPRIMEE EN OXYDEMETON METHYL]	MRL overrun
6126	CELERI BRANCHE	ETOFFENPROX	illegal use in France and MRL overrun
1461	LAITUES FEUILLE DE CHENE	VINCLOZOLINE [parent]	MRL overrun
579	LAITUES BATAVIA	FOLPET (FOLPEL)	MRL
2314	BAIES ROSES	CYPERMETHRINE [SOMME DES ISOMERES]	MRL overrun
2314	BAIES ROSES	PIPERONYL BUTOXYDE	not covered by R 396-2005 - Nat MRL overrun (drying factor of 5)
2315	BAIES ROSES	PIPERONYL BUTOXYDE	not covered by R 396-2005 - Nat MRL overrun (drying factor of 5)
2317	PIMENTS FORTS SECHES	PIPERONYL BUTOXYDE	not covered by R 396-2005 - Nat MRL overrun (drying factor of 5)
2257	ORGE	PYRIMIPHOS METHYL	MRL overrun
1170	HARICOTS VERTS	ENDOSULFAN [SOMME ALPHA + BETA + SULFATE, EXPRIMEE EN ENDOSULFAN]	MRL overrun
5060	PETALES DE ROSE SUCRES	PIPERONYL BUTOXYDE	not covered by R 396-2005 - Nat MRL overrun
5061	PETALES DE ROSE SUCRES	PIPERONYL BUTOXYDE	not covered by R 396-2005 - Nat MRL overrun
2287	PERSIL PLAT	AZOXYSTROBINE	MRL uprising to 70 a few days after sampling
3079	CERISES	DIMETHOATE ET OMETHOATE [SOMME, EXPRIMEE EN DIMETHOATE]	MRL overrun
2169	HARICOTS VERTS	THIOPHANATE METHYL	MRL overrun
539	LAITUES BATAVIA SOUS ABRI	FOLPET (FOLPEL)	MRL overrun
532	LAITUES FEUILLE DE CHENE SOUS ABRI	OXADIXYL	illegal use in France and MRL overrun
1229	LAITUES BATAVIA SOUS ABRI	FOLPET (FOLPEL)	MRL overrun
374	GRAINES DE CUMIN	CARBENDAZIME ET BENOMYL [SOMME EXPRIMEE EN CARBENDAZIME]	MRL overrun
374	GRAINES DE CUMIN	PROFENOPHOS	MRL overrun
6931	LAITUES BATAVIA	FOLPET (FOLPEL)	MRL overrun
6931	LAITUES BATAVIA	IPRODIONE	MRL overrun

N° d'échantillon	Denrée	Substance active	Conclusion
741	LAITUES FEUILLE DE CHENE SOUS ABRI	FOLPET (FOLPEL)	MRL overrun
741	LAITUES FEUILLE DE CHENE SOUS ABRI	PENCYCURON	MRL overrun
1359	LAITUES BATAVIA	FOLPET (FOLPEL)	MRL overrun
1574	AUBERGINES	CARBOFURAN [SOMME, INCLUANT LE 3-HYDROXYCARBORAN, EXPRIMEE EN CARBOFURAN]	MRL overrun - border rejection
1574	AUBERGINES	CARBOSULFAN	MRL overrun - border rejection
3443	CHOUX POMMES	DIFENOCONAZOLE	MRL overrun
3443	CHOUX POMMES	DIMETHOMORPHE	MRL overrun - border rejection
3560	AUBERGINES BLANCHES	DIMETHOATE ET OMETHOATE [SOMME, EXPRIMEE EN DIMETHOATE]	MRL overrun - border rejection
4333	AUBERGINES	ACETAMIPRIDE	MRL overrun - RASEF information
5138	AUBERGINES	METHOMYL ET THIODICARBE [SOMME, EXPRIMEE EN METHOMYL]	MRL overrun - border rejection
5404	PIMENTS	CHLORFENAPYR	MRL overrun - border rejection
5404	PIMENTS	CYPERMETHRINE [SOMME DES ISOMERES]	MRL overrun - border rejection
5404	PIMENTS	TRIFLOXYSTROBINE	MRL overrun - border rejection
2165	PIMENTS VERTS	DICOFOL [SOMME DES ISOMERES]	MRL overrun - border rejection
638	LAITUES BATAVIA SOUS ABRI	FOLPET (FOLPEL)	MRL overrun
7167	LAITUES BATAVIA	PENCYCURON	MRL overrun
632	LAITUES BATAVIA SOUS ABRI	FOLPET (FOLPEL)	MRL overrun
5607	VIN BLANC	OXADIXYL	value overruns MRL for wine grapes
2020	ANANAS	PIPERONYL BUTOXYDE	not covered by R 396-2005 - Nat MRL overrun
2574	GRAINES IDE COTON	PIPERONYL BUTOXYDE	not covered by R 396-2005 - Nat MRL overrun
186	SCAROLES	CHLOROTHALONIL	MRL overrun
407	LAITUES	BOSCALID	MRL overrun



N° d'échantillon	Denrée	Substance active	Conclusion
2639	GRAINES DE SOJA EXTRUDEES AGRICULTURE BIOLOGIQUE	PIPERONYL BUTOXYDE	not covered by R 396-2005 - Nat MRL overrun and organic labelling
906	CELERI BRANCHE	METHIOCARBE [SOMME, INCLUANT SULFOXIDE ET SULFONE]	MRL overrun
515	AIL	2,4,6 TRIBROMOPHENOL	not authorized for food container in Europe and MRL overrun
516	AIL	2,4,6 TRIBROMOPHENOL	not authorized for food container in Europe and MRL overrun
2109	FRAMBOISES	ACETAMIPRIDE	illegal use in France and MRL overrun
315	LAITUES BATAVIA	AZOXYSTROBINE	MRL overrun
3472	THE VERT A LA MENTHE	BUPROFEZINE	MRL overrun
2848	BETTES	METHOMYL ET THIODICARBE [SOMME, EXPRIMEE EN METHOMYL]	illegal use in France and MRL overrun
3771	LAITUES	DIMETHOATE ET OMETHOATE [SOMME, EXPRIMEE EN DIMETHOATE]	MRL overrun
303	AIL	2,4,6 TRIBROMOPHENOL	not authorized for food container in Europe and MRL overrun
2581	CERISES	DIMETHOATE ET OMETHOATE [SOMME, EXPRIMEE EN DIMETHOATE]	MRL overrun
2040	ANANAS	PIPERONYL BUTOXYDE	not covered by R 396-2005 - Nat MRL overrun
2647	CAROTTES DE PRIMEUR	PIPERONYL BUTOXYDE	not covered by R 396-2005 - Nat MRL overrun
3486	CAROTTES	ETHION (DIETHION)	illegal use in France and MRL overrun
3167	FRAISES	CARBENDAZIME ET BENOMYL [SOMME EXPRIMEE EN CARBENDAZIME]	MRL overrun
3766	PECHES	PROCYMIDONE	illegal use in France and MRL overrun
2542	FRAISES	THIOPHANATE METHYL	MRL overrun

N° d'échantillon	Denrée	Substance active	Conclusion
62	LAITUES BATAVIA SOUS ABRI	FLUDIOXONIL	MRL overrun
62	LAITUES BATAVIA SOUS ABRI	IPRODIONE	MRL overrun
324	LAITUES BATAVIA	FLUDIOXONIL	MRL overrun
2700	CITRONS AGRICULTURE BIOLOGIQUE	DIMETHOATE ET OMETHOATE [SOMME, EXPRIMEE EN DIMETHOATE]	organic labelling and MRL overrun
405	BAIES DE GOJI FRAICHES	ACETAMIPRIDE	MRL overrun
207	CAROTTES	CHLORPROPHAME [parent]	illegal use in France and MRL overrun
483	ANANAS	PIPERONYL BUTOXYDE	not covered by R 396-2005 - Nat MRL overrun
1243	PERSIL	BIFENTHRINE	MRL overrun
2486	ANANAS	PIPERONYL BUTOXYDE	not covered by R 396-2005 - Nat MRL overrun
3565	BETTES	FLUTRIAFOL	MRL overrun
4122	HARICOTS VERTS	ENDOSULFAN [SOMME ALPHA + BETA + SULFATE, EXPRIMEE EN ENDOSULFAN]	MRL overrun
4190	CELERI BRANCHE	FLUTRIAFOL	MRL overrun
191	CHOUX POMMES	OXAMYL	MRL overrun
3141	FARINE MULTICEREALES	ORTHOPHENYLPHENOL (OPP)	authorized only for storage and transport materials
3142	PREPARATION POUR PIZZA	ORTHOPHENYLPHENOL (OPP)	authorized only for storage and transport materials
4234	ANANAS	PIPERONYL BUTOXYDE	not covered by R 396-2005 - Nat MRL overrun
1635	CIVES (BULBES)	AZOXYSTROBINE	MRL uprising to 10 a few days after sampling
3348	CIVES (BULBES)	DIFENOCONAZOLE	MRL overrun
1386	ORANGES	CARBARYL	MRL overrun
3073	RAISIN DE TABLE	CHLORPYRIPHOS ETHYL	MRL overrun
576	NAVETS	ETHION (DIETHION)	illegal use in France and MRL overrun
2468	POIRES	ETHION (DIETHION)	MRL overrun
2357	THE AU JASMIN	FIPRONIL [parent]	MRL overrun
2121	CERISES	DIMETHOATE ET OMETHOATE [SOMME, EXPRIMEE EN DIMETHOATE]	MRL overrun
1898	NAVETS	ETHION (DIETHION)	illegal use in France and MRL overrun
4236	HARICOTS VERTS	DIMETHOATE ET OMETHOATE [SOMME, EXPRIMEE EN DIMETHOATE]	MRL overrun

N° d'échantillon	Denrée	Substance active	Conclusion
75	COURGETTES	DIMETHOATE ET OMETHOATE (SOMME, EXPRIMEE EN DIMETHOATE)	illegal use in France and MRL overrun
1447	AUBERGINES	DIMETHOATE ET OMETHOATE (SOMME, EXPRIMEE EN DIMETHOATE)	MRL overrun
277	LAITUES SOUS ABRI	DITHIOCARBAMATES (EXPRIMES EN CS2)	MRL
4322	LAITUES BATAVIA	BROMURES (EN ION BR-)	MRL overrun
72	LAITUES BATAVIA SOUS ABRI	DITHIOCARBAMATES (EXPRIMES EN CS2)	MRL overrun
62	LAITUES BATAVIA SOUS ABRI	BROMURES (EN ION BR-)	MRL overrun
92	LAITUES FEUILLE DE CHENE	BROMURES (EN ION BR-)	MRL overrun
533	LAITUES SOUS ABRI	DITHIOCARBAMATES (EXPRIMES EN C52)	MRL overrun
407	LAITUES	DITHIOCARBAMATES (EXPRIMES EN C52)	MRL overrun
254	HARICOTS VERTS	DITHIOCARBAMATES (EXPRIMES EN CS2)	MRL overrun
4563	BETTES	DITHIOCARBAMATES (EXPRIMES EN CS2)	MRL overrun
725	RACINES DE MADERE	CHLORDECONE	MRL overrun

### 30.4. Quality assurance

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
FR	SCL – Laboratoire de Montpellier	SCL34	1997	Comité Français d'accréditation - Cofrac	PT 2010 : FV 12, C4, SRM03, SM 02, FAPAS, Bipea
FR	SCL – Laboratoire de Massy	SCL91	1996	Comité Français d'accréditation - Cofrac	PT2010 : FV12, C4, SRM03, SM02, FAPAS, Bipea
FR	SCL – Laboratoire de Rennes	SCL35	2008	Comité Français d'accréditation - Cofrac	PT2010 : FV12, C4, BIPEA
FR	SCL - Laboratoire de Strasbourg	SCL67	2001	Comité Français d'accréditation - Cofrac	PT2010 : FV12, BIPEA
FR	SCL - Laboratoire de Bordeaux	SCL33	2002	Comité Français d'accréditation - Cofrac	PT2010 : FV12, FAPAS , BIPEA
FR	Scl –	SCL974	Le laboratoire		PT : FV12

	Laboratoire de Saint Denis de la Réunion		n'est pas accrédité		
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### 30.5. Additional Information

Les analyses sont encodées, au niveau national, en distinguant deux stratégies d'échantillonnage dénommées « **surveillance** » pour les prélèvements aléatoires (incluant le programme coordonné européen) et « **contrôle** » pour les prélèvements ciblés sur certains producteurs et / ou denrées ayant fait l'objet de non-conformités importantes lors de l'année n ou lors des années antérieures.

Or l'AESA ne considère pas les prélèvements sur des **matrices et/ou des pays** ciblés en fonction de leur risque de non-conformité comme faisant partie du programme « contrôle ». Selon cet organisme, seuls relèvent de ce programme les prélèvements visant **des professionnels et / ou des lots** dont le risque de non conformité est avéré. Or, dans la mesure où l'encodage effectué au niveau national ne permet pas d'isoler ces deux catégories de prélèvement, l'AESA a considéré qu'aucune analyse effectuée en 2010 ne relevait du « contrôle ». **Ce choix introduit assurément certains biais dans l'appréciation statistique des résultats.**

Ces biais sont renforcés par la comptabilisation des produits provenant des départements d'outre-mer dans les produits provenant des pays tiers.

## 31. Germany

### 31.1. Objective and design of the national control programme

Germany's multi-annual national programme for control of pesticides residues in and on foodstuffs serves the planning of official controls to make sure that residues in food of animal or vegetal origin do not lead to unacceptable risks to health. Investigations under this programme aim to evaluate consumers' exposure to pesticides residues and control compliance with legal regulations.

The control programme is jointly developed by the Federal Government and the states (Länder). Each programme covers a period of three years and is updated each year and submitted to the commission and EFSA three months before the end of the current calendar year at the latest, in accordance with Article 30(1)2 of Regulation (EC) No. 396/2005.

To reach both the aim of evaluating consumer exposure and of monitoring legal compliance, part of the samples are analysed following the provisions set out in a multi-annual national monitoring plan which has been specifically conceived to measure pesticide residues, to the end of determining consumers' exposure on a national scale. Sampling is made at random and is based on the conditions of the German market, as regards the origin of samples and their distribution over conventional and ecological farming.

A much larger amount of samples is taken and analysed for the purpose of testing compliance with legal provisions. Sampling is performed on a risk basis and at all levels of trade (import, wholesale, retail sale, production), on the basis of uniform criteria, which allows to integrate the sampling plans separately developed by the *Länder* into one national sampling plan.

The following criteria have been set up for the selection of products to be sampled, in order to allow a uniform approach to developing the multi-annual national control plan, and integration of the *Länders'* plans into a national sampling plan in a transparent manner:

a) "Hard" criteria:

- Product risk as defined in a health risk assessment of the respective product (risk to population, risk to sensitive consumer groups, food with potential risks), while considering the product's dietary importance
- Amount of production/import/distribution of the food product in question
- Frequency of non-compliance with residue levels, frequency of complaints
- Frequency of findings (distribution of frequency), frequency of multiple residues
- Findings under the monitoring programme; findings reported in the Annual Report pursuant to Article 32 of Regulation (EC) No. 396/2005

b) "Soft" criteria:

- Seasonal particularities (for instance, early strawberries: sampling should be concentrated at the beginning of the season, to allow forecasts of trends in residue findings)
- Origin and regional particularities (for instance, regional prevalence of certain crops)
- Consideration of findings in controls performed by the Crop Protection Services of the *Länder* (for instance, findings about improper or unauthorised use of plant protection products, or suspicion of residues of unauthorised use of plant protection products or use of banned products)
- Information of the public/public perception of pesticide residues
- Type of farming (such as, ecological/conventional, small-scale/large-scale cropping)
- Efficiency of producers'/suppliers' self-control systems

With both control programmes, sampling and actual analyses are performed by the competent authorities of the *Länder*. Analytic results are delivered to the BVL. The BVL compiles the data delivered by the *Länder*, makes an assessment, and sends the data to the European Commission, to EFSA, and to the other Member States, in accordance with Article 31(1) of Regulation (EC) No. 396/2005. In addition, the programme results are published annually in a “National Report about Residues of Plant Protection Products in Foodstuffs”. They serve as a basis for discussing risk-minimising measures in the field of food safety.

### 31.2. **Key findings, interpretation of the results and comparability with the previous year results**

In 2010 in the Federal Republic of Germany a total of 17,585 samples (17,218 surveillance and 367 follow-up enforcement samples) were tested for pesticide residues. Of these samples, 7,706 were from products produced in Germany, 5,078 samples came from the EU, 3,444 samples were produced outside the EU and 1,357 of the samples had an unknown origin. The samples included 15,162 samples of fruits, vegetables and other plant origin, 446 samples of cereals, 1,521 samples of animal products, 275 samples of baby food and 181 samples of processed products.

The participating laboratories reported a total of 5,160,058 analyses for the food samples. The samples were analysed for a total of 845 different pesticides (excluding isomers and metabolites) from which 371 were detected at least in one sample. Residues of 149 individual pesticides exceeded MRLs.

In 7,132 (41.4 %) surveillance samples no residues of pesticides could be quantified (2009: 39.9 %). In 9,628 (55.9 %) surveillance samples residues of pesticides were quantified at or below MRLs (2009: 57.1 %). 458 (2.7 %) surveillance samples contained residues of pesticides exceeding MRLs (2009: 2.9 %). 287 (1.7 %) samples had residues non-compliant with the MRL (2009: 1.9 %).

In 114 (31.1 %) follow-up enforcement samples no residues of pesticides could be quantified (2009: 33.9 %). In 229 (62.4 %) follow-up enforcement samples residues of pesticides were quantified at or below MRLs (2009: 52.5 %). 24 (6.5 %) follow-up enforcement samples contained residues of pesticides exceeding MRLs (2009: 13.6 %). 20 (5.4 %) samples had residues non-compliant with the MRL (2009: 11.4 %).

1,337 samples of 17,585 (7.6 %) were from products produced under the rules of organic farming. In 269 (20.1 %) samples residues of pesticides could be quantified. Only 3 (0.2 %) of organic samples contained residues of pesticides exceeding MRLs. The sampling strategies for these products varied between the States. Some have special programs, others take samples rather by chance.

Multiple residues were found and quantified in 40.3 % of all samples (2009: 33.9 %).

### 31.3. **Non-compliant samples: possible reasons and actions taken**

In 2010, 1.7 % of the samples (307 samples in total) were found non-compliant with the EU MRL. For 11 samples RASF notifications were issued.

The following follow-up actions were taken in case of sample non-compliant with the EC MRL (measurement uncertainty taken into consideration):

Number of non-compliant samples	Action taken	Note
86	Administrative consequences	
11	Rapid Alert Notification	Sample code: 0005386714; 0005674937; 0005734536; 0005648945; 0005648973; 0005649300; 0005649352; 0005389018; 0005689061; 0005686377; 0005684606
21	Warnings	
32	No action	
96	Other	Forwarded to competent authority
11	Other	Rejected at border. Commodity destroyed.
2	Other	Destruction of the commodity
48	Other	Next three consignments are withheld at Frankfurt Border Inspection Post (BIP) and tested for pesticides. Release only after negative test results. Administrative offence by Local Competent Authorities.

The possible reasons for the MRL exceedances were submitted in only twelve cases from the competent authorities in the Federal States. In all other cases the information was not available.

Product	Residue	Reason for MRL non compliance	Note (Reason for MRL non compliance)
Processed cereal-based foods	Anthraquinone	Contamination during handling, storage or transport of crop	Contamination caused by paper package
Lettuce	Dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	GAP not respected: use of pesticide non-authorized on the specific crop	
Lettuce	Pendimethalin	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Kale	Pendimethalin	Contamination: spray drift	
Kale	Pendimethalin	Contamination: spray drift	
Kale	Pendimethalin	Contamination: spray drift	
Celeriac	Iprodione	Contamination: spray drift	
Kohlrabi	Dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	Contamination: spray drift	

Product	Residue	Reason for MRL non compliance	Note (Reason for MRL non compliance)
Leek	Iprodione	Contamination: spray drift	
Radishes	Dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	Other (please specify in the "Note" column)	irreproducible if "GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected" or "use of pesticide according to authorised GAP: unexpected slow degradation of residues (e.g. unfavourable)
Radishes	Dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	Other (please specify in the "Note" column)	irreproducible if "GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected" or "use of pesticide according to authorised GAP: unexpected slow degradation of residues (e.g. unfavourable)
Courgettes	Heptachlor (sum of heptachlor and heptachlor epoxide expressed as heptachlor)	Contamination: residues resulting from previous use of a pesticide (e.g. persistent pesticides no longer authorised, soil residues taken up in succeeding crops)	

#### 31.4. Quality assurance

28 accredited laboratories took part in the national control programme for 2010.

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
DE	Chemisches und Veterinäruntersuchungsamt Freiburg 79114 Freiburg Bissierstr. 5	082102	02/12/2008	SAL-Wiesbaden	FAPAS 0571, FAPAS 0574 EUPT 2010: Dioxins and PCBs in Animal Fat
DE	Chemisches und Veterinäruntersuchungsamt Stuttgart 70736 Fellbach Schaflandstr. 3/2	082107	05/01/2009	SAL-Wiesbaden	EUPT 2010: C4, FV 12
DE	Bayerisches Landesamt für Gesundheit und Lebensmittelsicherheit Dienststelle Oberschleißheim 85764 Oberschleißheim Veterinärstraße 2	092811	29/06/2009	SAL-Wiesbaden	EUPT 2010: AO 05, PCB



Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
DE	Bayerisches Landesamt für Gesundheit und Lebensmittelsicherheit 91058 Erlangen Eggenreuther Weg 43	092821	29/06/2009	SAL-Wiesbaden	EUPT 2010: C4, FV 12, FV-SM02, SRM5
DE	Landeslabor Berlin-Brandenburg Dienstszitz Berlin 10557 Berlin Invalidenstr. 60	112001	20/04/2009	AKS-Hannover	EUPT 2009: FV11 EUPT 2010: AO 05
DE	Landeslabor Berlin-Brandenburg Dienstszitz Frankfurt (Oder) 15236 Frankfurt (Oder) Gerhard-Naumann-Straße 2/3	122104	20/04/2009	AKS-Hannover	EUPT 2009: FV 11, C3/SRM4  EUPT 2010: FV 12
DE	Landesuntersuchungsamt für Chemie, Hygiene und Veterinärmedizin 28217 Bremen Lloydstraße 4	042101	12/05/2009	AKS-Hannover	EUPT 2011: FV 13 EUPT 2010: AO 05
DE	Institut für Hygiene und Umwelt 20539 Hamburg Marckmannstr. 129a	022020	26/09/2008	AKS-Hannover	EUPT 2010: AO 05, C4, FV 12, SRM5
DE	Landesbetrieb Hessisches Landeslabor FG I.3 Datenmeldestelle 65203 Wiesbaden Glarusstraße 6	062109	02/12/2008	SAL-Wiesbaden	EUPT 2010: C4, FV 12
DE	132101 Landesamt für Landwirtschaft, Lebensmittelsicherheit und Fischerei Mecklenburg-Vorpommern 18059 Rostock Thierfelderstr. 18	132101	10/03/2009	AKS-Hannover	EUPT 2010: AO 05, C4, FV 12
DE	Niedersächsisches Landesamt für Verbraucherschutz und Lebensmittelsicherheit -Lebensmittelinstitut Oldenburg- 26133 Oldenburg Martin-Niemöller-Straße 2	032002	12/09/2008	AKS-Hannover	EUPT 2010: AO 05, C4, FV 12, FV-SM02, SRM5
DE	Stadt Bochum Chemisches Untersuchungsamt 44793 Bochum Carolinenglückstr. 27	052107	23/04/2009	SAL-Wiesbaden	EUPT 2010: FV 12
DE	Stadt Dortmund Chemisches und Lebensmitteluntersuchungsamt 44137 Dortmund Hövelstraße 8	052109	23/04/2009	SAL-Wiesbaden	EUPT 2010: FV 12

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
DE	Stadt Hagen Chemisches Untersuchungsamt 58099 Hagen Pappelstraße 1	052114	23/04/2009	SAL- Wiesbaden	EUPT 2010: FV 12
DE	Chemisches und Veterinäruntersuchungsamt Ostwestfalen-Lippe CVUA-OWL 32717 Detmold Postfach 2754	052203	05/01/2009	SAL- Wiesbaden	EUPT 2010: FV 12
DE	Chemisches und Veterinäruntersuchungsamt Rhein-Ruhr-Wupper CVUA-RRW 47798 Krefeld Deutscher Ring 100	052306	05/01/2009	SAL- Wiesbaden	EUPT 2010: AO 05, C4, FV 12
DE	Landeshauptstadt Düsseldorf Amt für Verbraucherschutz Chemische und Lebensmitteluntersuchung 40468 Düsseldorf Ulmenstraße 215	052311	16/12/2009	SAL- Wiesbaden	EUPT 2010: FV 12
DE	Kreisverwaltung Mettmann Amt für Verbraucherschutz Chemische und Lebensmitteluntersuchungen 40822 Mettmann Düsseldorfer Str. 26	052319	16/12/2009	SAL- Wiesbaden	EUPT 2010: FV 12
DE	Stadt Bonn Chemisches und Lebensmitteluntersuchungsamt 53111 Bonn Engeltalstraße 4	052408	12/08/2008	SAL- Wiesbaden	EUPT 2010: AO 05, C4, FV 12, SRM5
DE	Stadt Leverkusen Chemisches Untersuchungsamt 51379 Leverkusen Düsseldorfer Str. 147	052418	12/08/2008	SAL- Wiesbaden	EUPT 2010: AO 05, C4, FV 12, SRM5
DE	Chemisches und Veterinäruntersuchungsamt Münsterland-Emscher-Lippe CVUA-MEL 48147 Münster Joseph-König-Straße 40	052502	24/04/2009	SAL- Wiesbaden	EUPT 2010: AO 05, C4, FV 12, FV-SM2, SRM5
DE	Landesuntersuchungsamt Institut für Lebensmittelchemie 67346 Speyer Nikolaus-von-Weis-Str. 1	072107	05/01/2009	SAL- Wiesbaden	EUPT 2010: C4, FV 12, SRM5

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
DE	Landesamt für Soziales, Gesundheit und Verbraucherschutz Abt. G (Lebensmittelchemie) 66115 Saarbrücken Hochstrasse 67	101101	23/04/2009	SAL-Wiesbaden	EUPT 2010: AO 05, FV 12
DE	Landesuntersuchungsanstalt für das Gesundheits- und Veterinärwesen Sachsen Standort Dresden 01099 Dresden Jägerstraße 8/10	142262	02/12/2008	SAL-Wiesbaden	EUPT 2010: AO 05, C4, FV 12, FV-SM2
DE	Landesamt für Verbraucherschutz Sachsen-Anhalt Fachbereich 3 06112 Halle Freiimfelder Str. 68	152200	29/08/2008	AKS-Hannover	EUPT 2010: AO 05, FV-12, C-4, SRM-5
DE	Landeslabor Schleswig-Holstein (Lebensmittel-, Veterinär- und Umweltuntersuchungsamt) Postfach 2743 24537 Neumünster Max-Eyth-Str. 5	012001	19/01/2010	AKS-Hannover	EUPT 2010: AO 05, FV12, SRM-5
DE	Thüringer Landesamt für Lebensmittelsicherheit und Verbraucherschutz Standort Bad Langensalza 99947 Bad Langensalza Tennstedter Str. 8/9	162104	12/08/1008	SAL-Wiesbaden	EUPT 2010: FV12

## 32. Greece

### 32.1. Objective and design of the national control programme

National control programme of 2010 for pesticide residues (monitoring) as part of the Multi Annual Control Programme of 2010-2012 has been established according to terms and conditions of Articles 26-35 of Regulation (EC) No 396/2005 of the European Parliament and the Council, of 23.02.2005 on Maximum Residue Levels of pesticides in or on food and feed of plant and animal origin and amending Council Directive 91/414/EEC.

The monitoring programme was designed and coordinated by the Ministry of Rural Development and Food (Directorate of Plant Produce Protection). The programme was based on several risk analysis criteria and parameters: number of samples (domestic and imported) for each product, agricultural produce, cultivation area per culture, expected imports, results from previous years' monitoring programmes, dietary intake contribution of each product, sampling location, community control programme, pesticides used in practice by the farmers, relevant RASFF notifications for pesticide residues, personnel and analytical capacity of the official laboratories. It aims at ensuring compliance with maximum levels and assessing consumer exposure in order to achieve a high level of protection and application of good agricultural practice in all stages of production and harvest of agricultural products.

The responsibilities of the laboratories involved, regarding the number of samples of each commodity that should be analysed and the areas of sampling were well defined. The responsible for the EU coordinated program laboratories were clearly stated. The sampling was carried out by the responsible for sampling regional and local authorities.

Sampling strategy was based on “from the farm to the fork” rationale, taking into account the specificities of each region of the country. The sampling methods, necessary for carrying out such controls of pesticide residues, were those provided for in JMD 91972/2003 (Directive 2002/63/EC). Samples were taken by domestic production and imports, proportionally, covering points of collection, storage, packing and trade of products of plant origin.

The official laboratories, analysing samples for pesticide residues are accredited and participate in the Community Proficiency Tests. The methods of analysis used by the laboratories comply with the criteria set out in relevant EU law provisions and other adopted technical guidelines.

In a case of an MRL exceedance, before any administrative and punitive enforcement action is taken, a default analytical uncertainty of 50% is subtracted from the measured value. If this figure still exceeds the MRL, enforcement action relevant to the case is taken.

32.2. **Key findings, interpretation of the results and comparability with the previous year results**

**Surveillance**

Category	Total number of samples		Number of samples without detectable residues		Number of samples with residues at or below EU MRL or for which no MRL is set		Number of Samples with residues exceeding EU-MRL	
Fruits and Vegetables	2086		1503		506		77	
Cereals	22		16		5		1	
Plant Origin Processed products	225		208		17		-	
Baby Food	17		17		0		0	
Food of Animal origin	15		15		0		0	
Feed	15		15		0		-	
<b>Total</b>	Year 2009: 2186	<b>2380</b>	Year 2009: 1716	<b>1774</b>	Year 2009: 413	<b>528</b>	Year 2009: 57	<b>78</b>

**Follow up**

Category	Total number of samples		Number of samples without detectable residues		Number of samples with residues at or below EU MRL or for which no MRL is set		Number of Samples with residues exceeding EU-MRL	
Fruits and Vegetables	158		64		75		19	
Cereals	0		0		0		-	
Plant Origin Processed products	4		1		3		-	
Baby Food	0		0		0		0	
Food of Animal origin	0		0		0		0	
Feed	2		1		1		-	
<b>Total</b>	Year 2009: 100	<b>164</b>	Year 2009: 33	<b>66</b>	Year 2009: 53	<b>79</b>	Year 2009: 14	<b>19</b>

### 32.3. Non-compliant samples: possible reasons and actions taken

In 2010, from the 2380 samples analysed, 78 samples (3.27%) were exceeding the EU MRLs and 42 were non compliant (1.76%). In 2009, 57 samples out of 2186 (2.6%) were exceeding the EU MRLs.

Analytical information about the samples and the actions taken regarding non compliant samples and unauthorised uses (for compliant and non compliant samples) are given at the tables below (Tables 1 and 2).

A separate table (Table 3) provides information on RASFF notifications.

**Table 1:** Non Compliant Samples (surveillance) for which administrative actions were taken.

LabSampCode	Product	Residue	Reason for MRL non compliance	Note	
1	GR-002-10-029	Lettuce	chlorpyrifos	GAP not respected: use of pesticide non-authorised on the specific crop	Only the granular formulation allowed
2	GR-001-10-210	Wheat	chlorpyrifos	GAP not respected: use of pesticide non-authorised on the specific crop	Biological cultivation
3	GR-002-10-047	Beans (dry)	clofentezin	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	Import from Jordan
4	GR-002-10-049	Peppers	acephate	Reason unkown	Import from Jordan
			carbendazim	Reason unkown	
			methamidophos	Reason unkown	
5	GR-003-10-09	Apples	phosalone	GAP not respected: use of non-authorised pesticide on all crops	
6	GR-002-10-052	Beans (with pods)	acetamiprid	Reason unkown	Import from Turkey
7	GR-001-10-058	Lettuce	chlorothalonil	GAP not respected: use of pesticide non-authorised on the specific crop	
			chlorpyrifos	GAP not respected: use of pesticide non-authorised on the specific crop	
8	GR-009-10-005	Spinach	chlorothalonil	GAP not respected: use of pesticide non-authorised on the specific crop	
9	GR-009-10-007	Spinach	chlorothalonil	GAP not respected: use of pesticide non-authorised on the specific crop	
10	GR-001-10-332	Lettuce	chlorpyrifos	GAP not respected: use of pesticide non-authorised on the specific crop	
11	GR-002-10-145	Apricots	dimethoate	GAP not respected: use of pesticide non-authorised on the specific crop	
			phosmet	GAP not respected: use of pesticide non-authorised on the specific crop	

LabSampCode	Product	Residue	Reason for MRL non compliance	Note	
12	GR-005-10-042	Cherries	dimethoate	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
13	GR-005-10-036	Cucumber	fosthiazate	GAP not respected: use of pesticide non-authorised on the specific crop	
14	GR-001-10-542	Cucumber	chlorpyrifos	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
15	GR-001-10-377	Peaches	imazalil	Reason unknown	Import from Israel
16	GR-001-10-605	Lemons	penconazole	Reason unknown	Import from Argentina
17	GR-001-10-247	Tomatoes	chlormequat	GAP not respected: use of pesticide non-authorised on the specific crop	
18	GR-001-10-249	Tomatoes	chlormequat	GAP not respected: use of pesticide non-authorised on the specific crop	
19	GR-002-10-324	Potatoes	bifenthrin	GAP not respected: use of pesticide non-authorised on the specific crop	
20	GR-003-10-273	Table grapes	chlorpyrifos	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	Administrative consequences in progress
21	GR-009-10-044	Spinach	chlorothalonil	GAP not respected: use of pesticide non-authorised on the specific crop	
22	GR-003-10-285	Lettuce	chlorpyrifos	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	Administrative consequences in progress
23	GR-003-10-315	Lettuce	chlorpyrifos	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	Administrative consequences in progress
24	GR-009-10-056	Spinach	chlorpyrifos	GAP not respected: use of pesticide non-authorised on the specific crop	
25	GR-005-10-114	Cucumber	dimethoate	Reason unknown	Import from FYROM.
26	GR-007-10-186	Spinach	dimethoate	GAP not respected: use of pesticide non-authorised on the specific crop	
			omethoate	GAP not respected: use of non-authorised pesticide on all crops	
27	GR-001-10-710	Tea (Coriander)	chlorbromuron	Reason unknown	Import from Thailand. Administrative consequences in progress

LabSampCode	Product	Residue	Reason for MRL non compliance	Note	
28	GR-001-10-154	Peppers	carbendazim	Reason unknown	Import from Syria. Administrative consequences in progress
29	GR-001-10-177	Vine leaves (grape leaves)	azoxystrobin	Reason unknown	Import from Turkey. Administrative consequences in progress
			boscalid	Reason unknown	
			flufenoxuron	Reason unknown	
			kresoxim methyl	Reason unknown	
			trifloxystrobin	Reason unknown	
			fenvalerate & esfenvalerate	Reason unknown	
30	GR-001-10-263	Vine leaves (grape leaves)	acetamiprid	Reason unknown	Import from Turkey. Administrative consequences in progress
			azoxystrobin	Reason unknown	
			boscalid	Reason unknown	
			carbaryl	Reason unknown	
			chlorpyrifos	Reason unknown	
31	GR-001-10-327	Apples	thiacloprid	Reason unknown	Import from Chile. Administrative consequences in progress
32	GR-001-10-397	Apples	dimethoate	GAP not respected: use of pesticide non-authorized on the specific crop	Administrative consequences in progress
33	GR-001-10-413	Vine leaves (grape leaves)	azoxystrobin	Reason unknown	Import from Turkey. Administrative consequences in progress
34	GR-001-10-551	Vine leaves (grape leaves)	azoxystrobin	Reason unknown	Import from Turkey. Administrative consequences in progress
			boscalid	Reason unknown	
			hexaconazole	Reason unknown	
			methoxyfenozide	Reason unknown	
			propargite	Reason unknown	
35	GR-001-10-604	Vine leaves (grape leaves)	azoxystrobin	Reason unknown	Import from Turkey. Administrative consequences in progress
			boscalid	Reason unknown	
36	GR-001-10-641	Peppers	fenvalerate & esfenvalerate	Reason unknown	Import from Hungary. Administrative consequences in progress
37	GR-001-10-899	Vine	azoxystrobin	Reason unknown	Import from



LabSampCode	Product	Residue	Reason for MRL non compliance	Note	
	leaves (grape leaves)	boscalid	Reason unknown	Turkey. Administrative consequences in progress	
		chlorpyrifos	Reason unknown		
38	GR-001-10-900	Vine leaves (grape leaves)	hexaconazole	Reason unknown	Import from Turkey. Administrative consequences in progress
39	GR-001-10-901	Vine leaves (grape leaves)	boscalid	Reason unknown	Import from Turkey. Administrative consequences in progress
			kresoxym methyl	Reason unknown	
40	GR-002-10-085	Melons	acetamiprid	Reason unknown	Import from Turkey. Administrative consequences in progress
41	GR-003-10-096	Apricots	phosmet	GAP not respected: use of	

**Table 2:** Not authorised uses for which administrative actions were taken.

labSampCode	Product	Residue	Reason of non- authorised pesticide	Note
1	GR-002-10-039	Spinach	chlorpyrifos	GAP not respected: use of pesticide non- authorised on the specific crop
2	GR-007-10-11	Olive oil	endosulfan	GAP not respected: use of pesticide non- authorised on the specific crop
3	GR-001-10-058	Lettuce	imidacloprid	GAP not respected: use of pesticide non- authorised on the specific crop
4	GR-002-10-070	Kiwi	tebuconazole	GAP not respected: use of pesticide non- authorised on the specific crop
			trifloxystrobin	GAP not respected: use of pesticide non- authorised on the specific crop

labSampCode	Product	Residue	Reason of non- authorised pesticide	Note	
5	GR-002-10-071	Kiwi	chlorpyrifos	GAP not respected: use of pesticide non-authorised on the specific crop	
6	GR-001-10-063	Apples	imazalil	GAP not respected: use of pesticide non-authorised on the specific crop	
7	GR-001-10-200	Tomatoes	dimethomorph	GAP not respected: use of pesticide non-authorised on the specific crop	
			tebufenpyrad		
8	GR-001-10-383	Origanum	pirimiphos methyl	GAP not respected: use of pesticide non-authorised on the specific crop	
9	GR-002-10-095	Strawberries	penconazole	GAP not respected: use of pesticide non-authorised on the specific crop	
10	GR-003-10-096	Cucumbers	fenhexamid	GAP not respected: use of pesticide non-authorised on the specific crop	
11	GR-002-10-111	Strawberries	triadimenol	GAP not respected: use of pesticide non-authorised on the specific crop	
12	GR-002-10-112	Strawberries	triadimenol	GAP not respected: use of pesticide non-authorised on the specific crop	
13	GR-001-10-204	Pears	chlormequat	GAP not respected: use of pesticide non-authorised on the specific crop	
14	GR-001-10-109	Strawberries	kresoxim methyl	GAP not respected: use of pesticide non-	

labSampCode	Product	Residue	Reason of non- authorised pesticide	Note	
		penconazole			
15	GR-002-10-099	Strawberries	penconazole	GAP not respected: use of pesticide non-authorised on the specific crop	
16	GR-002-10-107	Lettuce	bifenthrin	GAP not respected: use of pesticide non-authorised on the specific crop	
17	GR-002-10-116	Cherries	omethoate	GAP not respected: use of pesticide non-authorised on the specific crop	In this case no fine was imposed. The producer complied.
18	GR-002-10-114	Cherries	bifenthrin	GAP not respected: use of pesticide non-authorised on the specific crop	In this case no fine. The producer complied.
			tebuconazole		
19	GR-002-10-087	Kiwi	chlorpyrifos	GAP not respected: use of pesticide non-authorised on the specific crop	
20	GR-002-10-098	Strawberries	triadimenol	GAP not respected: use of pesticide non-authorised on the specific crop	
21	GR-002-10-115	Cherries	tebuconazole	GAP not respected: use of pesticide non-authorised on the specific crop	
22	GR-003-10-096	Apricots	chlorpyrifos	GAP not respected: use of pesticide non-authorised on the specific crop	
23	GR-002-10-165	Beans (with pods)	indoxacarb	GAP not respected: use of pesticide non-authorised on the specific crop	
24	GR-001-10-398	Lettuce	metalaxyl	GAP not respected: use of pesticide non-authorised on the specific crop	

labSampCode	Product	Residue	Reason of non- authorised pesticide	Note	
25	GR-001-10-354	Lettuce	λ-cyhalothrin	GAP not respected: use of pesticide non- authorised on the specific crop	In this case no fine was imposed. The producer complied.
26	GR-001-10-544	Peppers	metalaxyl	GAP not respected: use of pesticide non- authorised on the specific crop	
27	GR-001-10-496	Cherries	pyrimethanil	GAP not respected: use of pesticide non- authorised on the specific crop	
28	GR-002-10-180	Strawberries	triadimenol	GAP not respected: use of pesticide non- authorised on the specific crop	
29	GR-002-10-241	Peppers	metalaxyl	GAP not respected: use of pesticide non- authorised on the specific crop	
30	GR-002-10-210	Kiwi	azoxystrobin	GAP not respected: use of pesticide non- authorised on the specific crop	
31	GR-002-10-207	Plums	bifenthrin	GAP not respected: use of pesticide non- authorised on the specific crop	
			cyfluthrin		
			tebuconazole		
32	GR-002-10-179	Strawberries	triadimenol	GAP not respected: use of pesticide non- authorised on the specific crop	
33	GR-002-10-333	Tomatoes	terbuthylazine	GAP not respected: use of pesticide non- authorised on the specific crop	
			tebufenpyrad		
34	GR-001-10-639	Eggplants	imidacloprid	GAP not respected: use of pesticide non- authorised on the specific crop	
			metalaxyl		
			spiroxamine		
			pendimethalin		

labSampCode	Product	Residue	Reason of non- authorised pesticide	Note	
35	GR-002-10-113	Strawberries	triadimenol	GAP not respected: use of pesticide non-authorised on the specific crop	
36	GR-002-10-142	Strawberries	triadimenol	GAP not respected: use of pesticide non-authorised on the specific crop	
37	GR-001-10-503	Tomatoes	tebuconazole	GAP not respected: use of pesticide non-authorised on the specific crop	In this case no fine was imposed. The producer complied.
38	GR-002-10-178	Strawberries	triadimenol	GAP not respected: use of pesticide non-authorised on the specific crop	Administrative consequences in progress
39	GR-007-10-075	Cherries	Dimethoate/omethoate	Authorization on cherries was revoked since 17-5-2010	
40	GR-007-10-076	Cherries	Dimethoate/omethoate	Authorization on cherries was revoked since 17-5-2010	In this case no fine was imposed. The producer complied
41	GR-001-10-112	Strawberries	metalaxy	GAP not respected: use of pesticide non-authorised on the specific crop	
			thiacloprid		
42	GR-002-10-367	Kiwi	chlorothalonil	GAP not respected: use of pesticide non-authorised on the specific crop	
			metalaxyl		
43	GR-009-10-044	Spinach	chlorothalonil	GAP not respected: use of pesticide non-authorised on the specific crop	
44	GR-002-10-358	Kiwi	imidacloprid	GAP not respected: use of pesticide non-authorised on the specific crop	
45	GR-001-10-729	Lettuce	$\lambda$ -cyhalothrin	GAP not respected: use of pesticide non-authorised on the specific crop	

labSampCode	Product	Residue	Reason of non- authorised pesticide	Note	
46	GR-001-10-732	Lettuce	pyriproxifen	GAP not respected: use of pesticide non-authorised on the specific crop	
47	GR-005-10-196	Kiwi	chlorpyrifos	GAP not respected: use of pesticide non-authorised on the specific crop	
			azoxystrobin		
48	GR-009-10-055	Spinach	cypermethrin	GAP not respected: use of pesticide non-authorised on the specific crop	
49	GR-009-10-064	Spinach	chlorothalonil	GAP not respected: use of pesticide non-authorised on the specific crop	
50	GR-001-10-768	Lettuce	metalaxyl	GAP not respected: use of pesticide non-authorised on the specific crop	
51	GR-009-10-068	Spinach	chlorpyrifos	GAP not respected: use of pesticide non-authorised on the specific crop	
52	GR-002-10-281	Grape	cyfluthrin	GAP not respected: use of pesticide non-authorised on the specific crop	
53	GR-002-10-397	Kiwi	boscalid	GAP not respected: use of pesticide non-authorised on the specific crop	
			pyraclostrobin	GAP not respected: use of pesticide non-authorised on the specific crop	
54	GR-007-10-086	Spinach	cypermethrin	GAP not respected: use of pesticide non-authorised on the specific crop	

labSampCode	Product	Residue	Reason of non- authorised pesticide	Note
55	GR-001-10-617	Grape	carbendazim	GAP not respected: use of non- authorised pesticide on all crops
56	GR-002-10-400	Pears	tebuconazole	GAP not respected: use of pesticide non- authorised on the specific crop

**Table 3.** RASFF notifications

Sample codes and actions taken

Destruction: GR-001-10-328 imported , GR-001-10-154 imported, GR-001-10-263 imported, GR-001-10-118 imported, GR-001-10-51 imported, GR-003-10-273 domestic, GR-002-10-45 imported

Re-dispatch-destruction: GR-002-10-49 imported

Re-inforced checking: GR-005-10-36 domestic

Recall from consumers: GR-005-10-114 imported

Withdrawal from the marketing: GR-007-10-186 domestic

32.4. **Quality assurance**

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
GR	Benaki Phytopathological Institute, Laboratory of Pesticide Residues	GR-001	09-07-2002	ESYD S.A. (Hellenic Accreditation System S.A.)	<b>2010:</b> EUPT-FV12, EUPT-FV-SM02, EUPT-C4, EUPT-AO5, EUPT-SRM5, OIV-CII-SMCA 2010-03-32 (Organisation International of Vine & wine)
GR	Regional Center of Plant Protection and quality control of <b>Thessaloniki</b> , Laboratory of pesticide residues	GR-002	08-09-2009	ESYD S.A. (Hellenic Accreditation System S.A.)	EUPT-FV12
GR	Regional Center of Plant Protection and quality control of <b>Kavala</b> Laboratory of Pesticide residues	GR-003	08-09-2009	ESYD S.A. (Hellenic Accreditation System S.A.)	EUPT-FV12

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
GR	Regional Center of Plant Protection and quality control of <b>Ioannina</b> Laboratory of pesticide residues	GR-004	08-09-2009	ESYD S.A. (Hellenic Accreditation System S.A.)	EUPT-FV12, EUPT-C4
GR	Regional Center of Plant Protection and quality control of <b>Magnesia</b> Laboratory of pesticide residues	GR-005	08-09-2009	ESYD S.A. (Hellenic Accreditation System S.A.)	EUPT-FV12
GR	Regional Centre of Plant Protection and Quality Control of <b>Achaia</b> Laboratory of pesticide residues	GR-006	23-10-2009	ESYD S.A. (Hellenic Accreditation System S.A.)	EUPT-SRM5
GR	Regional Centre of Plant Protection and Quality Control of <b>Pireaus</b> Laboratory of Pesticide Residues Analysis	GR-007	23-10-2009	ESYD S.A. (Hellenic Accreditation System S.A.)	EUPT-FV12, EUPT C5, COIPT 11
GR	Regional Center of Plant Protection and Quality Control of <b>Iraklion</b> Laboratory of pesticide residues	GR-008	08-9-2009	ESYD S.A. (Hellenic Accreditation System S.A.)	EUPT-FV-12, EUPT-SRM5, COIPT10
GR	Regional Center of Plant Protection and Quality Control of <b>Argolida</b> Laboratory of pesticide residues	GR-009	23-10-2009	ESYD S.A. (Hellenic Accreditation System S.A.)	EUPT-FV12



### 33. Hungary

#### 33.1. Summary of results

In 2010, the programme for controlling the residues was made in the 6 pesticide residue analytical laboratories.

In 2010, **3048** samples were analysed -in the frame of the official sampling programme – for a higher number of analytes (371 pesticides and metabolites).

Among them, there were **1381** domestic and **1256** introduced fresh vegetable, fruit and cereal samples, 189 fruits and vegetables domestic samples for export, **129** processed food of plant origin and **93** baby food and drink.

Out of the tested **2637** samples (fruits and vegetables, taken at market place, place of production) **44.7 %** did not contain pesticide residues above the level of detection. Altogether **1.2 %** of the samples were objected because of pesticide residues detected above the MRL.

All of these exceedances in the fruit and vegetable category with the greatest proportion in the cucumbers, peppers, table grapes and strawberries surveys.

The percentage of samples containing pesticide residues over the level of detection was **30.2 %** of the **129** samples of processed food of plant origin, and **5** baby food and drink samples out of the **93** samples showed residue levels above MRLs.

The most frequently found pesticides in 2010 as % of fruit and vegetable samples sought were: dithiocarbamates, chlorpyrifos, azoxystrobin, imazalil, fenhexamid, captan.

The most frequently found pesticides in cereal samples were pirimiphos – methyl, deltamethrin and chlorpyrifos-methyl.

#### 33.2. Organisation of Monitoring programmes and Sampling

##### 33.2.1. Responsibilities

*Central Agricultural Office Directorate of Plant Protection, Soil Conservation and Agri-environment (CAO DPPSCA)* is responsible for coordination of testing pesticide residues in unprocessed agriculture commodities, and processed food of plant origin; heavy metals and organic contaminants in soil and raw agriculture food commodities, quality control of agrochemicals, as well as for the diagnosis of pests and control of pest management technologies during production.

Raw agriculture food and feed commodities of plant origin: coordinating institute is *CAO DPPSCA* supervising 6 regional laboratories.

##### 33.2.2. Design of Programmes

The annual monitoring programme is based on risk assessment. The programme covers all important commodities of fruit and vegetables, cereals, selected processed products of plant origin, and baby-food products. In addition, some other crops of concern are also included. The sampling frequency of different commodities is determined taking in to consideration the production and food consumption figures as well as the results of previous monitoring programmes. The coordinated programme of the European Commission was included in the national programme.

The sampling plans prepared by the responsible directorates are harmonised and approved at CAO level.

##### 33.2.3. Sampling

Sampling is carried out in accordance with 66/2010 order issued by MARD based on order 2002/63/EC for pesticide residues.

The programme for official sampling made by the analytical network covered mostly the produces representing the main consumption habits, but other crops were also included.

*Sampling points:* Border Station Offices, wholesales, markets, places of production.

*Personal:* border and plant protection inspectors within the country.

### 33.3. Quality assurance

#### 33.3.1. Status of accreditation of laboratories:

All 6 laboratories analysing pesticide residues in commodities of plant origin have GLP accreditation. Three of them also accredited according to MSZ EN ISO 17025. The laboratory testing animal products has MSZ EN ISO 17025 accreditation. They have detailed quality assurance programme which complies with the DG SANCO Guidelines for 'Method Validation and Quality Control Procedures for Pesticide Residues Analysis in Food and Feed' and the requirements of joint decree 31/1999 (VIII.6.) MH -MARD and 9/2001 (III.30.) MH- MARD.

The laboratories are able to carry out a quick screening examination giving information on presence of a great number of pesticides. They have facilities for selective and confirmatory determinations, too. For analysis of the most components they use the QuEChERS-method, which is European and Hungarian standard method: MSZ EN 15662:2009.

#### 33.3.2. International proficiency tests

In 2010, the laboratories participated in the European Proficiency tests which were organised by the CRLs for fruit, vegetables and cereal. The Hungarian Analytical Laboratories obtained very good results (A).

#### 33.3.3. Analytical uncertainty

The laboratories established their own values for measurement uncertainty, but applied the larger default value of 50% (ref. SANCO/10684/2009) in the decision making process.

#### 33.3.4. Other Information

Hungary did not carry out the homogeneity exercise in 2010.

Details of risk assessment: are carried out by Hungarian Food Safety Office (HFSO) in cooperation with CAO DPPSCA. MARD – Ministry of Agriculture and Rural Development MH - Ministry of Health

## 34. Iceland

### 34.1. Objective and design of the national control programme

Vegetables are imported in large quantities to Iceland and only imported fruits can be found in stores, except for strawberries during the summer. Vegetables are grown in greenhouses and with the use of electrical illumination this allows fresh domestically grown vegetables through largest part of the year. The market for organic products is growing but not large. Organic fruits and vegetables are imported mostly by specialty stores.

A multi-annual sampling plan is revised every year. An emphasis is laid on the products consumed on daily basis by many and a random sampling regime. It is based on information on import volumes and domestic production and the co-ordinated EU programme in Regulation (EC) no. 901/2009 was also taken into consideration. Experience of residues found in prior samples is also taken into account. One quarter of the samples are of domestic produce, one quarter of samples are imported from third countries and the rest are from EC countries.

The Environmental and Public Health office in Reykjavik collected the samples and is responsible for enforcement action when necessary. Samples were collected according to national regulation no. 736/2003 on sampling methods for contaminants in foodstuffs, which is based on EC directives. Samples were taken at wholesaler's warehouses in Reykjavik and occasionally at retailer's.

A limited number of pesticides are included in the monitoring program. Laboratory capacity is the deciding factor but since 2008 the number of pesticides has risen from 44 to 61 pesticide residues. Laboratory capacity is also a deciding factor in why only samples were taken of fruits and vegetables. No samples were included of animal origin, nuts or grains. High costs with increased Laboratory capacity and also high costs and logistics of shipping samples overseas for another laboratory are the main limiting factors when it comes to increasing the number of residues and fulfilling the EU co-ordinated programme.

### 34.2. Key findings, interpretation of the results and comparability with the previous year results

A total of **275** samples of fruits and vegetables were taken and analysed for pesticide residues in Iceland. 2 samples were to follow-up on a non compliant sample.

In 33% of the samples one or more residues analysed for were detected. Seven samples had 3 different pesticide residues and two samples had 4 residues. Three samples had residues that measured above MRL and one sample was considered a true non-compliant after measurement uncertainty were taken into consideration. No exceedences are to report for samples from the EU coordinated program.

The residues most often detected were: Imazalil in 45 samples (16%), Thiabendazole in 23 samples (8%), Chlorothalonil in 15 samples (6%), Chlorpyrifos in 13 samples (5%), and Cyprodinil in 11 samples (4%).

When it comes to organic products nine samples were taken at retailer's level, 3 domestic and 6 imported. More samples might have been taken of organic product but could not be distinguished from other samples in the data. The residues analysed for, were not found in any of the organically grown samples.

### 34.3. Non-compliant samples: possible reasons and actions taken

In 2010 three samples were found to have residues above the EU MRL. After measurement uncertainty was taken into consideration, only one was non-compliant with the EU MRL. Warnings were issued for all three. The next two shipments from the non-compliant producer were held in customs until laboratory sent results showing compliance.

We were not able to determine the reason for non-compliance as the product was imported from third country.

Number of non-compliant samples	Action taken	Note
1	Warnings and administrative sanctions	

Product	Residue	Reason for MRL non compliance	Note
Mangoes	Ethion	Other (please specify in the "Note" column)	Imported from BR. Next 2 shipments were free from Ethion

#### 34.4. Quality assurance

The laboratory Matis ohf. is accredited since May 2007 by SWEDAC on behalf of ISAC - Iceland according to ISO/IEC 17025/2005. The method used is extraction with organic solvents followed by GC-MS analysis. Matis ohf. applies Quality Control procedures in line with the provisions of "Method validation and Quality Control Procedures for Pesticides Residues Analysis in Food and Feed"

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
IS	Matis ohf.	MATIS	01/05/2007	SWEDAC - Sweden	PT2010: FV12 SRM5

#### 34.5. Additional Information

## 35. Ireland

### 35.1. Objective and design of the national control programme

The 2010 Irish national monitoring programme for pesticide residues in food was carried out by the Pesticide Registration and Control Division of the Department of Agriculture, Fisheries and Food, with the co-operation of the Pesticide Control Laboratory and under the terms of a service contract with the Food Safety Authority of Ireland. The programme was designed to monitor different food groups for which MRLs have been established: fruit and vegetables, cereals and food of animal origin. It involved sampling of produce at distribution outlets, collection, storage, processing or slaughter premises and the analysis of those samples for the presence of pesticide residues at the Pesticide Control Laboratory.

The monitoring programme for 2010 took into consideration:

- the co-ordinated programme required by the European Commission<sup>10</sup>,
- dietary intake patterns of Irish consumers<sup>11</sup> (adult and children),
- the residue profile of commodities as established from the results of the monitoring programme in previous years,
- monitoring results from other Member States
- handling/processing of food prior to consumption.
- the capacity of the laboratory.

The planned number of monitoring samples (1,200) for the 2010 monitoring programme was agreed with the Food Safety Authority of Ireland (FSAI). The planned number of samples for food of animal origin (355) was decided in conjunction with the Veterinary Medicine Unit of the Department of Agriculture, Fisheries and Food (DAFF), as part of the National Residue Plan required under Directive 96/23/EC.

Table 1 provides a detailed breakdown of the number of samples for each of the crop commodity groups which were planned and achieved. A total of 1,315 monitoring samples were taken in 2010. While the planned number of samples was not always achieved for each commodity (some samples were included under ‘processed products’), the overall planned number of samples for the major food groupings of ‘fruit and vegetables’, ‘cereals’ and ‘food of animal origin’ was exceeded. Some 24 samples were taken from consignments labelled as ‘organically produced’. All other consignments sampled were considered to be produced by ‘conventional cultural methods’. In addition, following the validation and extension of the analytical methods to baby food in 2010, 12 samples of baby food, which were not contained in the programme, were analysed.

As follow up to non-compliant samples in 2009, 10 enforcement samples were identified and analysed in 2010.

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<sup>10</sup> Commission Regulation of 29<sup>th</sup> of September 2009, concerning a coordinated multiannual Community control programme for 2010, 2011 and 2012, Commission Regulation (EC) No 901/2009 OJ No L 256/14.

<sup>11</sup> IUNA, Irish Universities Nutrition Alliance. North South Food Consumption Database, 2001 and National Children’s Food Survey 2005.

**Table 1: Number of samples planned and achieved in the 2010 monitoring programme**

<b>Commodity</b>	<b>Planned</b>	<b>Achieved</b>
Citrus fruits	125	124
Pome fruits	130	125
Stone fruits	50	46
Berries and small fruits	50	49
Miscellaneous fruits	70	67
Root/ tuber vegetables	30	36
Potatoes	45	44
Bulb vegetables	5	5
Fruiting vegetables	50	53
Brassica vegetables	20	26
Leafy vegetables	60	55
Legume vegetables	15	16
Stem vegetables	20	27
Fungi	20	16
Oilseeds/Spice	5	0
Processed food (various fruit and vegetables)	60	75
Food of animal origin	355	419
Cereals	70	108
Enforcement samples	15	10
Complaint	5	2
Baby food	0	12
Total	1200	1315

### 35.2. Key findings, interpretation of the results and comparability with the previous year results

Table 2 give the breakdown of the origin and the residue profiles for the fruit and vegetables, cereal, food of animal origin (FAO), baby food and the enforcement samples. Over half of the 1315 samples taken in 2010 were of domestic origin. Nearly 60% of the samples had no detectable residues, 38% with residues at or below the MRL and 2.2% above the MRL.

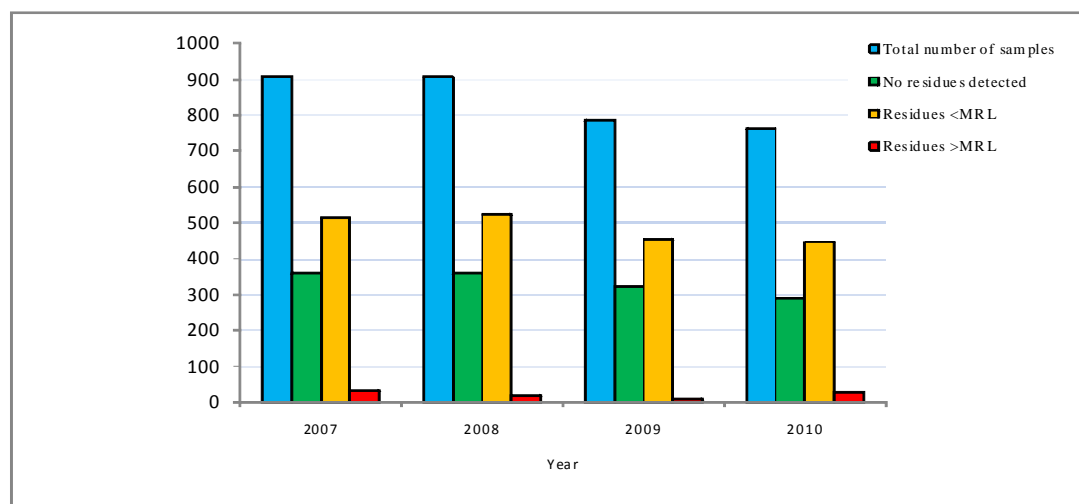
Six samples with MRL breaches were of domestic origin, four were from other EU countries and the remaining 19 samples originated from non-EU countries. Twenty five (86%) of the 29 MRL breaches, detected under Regulation (EC) No 396/2005, related to pesticides where the MRL has been set at the Limit of Determination (LOD).

**Table 2: Summary of number of samples origin of produce (domestic or imported) and residues detected in 2010**

Sampling	Commodity	Sample Number			Residues		
		Total	Domestic	Imported	<LOQ	≤MRL	>MRL
Monitoring	Fruit/veg	764	150	614	290	449	25
	Cereal	108	88	20	81	26	1
	FAO	419	414	5	401	16	2
	Baby food	12	12	0	12	0	0
Enforcement	Fruit/veg	10	6	4	2	7	1
	'Complaint'	2	1	1	0	2	0
<b>Total</b>		<b>1315</b>	<b>670</b>	<b>645</b>	<b>786</b>	<b>500</b>	<b>29</b>
<b>Total%</b>			<b>51.0%</b>	<b>49.0%</b>	<b>59.8%</b>	<b>38.0%</b>	<b>2.2%</b>

### Fruit and Vegetables

Of the 764 fruit and vegetable samples analysed during the monitoring programme in 2010, 290 (38%) contained no detectable pesticide residue, 447 (58.5%) contained one or more detectable residues at or below the MRL and 25 samples (3.3%), including 1 sample of 'organically produced' fruit, contained residues in excess of EU MRLs. Despite the increase in the number of pesticides sought in the analytical scope since 2007, the percentage of samples with detectable residues remained consistent at around 60%. The number of MRL breaches for fruit and vegetables ranged from 3.6% in 2007, 2.2% in 2008, 1.3% in 2009 and 3.3% in 2010 (Figure 1).



**Figure 1:** Number of fruit and vegetable samples analysed (2007 to 2010), number with no residues detected (less than the LOQ), below MRL (<MRL), above MRL (>MRL).

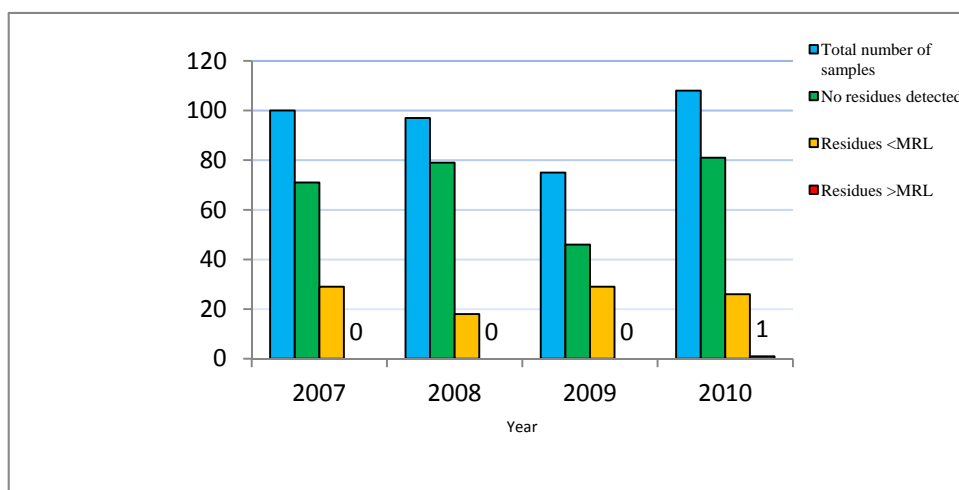
Two samples of strawberries of domestic origin and one sample of oranges from South Africa contained residues of ten pesticides, the highest number of pesticides detected in a single sample.

Imazalil was the most frequently detected pesticide, detected in 18.4% of fruit and vegetable samples analysed, followed by thiabendazole at 13.2%. Both pesticides were mainly detected in citrus and pome fruits. Chlorpyrifos, the third most frequently detected pesticide, was found on citrus, pome fruits and grapes. Boscalid, which was added to the analytical scope in 2007, was the fourth most commonly detected pesticide in 2010 and detected mainly in apples, lettuce, strawberries and table grapes.

The 764 fruit and vegetable commodities sampled in 2010 comprised of 150 (19.6%) of domestic origin, 309 (40.4%) imported from other EU countries, 258 (33.8%) imported from countries outside of the EU and a further 47 (6.2%) of unknown origin. Most of the samples of unknown origin were processed products.

### Cereals

Some 25% of the 108 cereal samples contained pesticide residues in 2010, a frequency similar to that found in 2007 (29%) and 2008 (23%) but lower than the level detected in 2009 (39%). One sample of imported cereal exceeded the MRL (Figure 2).



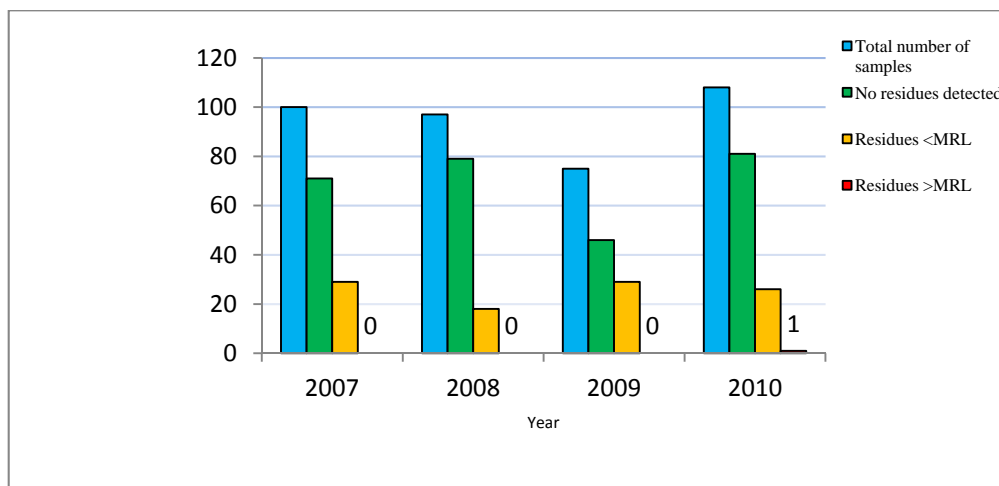
**Figure 2:** Number of cereal samples analysed (2007 to 2010), number with no residues detected (less than the LOQ), below MRL (<MRL), above MRL (>MRL).

Most (81%) of the cereal samples were of domestic origin and pirimiphos methyl was the most commonly detected pesticide in the 34 wheat samples analysed (47%) with results ranging from 0.02 mg kg<sup>-1</sup> to 0.21 mg kg<sup>-1</sup>.

### Food of animal origin

Some 18 (4.2%) samples of the 419 food of animal origin samples contained detectable residues in 2010. All of the residues were detected in kidney fat samples, due mainly to the presence of diazinon and DDT. Diazinon has replaced DDT as the most frequently detected pesticide in animal fat samples during 2010. Diazinon is the result of the approved use of veterinary products for ectoparasite control in sheep. One of the two ovine samples, containing diazinon residues above the MRL established in Regulation (EC) No 396/2005, was in compliance with Commission Regulation (EU) No 37/2010. The presence of DDT as metabolites and HCB are likely to have arisen from intake of trace levels in animal feed or from the ingestion of contaminated soil, as a consequence of former use. Figure 3 below provides a summary of the numbers of samples taken from 2007 to 2010, containing no residues, residues below the MRL and residues above the MRL.





**Figure 3:** Number of food of animal origin samples (kidney fat samples only) analysed (2007 - 2010), number with no residues detected (less than the LOQ), below MRL (<MRL), above MRL (>MRL).

No residue was detected in milk, egg, honey or baby food samples.

### Enforcement samples

As follow up to MRL breaches and non-registered uses detected in 2009, a RASFF alert notification and 2 ‘risk based’ (complaint) samples, 10 samples were taken as part of the Enforcement programme. One consignment of apples was targeted for sampling in response to a RASFF alert notification and contained residues of dimethoate and omethoate in excess of the MRL. The remainder of the consignment was removed from the market and destroyed. The remaining 9 targeted samples were in compliance with the pesticide legislation and required no further action.

### 35.3. Non-compliant samples: possible reasons and actions taken

Twenty nine (2.2%) of the 1315 samples taken in 2010 contained residues above the legal limit (MRL) set in Regulation (EC) No 396/2005. One of the samples was in compliance with Commission Regulation (EU) No 37/2010 and was not dealt with as a MRL breach. The majority (25) of the breaches was found in the fruit and vegetable samples, taken as part of the monitoring programme.

The breaches in 2010 were due to several factors, including:

- The majority (86%) of the MRL breaches related to substances where the MRL was set to the LOD,
- Many (15) of the breaches involved produce from outside the EU and related to substances with no EU GAP,
- Four consignments of table grapes from India containing chlormequat following an EU-wide RASFF notification,
- Three breaches involving imazalil in citrus from Peru,
- Six breaches, mainly on citrus, involved malathion, following the reduction of the MRL to the LOD in 2009.

Inspections were carried out on the farms/sites in the case of all 5 non-compliant domestic samples and produce from these domestic growers was placed on the targeted list for 2011.

No action was taken in the case of one sample of ovine kidney fat containing diazinon due to its compliance with the relevant veterinary legislation.

In the case of the 22 non-compliant monitoring samples of imported fruit, vegetables and cereals, warning letters were issued to the Irish FBO (food business operators) where the samples were taken and to the contact points in the country of origin.

One enforcement sample of apples from Chile was non-compliant. The consignment was removed from the market and destroyed because the risk assessment, for the dimethoate and omethoate detected, indicated an unacceptable acute intake for the children due to exceedance of the ARfDs for those substances.

A summary of the follow-up actions taken in case of samples found to be non-compliant with the EC MRL legislation, without taking the measurement uncertainty into consideration, is provided in Table 3.

The possible reasons, if known, for the MRL non-compliances are provided in Table 4.

**Table 3: Summary of MRL breaches and follow-up actions taken**

Number of non-compliant samples	Action taken	Note
5	Inspections carried out and warnings issued to producers. Target sampling for 1 year.	MRL breaches of domestic origin
22	Warnings issued to food business operators (FBOs). Contact point in country of origin informed	MRL breaches of imported samples.
1	Remainder of consignment destroyed.	Follow up to RASFF alert
1	No action taken.	Fat sample in compliance with veterinary legislation

**Table 4: Details of reasons for MRL non-compliances, (if known) in 2010**

Product	Residue	Reason for MRL non compliance	Note
Lettuce	Mepanipyrim	No records of use of ppp on lettuce. Possible explanation is insufficient cleaning of sprayer after use on other crops.	
Onion	Chlorpropham	Contamination from potatoes during handling, storage or transportation of consignment.	
Mushroom	Deltamethrin	Non-registered use of a ppp on mushrooms.	
Turnip	Chlorpyrifos	Pesticide use d according to authorised GAP. Possible explanation is double application on small section of plot.	
Sheep fat x 2	Diazinon	Residues resulting from use of an approved veterinary medicine product. Insufficient withdrawal period prior to slaughter, following 'spot treatment'.	One of the breaches of Reg. 396/2005 legislation was in compliance with the veterinary legislation, Commission Reg. 37/2010.
Carrot	Linuron	Reasons unknown	Imported consignment.
Grapefruit	Dimethoate	Reasons unknown	Imported consignment.
Canned pears	Chlormequat	Reasons unknown	Imported consignment.
Wheat	Bendiocarb	Reasons unknown	Imported consignment.

Product	Residue	Reason for MRL non compliance	Note
Table grapes x 4	Chloromequat	Reasons unknown	Imported consignment.
Passion fruit	Dimethoate	Reasons unknown	Imported consignment.
Passion fruit	Chlorothalonil Cypermethrin Thiophanate me	Reasons unknown	Imported consignment.
Satsuma	Imazalil	Reasons unknown	Imported consignment.
Mandarin	Imazalil	Reasons unknown	Imported consignment.
Clementine	Chlorfenapyr Imazalil	Reasons unknown	Imported consignment.
Clementine	Chlorfenapyr	Reasons unknown	Imported consignment.
Avocado	Permethrin	Reasons unknown	Imported consignment. Consignment labelled as organic.
Orange x 3	Malathion	Reasons unknown	Imported consignment. New MRL set in 2009.
Table grape	Malathion	Reasons unknown	Imported consignment. New MRL set in 2009.
Satsuma	Malathion	Reasons unknown	Imported consignment. New MRL set in 2009.
Mandarin	Malathion	Reasons unknown	Imported consignment. New MRL set in 2009.
Orange	Bromopropylate	Reasons unknown	Imported consignment. New MRL set in 2009.
Apple	Dimethoate	Reasons unknown	Follow up to a RASFF alert.

#### 35.4. Quality assurance

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
IE	Pesticide Control Laboratory	FRT/01/2009	01/01/2009	Irish National Accreditation Board	PT2010: C4, A05, FV12

#### 35.5. Additional Information

According to Regulation (EC) No 901/2009, Ireland was required to carry out a minimum number of selected commodities as part of the EU coordinated programme. Samples of apples (89), head cabbage (16), leek (15), lettuce (38), milk (68), peaches and nectarines (20), oats(22), strawberries(18), swine meat(15), and tomatoes (19) were analysed. A discrepancy was noted in the number of swine meat with none listed in the main EFSA report due to a difference labelling.

## 36. Italy

### 36.1. Objective and design of the national control programme

The national control program are defined by Ministerial Decree 23 December 1992, transposing Directive 90/642/EEC, integrated by the Ministerial Decree 30 July 1993 regarding the programming of official controls for importation from Third Countries.

The National Program Pesticide Residues foresees a detailed programme implementing the checks to be carried out by the Regions and Autonomous Provinces of Trento and Bolzano, with indication of the minimum number and the typology of samples to be analysed. The division of the number of samples to be taken for each Region/Province is calculated according to the data on consumption and production of a given foodstuffs in the Region or autonomous Province concerned. The Decree contains some tables reporting the number of samples to be taken for each Region/Province for the following foodstuffs: vegetables, fruits, cereals, wine, and oils. The plan foresees also priority of a research of residues of plant protection products in vegetable origin foodstuffs.

As regards products of vegetable origin imported from Third Countries, the sampling is performed by Uffici di Sanità Marittima, Aerea e di Frontiera (USMAF) of Ministry of Health, in at least 3% of a lot present at importation with a priority given to fruit and vegetable origin products.

In the national program there isn't reported the types of residues of pesticide that the Laboratories have to search but the Laboratories refer to data of the sale of the pesticide, they refer to rasff notifications, they refer to the data of the proficiency test etc. These choices are done if they are comparable with the capacity of laboratories.

### 36.2. Key findings, interpretation of the results and comparability with the previous year results

Of a total of 8449 (Tab.1 e 2), 2737 samples (32.4%) with residues not exceeding permitted levels were found, while 32 (0.4%) were found with residues exceeding permitted levels; no residues were detected in 5680 samples (67.2%). The percentage of irregular samples is equal to 0.4 % of which 0.4% for fruit and vegetables; 0.3% for cereals; 0.0% for oil and wine, 0.0% for baby food (Infant formulae/follow-on formulae and baby food) 0.5% for other food (bread, pasta, transformed tomatoes, tea, coffee, herbal infusions, and cocoa, sugar plants, spices, oilseeds and oilfruits).

SUMMARY OF DATA - YEAR 2010						
	Fruit and Vegetable	Cereals	Processed products (wine and oil)	all baby food	other food	Total
Nr. Of samples	5.376	583	730	106	1654	8.449
Regular samples	5.355	581	730	106	1645	8.417
Irregular samples	21	2	0	0	9	32
Irregular samples %	0,4	0,3	0,0	0,0	0,5	0,4

Tab. 1

PESTICIDE RESIDUES IN REGULAR SAMPLES						
	Fruit and Vegetable	Cereals	Processed products (wine and oil)	all baby food	other food	Total
Nr. Of samples without residues	3.449	420	406	105	1300	5680
Nr. Of samples without residues %	64,2	72,1	55,6	99,1	78,6	67,2
Nr. Of samples with residues within legal limits	1.906	161	324	1	345	2737
Nr. Of samples with residues within legal limits %	35,4	27,6	44,4	0,9	20,9	32,4

Tab. 2

In respect the last year we have the increase of total control and the decrease of irregular sample. The increase of control refers all type of control while the irregularities are not in relation to baby food and processed of wine and oil as the last year.

### 36.3. Non-compliant samples: possible reasons and actions taken

In 2010, 0.4 % of the samples (32 samples in total) were found non-compliant with the EU MRL. No samples had generated RASFF notifications for other sampling the health authority generally adopts the penalty sanction because we have violation of the art 5 of L 283/1962.

The following follow-up actions were taken in case of sample non compliant with the EC MRL (measurement uncertainty taken into consideration):

Number of non-compliant samples	Action taken	Note
32	Penalty sanctions	

Product	Residue	Reason for MRL non compliance	Note
arance	Dimethoate	Use of pesticide according to authorised GAP: unexpected slow degradation of residues (e.g. unfavourable weather conditions)	
pesche	Dimethoate	GAP not respected: use of pesticide non-authorized on the specific crop	
limoni	Orthophenylphenol	Other (please specify in the "Note" column)	use of pesticide non - authorised in Italy- the product has origin different of Italy

Product	Residue	Reason for MRL non compliance	Note
more	Chlorpyrifos	GAP not respected: use of pesticide non- authorised on the specific crop	
mele	Triflumuron	GAP not respected: use of non- authorised pesticide on all crops	
pesche	Captan	Use of pesticide according to authorised GAP: unexpected slow degradation of residues (e.g. unfavourable weather conditions)	
mele	Phosalone	GAP not respected: use of non- authorised pesticide on all crops	
mandarini	Carbaryl	GAP not respected: use of non- authorised pesticide on all crops	
patate	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)	Contamination during handling, storage or transport of crop	
lattuga	Chlorothalonil	GAP not respected: use of pesticide non- authorised on the specific crop	
patate	Chlorpropham	Use of pesticide according to authorised GAP: unexpected slow degradation of residues (e.g. unfavourable weather conditions)	
patate	Chlorpyrifos	Use of pesticide according to authorised GAP: unexpected slow degradation of residues (e.g. unfavourable weather conditions)	
funghi	Cypermethrin	GAP not respected: use of pesticide non- authorised on the specific crop	
finocchi	Deltamethrin (cis- deltamethrin)	GAP not respected: use of pesticide non- authorised on the specific crop	
lattuga	Dicloran	GAP not respected: use of non- authorised pesticide on all crops	
prezzemolo	Difenoconazole	GAP not respected: use of pesticide non- authorised on the specific crop	
bietola da coste	Dimethoate	GAP not respected: use of pesticide non- authorised on the specific crop	

Product	Residue	Reason for MRL non compliance	Note
altri ortaggi	Dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	GAP not respected: use of pesticide non- authorised on the specific crop	
basilico	Fenitrothion	GAP not respected: use of non- authorised pesticide on all crops	
finocchi	Lambda- Cyhalothrin	Use of pesticide according to authorised GAP: unexpected slow degradation of residues (e.g. unfavourable weather conditions)	
finocchi	Penconazole	GAP not respected: use of pesticide non- authorised on the specific crop	
ortaggi a foglia ed erbe fresche	Quinoxifen	GAP not respected: use of pesticide non- authorised on the specific crop	

#### 36.4. Quality assurance

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
IT	IZS DELLE VENEZIE	I0300000	Dal 18/07/1997	Accredia	EUPT- F12 2010 - EUPT - C4 2010
IT	IZS ABRUZZO E MOLISE	I0700000	Dal 18/12/2003	Accredia	EUPT - C4 2010
IT	ARPA TORINO	P0101010	Dal 1998	Accredia	EUPT- F12 2010-
IT	ARPA AOSTA	P0201010	Dal 03/10/2007	Accredia	EUPT- F12 2010-
IT	ASL BERGAMO	P0302510	Dal 19/06/2009	Accredia	EUPT - C4 2010 - EUPT- F12 2010
IT	APPA BOLZANO	P0411010	Dal 05/12/2001	Accredia	EUPT - C4 2010 - EUPT- F12 2010
IT	APPA TRENTO	P0421010	Dal 02/04/2001	Accredia	EUPT - C4 2010 - EUPT- F12 2010
IT	ARPAV VERONA	P0501200	Dal 09/07/2008	Accredia	EUPT - C4 2010 - EUPT- F12 2010
IT	ARPA PORDENONE	P0601060	Dal 18/11/2004	Accredia	EUPT - C4 2010 - EUPT- F12 2010
IT	ARPAL LA SPEZIA	P0701050	Dal 25/06/2002	Accredia	EUPT- F12 2010
IT	ARPA FERRARA	P0801090	Dal 1997	Accredia	EUPT - C4 2010 - EUPT- F12 2010
IT	ARPA LIVORNO	P0901060	Dal 25/02/2002	Accredia	EUPT - C4 2010 - EUPT- F12 2010
IT	ARPA AREZZO	P0901080	Dal 25/02/2002	Accredia	EUPT - C4 2010 - EUPT- F12 2010
IT	ARPA	P1001020	Dal 2003	Accredia	EUPT- F12 2010

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
	PERUGIA				
IT	ARPAM MACERATA	P1101090	Da dicembre 1999	Accredia	EUPT - C4 2010 - EUPT- F12 2010
IT	ARPA ROMA	P1200020	Dal 18/03/2004	Accredia	
IT	ARPA VITERBO	P1201090	Dal 18/03/2004	Accredia	
IT	ARPA RIETI	P1201100	Dal 18/03/2004	Accredia	
IT	ARPA LATINA	P1201110	Dal 18/03/2004	Accredia	
IT	ARPA FROSINONE	P1201120	Dal 18/03/2004	Accredia	
IT	ARPA BARI	P1601040	Dal 25/02/2010	Accredia	EUPT - C4 2010 - EUPT- F12 2010
IT	ARPA BRINDISI	P1601060	Dal 18/12/2001	Accredia	
IT	ARPAB POTENZA	P1701020	no		
IT	ARPAB MATERA	P1701040	no		
IT	ARPA CATANZARO2	P1800070	no		
IT	ARPA VIBO VALENTIA	P1801020	no		
IT	ARPA COSENZA	P1801040	no		
IT	ARPA REGGIO CALABRIA	P1801110	no		EUPT- F12 2010
IT	ARPA CAGLIARI	P2001080	no		



## 37. Latvia

### 37.1. Objective and design of the national control programme

The Ministry of Agriculture in collaboration with the Food and Veterinary Service and the State Plant Protection Service updated the National surveillance programme for pesticide residues control in plant products for 2010 according to Article 30 Part 1 of Regulation (EC) No 396/2005 of the European Parliament and of the Council of 23 February 2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin and amending Council Directive 91/414/EEC.

Plant products have been chosen according to statistical information of National Food Consumption Survey of Latvia (2007-2009). Fresh plant products of domestic origin from conventional farms are included in National surveillance programme for pesticide residues control in plant products for 2010. Above mentioned plant products have a high importance for agricultural production of Latvia. Taking into account RASFF notifications (chlormequate in grapes from India), also imported fruits were included in the programme. The food for sensitive groups of the population, e.g. baby food is not included in the National surveillance programme for pesticide residues control in plant products for 2010. Sampling was carried out at different marketing levels (farm gates, wholesalers) by trained inspectors and samples are taken in regional offices of the Food and Veterinary Service (FVS) according to Commission Directive 2002/63/EC of 11 July 2002 establishing Community methods of sampling for the official control of pesticide residues in and on products of plant and animal origin.

Pesticide residues have been chosen on the basis of application of plant protection products in Latvia. Only pesticide residues are not included in the EU coordinated programme have been chosen for National surveillance programme for pesticide residues control in plant products for 2010.

The Food and Veterinary Service and The Institute of Food Safety, Animal Health and Environment „BIOR” are responsible of implementation of National pesticides residues control programme.

In the planning of programme the following approach was used – the products included in the Coordinated programme were not included in National programme.

### 37.2. Key findings, interpretation of the results and comparability with the previous year results

Coordinated programme – In 2010 a total of 244 samples of fruit, vegetables, cereals animal products and baby food were analysed for the pesticides residues: 114 samples of domestic origin, 123 samples from other EU countries, 7 samples from non – European countries.

National programme – Total of 56 samples of fruit, vegetables, rape seeds were analysed for pesticides residues: 19 samples of domestic origin, 27 samples from other European countries, 10 samples from non – European countries.

In framework within the National programme the samples of domestic products (potatoes, carrots, onions, rape seeds, Chinese cabbages) and imported (Chinese cabbages, grapes, melons, water melons, aubergines, sweet peppers) products were collected.

The most frequently found pesticides residues are dithiocarbamates, cyprodinil, bromide ions, boscalid (above LOQ, but under MRL).

Non-compliant samples: possible reasons and actions taken

Number of non-compliant samples	Action taken	Note
5	Administrative sanction and the product was withdrawn from the market	Sample code: 6009-2010 6209-2010 6255-2010 6260-2010 6406-2010
1	Product was already consumed.	Sample code: 5172-2010
1	It was allowed to use the product for production of biofuel.	Sample code: 12838-2010

Product	Residue	Reason for MRL non compliance	Note
Table grapes	Chlormequat	GAP not respected: use of non-authorized pesticide on all crops	The product of Indian origin.
Table grapes	Chlormequat	GAP not respected: use of pesticide non-authorized on the specific crop	The product of Indian origin.
Table grapes	Chlormequat	GAP not respected: use of pesticide non-authorized on the specific crop	The product of Indian origin.
Table grapes	Chlormequat	GAP not respected: use of non-authorized pesticide on all crops	The product of Indian origin.
Table grapes	Chlormequat	GAP not respected: use of pesticide non-authorized on the specific crop	The product of Indian origin.
Rape seeds	Bifenthrin	GAP not respected: use of pesticide non-authorized on the specific crop	Bifenthrin was not authorised in Latvia.
Apples	Flusilazole	Other (please specify in the "Note" column)	The product was of Polish origin.

37.3. Quality assurance

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
LV	Institute of Food Safety, Animal Health and Environment "BIOR"		08/06/2011	Latvian National Accreditation Bureau - LATAK	EUPT-2010: FV-12;AO-05;SRM-05;C-04
DE	Eurofins GfA Lab Service GmbH	37.3.1.	02/08/2011	German Accreditation Body - DAKKS	FAPAS-04/2010/19106F; FAPAS-09/2010/19110F; FAPAS-11/2010/19114F; FAPAS-05/2010/0965

## 38. Lithuania

### 38.1. Objective and design of the national control programme

- Importance of a commodity in national food consumption;
- Food commodities with high residues/non-compliance rate in previous monitoring years;
- Food consumed fresh or in processed form;
- Origin of food: domestic, EU or third country;
- Sampling at different marketing levels: farm gates, wholesaler, retailer, processing industry, schools or restaurants;
- Seasonal availability of food commodities;
- RASFF notifications;
- Food for sensitive groups of the population, e.g. baby food;
- Importance of the commodity in the production of the reporting country;
- Sampling of crops close to the national production/cultivation area;

Regarding the pesticides included in the national control programmes, the reporting countries consider:

- Use pattern of pesticides;
- Toxicity of the active substances;
- Cost of the analysis: single methods /multiple methods;
- Capacity of laboratories.

### 38.2. Key findings, interpretation of the results and comparability with the previous year results

- Selection of commodities for control programme based on previous RASFF notifications, consequently rate of exceedences is higher than for a programme based on objective sampling;
- The LOQ achieved within our laboratories for pesticide residues is suitable for identifying all MRL exceedences.
- There has been a targeted programme for certain Asian commodities at border controls (in line with Regulation 669/2009); this has resulted in increased MRL exceedence rates in 2010 for fruits, especially orange, mandarin, grapes and rice
- The use of unauthorised pesticides was not detected. ;
- The QuEChers extraction method and LC-MS/MS detection method has been implemented in our laboratories increasing the number of residue of plant origin measure to 304 compared with 274 pesticides in the previous year. This may justify an higher percentage of samples with positive detections;
- The change to harmonised MRLs this year has resulted in a increase in the rate of exceedences and as a consequence the results cannot be directly compared with results from previous years;
- The reported higher MRL exceedance rate in enforcement samples of imported food is ascribed to the increased control of certain imported food according to Regulation 669/2009.

### 38.3. Non-compliant samples: possible reasons and actions taken

- In 2010, 6.8 % of the samples (26 samples in total of 383) were found non-compliant with the EU MRL. Exceeding of MRLs, but in level lower MRL+0,5MU were determined in 3.1% of the samples (12 of 383), and these samples were not included in number of samples non compliant with EC MRLs. For 5 samples RASF notifications were issued; All RASF lots were of import control and were not allowed on the market. For 5 samples administrative sanctions were taken without RASF notification. For 16 samples in which level of residues was at level MRL+0,5MU the warning was applied. All lots from which samples were found MRL non-compliant (A and W) were released on the market, before the results were obtained.
- The following follow-up actions were taken in case of sample non compliant with the EC MRL (measurement uncertainty taken into consideration):

Number of non-compliant samples	Action taken	Note
16	Warnings	Applied for results at level MRLs with MU taken in consideration, and samples with two residues at level of MRLs
5	Warnings and administrative sanctions	Applied for results non compliant with the MRLs with MU taken in consideration. (No RASF notification)
5	RASFF notification	Applied for results non compliant with the MRLs with MU taken in consideration Sample code: 2676; 3665; 6467; 10680; 12291. RASFF ref: 20100453; 20100577; 20101014; 20101473; 20101614 All 5 lots not released on the market

Product	Residue	Reason for MRL non compliance	Note
Grapes	Dimethoate, Chloromequat	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	Import. There are not enough data for evaluation reason for MRL not compliance
Pomegranates	Methomyl and	Other (please specify in the "Note" column)	Import. There are not enough data for evaluation reason for MRL not compliance
Grapes (Rasins)	Carbendazim	Other (please specify in the "Note" column)	Import. There are not enough data for evaluation reason for MRL not compliance
Baby food	Piperonyl butoxide	Other (please specify in the "Note" column)	Pesticide synergist . Was out of control
Grapes	Methomyl and	Other (please specify in the "Note" column)	MRL 0.05 decrease to 0.02 in 2010
Oranges	Dimethoate, fenitrothion, Diazinon	Other (please specify in the "Note" column)	Import. There are not enough data for evaluation reason for MRL not compliance. Low MRLs
Pomegranates	Aceramiprid	Other (please specify in the "Note" column)	Import. There are not enough data for evaluation reason for MRL not compliance. Low MRL.

### 38.4. Quality assurance

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
LT	National Food and Veterinary Risk Assessment Institute	NFVRAI	07/05/2010	DAkKS, Germany	PT2010, EUPT C4, EURL, Germany PT2010, A05, EURL, Germany PT2010, FV,12, EURL, Spain, PT2010, SRM5, EURL, Germany

### 38.5. Additional Information

Analytical methods used. Samples were mainly analysed by QuEChers extraction methods, EN 15637: ChemElut. Dithiocarbamates were determined by method EN 12396-1:2000. Pesticides surveyed: - Maneb group and Thiuram.

Analytical uncertainty: Laboratory uses the MU = 50 % figure to take consideration inter-laboratory variations for MRL breaches.

## 39. Luxembourg

### 39.1. Objective and design of the national control programme

#### Food of plant origin, cereals, baby food

The Food safety service is responsible for drafting the programme for the sampling and for the control of presence of pesticides residues in fruit, vegetables, cereals and baby food.

The national control programme included two different programmes:

- The Coordinated community control programme based on the Commission Regulation (EC) N° 901/2009 of 25 September 2009 concerning a coordinated multiannual community control programme and
- The national programme based on a risk assessment where several factors were taken into account: results from previous checks, toxicological data of residues, national production and food consumption figures. The risk assessment which produces the national coordinated multiannual programme for pesticides 2010-2012 is available on the internet site: [http://www.securite-alimentaire.public.lu/professionnel/denrees\\_alimentaires/mycotoxines/memoire\\_N\\_Denis.pdf](http://www.securite-alimentaire.public.lu/professionnel/denrees_alimentaires/mycotoxines/memoire_N_Denis.pdf)

The EU coordinated programme is the main part of the control programme.

For the national programme, wine grapes, herbal tea, aubergines, basil, courgettes, onions and fresh herbs were chosen in relation with the national production. Apricots have been chosen as follow-up of a non-compliance result the previous year.

Sampling was carried out mainly at wholesalers but also at the retail level. All samples collected by inspectors of the Food safety service were disposed at the laboratory of National health of Luxembourg

- Since 2009, the samples for the coordinated community control have been sent to an external laboratory in Belgium (Fytolab).
- The samples for the national annual programme are analysed by the laboratory of National health of Luxembourg.

All results for food of plant origin are reported to the Food safety service.

#### Food of animal origin:

The annual control programme for food of animal origin is drafted by the Veterinary services administration (ASV).

The monitoring is in compliance with directive (CE) N° 96/23 and decision (CE) N° 97/747. The number of samples per matrix to be analysed is defined by these regulations.

All results were transmitted to the DG SANCO unit 5 through a special database application available online “Residues – Monitoring plan and result”.

### 39.2. Key findings, interpretation of the results and comparability with the previous year results

In 2010, a total of 285 samples (174 samples under the coordinated community control programme and 111 samples under the national programme), were tested for pesticide residues. 35% were domestic sample, 46% originated from other EU member states, 11% from third countries and 6.9% had unknown origin (mainly tea and baby food).

For the national programme, 379 different pesticides were analysed for wine grapes and 112 for the other fruits and vegetables matrix. The number of samples analysed for the national programme was higher than in 2009, where only 28 samples were analysed. 2009 was a transitional year due to changes of the extraction method from D19 to Quechers, with the necessity to verify limit and recovery of each pesticide with the new extraction method.

For the coordinated programme, the samples included 116 samples of fruits and vegetables (with 346 pesticides analysed), 15 samples of cereals flour (with 344 pesticides analysed), 33 of milk product and swine meat (with 66 pesticides analysed) and 10 samples of baby food (with 378 pesticides analysed).

#### Summary of results for non organic samples

Matrix	Total samples	Result without Residues	Result with residues <MRL	Result >MRL	Result non compliant
<b>Non organic samples</b>					
Milk Products, Swine meat	33	100%	0%	0%	0%
Baby food	9	100%	0%	0%	0%
Processed products, flour, infusion	21	57%	43%	0%	0%
Fruit, vegetables	186	53.8%	44.6%	1.6%	1%
<b>Total</b>	<b>249</b>	<b>61.8%</b>	<b>36.9%</b>	<b>1.2%</b>	<b>0.8% (2éch)</b>

In 61.8% of non-organic surveillance samples, no pesticide residue was detected. In 36.9% of non-organic surveillance samples, residues of pesticides were quantified but were in compliance with MRLs. The maximum residue level (MRLs) was exceeded in three (1.2%) non-organic surveillance samples of which one was compliant when measurement uncertainty was considered. In baby food, milk products and swine meat samples, no pesticide residue was detected. In none of the thirty six samples taken from organic products, pesticide residues have been detected.

Five samples were taken in the framework of enforcement.

#### Specificities:

The programme for leeks was not finished in 2010 because they come mainly from the same wholesaler from Belgium. Instead, it was decided to sample more apples because of national production. Consumption is important in Luxembourg as apples but also as apple juice often consumed by children.

Instead of table grapes, wine grapes for national wine production were sampled. This production is locally very important whereas table grapes are not grown in Luxembourg.

For cereals, the aim was to target the national production for food, not for feed. In Luxembourg, the destiny of grains is not yet decided at harvest. Therefore flour samples with clear food destination were taken.

### 39.3. Non-compliant samples: possible reasons and actions taken

For all samples, a report with analytical results and evaluation of the compliance is systematically sent to the holder of the product for information or action. In addition, for surveillance samples exceeding the MRL, the competent authorities apply adequate measures (e.g. follow-up examinations, warnings, withdrawal from market). Furthermore, the competent authorities follow up the responsible companies. If the risk assessment indicates an acute toxicological risk to the consumer with a rapid alert is issued to RASFF (following the draft document SANCO/3346/2001 rev7).

In 2010, 2.07% of the samples (three samples in total) were found non-compliant with the EU MRLs. One sample was in compliance due to measurement uncertainty. Two samples remained non-compliant due to measurement uncertainty. For one of them, a RASFF notification was issued and for the other, an administrative warning was issued. All lots from which samples were found MRLs non-compliant were withdrawn from the market;

Number of non-compliant samples	Action taken	Note
1	No action	Result >MRLs but compliant due to measurement uncertainty
1	Warnings and withdraw	
1	RASFF notification	Sample code: FYTOLAB5337 RASFF ref: 2010.1185 Withdrawn from the market

Product	Residue	Reason for MRL non compliance	Note
Peaches	Fenthion		not known because a production of Marocco
Savoy cabbage	Dimethoate		not known because a production of Belgium

### 39.4. Quality assurance

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
BE	Centre d'économie rural - BE	CER	03/03/2009	BELAC - Belgium	10/01316; 10/01317, 10/03394
BE	Fytolab - BE	FYTOLAB	09/06/2009	Belac - Belgium	EUPT-C4; EUPT FV SM02; CRL EUPT FV12; CRL EUPT SRM5; Relana;
LU	Laboratoire National de Santé, contrôle des denrées alimentaires - LU	LNS-CDA	23.04.2008	OLAS – Luxembourg	EUPT FV12; EUPT C4;



## 40. Malta

### 40.1. Objective and design of the national control programme

The National Monitoring Programme for pesticide residues in produce of plant and animal origin 2010 was based on a number of factors which determined the type and frequency of monitoring for the particular produce. These factors included:

- Commission Regulation 1213/2008/EC concerning a Coordinated Multiannual Community Control Programme
- Local production/Imports of commodities
- Past findings that may indicate a historical residue problem
- In the light of new risks (e.g. knowledge on use of banned pesticides) or other country monitoring schemes.

A total of 13 different food commodities (including fruit and vegetables, food of animal origin and baby food) were analysed during 2010. The commodities analysed included the following: Apples, Head cabbage, Leek, Lettuce, Tomatoes, Peaches, Strawberries, Potatoes, Grapes, Kiwi, Milk, Swine meat and Baby food. The sampling strategy adopted was mainly Objective sampling except where there was a reasonable suspicion on specific produce and thus a Selective or Suspect sampling strategy was adopted.

### 40.2. Key findings, interpretation of the results and comparability with the previous year results

In 2010 a total of 169 products have been analysed for pesticide residues compared to a total of 170 products analysed in 2009 and 97 in 2008. Out of the 169 samples, 139 samples were objective sampling, 15 samples were selective sampling whilst another 15 samples were suspect sampling. The 15 suspect samples included 7 samples of strawberries, 1 sample of lettuce and 2 samples of peaches. These suspect samples were analysed since the first sample taken had revealed levels of pesticide residues exceeding the MRL levels, pesticide residues of active ingredients not included in Annex 1 and/or pesticide residues which do not occur in any of the plant protection products registered in Malta.

Out of the 169 samples analysed in 2010, 7 samples were of organic production origin, 102 samples were of non-organic production origin whilst for 60 samples the production method was unknown. These were mainly imported samples.

In 2010 the percentage of domestic samples amounted to 73.9% compared to 52% in 2009 and 57% in 2008. Samples from other member states amounted to 23.7% and the amount of samples from Third Countries amounted to 2.4% compared to 13% in 2009. This difference is mainly because some of the commodities included in the 2009 EU/National Coordinated Programme were not grown in Malta but originated mainly from Third Countries such as bananas. Almost all of the commodities included in the 2010 EU/National Coordinated Programme are grown in Malta thus explaining why the percentage of domestic samples increased this year compared to the previous years. Another reason is that since from previous years it was observed that the main problems with high MRLs were found in local produce, then more emphasis was placed on the commodities grown in Malta than those imported.

In 2010, 3.6% of the samples analysed had pesticide residues exceeding the EC-MRL compared to the 1.8% in 2009 and the 8.3% of samples that exceeded the EC-MRL in 2008.

#### 40.3. Non-compliant samples: possible reasons and actions taken

In 2010, 3.6% of the samples (6 samples in total) were found non-compliant with the EU MRL. They were all of domestic production. RASFF notifications were not necessary since the PSTI calculated in each case resulted lower than the ADI and/or ARfD. However a warning letter was issued to all the producers informing them of the results. Five of the lots from which samples were found MRL non-complaint were released on the market. Only one case of the sampled lot found with high MRL level was destroyed.

The following follow-up actions were taken in case of sample non compliant with the EC MRL (measurement uncertainty taken into consideration):

Number of non-compliant samples	Action taken	Note
5	Warnings	
1	Warnings and lot destroyed	

Product	Residue	Reason for MRL non compliance	Note
Peaches	Captan	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	Time interval from last application to harvest time not respected
Strawberries	Monocrotophos	GAP not respected: use of pesticide non- authorised on the specific crop	Sample of domestic origin. The use of monocrotophos is no longer authorised in Europe.
Lettuce	Chlorothalonil	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Peaches	Dimethoate	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Peaches	Dimethoate	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Peaches	Dimethoate	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	

#### 40.4. Quality assurance

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
IT	CE.FI.T S.r.l	Cefit	December 2010	ACCREDIA	Yes – C5/SRM6 & A06
DE	Eurofins GFA	GFA	October 2010	Akkreditierungsstelle GmbH	Yes

## 41. The Netherlands

### 41.1. Objective and design of the national control programme

In the national control program choices were made concerning kind and number of samples to be taken for analysis as many different pesticides, vegetables and fruits are involved. Therefore, a number of considerations are of importance:

1. Consumption of the commodity.
2. Production or import volume of the commodity.
3. Experience from the previous years concerning violations.
4. The occurrence of pesticide/crop combinations that might lead to exceedances of the acute reference dose (ARfD).
5. The degree of sampling and analysis, performed by the producer/importer.
6. Availability of cost-effective analytical methods, preferably multi-residue method (MRM).

The regulation mentions two main objectives of the official control program: enforcement of MRLs and obtaining data to be able to assess consumer exposure. For the latter objective representative sampling is a prerequisite, whereas the first objective is optimised by searching for high risk products. The Dutch program is a mixture of both strategies. Sampling in the market is in general representative for the product present in the market at that time and can be used for intake calculations. The choice of products to be sampled, however, is risk based. Products sampled at border control and importers of high risk products are typically non-representative and selected from an enforcement point of view. High violation rates can indicate both an efficient sampling strategy and problems in the agricultural practice.

The monitoring program is primarily directed to major products in the consumption pattern. These products are in line with the products the EU has chosen for the multi annual rolling program of the control regulation 901/2009/EC. In addition endive, broccoli, red beet and kiwi were planned to be sampled as major Dutch consumption items. The latter two are of special interest, because they are frequently eaten by young children. Some capacity is reserved to minor products, for 2010 this number was 800 samples of fruits and vegetables.

The main sampling points are distribution centres of retail chains, importers, warehouses and for both domestic and non-domestic products and the premises of the auction system for Dutch products. At those inspection points, it is clear who is responsible for the product, so that appropriate legal action can be taken in case of non-compliance. A number of samples was taken in retail shops as part of a pilot project to provide public information on samples, results and responsible companies.

The control program involves both Dutch and foreign production. The EU-harmonisation results in such a lowering of exceedance rates of EU-products that less attention is needed for that market segment and can be redistributed to more riskful imports from third countries. As the main consumption products come from the European market, their sampling has been reduced, unless a reasonable high violation rate exists. In 2010 the attention has been shifted from sampling of imported products at border control to sampling at importers after entry of the product into the EU.

In general control based on the primary product is preferred over that of processed food. It is useful to monitor processed products in the following cases:

- toxic metabolites can originate (ETU, PTU)
- the primary product is not accessible. Examples are:
  - o products processed in other countries, e.g. fruit juices, vegetable oil.
  - o products obtained by the processing industry directly from the grower.
- processed food gives a good overview of the situation of the market as to dietary intake, e.g. flour and baby food

The VWA applies as much as possible MRMs for the analysis of pesticide residues. The main procedure is extraction with acetone, followed by solvent partitioning with dichloromethane/petroleum ether. The extract is analysed with GC/MS(ITD) and LC/MS-MS. These methods comprise about 400 and 170 pesticides, respectively. Because of some overlap in scope, these methods together have a scope of about 500 active substances. For pesticides outside the scope of MRMs Single Residue Methods (SRMs) must be applied. As these give only information on one analyte, they are much less cost-effective than MRMs, and only applied when the following criteria are met:

- a) For the commodity-pesticide combination an MRL above the LOQ exist, indicating that residues may be expected.
- b) For the commodity-pesticide combination improper use of the pesticide is expected.

#### 41.2. Key findings, interpretation of the results and comparability with the previous year results

During 2010 about 5200 samples, both domestic and non-domestic products, were analysed for pesticide residues. The national and co-ordinated control plan accounted for about 4250 samples. In the framework of the import control regulation 669/2009/EU about 950 samples were analysed. Within the national control plan domestic fresh produce made up 28 % of the samples, 26 % of the samples came from other EU countries and 46 % from non-EU countries. Dutch products show residues above the reporting limit in about 52 % of the samples, whereas non-domestic products contain residues in 69 % (EU) and 57 % (non-EU) of the cases, respectively. For non-EU-products this figure is again lower than that of the previous year. For Dutch and EU-products these percentages are comparable with the year before.

In about 5200 samples 7340 residues of 156 different analytes were found. The scope of the EU-coordinated program comprised 94 % of the residues found. The extension of the scope in 2010 enlarged the coverage considerably. For a majority of the results it has been established whether an Acute Reference Dose (ARfD) is necessary or not (table 1). When food safety issues are involved in pesticide residues, it is mainly with respect to acute effects. Therefore, it is important to notice to what extent pesticides that give acute intake hazards are used. For product/pesticide combinations the Critical Crop/Pesticide Concentration (CCPC) has been evaluated. At this limit 100 % of the ARfD is reached based on a point-estimate and a product is considered to be unsafe and “injurious to health” in the meaning of the General Food Law (Regulation EC/178/2002). In such cases the product is recalled when possible, and a Rapid Alert is issued. The Netherlands issued eighteen rapid or information alerts on pesticide residues, as indicated in table 4.

Table 1. Pesticide residues found in the EU-coordinated and Dutch monitoring program.

Program	active substances	number of residues of pesticides in samples			
		with ARfD	no ARfD needed	ARfD unknown	total
EU-coordinated	118	4256	2527	4	6787
Dutch national	38	136	306	4	446
Total	156	4392	2833	8	7233

### 41.3. Non-compliant samples: possible reasons and actions taken

As a result of the harmonisation of the MRLs in the EU, the percentage of non-compliances of products from EU countries has decreased strongly since 2008. In 2010 MRL violations remained at this low level. A few cases of illegal use could be identified (vinclozolin/lettuce, mepanipyrim/celery) or improper use (linuron/celery). Imports from third countries showed a slight decrease in MRL-violations. This might be related to intensifying border control of higher risk products. Products from South-East Asia still often violate limits. Table 2 gives the most frequently non-complying pesticide/crop combinations with the main countries of origin for the samples in the national control plan. Table 3 gives this overview for the 669/2009 regulated imports. It is remarkable that old organophosphates and carbamates as omethoate (without dimethoate), ethion and carbofuran are still in use. In spite of these measures for some products the new import regime still detects considerable numbers of non-compliances (table 3). On the other hand, some other products in the 669/2009 scheme like mango and banana from the Dominican Republic did not show any violation. They have been taken out of Annex 1 of this Regulation.

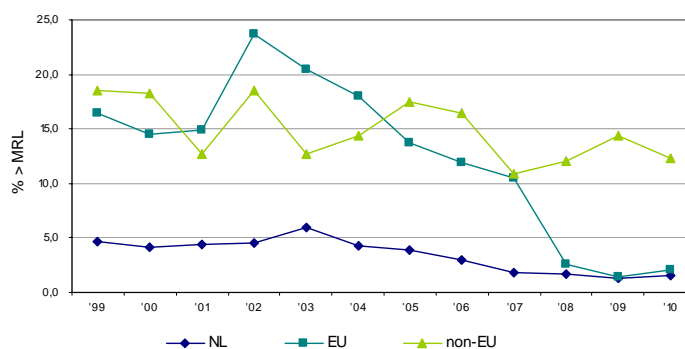


Figure 1. Percentage of MRL violations not including 669/2009 import control.

Table 4 gives results on main products in the year 2010. A comparison is made with the results of previous years. For the main products in the national program, fewer violations were observed with most of the products, as in general compliance increased.

Some minor products, not planned within the national program show still a considerable violation rate. Examples are tropical products, like herbs and egg plant.

Table 2. Main products with high percentages of non-compliances, with corresponding pesticides and countries of origin of national control plan samples.

Product	Pesticides	%>MRL	Countries
Pepper	profenofos, ethion, prochloraz, methomyl, dimethoate, carbendazim	31,0	Thailand, Uganda
Peas with pod	dimethoate	29,2	Kenya
Various leafy vegetables	acetomiprid, dimethomorph, pyridaben	24,5	China, Thailand
Grapes	chlormequat	21,4	India
Yard long bean, black-eyed pea	dimethoate, various	10,7	Egypt, Kenya

Table 3. Main products with high percentages of non-compliances, with corresponding pesticides and countries of origin for samples in the framework of 669/2009 import control.

Product	Pesticides	%>MRL	Countries
Pepper	various	31,3	Dominican rep.
Various cucurbits with inedible peel	various	10,2	Dominican rep.
Various leafy vegetables, herbs	carbofuran, various	32,8	Thailand

Yard long bean, black-eyed pea	dimethoate, methomyl, acephate, carbofuran, various	18,8	Thailand, Dominican rep.
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Table 4. Samples of crops taken in the national control program 2010, with trends in percentage MRL violations, comparing origin and previous years.

PRODUCT	Consumption (g/day)	Year EU-coordinated program	Dutch program 2010	samples realised 2010	% samples > MRL 2010	% samples > MRL 2010 Dutch	% samples > MRL 2010 EU	% samples > MRL 2010 non-EU	samples a year 2005-2009	% samples > MRL 2005-2009
Tangerines	13,4	05/08/11	100	68	1,5	0,0	0,0	3,0	89	8,3
Orange	93,7	05/08/11	150	156	3,8	0,0	0,0	6,4	152	8,3
Apple	74,4	07/10	100	135	0,7	0,0	0,0	2,4	128	3,6
Pear	10,8	05/08/11	75	77	0,0	0,0	0,0	0,0	69	1,2
Peach/nectarine	3,5	07/10	125	37	0,0	0,0	0,0	0,0	46	12,6
Plum, including damson	2,2		50	60	3,3	0,0	4,0	3,6	38	3,1
Grape	14,4	06/09/12	200	168	21,4	0,0	0,0	30,0	191	11,9
Strawberry	4,8	07/10	125	87	4,6	1,8	5,3	18,2	105	3,8
Banana	19,7	06/09/12	50	59	0,0	0,0	0,0	0,0	49	0,4
Kiwi fruit	2,9		75	70	0,0	0,0	0,0	0,0	42	3,3
Beetroot	4,4		50	25	0,0	0,0	0,0	0,0	28	1,4
Carrot	13,6	05/08/11	75	76	6,6	1,9	23,5	0,0	84	2,1
Onion	14,5	04	75	60	3,3	0,0	20,0	7,1	53	1,1
Tomato	26,9	07/10	125	129	2,3	3,4	2,1	0,0	129	4,5
Sweet pepper	4,2	06/09/12	150	117	0,9	0,0	0,0	3,6	134	10,4
Pepper	0,0	06/09/12	75	100	31,0	0,0	20,0	35,3	98	34,8
Cucumber	7,9	05/08/11	150	104	3,8	0,0	6,7	6,7	110	5,6
Melon	3,3	99/03	50	63	4,8	0,0	7,7	2,8	53	4,2
Broccoli	4,9		75	92	16,3	0,0	0,0	75,0	55	1,8
Cauliflower	14,9	06/09/12		46	0,0	0,0	0,0	0,0	57	0,0
Red Cabbage	4,2	07/10	18	18	0,0	0,0	0,0	0,0	17	0,0
White Cabbage	6,2	07/10	17	14	0,0	0,0	0,0	0,0	20	0,0
Lettuce	4,2	05/08/11	150	79	1,3	2,0	0,0	0,0	111	5,6
Iceberg lettuce	3,3	05/08/11	0	79	0,0	0,0	0,0	0,0	79	5,3
Endive	7,3		150	69	2,9	2,1	5,0	0,0	82	4,9
Spinach	8,9	05/08/11	125	41	0,0	0,0	0,0	0,0	65	4,0
Beans(fresh)	3,2	05/08/11	50	149	10,7	0,0	5,0	12,8	159	13,7
Peas (fresh)	12,6	06/09/12	100	48	29,2	0,0	0,0	30,4	42	10,5
Leek	12,3	07/10	50	58	1,7	2,1	0,0	0,0	64	2,8
Potato	172,6	05/08/11	75	62	0,0	0,0	0,0	0,0	62	2,6
Rice	10,1	05/08/11	25	34	2,9	0,0	12,5	0,0	28	0,7
Cereals	130,6	07/10/12	165	47	2,1	3,4	0,0	0,0	29	0,7
Babyfood			120	80	0,0	0,0	0,0	0,0	96	0,2
Processed products			275	458	1,5	1,9	0,0	1,7	303	4,6
Products in program	695,4		3230	2965	5,3	1,2	2,0	12,4	2867	6,6
Total	838,8		4266	4176	6,4	1,4	2,1	12,6	3867	8,2

Table 5. Notifications to the RASFF system issued by the Netherlands.

Product	Pesticide	Country
strawberry	methamidophos (1,5 mg/kg)	Egypt
padval	triazophos (0,075 mg/kg)	India
	triazophos (68 mg/kg) and oxydemeton-methyl (0,82 mg/kg)	
curry leaves		India
white eggplant	dimethoate (0,21 mg/kg)	Thailand
water mimosa	omethoate (2,7 mg/kg)	Thailand
young kale	carbofuran (0,85 mg/kg)	Thailand
hairy basil	carbofuran (6,1 mg/kg)	Thailand
yard long beans	triazophos (2,4 mg/kg)	Thailand
yard long beans	omethoate ( 0,83 mg/kg)	Thailand
orange	fenitrothion (0,41 mg/kg)	Egypt
orange	phenthoate (0,12 mg/kg)	Egypt
pomegranate	phenthoate (0,60 mg/kg)	India
cha om leaf	omethoate ( 2,2 mg/kg)	Thailand
yard long beans	triazophos (0,33 mg/kg)	Thailand
eggplant	carbofuran (0,079 mg/kg)	Thailand
white eggplant	carbendazim (0,54 mg/kg)	Dominican Republic
dragon fruit	carbendazim (1,3 mg/kg) in dragon fruit from Thailand	Thailand
grape	omethoate (0,22 mg/kg) and several other residues	India

Table 6. Action taken in case of non compliances.

Number of non-compliant samples	Action taken	Note
150	Administrative sanctions	
18	RASFF notification	8 in the framework of the national control plan, 10 as a result of 669/2009 import control
7	None	Anonymous survey sample
66	Import refused	10 samples led to a RASFF-notification as well

## 42. Norway

### 42.1. Objective and design of the national control programme

The Norwegian monitoring programme for pesticide residues in fresh fruit and vegetables, cereals, baby food, animal products and some other products has the last years included approximately 1500 samples. In addition to the monitoring program, this report also includes official controls on imports of certain feed and food of non-animal origin, EU-regulation no. 669/2009 (border control samples). The sampling plan was based on Commission Regulation (EC) No 901/2009, national three years plan and different projects. The plan specifies the foods to be sampled and the number of samples to be taken for each commodity.

The number of each commodity and the percentage of imported vs. domestic samples are based on Norwegian statistic of food consumption rates, the risk for residues, previous RASFF notifications and the national three years plan. The criteria for taking organic grown samples are dependent on their market share and the availability on the market. The sampling includes products which are important in the Norwegian diet, but more sporadic products are included as well.

The National programme includes projects which focus on residues in specified commodities. Raisins were chosen for the 2010.

The balance of organic and conventional products in the national monitoring program was almost like earlier years in Norway. In 2010 a number of 107 organic samples were analysed.

The inspectors from the Norwegian Food Safety Authority are taking the monitoring samples mainly at importers' and wholesalers' warehouses in different parts of Norway. Some samples were also collected at farmers or retail sale.

In 2010 Norway did not have any RASFF notification from the monitoring programme. But Norway gave two samples from the border control an RAFSS notification.

The Norwegian Institute for Agricultural and Environmental Research (Bioforsk) was responsible for the analyses of the samples of fruit, vegetables, baby food and cereals. The sampling plans and the annual reports were produced by Bioforsk in cooperation with the NFSA. Norwegian School of Veterinary Science analysed samples of animal origin.

### 42.2. Key findings, interpretation of the results and comparability with the previous year results

A total of 1492 samples were analysed for pesticide residues in Norway 2010, seven samples less than in 2009. In addition 46 samples from border control were analysed, because of targeted programme for certain Asian commodities (in line with Regulation 669/2009). All samples in this report, has therefor a total number of 1536. The reported higher MRL exceedance rate in enforcement samples of imported food (especially tropical fruits and fresh herbs) is ascribed to the increased control of certain imported food according to Regulation 669/2009.

Norway started taken border control samples after regulation 669/2009 in October 2010. There were findings in 19 of the samples. Ten samples had findings that exceeded the MRL. Two of the samples



from border control had RAFSS notification in 2010, aubergine and bean with pod, both had findings of dimethoate and were from Thailand.

In the ordinary monitoring programme (border control not included) twenty-two samples had residues above the MRLs. None of the exceeding's assessed to cause acute health risk, and there were none follow-up sample. Nineteen of these exceeding was consider as non-compliant after the measurement uncertainty was taken into account. No residues were found in 74.2 % of domestic and 37.8 % of import samples analysed under Norwegian Food Safety Authority's regulatory monitoring approach in 2010. No domestic samples had residue levels that exceeded the MRLs, but 2.2 % of imported samples had residue levels above the MRLs. This gives almost same results like previous years. There have not been domestic samples exceeding the MRLs since 2007. Last year imported samples had 1.2 % residue levels above the MRLs.

A new LC-MS/MS detection method has been implemented in our laboratories increasing the total number (both GC-MS and LC-MS/MS multimethodes) of residue measure to 293 compared with 272 pesticides in the previous year. This may justify a higher percentage of samples with positive detections.

The change to harmonised MRLs this year has resulted in a decrease in the rate of exceedences and as a consequence the results cannot be directly compared with results from previous years.

#### 42.3. Non-compliant samples: possible reasons and actions taken

In 2010, 1.8 % of the samples (1538 samples in total) were found non-compliant with the EU MRL. For 2 samples RASF notifications were issued. All lots from the monitoring program (not from the border control) which samples were found MRL non-compliant were released on the market. These samples were withdrawal as soon as possible from the marked.

The pesticides found are compared with the MRLs and the measurement uncertainty has been taken into consideration for all samples.

<sup>1</sup> If the national competent authorities consider that the measured residues in a sample, taking into account the measurement uncertainty, exceed the legal EU MRLs, the sample is considered as MRL “non-compliant” and the competent authorities shall take enforcement measures, where permitted by national legislation.

Number of non-compliant samples	Action taken	Note
Border control *) 2	Warnings	Taking into account the measurement uncertainty the sample is considered as MRL “compliant”.
Border control *) 8	Warnings and administrative sanctions	Not released on the market
Border control *) 2	RASFF notification	RASFF ref 2010.CBG and ref 2010.CAV. Not released on the market
Monitoring programme 3	Warnings	Taking into account the measurement uncertainty the samples are considered as MRL “compliant”.

Number of non-compliant samples	Action taken	Note
Monitoring programme 19 samples (21 exceedings)	Warnings and administrative sanctions	Some of the products were already consumed, but the remaining product/ consignments were withdrawal from the marked.

\*) Border control samples are samples taken after EU-regulation no. 669/2009 on official controls on imports of certain feed and food of non-animal origin.

*Samples from the Norwegian monitoring program:*

Product	Residue	Reason for MRL non compliance	Note
Orange	Imazalil *)	**)	Imported from South Africa
Cucumber	Abamectin *)	**)	Imported from Bulgaria, ecological cucumber
Beans with pods	Dimethoat	**)	Imported from Morocco
Dill	Captan	**)	Imported from Italy
Pomegranate	Acetamiprid	**)	Imported from Turkey
Carrot	Metamidofos	**)	Imported from Israel
Lime	Dimethoat	**)	Imported from Brazil
Lime	Tebuconazole	**)	Imported from Brazil
Passion fruit	Cypermethrin Permethrin (sum)	**)	Imported from Colombia
Passion fruit	Dimethoat (sum) Lambda-Cyhalothrin (sum)	**)	Imported from Colombia
Passion fruit	Carbendazim and benomy	**)	Imported from Kenya
Physalis fruit	Clothianidin *) Tebuconazole Tetraconazole *) Trifloxystrobin *)	**)	Imported from Colombia
Leek	Acrinathrin Cypermethrin *)	**)	Imported from Spain
Rice	Isoprothiolan	**)	Imported from India
Rice	Isoprothiolan *)	**)	Imported from India
Table grapes	Acetamiprid Thiophanate-methyl *)	**)	Imported from Egypt
Table grapes	Chlormequat	**)	Imported from India
Table grapes	Chlormequat	**)	Imported from India
Carambola/ starfruit	Carbendazim and benomy	**)	Imported from Malaysia
Tea	Acetamiprid *) Imidachlopid	**)	Imported from China
Tea	Imidachlopid	**)	Imported from Asia
Tea	Orthophenylphenol	**)	Imported from Sri Lanka

\*) Taking into account the measurement uncertainty the residue levels are considered as MRL “compliant”.

\*\*\*) The Norwegian Food Safety Authority has non comments to possible reasons for EC MRL exceeding.

*Samples from the Norwegian border control after regulation 669/2009:*

Product	Residue	Reason for MRL non compliance	Note
Coriander	Chlorpyrifos	**)	Imported from Thailand
Bean with pods	Dimethoat	**)	Imported from Thailand
Kale	Procymidon	**)	Imported from Thailand
Basil	Profenophos *)	**)	Imported from Thailand
	Chlortalonil		Imported from Thailand
Basil	Carbendazim and benomy	**)	
	Cyprokonazol		Imported from Thailand
Mint	Profenophos	**)	
Bean with pods	Dimethoat	**)	Imported from Thailand
Aubergine	Dimethoat	**)	Imported from Thailand
	Carbendazim and benomy *)	**)	Imported from Thailand
Basil	Chlorpyrifos	**)	Imported from Thailand

\*) Taking into account the measurement uncertainty the samples are considered as MRL “compliant”.

\*\*\*) The Norwegian Food Safety Authority has non comments to possible reasons for EC MRL exceeding.

#### 42.4. Quality assurance

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
NO	Bioforsk Pesticidkjemii	BIOFORSK	27.04.1995 Valid to 19.02.2013	Norsk Akkreditering	EUPT-C4, EUPT FV 12, EUPT SRM5, AGES, EUPT-FV-SM-02
NO	Norwegian School of Veterinary Science (NVH)	NVH 971 033 525	30.06.1999 Valid to 18.01.2013	Norsk Akkreditering	EUPT-AO-05
NO	Eurofins, Specht Germany	EUROFINS 1	Valid to 02.08.2012	Deutsche Akkreditierungsstelle	

#### 42.5. Additional Information

Norway has a delay in implementing new legislations because the new legislation must be agreed by the EEA-committee.

## 43. Poland

### 43.1. Objective and design of the national control programme

The State Sanitary Inspection under the Ministry of Health' authority is responsible for the control of pesticide residues in food of plant and animal origin, including baby food. It is also responsible for the elaboration of the national programme for pesticide residues which includes a coordinated EU monitoring programme.

The objectives of this programme is to control food commodities for compliance with the MRLs and monitor pesticide residues surpassing admissible level as a basis for follow-up and enforcement actions.

The 2010 national programme was designed to monitor 185 active substances, including breakdown products and metabolites, in 40 different food commodities. If compared with 2009 and 2008, the number of pesticides sought and commodities analysed substantially increased.

The National Plan for 2010 was developed taking into considerations several factors: specific conditions of Polish agriculture, consumption data, findings from previous years, balance of organic and conventional production, reports of RASFF system. Food for sensitive groups of consumers (e.g. baby food) and the capacity of laboratories are also taken into account.

The food samples were collected, according to the sampling plan, by trained inspectors of Sanitary-Epidemiological Stations mainly from the market, at wholesalers or importers, sometimes from food producers.

### 43.2. Key findings, interpretation of the results and comparability with the previous year results

In 2010, a total number of 1965 samples (1948 surveillance samples and 17 enforcement samples) of food commodities, including fresh and frozen fruit and vegetables, cereals, processed food (including baby food) and animal products were taken and analysed for the presence of pesticide residues. The samples included: 1380 samples of fruit, vegetables and other samples of plant origin, 151 samples of cereals, 253 samples of animal products and 181 samples of baby food. Above figures include 23 samples of ecological products: 8 samples of fruit, 12 samples of cereals and 3 samples of animal products.

Out of the total number, 1466 (74,6%) samples taken were of domestic origin, 278 (14,2%) samples originated from EU countries and 221 (11,2%) samples were from third countries.

No residues were found in 1531 (78%) of all samples. The residue level at or below the MRL was found in 416 (21,2% of the samples) and was slightly higher as in 2009 (19,0%). The residues exceeding MRL were found in 16 (0,8% of samples). No violations of the MRLs were found in baby food and processed food.

Compared with 2009, there was small increase of products tested containing violative amounts of pesticide residues. Over the years, the number of samples with residues above the MRL slightly decreases. The likely reason for that may be greater consciousness of danger and better general knowledge of food producers as well as observance of GAP. No violations of the MRLs were found in baby food and processed food.

56 Different pesticides out of 185 sought were found in at least one sample. The most often detected residues were: dithiocarbamates, carbendazim, chlorothalonil and thiabendazole.

In 2010, 17 enforcement samples were analysed: 14 samples of fruit and vegetables, 1 sample of cereals and 2 samples of processed products. The majority of those samples were taken as "border control samples" in the framework of the Regulation 669/2009.

Pesticide residues at or below the MRL were found in 12 samples, no exceedances were found.

Summary of results (2007-2010)

Year	Total number of samples	No residues detected (%)	Residues ≤ MRL (%)	Residues > MRL (%)*
2007	1462	85,6	13,4	1,0
2008	1584	86,7	11,5	1,8
2009	1817	80,5	19,0	0,5
2010	1965	78,0	21,2	0,8

\* -Measurement uncertainty is not taken into account

### 43.3. Non-compliant samples: possible reasons and actions taken

In 2010, 16 surveillance samples (0,5 %) were found exceeding the MRL, but taking into account measurement uncertainty, only 9 of them were non-compliance with the EU MRL. In the case of 4 samples warnings and administrative consequences were taken. For 5 samples RASFF notifications were issued. All these samples originated from domestic production.

Risk assessment for acute exposure was carried out in the case of 2 samples: spinach and mushrooms. The questioned lot of spinach has been withdrawn from the market. Remaining samples have not been subjected to risk assessment for consumers because the whole volume has been already sold.

The following follow-up actions were taken in case of samples non-compliant with the EC MRL (measurement uncertainty taken into consideration):

Number of non-compliant samples	Action taken	Note
4	Warning and administrative sanctions	
5	RASFF notification	Sample code: 18/4/PO252010A/2010 22/4/PO280010A/2010 36/4/PO251020A/2010 75/4/PO251020A/2010 52/12/PO152000A/2010

Product	Residue	Reason for MRL non compliance	Note
spinach	ditihiocarbamates	GAP not respected: use of pesticide authorised on the specific crop application rate and/or application method not respected	a lot has been withdrawn from the market
mushrooms	carbendazim	GAP not respected: use of pesticide authorised on the specific crop application rate and/or application method not respected	the whole volume has been sold
lettuce	azoxystrobin	GAP not respected: use of pesticide authorised on the specific crop application rate and/or application method not respected	the whole volume has been sold
lettuce	chlorothalonil	GAP not respected: use of pesticide authorised on the specific crop application rate and/or application method not respected	the whole volume has been sold
strawberry	carbendazim	GAP not respected: use of pesticide authorised on the specific crop application rate and/or application method not respected	the whole volume has been sold
strawberry	vinclozolin	GAP not respected: use of pesticide non- authorised on the specific crop	the whole volume has been sold

Product	Residue	Reason for MRL non compliance	Note
eggs	DDT	Contamination: residues resulting from previous use of a pesticide (e.g. persistent pesticides no longer authorised, soil residues taken up in succeeding crops)	ecological production

#### 43.4. Quality assurance

16 Accredited laboratories took part in the national control programme for 2010.

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
PL	Voivodship Sanitary – Epidemiological Station in Wrocław	Lab No 1	08/12/2005	The Polish Centre of Accreditation	EUPT-FV-12, EUPT-SRM5
PL	Voivodship Sanitary – Epidemiological Station in Bydgoszcz	Lab No 2	08/10/2004	The Polish Centre of Accreditation	EUPT-SRM5
PL	Voivodship Sanitary – Epidemiological Station in Lublin	Lab No 3	27/08/2007	The Polish Centre of Accreditation	
PL	Voivodship Sanitary – Epidemiological Station in Gorzów Wlkp.	Lab No 4	13/05/2005	The Polish Centre of Accreditation	
PL	Voivodship Sanitary – Epidemiological Station in Łódź	Lab No 5	03/01/2006	The Polish Centre of Accreditation	EUPT-FV-12
PL	Voivodship Sanitary – Epidemiological Station in Kraków	Lab No 6	2005	The Polish Centre of Accreditation	EUPT-C4 EUPT-FV-12
PL	Voivodship Sanitary – Epidemiological Station in Warszawa	Lab No 7	19/10/2004	The Polish Centre of Accreditation	EUPT-C4 EUPT-FV-12 EUPT-SRM-5
PL	Voivodship Sanitary – Epidemiological Station in Opole	Lab No 8	15/11/2004	The Polish Centre of Accreditation	EUPT-C4 EUPT-FV-12 EUPT-SRM-5

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
PL	Voivodship Sanitary – Epidemiological Station in Rzeszów	Lab No 9	18/06/2004	The Polish Centre of Accreditation	EUPT-C4 EUPT-FV-12 EUPT-OA5
PL	Voivodship Sanitary – Epidemiological Station in Białystok	Lab No10	07/08/2002	The Polish Centre of Accreditation	
PL	Voivodship Sanitary – Epidemiological Station in Gdańsk	Lab No 11	30/11/2004	The Polish Centre of Accreditation	EUPT-C4
PL	Voivodship Sanitary – Epidemiological Station in Katowice	Lab No 12	31/03/2005	The Polish Centre of Accreditation	
PL	Voivodship Sanitary – Epidemiological Station in Kielce	Lab No 13	06/10/2005	The Polish Centre of Accreditation	
PL	Voivodship Sanitary – Epidemiological Station in Olsztyn	Lab No 14	11/04/2006	The Polish Centre of Accreditation	EUPT-FV-12,
PL	Voivodship Sanitary – Epidemiological Station in Poznań	Lab No 15	05/09/2005	The Polish Centre of Accreditation	
PL	Voivodship Sanitary – Epidemiological Station in Szczecin	Lab No 16	06/08/2004	The Polish Centre of Accreditation	

#### 43.5. Additional Information

The results indicate that use of unauthorised pesticides has increased last years resulting in a “no tolerance” violation.

## 44. Portugal

### 44.1. Objective and design of the national control programme

Directorate-General of Agriculture and Rural Development (DGADR), from the Ministry of Agriculture, Sea, Environment and Land Management, is the National Competent Authority for Pesticide Residue Control in Food of Plant Origin.

In Portugal different bodies are involved in the National Pesticide Residues Control Programme in Products of Plant Origin, they are:

- DGADR, responsible to prepare, promote the implementation and execution of the pesticide residues program in products of plant origin;
- GPP, the National Office for Planning and Policies, responsible for the co-ordination of the Multiannual National Integrated Control Plan and for specific control programmes, like baby food and import controls;
- INRB-INIA-Pesticide Residues Laboratory (INRB-LRP), the National Reference Laboratory for Fruits, Vegetables and Cereals, responsible for the execution of part of the analysis and responsible to coordinate and compile the results of all the national laboratories participating in the Pesticide Residues Official Control in Food of Plant Origin and for submitting this results to EFSA;
- Laboratory from the North Regional Directorate (L-DRAPN) – responsible for the execution of part of the analysis;
- Laboratory from the Algarve Regional Directorate (L-DRAPALG) – responsible for the execution of a few analysis;
- From the Autonomous region of Madeira, the Laboratory of the Regional Directorate and Rural Development of Madeira (L-DAR), responsible for the execution of part of the analysis;
- ASAE, the National Authority for Food and Economical Safety, from Ministry of Economy and Employment, responsible for sampling collection in the mainland, according to the procedures laid down in Directive 2002/63/EC, and for enforcement actions;
- In the autonomic region of Madeira sampling was carried out by the Agricultural Department for Markets and Food Safety (DSMSA) and by the Regional Inspectorate of Economical Activities (IRAE), that is the regional body responsible for enforcement actions;
- The autonomic region of Açores also participated in the programme, with sampling carried out by the Department of Agriculture and Veterinary and by the respective IRAE, that is the regional body responsible for enforcement actions.

DGADR is the National Competent Authority responsible for the elaboration of the national pesticide residues monitoring programmes concerning the samples of plant origin (specific control programmes, baby food and import controls, are from GPP responsibility).

The 2010 National Monitoring Programme was elaborated with the participation and collaboration of representatives of all the intervening bodies in the control (DGADR, GPP, ASAE and corresponding regional services, INRB-LRP and analysts from all the Laboratories participating in the control).

National Monitoring Planes are designed taking into consideration the following objectives:

- To comply as much as possible with the multiannual coordinated pesticide residues control programme of the European Commission (Regulation n° 901/2009 of 28 of September);
- To follow the binomials plant product/pesticide with repeated infractions in the previous years;
- To take in consideration the capacities of the laboratories;



- -To have a representative sampling plan that includes national products and products deriving from the EU and from third countries proportional to the consumption of those products;
- -To collect the national products as much as possible near of the production and organic farming in proportion with the market share.

So, the National Monitoring Programme for products of plant origin for 2010 was based on the EU coordinated monitoring programme, which was extended to other pesticides, according to the capabilities of the laboratories and with the cost of the analysis (single methods /multiple methods), and to other commodities, such as spinach, national pears, oranges, wine grapes, bananas, pineapple, small melon, passion fruit, according to the national and regional needs.

The programme of target sampling for bananas and wine grapes grown in Madeira Island was decided to continue with a view to correction the agricultural practice in that region, as previous results have shown that some small farmers have continued to use plant protection products which are no longer approved for those commodities or no longer approved at all.

Every year we intend to include some organic products in the control programmes, but attending to difficulties in sampling this product type was not included in the planned programme, however when possible it is sampled.

Concerning the specific control of baby food, 12 samples were planned to 2010 by GPP.

#### 44.2. **Key findings, interpretation of the results and comparability with the previous year results**

In 2010, a total of 749 samples were analysed for residues of up to 230 pesticides and relevant metabolites. This number of samples comprised 713 fruits and vegetables, 7 cereals, 12 baby food and 17 processed products, especially tomato products and wines.

The total number of samples was decreasing relatively to 2009, only 68% of the programmed analysis of the official programme were effectively performed, less than in 2009 (92,2%), that occurred mainly because one laboratory was inoperative due to the lack of staff. The other reason was the difficulties occurred in the cereals sampling (only 7 from the predicted 50 were collected). In addition the wine grapes for INRB-LRP were not sampled by ASAE and only 13 samples from the planned 20 peach samples were collected for L-DRAPN.

From the 749 samples analysed, in 379 samples (51%) no residues were detected, 342 (46%) with residues below the MRL and 28 samples (3,7%) with residues exceeding the MRL, from this 22 samples (2,9%) were non compliant samples.

Comparing with 2009, the number of samples without residues was decreasing (71% in 2009 and 51% in 2010) and the number of samples with residues was increasing proportionally (26% in 2009 and 46% in 2010), the number of samples above MRL was similar, but slightly higher in 2010 (3,7 %). The percentage of non-compliance samples was the same in 2009 and 2010 (2,9%).

The majority of the samples of fruits, vegetables and cereals were analysed in the framework of the EU co-ordinated monitoring programme and were from surveillance strategy.

Over half of the 749 samples were of domestic origin (87%), 10% from EEA and 3,1% from Third Countries. This difference is mainly because the commodities included in the 2010 coordinated programme are predominantly of domestic production.

For this reason, practically all the non-compliant samples were from domestic production.

For fruit, vegetables and other plant origin a total of 713 samples were analysed, in 346 samples (49%) no residues were detected, 341 (48%) with residues below the MRL and 26 samples (3,6%) with residues exceeding the MRL, from this 20 samples (2,8%) were non compliant samples, which is according to the fact that fruit and vegetables were the majority of the samples.

For cereals no infringements to the respective MRL occurred, the same situation from 2009.

But in 2010, only 7 cereals samples were analysed, due to sampling difficulties, in 6 samples (86%) no residues were detected and 1 sample (14 %) with residues below the MRL.

Concerning the 12 samples of baby food and infant formula analysed, in 10 samples (83%) no residues were detected and two infringements occurred (residues of imazalil in 2 samples).

Relatively to processed products, 17 samples were analysed and in all of them no residues were detected, 100% of the samples without residues.

Residues were detected in 3 of the 8 samples analysed from organic production (2 samples with dithiocarbamates and 1 sample with tiabendazol).

Concerning the programme of target sampling for bananas and wine grapes grown in Madeira Island, the 2010 results corroborate the decreasing of non-compliances in banana samples from Madeira and the fact that the wine grapes continued to present a percentage of non-compliances grather than the other samples, justifying the continued monitoring of the wine grapes by the authorities.

Residues of at least one of the pesticides sought were found in about 50 % of the fruits and vegetables and in 1 sample of cereals (14%) of the surveillance samples.

The two most frequent residues detected in fruits and vegetables were dithiocarbamates (79 occurrences) and thiabendazole (62 occurrences, which were followed by chlorpyrifos (55 occurrences) and diphenylamine and imazalil (booth with 27 occurrences).

For cereals the only pesticide found was pirimiphos-methyl in one sample.

Multiple residues occurred in 207 samples of fruits, vegetables and cereals and in 2 samples of infant formulae. The maximum number of residues found was 8, in one sample of apples.

#### 44.3. **Non-compliant samples: possible reasons and actions taken**

In 2010, 2,9 % of the samples analyse in the framework of the National Monitoring Programme for Products of Plant Origin (22 samples in a total of 749 samples) were found non-compliant with the EU MRL, the same proportion that occurred in 2009.

The majority of this samples (20) was fruit and vegetables samples, one part from the coordinated monitoring programme and other from the national and regional programme. All this 20 samples were from domestic production, excepting one that is from Uruguay.

Two, from these 22 samples, are baby-food samples from Third Countries.

The use of non-authorized products was associated with all the non compliances except in one, this case involved produce from outside the EU and related to substances with no EU GAP.

The use of a product previously authorized for a long time and still authorized for some commodities, was the main reason for the cases of the consumer's risk.

Most of the non-compliances occurred as a result of the recent changes in a great number of agricultural practices due to the withdrawal of many active substances that have been used for many years and related to substances where the MRL was set to the LOD.

ASAE, IRAE-Madeira and IRAE-Açores have the responsibility for the enforcement actions, such as official warnings, levying of fines or preparation of prosecutions to the court (criminal-proceedings), according to the severity of infringements.

Administrative consequences were applied to 17 infringements cases occurred in 2010 samples (cases without risk to consumers) and 5 criminal-proceedings are applied to the cases of risk to the consumers.

All lots from which samples were found MRL non-compliant were released on the market.

Values detected above MRL are reported as non-compliant, if the achieved value minus the respective estimated uncertainty exceeds the MRL. Nevertheless, every time the uncertainty does not allow to ensure an exceedance of the MRL, an official warning is issued in order to alert the producer that there is also a probability of the value being above the legal limit.

The following follow-up actions were taken in cases of samples non-compliant with the EC MRL:

Number of non-compliant samples	Action taken	Note
17	Warnings and administrative sanctions	
5	Criminal-proceedings	Pending court decision

Product	Residue	Reason for MRL non compliance	Note
apples	diclorvos	GAP not respected: use of non-authorized pesticide on all crops	Sample of EU origin. The use of diclorvos is no longer authorised in Europe.
apples (3 samples)	dimethoate	GAP not respected: use of pesticide non-authorized on the specific crop	3 samples of apples with dimethoate, MRL non compliance.
apples (2 samples)	dimethoate and ometoate	GAP not respected: use of pesticide non-authorized on the specific crop	2 samples of apples with dimethoate and ometoate, MRL non compliance.
bananas	dimethoate	GAP not respected: use of pesticide non-authorized on the specific crop	
bananas	acrinathrin	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
head cabbage	dicofol	GAP not respected: use of non-authorized pesticide on all crops	
leek (3 samples)	bromopropilate	GAP not respected: use of non-authorized pesticide on all crops	3 samples of leek with bromopropilate, MRL non compliance.
lettuce	clorpyriphos	GAP not respected: use of pesticide non-authorized on the specific crop	
lettuce	endossulfan	GAP not respected: use of non-authorized pesticide on all crops	
lettuce	folpet	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
oranges	bromopropilate	Other	The use of bromopropilate is no longer authorised in Europe. Sample of third country origin (Uruguay). Codex MRL: 2mg/kg.
oranges	dimethoate	GAP not respected: use of pesticide non-authorized on the specific crop	

Product	Residue	Reason for MRL non compliance	Note
wine grapes	carbendazim	GAP not respected: use of pesticide non-authorized on the specific crop	
wine grapes	clorpyrifos	GAP not respected: use of pesticide non-authorized on the specific crop	
wine grapes	dimethoate	GAP not respected: use of pesticide non-authorized on the specific crop	
baby-food (2 samples)	imazalil	GAP not respected: use of pesticide non-authorized on the specific crop	1 samples of baby-food with imazalil, MRL non compliance.

#### 44.4. Quality assurance

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
PT	INRB-INIA-Pesticide Residues Laboratory (LRP)	LRP INRB	03/06/2005	IPAC – Portugal	PT 2010: FV12, C4, SM02, SRM5
PT	Agricultural Quality Laboratory of the Regional Agricultural Directorate of Madeira	DAR	08/07/2011	IPAC – Portugal	PT 2010: FV12, C4, SRM5
PT	Laboratory of the Northern Regional Agricultural Directorate	L-DRAPN	*	IPAC – Portugal	PT 2010: FV12, C4, SRM5
PT	Laboratory of the Regional Agricultural Directorate of Algarve	LAB-DRAPALG	22/06/2007	IPAC – Portugal	PT 2010: SRM5

\*- The Laboratory of the Northern Regional Agricultural Directorate had the audit of the grant on 16/03/2011 and currently is waiting for the certificate of accreditation.

The INRB-INIA-Pesticide Residues Laboratory is accredited since June 2005, for the majority of compounds analyzed and holds flexible accreditation since May 2008.

The Laboratory of the Regional Agricultural Directorate of Algarve only participated in EUPT-SRM5 because they only contribute to the national control with dithiocarbamates method.

#### 44.5. Additional Information

Due to the lack of LC-MS/MS instrumentation at INRB-INIA-Pesticide Residues Laboratory (LRP), several pesticides which can be analysed through MRM are still analysed using SRM. This is the case of the benomyl group and thiabendazole, which are determined by HPLC-DAD after ethyl acetate extraction and pH adjustment, and the N-methylcarbamates group, which are determined by HPLC-FLD with on-line OPA derivatization post-column, after extraction and clean-up identical to method P. Organophosphorus insecticides precursors of sulphoxides and sulphones are analysed by oxidation of the cleaned extract obtained according to method P.

Agricultural Quality Laboratory of the Regional Agricultural Directorate of Madeira has already available a LC-MS/MS and reported a good part of the results by this method.

## 45. Romania

### 45.1. Objective and design of the national control programme

Romanian Agriculture and Rural Development Ministry (ARDM) has the responsibility for national monitoring plan of pesticides residues in fruits, vegetables, cereals. Implementation of monitoring plan is performed by Central Laboratory for Pesticides Residues Control in Plants and Vegetable Products, which analyses the samples taken by Counties and Bucharest Phytosanitary Units.

National Sanitary Veterinary and Food Safety Authority (NSVFSA) has the responsibility for national monitoring plan of pesticides residues in food of plant and animal origin. NSVFSA draws up one independent annual plan for control pesticide residues in food of plant and animal origin. Implementation of monitoring plan is performed by Sanitary Veterinary and Food Safety County Division.

Ministry of Health is responsible for baby food analysis and food for special nutritional purposes. Within the National Prophylaxis Program - Public Health Subprogram, MH realises monitoring and control of pesticide residues from processed cereal based foods and baby foods for infants and young children

The factors which have been taking into account in designing the national control plan are. :

- Importance of the commodities in national food consumption;
- Food commodities with high residues/non-compliance rate in previous monitoring years;
- Food consumed fresh or in processed form;
- Balance of organic/conventional production;
- Origin of food: domestic, EU or third country;
- Sampling at different marketing levels: wholesaler, retailer; import activities, border inspection activities, farming, slaughtering,
- Seasonal availability of food commodities;
- RASFF notifications;
- Food for sensitive groups of the population, e.g. baby food;
- Food commodities not included in the EU coordinated programme.

Regarding the pesticides included in the national control programmes, Romania consider:

- Use pattern of pesticides;
- Cost of the analysis: multiple methods;
- Capacity of laboratories.

The programme of the NSVFSA is drawn up at central level and specifies samples of food of plant origin from third country or Member State, point of sampling, the active substances to be analyzed. The 32 commodities have been included in monitoring programme on 2010 and also the number of active substances has been increased from 40 to 66.

In the monitoring programme of ARDM for 2010 were planned 2500 samples from 46 agricultural products. Additional to 2009, two agricultural products were added: rye and spring onion and also the number of active substances has been increased from 113 to 117.

MH carries out monitoring and control of pesticide residues from processed cereal - based foods and baby foods for infants and young children. In 2010 monitoring programme of MH was containing 252 samples from baby food products for infants and young children.

#### 45.2. Key findings, interpretation of the results and comparability with the previous year results

The main findings and conclusions for the national and EU coordinated programme and a comparison with previous years results, including possible reasons for differences/trends observed:

- Selection of commodities for control programme based on previous RASFF notifications, consequently rate of exceedences is higher than for a programme based on objective sampling;
- The results indicate the use of unauthorised pesticides.

#### 45.3. Non-compliant samples: possible reasons and actions taken

In 2010, 0,73 % of the samples (26 samples in total) were found non-compliant with the EU MRL. For 25 samples RASF notifications were issued. Withdrawal from the market and official detained in order to be destroyed or officially detained until the level of pesticide residue would reach the legal MRL.

However in most of the cases the analytical report was issued when the product was no longer on the market and had been already sold to the final consumer, fruit and vegetables being perishable merchandise. .

The following follow-up actions were taken in case of sample non compliant with the EC MRL (measurement uncertainty taken into consideration):

Number of non-compliant samples	Action taken	Note
18	RASFF notification	<p>Sample code: LCCRPP_10-0554, LCCRPP-10-0555, LCCRPP-10-1735, LCCRPP-10-1736, LCCRPP-10-1737, LCCRPP-10-1739, LCCRPP-10-1740, LCCRPP-10-1748, LCCRPP-10-1749, LCCRPP-10-1750, LCCRPP-10-1751, LCCRPP-10-1754 LCCRPP- 10-1872, LCCRPP-10-1874, LCCRPP-10-1957, LCCRPP-10-2259, LCCRPP-10-2263, LCCRPP-10-2264</p> <p>RASFF ref: 026/20.04.2010, 027/29.04.2010, 093/08.10.2010, 094/08.10.2010, 098/19.10.2010, 099/20.10.2010, 107/03.12.2010, 108/03.12.2010.</p>
1	Administrative consequences	<p>Not released on the market for final consumption The commodity (wine grapes) was used for wine production Sample code :RO321-ANSVSA-2199</p>

Number of non-compliant samples	Action taken	Note
7	RASFF notification	Sample code: RO321-ANSVSA-2464 RO321-ANSVSA-2528 RO321-ANSVSA-2529 RO321-ANSVSA-2530 RO321-ANSVSA-2681 RO321-ANSVSA-3216 RO321-ANSVSA-3217 RASFF ref 093/08.10.2010 103/04.11.2010 108/03.12.2010

Product	Residue	Reason for MRL non compliance	Note
Lettuce	Chlorpyrifos, Chlotohalonil	GAP not respected: use of pesticide non-authorised on the specific crop	Sample of EU origin. The use of chlorothalonil is no longer authorised for lettuce.
Table grapes	Procymidone	GAP not respected: use of non-authorised pesticide on all crops	Sample of EU origin. The use of procymidone is no longer authorised in Europe.
Wine grapes	Procymidone	GAP not respected: use of non-authorised pesticide on all crops	Sample of EU origin. The use of procymidone is no longer authorised in Europe.
Apples	Dicofol	GAP not respected: use of non-authorised pesticide on all crops	Sample of EU origin. The use of dicofol is no longer authorised in Europe.
Wine grapes	bromopropylate	GAP not respected: use of non-authorised pesticide on all crops	

#### 45.4. Quality assurance

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
RO	Laboratory for Pesticide Residues Control in Plants and Vegetable Products	RO_321_LCCRPPV	16.01.2006	RENAR	PT 2010; C4, FV12
RO	Bucharest Sanitary Veterinary and Food Safety Laboratory	RO-321-ANSVSA	08.04.2008	RENAR	PT 2010; C4, FV12



Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
RO	Bucharest National Institute of Public Health of Bucharest	RO213-MS	09.02.2011	RENAR	
RO	Regional Center of Public Health of Iasi	RO213-MS	Not applicable	Not applicable	
RO	Regional Center of Public Health of Cluj Napoca	RO213-MS	Not applicable	Not applicable	
RO	Institute for Hygiene and Veterinary Public Health	RO321-IISPV	1.04.2003	RENAR	PT 2010: AO 05 PT 2011: AO 06
RO	Calarasi Sanitary Veterinary and Food Safety Laboratory	RO312-ANSVSA	28.11.2005	RENAR	PT 2010: AO 05 PT 2011: AO 06
RO	Constanta Sanitary Veterinary and Food Safety Laboratory	RO223-ANSVSA	24.05.2004	RENAR	PT 2011: EUPT AO 06
RO	Suceava Sanitary Veterinary and Food Safety Laboratory	RO215-ANSVSA	05.03.2007	RENAR	PT 2010: AO-05; PT 2011: AO-06

## 46. Slovakia

### 46.1. Objective and design of the national control programme

Pesticide residue monitoring in 2010 was conducted in compliance with the National Control Programme for Pesticide Residues in Food, implementing Commission Regulation (EC) No 901/2009 that governs the EU monitoring 2010. In drawing up a national plan we set up several priorities. As regards types and number of samples to be collected and analyzed, certain criteria were set using consumption and production of a given commodity in Slovakia as well as the results of analyses from previous year and information from the RASFF. The commodity selection was focused on fresh fruits and vegetables. Within the scope of the EU monitoring 2010, the following commodities were sampled: peaches or nectarines, apples, strawberries, head cabbage, leek, tomatoes, lettuce, rye or oats, milk and swine meat. 15 samples of each food type were collected and analyzed. As many as 25 samples were collected and analyzed of those monitored commodities that are associated with a higher consumption in Slovakia (apples, peaches, strawberries and tomatoes). In addition, within the scope of the national programme, 21 food types were sampled and analyzed, the number of samples to be collected ranged from 5 to 20 for each food type. In compliance with legislative requirements, 19 samples of organic foods and 60 samples of baby foods were collected and analyzed. The sampling from trade network preferred food samples originating in third countries. The sampling of food of domestic origin was preferentially done across the growers' distribution warehouses as well as trade network. The real proportion of samples to be collected for pesticide residue analyses reflected food offers in the Slovak market and herewith food consumption trends in Slovakia (food of domestic origin – 28,3%, third countries – 26,9%, EU countries – 42,0%). The number of samples to be taken was limited by capacity of the analytical laboratory that owes a duty to perform pesticide analyses as well as its technical possibilities.

As regards the extension of the scope of pesticide residue analyses in 2010, we followed the requirements of Regulation (EC) No 901/2009 governing the EU coordinated monitoring programme. New pesticides that had not been analyzed within the frame of official samples in the course of 2009 were included in routine analyses. Besides widening the analyte range with pesticides (active substances), we also went for an extension of substances that fall within the definition “pesticide residues” (metabolites and/or breakdown or reaction products) being characterized by highly toxic properties. The number of analytes (pesticides, metabolites or isomers) was extended with 21 new analytes and reached the number of 308 (comparing 287 in 2009).

Collected samples were analyzed in two laboratories. Food samples were analyzed by the State Veterinary and Food Institute in Bratislava and samples of baby food and infant formulae were analyzed by the Laboratory of the Public Health Authority of the SR. Two multiresidue methods (MRM) and four single residue methods (SRM) were used for food analyses (besides baby food and infant formulae). Two MRMs and six SRMs were used to analyze baby food and infant formulae samples.

Owing to the fact that the number of pesticides to be analyzed has been raised since the last years, equally financial demands for sample analyses have increased. Especially it is valid with those analytes that must be determined by single residue methods that are financially demanding. The samples under the EU monitoring were detected for pesticide residues to the extent required by the legislation. In the majority of food samples, both MRMs were used to confirm the presence of pesticide residues. In an effort to use most effectively the resources allocated, we used only one MRM method (preferentially GC method) for the determination of pesticide residues in some commodities (e.g. cereals) and the SRM method for the determination of chlormequat residues.

#### 46.2. Key findings, interpretation of the results and comparability with the previous year results

A total of 657 samples were analyzed in 2010, thereof 467 samples of fresh or frozen fruit together with fresh or frozen vegetables. No pesticide residues were detected in 316 samples to represent 48,1% of all analyzed samples (the values below the LOQ). One or more pesticide residues under the MRL were detected in 329 samples to represent 50,1% of all analyzed samples. MRL exceeding was detected in 12 analyzed samples, thereof 9 samples of fruits, 1 sample of vegetable, 1 sample of processed food and 1 sample of baby food (after inclusion of a 50% measurement uncertainty in the results)

Year	Total number of samples	% of samples without detectable residues	% of samples with residues at or below MRL *	% of samples with residues exceeding MRLs
2010	657	48,1	50,1	1,8
2009	724	55,7	43,5	0,8

\*including the samples with MRL exceedances after inclusion of a 50% measurement uncertainty in the results

By comparing the above results obtained in both years it is clear that the number of analyses in 2010 was lower than the number in 2009 but the percentage of samples positive to pesticide residues was higher. Also the number of non-compliant samples went up in 2010. In terms of the national programme we focussed our activities on the sampling of food originating in third countries. Within imported food from third countries 54 samples were collected. When non-compliant samples were discovered through the control, suspect sampling for residues was carried out on the additional consignments. The monitoring of pesticide residues in food passed in accordance with Regulation 669/2009/EC to the full extent.

Multiple pesticide residues were detected in 188 samples which is an increase by 31 samples compared to year 2009. In 2010, we detected 19 different pesticides in a sample of dried vine fruit originating from Turkey but the residues found did not exceed the MRLs. In respect of risk assessment based on Hazard Index (HI) calculation, it can be concluded that this multiple pesticide residue discovery did not present any risk for children and adults.

In compliance with requirements of the legislation, we collected and analyzed 19 samples of organic foods, thereof 10 samples of domestic origin, 7 samples of EU origin and 2 samples of third country origin.

#### 46.3. Non-compliant samples: possible reasons and actions taken

In 2010, 1,8 percent of analyzed samples (i.e. 12 samples) were not in compliance with Regulation 396/2005/EC:

- table grapes, chlormequat 0,17 mg/kg, India
- table grapes, chlormequat 0,137 mg/kg, India
- table grapes, chlormequat 0,124 mg/kg, India
- head cabbage, dimethomorph 0,107 mg/kg, Slovakia
- lemons, biphenyl 0,27 mg/kg, Turkey
- lemons, bromopropylate 0,154 mg/kg, Turkey
- lemons, bromopropylate 0,386 mg/kg, Turkey
- lemons, bromopropylate 0,038 mg/kg, Spain
- peaches, fenpropathrin 0,087 mg/kg, Egypt

- table grapes, folpet 0,29 mg/kg, Bosnia and Herzegovina
- origanum dehydrated, chlorpyrifos 0,475 mg/kg, Egypt
- babyfood, pyrimiphos-methyl 0,1 mg/kg, Slovakia.

There were two RASFF notifications in 2010. In compliance with the national food legislation, appropriate administrative procedures were taken against faulty subjects. Fines were imposed on three discoveries of non-compliant samples. As far as three other cases, additional administrative proceedings were initiated against food business operators.

As regards dealing with the consignments after detecting them as non-compliant, one consignment was returned back to the supplier being resident outside the territory of the SR. In case of other two non-compliant consignments, parts of them were withdrawn from the trade network. Other non-compliant consignments or their parts being discovered through the monitoring were no longer available on the market.

Follow-up procedures were also applied in the monitoring. Within an import control of dried spices, three suspect samples were collected (all three samples were without MRL exceedance).

By evaluating the findings relating to brompropylate discovery in three lemon samples, residues above the MRL level were traced additionally owing to intricate amendments in the legislation governing the MRL for brompropylate. In respect of these three lemon samples no additional actions were taken.

Number of non-compliant samples	Action taken	Note
3	Administrative consequences	
3	Administrative sanctions	A monetary fine was imposed.
2	RASFF notification	Sample code: BA11179_10 BA9560_10

A reliable identification of the reason for MRL exceedance might-be only in the case of foods of domestic origin. In 2010 monitoring, the reason for non-compliance was traced only in 1 sample. It was a matter of head cabbage that was evaluated as non-compliant because of dimethomorph residues above the MRL. In further case of second overlimited sample of domestic origin (baby food), we were not able to find evidently the reason for MRL exceedance (it was a matter of compound food). Other non-compliant samples originated in third countries and we were not able to trace the reason for violations.

Product	Residue	Reason for MRL non compliance	Note
Head cabbage	dimethomorph	GAP not respected: use of pesticide non-authorized on the specific crop	

#### 46.4. Quality assurance

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
SK	State Veterinary and Food Institute Bratislava	156434	4.4.2007	SNAS	EUPT C4, FV12, SRM5, AO5, FAPAS 19114
SK	Public Health Authority of the SR	607223	1.6.2009	SNAS	EUPT-FV12, EUPT-C4

#### 46.5. Additional Information

It was not possible to determine the country of origin as regards 18 collected and analyzed samples of food. In most cases it was a matter of rice samples collected at the market. A Slovak, resp. Czech packer was indicated on each consumer packaging. The real country of origin of rice (rice is not grown either in the Slovak Republic or the Czech Republic) was not indicated on the packs.

## 47. Slovenia

### 47.1. Objective and design of the national control programme

The selection of commodities included into the monitoring programme was based on the following criteria:

- staple food (presenting most important food in national food consumption as well as food for sensitive group of population-baby food),
- food included in EU coordinated programme,
- food offered on the Slovenian market, where also data of Statistical Office of RS on average annual quantity of purchased food and beverages per household member are taken into account, this is covered as part of national rolling programme
- commodities found non-compliant previous year
- problematic commodities as evident within the CIRCA -RASFF database

The inspection services responsible for official control sampled commodities at primary production and at other stages of the food chain - wholesale, retail, open markets, and shops. Sampling had taken into account seasonal availability of product however if commodities were present on the market throughout of the year then sampling period was extended. For this reason samples taken were of domestic, EU, third countries origin. Where commodities from organic production were available, they were included into sampling. Beside fresh commodities also processed products were included into the sampling program.

The selection of pesticides to be sought was primarily determined on data on national use of pesticides, potential for residues based on use pattern, toxicological profiles of pesticides, preference list of active substance prepared by reference laboratories, data from CIRCA RASFF database, analytical capabilities of the laboratories and those mentioned in Commission Regulation (EU) No 915/2010 on EU coordinating programme and financial constrains as well.

### 47.2. Key findings, interpretation of the results and comparability with the previous year results

In 2010 total 1239 samples of food were analysed on pesticide residues in Slovenia. Samples included: 40 samples of animal products, 60 samples of baby food, 36 samples of cereals, 425 samples of fruit, 629 samples of vegetables and 45 samples of other products of plant origin (processed food, infusions, oil plants, pulses, sugar plants), 3 samples of oil plants and 1 sample of sugar plants. There were 599 (48 %) samples without detectable residues, 601 (49 %) samples with residues below or at EU-MRL and 17 (1.4 %) samples with residues exceeding the EU-MRL. 507 (41 %) samples originated from domestic production, 574 (46 %) from other EU Member States, 158 (13 %) from Third Countries.

Samples of animal products were analysed for the presence of up to 38 (31 in 2009) pesticides. From 40 surveillance samples 39 (97.5 %) samples were without detectable residues and 1 (2.5 %) with residues below or at EU-MRL.

Samples of baby food were analysed for the presence of up to 268 (198 in 2009) pesticides. From 60 surveillance samples all (100%) samples were without detectable residues.

Samples of cereals were analysed for the presence of up to 252 (217 in 2009) pesticides. From 36 surveillance samples 26 (72.2 %) samples were without detectable residues and 10 (27.8 %) with residues below or at EU-MRL.

Samples of fruits and nuts were analysed for the presence of up to 251 (217 in 2009) pesticides. From 425 surveillance samples 88 (20.7 %) samples were without detectable residues, 335 (78.8 %) with residues below or at EU-MRL and 2 (0.5 %) with residues exceeding the EU MRL.

Samples of vegetables were analysed for the presence of up to 250 (217 in 2009) pesticides. From 622 surveillance samples 357 (57.4 %) samples were without detectable residues, 250 (40.2 %) with residues below or at EU-MRL and 15 (2.4 %) with residues exceeding the EU MRL.

Samples of oil plants were analysed up to 252 pesticides. From 3 surveillance samples all (100 %) samples were without detectable residues.

Samples of sugar plants were analysed up to 252 pesticides. This sample was without detectable residues.

Samples of other products of plant origin were analysed up to 247 (217 in 2009) pesticides. From 45 surveillance samples 18 (40 %) samples were without detectable residues, 26 (60 %) with residues below or at EU-MRL.

The change to harmonised MRLs has resulted in a decrease in the rate of exceedences and as a consequence the results cannot be directly compared with results from previous years.

#### 47.3. Non-compliant samples: possible reasons and actions taken

For non-compliant samples with exceeded legal limits the follow-up actions were taken:

In 2010, 1.4 % of the samples (17 samples in total, from 1239 samples taken) were found non-compliant with the EU MRL. For 2 samples 1 RASFF notification was issued, for 13 samples administrative consequences were taken. 3 samples were found to be dangerous for health, but the products were consumed before the analyses were finished. In this case only administrative sanctions and follow up activities were undertaken

The following actions were taken in case of samples non-compliant with the EC MRL: control inspections for checking internal control of the FBO.

Number of non-compliant samples	Action taken	Note
2	Warnings	
13	Warnings and administrative sanctions	
2	RASFF notification	Sample code: RASFF ref: 2010.1124 Already consumed

Product	Residue	Reason for MRL non compliance	Note
Spinach and similar (leaves)	Dithiocarbamates	Contamination: spray drift	Spray drift from pears orchard near by
Pears	Chlormequat	Contamination: residues resulting from previous use of a pesticide (e.g. persistent pesticides no longer authorised, permanent monitoring in succeeding year)	Residues taken-up by perennial pear trees
Watermelons	Oxamyl	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	

Product	Residue	Reason for MRL non compliance	Note
Cucumbers	Oxamyl	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Radishes	Dithiocarbamates	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Spinach and similar (leaves)	Dithiocarbamates	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Radishes	Oxamyl	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Celeriac	Mandipropamid	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Chinese cabbage	Dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Watermelons	Oxamyl	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Lettuce	Dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	GAP not respected: use of non-authorised pesticide on all crops	
Peaches	Phosmet (phosmet and phosmet oxon expressed as phosmet)	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Spinach and similar (leaves)	Indoxacarb as sum of the isomers S and R	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Parsley	Benalaxyl including other mixtures of constituent isomers including benalaxyl-M (sum of isomers)	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Parsley	Chlorpyrifos-methyl	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Lettuce	Chlorothalonil	GAP not respected: use of pesticide non-authorised on the specific crop	
Lettuce	Fenpyroximate	GAP not respected: use of pesticide non-authorised on the specific crop	
Oranges	Bromopropylate	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	



Product	Residue	Reason for MRL non compliance	Note
Lettuce	Famoxadone	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	

#### 47.4. Quality assurance

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
SI	National Institute of Public Health	IVZ LJ kemija	22.Avg.2003 Last update 19. Avg. 2011	SA – Ljubljana, Slovenia	PT2010: FV12, C4, SRM5 Aquacheck: Group 8 (Round 380, 388)
SI	Institute of Public Health Maribor	ZZV MB kemija	December 2001 Last update 15. Oct. 2010	SA – Ljubljana, Slovenia	PT2010: FV12, AO 05, C4, FV-SM 02, SRM5, ACA CF M1

#### 47.5. Additional Information

The reported data do not contain information on samples taken within investigation of presence chlormequat in pears originating from India.

## 48. Spain

### 48.1. Objective and design of the national control programme

#### - Objectives:

1 – To ensure that official controls are carried out in order not to place on the market food products treated by unauthorized pesticides.

2 – To ensure that official controls are carried out in order not to place on the market food products with pesticide residues levels above those established in regulations in force, so they can pose a health risk for consumers.

#### - Responsibilities:

The elaboration and implementation of the National Control Programme involves the following units:

1 - The Directorate General of Means of Production (DGMP) of Ministry of Environment and Rural and Marine Affairs (MERMA)

2 - The competent authorities of Agriculture and Health of the Autonomous Communities (ACs) (Ministries of Agriculture and Ministries of Health).

3 - The Directorate General of Health Affairs of the Ministry of Health, Social Policy and Equality (MHSPE)

4 - The General Directorate for the Coordination of Food Alerts and Programming Official Control of Spanish Nutrition and Food Safety Agency (SNFSA).

Each unit has assigned its duties about coordination or execution within its scope.

SNFSA is an autonomous body under the Ministry of Health, Social Policy and Equality and acts as liaison with the Commission and the European Food Safety Authority (EFSA).

#### - Design of Programmes:

This National Programme is made up of three sub-programmes based on the stage of the food chain where the samples are collected:

- Primary production Sub-program, coordinated by the MERMA.
- Market Sub-program, coordinated by the SNFSA.
- Imports Sub-program, coordinated by the MHSPE.

#### - Official Controls on residues:

The National Pesticide Residues Control Programme integrates controls performed by the ACs. DGMP is responsible for co-ordination of controls "at origin", while SNFSA is responsible for co-ordination of controls on the market. The programme of controls "at-origin" sets a number of samples to be taken at points where farmers deliver their crops to secondary operators. Non-compliances from controls "at-origin" lead to controls on farms, and increased checks during the "at-origin", and marketing stages. The annual plans developed by ACs and coordinated by SNFSA include monitoring of unauthorised products. The authorities plan to have a single control plan for the whole food chain.

- Criteria taken into account in program design:
  - a. The products listed in the Regulation concerning a coordinated multiannual Community control for 2010, 2011 and 2012, aimed at ensuring the enforcement of maximum residue limits pesticides in food of animal or plant origin and on them, and to assess the degree of consumer exposure to these residues
  - b. Annual data on production of agricultural statistics from different Autonomous Communities (kind of crop and production).
  - c. Consumption data of the "Study on diet and eating habits in the Spanish population" by the Department of Nutrition, Faculty of Pharmacy, University Complutense of Madrid for the Nuclear Safety Council, in collaboration with the Energy, Environment and Technology Centre.
  - d. The Spanish diet model for determining exposure to consumer chemicals.
  - e. Food for populations at risk (baby food).
  - f. Products with a high consumption in each region.
  - g. RASFF notifications.
  - h. Non compliant results obtained in previous years.
  
- Sampling:

The responsible staff of sampling are inspectors of the Autonomous Communities.

Those samples taken in the border inspection posts/points of entry are taken by staff depending functionally on Directorate General of Health Affairs.

#### 48.2. **Key findings, interpretation of the results and comparability with the previous year results**

- In 2010 a total of 2785 samples were analysed for pesticide residues compared to a total of 1476 samples analysed in 2009. Out of the 2785 samples, 2647 were surveillance samples and 138 were enforcement samples. Regarding sampling strategy, 93% were objective, 4.9% were suspects and 2.2% were selective. The 4.9% (138 samples in total) suspect samples included 5 domestic samples and 133 samples from Third Countries, mainly fruits and vegetables.
- In 2010, 2.6% of the samples analysed shown pesticide residues levels exceeding the EC-MRL , reaching the same percentage as in 2009.
- One sample of tomato produced by organic production method which was analyzed for Deltamethrin was considered non-compliant by the competent authority of the Autonomous Community of origin. Deltamethrin is not authorized substance in organic production.
- Some new detection methods were implemented in Spanish laboratories in order to increase the number of pesticide residues measured and to bring down the Detection Limit of some of them.
- Most of the samples were analyzed by multiresidue's methods. The methods used were: High Performance Liquid Chromatography (HPLC)/Liquid Chromatography (LC), Mass Spectroscopy and hyphenated methods without chromatography, Gas chromatography (GC), GC hyphenated methods, GC-(P)FPD, GC with standard detection methods, GC-ECD, GC-FID, GC-MS, GC-MS-MS, HG-(CT)GC-AFS, HPLC/LC hyphenated methods, HPLC with standard detection methods, HPLC-MS-MS, HPLC-UV, LC-MS, LC-MS/MS, Nuclear magnetic resonance (NMR) and Electron Spin Resonance (ESR), Organoleptic (sensoric) tests of food, Traditional analytical techniques (wet chemical tests) and others methods not included in EFSA catalogues.

- All the labs have procedures to estimate analytical uncertainty which is taken into account to decide any enforcement action. Document SANCO/ 2007/3131 is also considered.
- In 2010, 88% of the analytical determinations were performed in accredited labs compared to 72.8% in 2009. The main objective remains to reach 100%.

#### 48.3. Non-compliant samples: possible reasons and actions taken

- The total number of samples in the Co-ordinate Programme and the National Spanish Programme 2010 was 2785; 1817 (65,2 %) samples were taken from fruits and vegetables, 248 (8,9 %) from processed product, 52 (1,86 %) from fish products, 32(1,14 %) from cereals, 178 (6,3 %) from baby food, 455 (16,3) from Animal products and 3 (0,10 %) from others products.
- 2.69 % of the samples (75 samples in total) were found non-complaint with the EU MRL. For fruits, vegetables and other vegetables the number of samples that exceeded the MLRs was 72 (4,0 %), for processed products was 1 (0,4%), for cereals 1 (3,1%), for baby food 1 (0,6%). No samples for animal products, fish products and others products were above the MRL. Out of the 75 samples non-compliant, 45 were from domestic production and 30 were imported samples.
- Pesticides found above the MLRs were:
  - For fresh or frozen fruit: Acephate, Methamidophos, Malathion, Dimethoate, Carbendazim and Benomyl, Imidacloprid Iprodione, Chlorothalonil, Methomyd and Thiodicarb, Acetamiprid, Imazalil, Folpet, Chlorpyrifos and Procymidone, Dithiocarbamates, Propargite, Phosmet, Amitraz.
  - For vegetables fresh or frozen: Deltamethrin, Endosulfan, chlorpyrifos, Myclobutanil, Oxamyl, Imidacloprid, Carbendazim and Benomyl, Chlorothalonil, Fenpropathrin, Acetamiprid, Prochloraz, Propargite, Methiocarb, Fenamiphos, Pyridaphenthion, Dithiocarbamates, Metalaxy, Folpet, Cyproconazole, Dimethoate, Acrinathrin, Dimethomorf
  - For Cereals: Tebuconazole
  - For baby food and processed products: Heptachloroepoxide-trans.

Information about the samples, reason for MRL non-compliant and the actions taken regarding non compliant samples are given at the tables below: (Table 1 and 2)

Table 1 - Action taken

Number of non-compliant samples	Action taken	Note
12	Warnings	Samples codes: 10ES114-000000003526 10ES114-000000003512 10ES114-000000003507 10ES114-000000003506 10ES114-000000003505 10ES523-000000003291 10ES522-000000003221 10ES521-000000003203 10ES523-000000003133 10ES522-000000003029 10ES521-000000003011

Number of non-compliant samples	Action taken	Note
		10ES523-000000002939
2	Warnings and administrative sanctions	Samples codes: 10ES617-000000003459 10ES523-000000003295
2	RASFF notification	Sample code:  10ES617-000000003452 RASFF ref: 2010.0708 Not released on the market 10ES617-000000003436 RASFF ref: 2010.0707 Not released on the market
6	No action taken	10ESZZZ-000000004776  10ES511-000000004691 10ES511-000000004620 10ES511-000000004616 10ES521-000000002983 10ES523-000000002570
54	Others* *Special follow *Official sampling *Communication to the Competent Authority of sample's origin	10ES51100000005195  10ESZZZ-000000005058 10ESZZZ-000000005049 10ESZZZ-000000005048 10ESZZZ-000000005047 10ESZZZ-000000005046 10ES511-000000005009 10ESZZZ-000000005007 10ESZZZ-000000004994 10ESZZZ-000000004887 10ESZZZ-000000004855 10ES241-000000004789 10ESZZZ-000000004786 10ES423-000000004730 10ES130-000000004692 10ES511-000000004597 10ESZZZ-000000004568 10ESZZZ-000000004566 10ESZZZ-000000004565 10ESZZZ-000000004564 10ESZZZ-000000004381 10ESZZZ-000000004376 10ESZZZ-000000004370 10ESZZZ-000000004366 10ESZZZ-000000004363 10ESZZZ-000000004362 10ESZZZ-000000004358 10ESZZZ-000000004357 10ESZZZ-000000004324 10ESZZZ-000000004316 10ESZZZ-000000004279 10ESZZZ-000000004252 10ESZZZ-000000004149 10ES523-000000003130

Number of non-compliant samples	Action taken	Note
		10ES522-000000003126
		10ES522-000000003121
		10ES523-000000003118
		10ES523-000000003115
		10ES521-000000003111
		10ES523-000000003070
		10ES521-000000003068
		10ES521-000000003063
		10ES523-000000003057
		10ES521-000000003054
		10ES521-000000003052
		10ES521-000000003049
		10ES523-000000003048
		10ES523-000000003046
		10ES522-000000003006
		10ES522-000000003003
		10ES521-000000002995
		10ES522-000000002987
		10ES523-000000002931

Table 2.- Reason for MRL non compliance.

Product	Residue	Reason for MRL non compliance	Note
Beans with pods	Chlorpyrifos	Contamination: residues resulting from previous use of a pesticide (e.g. persistent pesticides no longer authorised, soil residues taken up in succeeding crops)	
Baby food	Heptachlorepoxide, trans-	Bad practice	
Peaches	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim) Thiophanate-methyl	Bad practice	
Lettuce	Miclobutanyl	Bad practice	
Wine grapes	Folpet	Bad practice	
Onion	Propargite	Bad practice	
Wine grapes	Folpet	Bad practice	
Wine grapes	Chlorpyrifos Folpet Procimidone	Bad practice	

Product	Residue	Reason for MRL non compliance	Note
Kiwi	Dithiocarbamates (Dithiocarbamates expressed as CS <sub>2</sub> , including Maneb, Mancozeb, Metiram, Propineb, Thiram and Ziram)	Bad practice	
Apple	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)	Bad practice	
Apricot	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)	Bad practice	
Spinach	Methiocarb (sum of methiocarb and methiocarb sulfoxide and sulfone, expressed as methiocarb)	Bad practice	
Spinach	Chlorothalonil Methiocarb (sum of methiocarb and methiocarb sulfoxide and sulfone, expressed as methiocarb)	Bad practice	
Apple	Propargite	Bad practice	
Pears	Phosmet	Bad practice	
Pears	Amitraz	Bad practice	
Pepper	Pyridaphenthion	Bad practice	
Otras leguminosas frescas	Dithiocarbamates (Dithiocarbamates expressed as CS <sub>2</sub> , including Maneb, Mancozeb, Metiram, Propineb, Thiram and Ziram) Chlorothalonil Folpet	Bad practice	
Lemons	Imazalil Chlorpyrifos	Bad practice	
Lettuce	Dithiocarbamates (Dithiocarbamates expressed as CS <sub>2</sub> , including Maneb, Mancozeb, Metiram, Propineb, Thiram and Ziram)	Bad practice	
Otras frutas con pepitas	Acephate	Pesticide misuses	
Oranges	Malathion	Pesticide misuses	
Oranges	Malathion	Pesticide misuses	

Product	Residue	Reason for MRL non compliance	Note
Oranges	Malathion	Pesticide misuses	
Oranges	Malathion	Pesticide misuses	
Oranges	Malathion (sum of malathion and malaaxon expressed as malathion)	Pesticide misuses	
Oranges	Malathion (sum of malathion and malaaxon expressed as malathion)	Pesticide misuses	
Otras hierbas	Endosulfan (sum of alpha- and beta-isomers and endosulfan-sulphate expresses as endosulfan)	Pesticide misuses	
Mangos	Dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	Pesticide misuses	
Bananas	Imidacloprid	Pesticide misuses	
Cherry	Iprodione	Pesticide misuses	
Spinach	Oxamyl	Pesticide misuses	
Chard	Imidacloprid	Pesticide misuses	
Peppers	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)	Pesticide misuses	
Peppers	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)	Pesticide misuses	
Peppers	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)	Pesticide misuses	
Peppers	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)	Pesticide misuses	
Lemons	Methomyl and Thiodicarb (sum of methomyl and thiodicarb expressed as methomyl)	Pesticide misuses	
Oranges	Malathion (sum of malathion and malaaxon expressed as malathion)	Pesticide misuses	



Product	Residue	Reason for MRL non compliance	Note
Papaya	Acetamiprid	Pesticide misuses	
Papaya	Acetamiprid	Pesticide misuses	
Papaya	Imazalil	Pesticide misuses	
Papaya	Imazalil	Pesticide misuses	
Papaya	Imazalil	Pesticide misuses	
Papaya	Imazalil	Pesticide misuses	
Asparagus	Fenpropathrin	Pesticide misuses	
Asparagus	Acetamiprid	Pesticide misuses	
Papaya	Imazalil	Pesticide misuses	
Papaya	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim) Thiophanate-methyl	Pesticide misuses	
Okra, quimbombo	Acetamiprid	Pesticide misuses	
Wine grapes	Chlorpyrifos Folpet Procimidone	Pesticide misuses	
Wine grapes	Procymidone	Pesticide misuses	
Rice	Tebuconazole	Pesticide misuses	
Tomatoes	Fenamiphos	Pesticide misuses	
Mandarins	Malathion (sum of malathion and malaaxon expressed as malathion)	Pesticide misuses	

Product	Residue	Reason for MRL non compliance	Note
Peppers	Pyridaphenthion	Pesticide misuses	
Melons	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)	Pesticide misuses	
Olive oil	Chlorpyrifos	Pesticide misuses	
Chard	Dithiocarbamates (Dithiocarbamates expressed as CS2, including Maneb, Mancozeb, Metiram, Propineb, Thiram and Ziram) Metalaxyl (Metalaxyl including other mixtures of constituent isomers including Metalaxyl-M (sum of isomers) Cypermethrin	Pesticide misuses	
Otras leguminosas frescas	Chlorothalonil Dithiocarbamates (Dithiocarbamates expressed as CS2, including Maneb, Mancozeb, Metiram, Propineb, Thiram and Ziram) Folpet	Pesticide misuses	
Oranges	Chlorotalonil	Pesticide misuses	
Artichoke	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)	Pesticide misuses	
Chard	Cyproconazole	Pesticide misuses	
Chard	Methiocarb (sum of methiocarb and methiocarb sulfoxide and sulfone, expressed as methiocarb) Cyproconazole	Pesticide misuses	
Artichoke	Dithiocarbamates (Dithiocarbamates expressed as CS2, including Maneb, Mancozeb, Metiram, Propineb, Thiram and Ziram) Dimethoate	Pesticide misuses	
Lettuce	Dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	Pesticide misuses	
Lettuce	Acrinathrin	Pesticide misuses	
Lettuce	Acrinathrin	Pesticide misuses	

Product	Residue	Reason for MRL non compliance	Note
Oranges	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)	Pesticide misuses	
Artichokes	Chlorothalonil	Pesticide misuses	
Lemons	Imazalil	Pesticide misuses	
Cabbage	Dimethomorph	Pesticide misuses	
Oranges	Chlorpyrifos	Pesticide misuses	
Tomatoes	Deltamethrin (cis-deltamethrin)	Organic product	
Lemons	Imazalil	Incorrect use, e.g. use of too concentrated solution and incorrect dosage	

#### 48.4. Quality assurance

Table 3

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
ES	Labs & technological Services AGQ, S.L.	Labs & technological Services AGQ, S.L.	11.01.02	ENAC nº exp 305/LE1323	FAPAS, Test-Qual
ES	Laboratorio Tecnológico de las Palmas de Gran Canarias (Gobierno de Canarias)	Laboratorio Tecnológico de las Palmas de Gran Canarias (Gobierno de Canarias)	Unaccredited		EUPT
ES	Laboratorios ECOSUR, S.A.L.	Laboratorios ECOSUR, S.A.L.	14.03.03	ENAC nº exp 354/LE709	FAPAS, Test-Qual
ES	Laboratorio Regional de la Dirección General de Salud Pública de la Región de Murcia	Laboratorio Regional de la Dirección General de Salud Pública de la Región de Murcia	Unaccredited		FAPAS, EUPT

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
ES	Laboratorio Regional de la Comunidad Autónoma de La Rioja	Laboratorio Regional de la Comunidad Autónoma de La Rioja	23.07.10	ENAC nº exp 168/LE 399	FAPAS, EUPT
ES	Laboratorio Oficial de Salud Pública de la Delegación de Salud y Bienestar Social de Cuenca	Laboratorio Oficial de Salud Pública de la Delegación de Salud y Bienestar Social de Cuenca	Unaccredited		FAPAS
ES	Laboratorio KUDAM S.L	Laboratorio KUDAM S.L	24.05.02	ENAC nº exp 324/LE670	FAPAS, Test-Qual
ES	Laboratorio de Salud Pública de Valencia	Laboratorio de Salud Pública de Valencia	Unaccredited		
ES	Laboratorio de Salud Pública de Palma de Mallorca	Laboratorio de Salud Pública de Palma de Mallorca	Unaccredited		FAPAS, EUPT
ES	Laboratorio de Salud Pública de Almería (Junta de Andalucía)	Laboratorio de Salud Pública de Almería (Junta de Andalucía)	08.09.05	ENAC nº exp 480/LE568	FAPAS, EUPT, Test-Qual
ES	Laboratorio de la Agencia de Salud Pública de Barcelona (LASPB)	Laboratorio de la Agencia de Salud Pública de Barcelona (LASPB)	27.06.03	ENAC nº exp 227/LE459	FAPAS, Test-Qual
ES	Laboratorio COEXPHAL de El Viso (Almería)	Laboratorio COEXPHAL de El Viso (Almería)	16.02.01	ENAC nº exp 254/LE537	FAPAS, Test-Qual
ES	Laboratorio Arbitral Agroalimentario (Madrid) MARM	Laboratorio Arbitral Agroalimentario (Madrid) MARM	19.11.10	ENAC nº exp 181/LE390	FAPAS, EUPT, Test-Qual
ES	Laboratorio Agroalimentario y de Sanidad Animal (LAYSA) de Murcia	Laboratorio Agroalimentario y de Sanidad Animal (LAYSA) de Murcia	16.10.09	ENAC nº exp 745/LE1502	
ES	Laboratorio Agroalimentario de Zaragoza	Laboratorio Agroalimentario de Zaragoza	18.01.11	ENAC nº exp 758/LE1462	FAPAS, EUPT, Test-Qual
ES	Laboratorio Agroalimentario de Burjasot-Valencia (Comunidad Valenciana)	Laboratorio Agroalimentario de Burjasot-Valencia (Comunidad Valenciana)	22.10.99	ENAC nº exp 184/LE405	FAPAS, EUPT, Test-Qual
ES	Laboratorio Agrario y Fitopatológico de Galicia	Laboratorio Agrario y Fitopatológico de Galicia	Unaccredited		EUPT, Test-Qual

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
ES	Laboratorio Agrario de Villava-Navarra / NASERSA	Laboratorio Agrario de Villava-Navarra / NASERSA	31.07.09	ENAC n° exp 641/LE1375	EUPT, Test-Qual
ES	Enoquisa S.L.	Enoquisa S.L.		ENAC n° exp 65/LE112	FAPAS
ES	Aquimisa Laboratorios (Salamanca)	Aquimisa Laboratorios (Salamanca)	Unaccredited		
ES	Analytica Alimentaria GmbH Sucursal en España	Analytica Alimentaria GmbH Sucursal en España		DAKKS n° exp D-PL-14156-01-00	Test-Qual
ES	AINIA	AINIA	20.12.96	ENAC n° exp 97/LE211	FAPAS
ES	Laboratorio de Salud Pública de Lugo	Laboratorio de Salud Pública de Lugo	10.07.98	ENAC n° exp 131/LE324	FAPAS, EUPT
ES	Agroalimentario APPLUS Norcontrol S.L.U (Madrid)	Agroalimentario APPLUS Norcontrol S.L.U (Madrid)	20.01.06	ENAC n° exp 76/LE221	FAPAS, Test-Qual

## 49. Sweden

### 49.1. Objective and design of the national control programme

NFA uses a score method for the selection of the products to be included annually or intermittently in the national control programme. Twenty of the products with the highest scores will be included each year and the remaining products will be included in a frequency of every three years.

The criteria of setting plus and minus scores are based on consumption rate, the importance of the foodstuff in the diets of infants and young children, residues found in prior samples, RASFF notifications, edible or inedible peel, processing or not processing etc.

The sampling distribution between the origin of the food was roughly 30 % domestic, 30 % EU and 40 % from third country.

The sampling points for fresh fruits and vegetables were sampled at wholesalers' warehouses in the first trade channel. The imported cereal grains were sampled at the port where the shipment was discharged. Samples of domestic produced cereal grains were collected at the milling plants. Most of the samples of processed or frozen fruit and vegetables, juices, fruit drinks, rice, cereal products and vegetable oils were collected in retail shops or department stores.

The number of samples from the organic sector was roughly dependent on its share of the market and availability on the market.

All samples were analysed by multi-residue method, depending on the use pattern of pesticides and the products to be analysed we complement the multi residue method by using one or more single residue methods. Overall we used 14 analytical methods. In all, by using both multi-residue methods and single residue methods it was possible to determine 320 pesticides corresponding to 421 analytes. Compared with 2009 we have increased the scoop with 35 new analytes. The priority given to new analytes has been to supplementing those pesticides which have a residue definition and to incorporate the pesticides included in the Multinannual control programme.

### 49.2. Key findings, interpretation of the results and comparability with the previous year results

In 2010, a total of 1584 surveillance samples of fruits, vegetables, baby food, juices, cereal grains, vegetable oils, milk and swine meat were analysed for residues of 320 pesticides (421 analytes). EU harmonized Maximum Residue Limits (EC-MRLs) were exceeded in 125 samples (7.9 %).

A total of 247 samples of cereal grains were analysed. Most of the samples (71 %) contained no residues but fifteen samples (6 %) exceeded MRLs.

No residues were found in the 33 samples of foods for infants and young children.

The enforcements sampling included 17 samples on fruits and 61 samples on vegetables. Two (12%) respectively 16 (26%) of those samples exceeded the MRLs.

The short-term intake was estimated for all pesticides with an acute reference dose (ARfD) set by EU or WHO. The calculation was based on the residue found in a surveillance (composite) sample and EFSA calculation model PRIMO was used. For samples exceeding the ARfD a RASFF notification has been sent to the Commissions RASFF-team.

### 49.3. Non-compliant samples: possible reasons and actions taken

- In 2010, 5 % of the samples (49 samples in total) were found non-compliant with the EU MRL. For 5 samples RASF notifications were issued; for all but two samples the retailer and the competent authority in the country of sample origin were advised; for 2 samples administrative consequences were taken. All lots from which samples were found MRL non-compliant were released on the market;

- The following follow-up actions were taken in case of sample non compliant with the EC MRL (measurement uncertainty taken into consideration):

Number of non-compliant samples	Action taken	Note
46	Warnings and administrative sanctions	Administrative sanction was taken for 30 samples. 11 samples was prohibited for sale. RASFF-notifications were done for 5 (see below).
5	RASFF notification	Sample code: 1075 RASFF ref: 2010.0979 Not released on the market  Sample code: 1003 RASFF ref 2010.0882 Not released on the market  Sample code: 1386 RASFF ref 2010.1391 Not released on the market  Sample code: 81345 RASFF ref 2010.1442 Possibly distributed on the market  Sample code: 63295 RASFF ref 2010.1420 Possibly distributed on the market.

Product	Residue	Reason for MRL non compliance	Note
Chilli pepper	Triazophos	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Mandarin	Famoxadone	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Long beans	Methomyl	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Long beans	Indoxacarb	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Beans with pods	Dimethoate	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Oranges (navel)	Malathion	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	

Product	Residue	Reason for MRL non compliance	Note
Chilli pepper	Cypermethrin	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Beans with pods	Fenvalerate	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Table grapes	Chlormequat	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Table grapes	Malathion	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Table grapes	Chlormequat	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Papaya	Methomyl	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Long beans	Chlorpyrifos	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Brassica (variety yod kana/young kale)	Profenofos	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Cherries	Permethrin	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Apples	Diazinon	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Brassica (variety yod kana/young kale)	Carbendazim, Flusilazole	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Long beans	Triazophos, Methomyl, Acephate, Dimethoate	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Basmati rice	Dichlorvos	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Peaches	Phosmet	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Table grapes	Quinalophos, Lambda-cyhalothrin	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Chilli pepper	Methomyl, Difenconazole	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	



Product	Residue	Reason for MRL non compliance	Note
Chilli pepper	Ethion, Methamidophos, Acephate, Profenofos	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Chilli pepper	Cyproconazole	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Chilli pepper	Acephate, Ethion, Methamidophos, Monocrotophos, Phosalone, Profenofos, Triazophos	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Kiwi	Dimethomorph	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Parsley	Quintozone	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Basil	Dimethoate, Carbendazim	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Table grapes	Methomyl	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Basil	Famoxadone	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Papaya	Acetamiprid	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Basil	Chlorpyrifos-ethyl	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Celery leaves	DEET	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Passion fruits	Pyrimetamil, Iprodion	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Aubergine	Endosulfan	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Chilli pepper	Methomyl	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	

Product	Residue	Reason for MRL non compliance	Note
Celery	Iprodione, Chlorpyrifos, Flusilazole, Fenvalerate, Captan	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Basil	Dimethoate, Carbendazim	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Celery	Cypermethrin, Profenofos	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Aubergine	Carbaryl, Acephate	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Basmati rice	Isoprothiolane	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	

#### 49.4. Quality assurance

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
SE	Eurofins Food & Agro Sweden AB	Eurofins	02/09/1991	SWEDAC	EUPT 2010: C4, A05, FV12, SRM5, SM02  FAPAS 2010: Test0568-veg. Oil, Test0569-fish oil, Test19103-Grape, Test19104-cucumber, Test0964-maize flour, Test0965-Rye flour, Test19105-pear, Test19106-tomato, Test19107-Wine, Test0571-Milk powder, Test0966-Maize Flour, Test0573-Veg.oil, Test19112-nectarine
SE	National Food Administration Chemistry Division 1	SLV/Kem1	02/26/2007	SWEDAC	EUPT 2010: C4, A05, FV12, SM02

#### 49.5. Additional Information

## 50. United Kingdom

### 50.1. Objective and design of the national control programme

The UK national control programme is made up of surveys of commodities selected every year on the basis of an established prioritisation system. Proposals for the programme for 2010 were reviewed by the Pesticide Residues Committee, an independent committee of experts, before finalisation.

Full details of the programme and supporting justification were previously provided to EFSA and the Commission.



Factors of particular importance in determining surveys for this year's programme were:

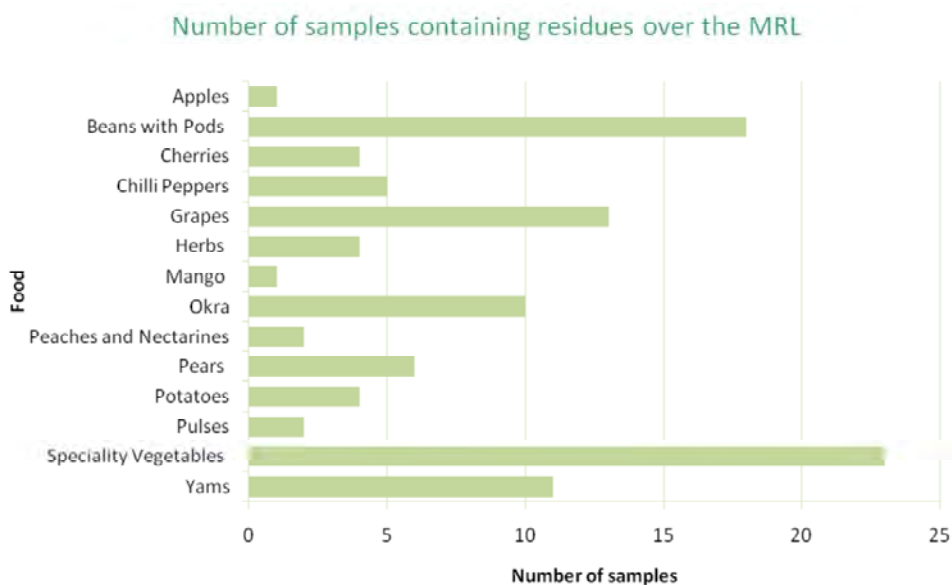
- EU monitoring programme – all foods covered by the required EU monitoring for 2011 were classified as high priority for incorporation into the national programme
- Foods for which recent results had attracted public interest (e.g. carbonated soft drinks)
- Staple foods – bread and milk are always included in the UK programme. In addition pulses were selected in this category for 2010.
- Foods of high dietary importance, whether for the whole population or for vulnerable sub-groups in particular infants and children.
- Foods for which RASFF notifications were issued for pesticide residues during 2009 and/or where previous results showed a high rate of non-compliance with MRLs.
- Lower priority foods which had not been surveyed for some years
- It should be noted that no adjustment was made to the programme with regard to animal products, as these have always been part of the UK national programme.
- In addition, certain foods were selected for “rolling reporting”, that is sampling by government inspectors and faster turn-around of results. An archive of these results is at <http://pesticides.gov.uk/prc.asp?id=2945> - however it should be noted that these are also covered by the main reports.

Only minor adjustments were made to the programme during the course of the year, which affected the balance of sample numbers between surveys and not its scope.

### 50.2. Key findings, interpretation of the results and comparability with the previous year results

Of the 3750 samples tested 104 (2.77%) contained one or more residues that was above the relevant MRL. Since the UK programme is made of surveys of different foods each year, it is not statistically appropriate to compare results to previous years.

The samples containing residues above the MRLs were all samples of fruit and vegetables except one that was a sample of pulses.



Detailed interpretation of results is provided in the Pesticide Residues Committee's quarterly reports at <http://www.pesticides.gov.uk/prc.asp?id=2937>.

#### Fresh fruit and vegetables (including potatoes)

Within this category residues above MRLs (without taking account of measurement uncertainty) was at 4.9%, a higher rate than in previous years. This is attributed mostly to high rates of non-compliance in certain vegetables as discussed below.

A relatively high rate of residue above the MRL was seen in beans with pods, speciality vegetables and okra although in line with previous years. This problem is mainly found with imported foods and pesticides where LOD MRLs apply due to absence of substantive MRLs. Due to these results beans with pods, speciality vegetables and okra are being surveyed again in 2011.

Samples of Indian grapes were found to contain chlormequat over the MRL. This issue was expected, as it was across the EU, since it came to light that Indian growers and exporters had not realised the implications of chlormequat use.

Three samples of potatoes were found to contain chlorpropham above the MRL. These results were unexpected and the UK potato supply industry is looking at them in detail to determine possible causes.

#### Animal products

Residues of trifluralin were detected in trout farmed in various locations in the UK. Trifluralin is not authorised for use in the UK however persistence in water was a known issue when it was withdrawn. This is the first year that trifluralin has been in the UK analytical suite for trout so no information historical incidence is available. When peer reviewing the results (as is standard UK practice) the UK Veterinary Medicines Directorate (competent authority for veterinary medicines) pointed out that trifluralin has been misused as a veterinary medicine outside the EU. However no evidence that the fish farms had misused trifluralin in this way was found. On balance the PRC concluded that these residues were most likely from environmental contamination from authorised use of trifluralin i.e. before it was withdrawn from use.

Other residues detected in animal products were consistent with either environmental contamination or veterinary use. No residues were above MRLs where applicable.

### Cereals and grains

Residues above the MRL were found in two samples of pulses- methomyl in (dried) moong beans and carbendazim in brown lentils. It should be noted that the country of origin for pulse samples is not necessary where the food was grown, but may be where they were dried and/or packed.

Residues were detected in the majority of bread samples in line with previous findings. Residues of chlormequat are considered to arise from legitimate use of chlormequat as a PGR, whereas residues of pirimiphos-methyl and malathion to rise from legitimate use those pesticides on either stored grain or stored flour. It should be noted that the country of origin for bread is that where the bread was baked and not necessarily the origin of the flour or the grain from which the flour was milled.

### Baby (infant) food

No residues were detected in baby food.

### 50.3. Non-compliant samples: possible reasons and actions taken

104 samples were found to contain 133 residues above the MRL, of which 71 samples were found to contain 87 residues in breach of the MRL after measurement uncertainty was taken into account.

Advisory letters were issued to sampling points about of residues above the MRL, in addition for those samples were residues were in breach of the MRL after measurement uncertainty in most cases these were highlighted as non-compliant when brand name details were published (brand-name details are routinely published for all UK samples taken from the supply chain.)

RASFF notifications were prepared in respect of 17 samples. Brand name details of these samples were also published separately.

For samples of non-UK food the appropriate authorities were also notified. For UK samples results were where possible investigated and/or referred for action under cross-compliance rules.

Reasons for non-compliance were not generally provided. In the case of food from outside the EU it appeared likely, although representations were not made to this effect, that the food had been grown in accordance with local GAP for local markets that is not to a specification that was compliant with EU requirements. The table below lists only those cases where further information is available.

Food	Country of Origin	Pesticides found	Residue found (mg/kg)	MRL (mg/kg)	Breach of the law after allowing measurement uncertainty	Reasons for non-compliance
Grapes	India	chlormequat	0,5	0.05*	Yes	Lack of understanding of implications for trade with EU of using chlormequat, addressed by Commission
Grapes	India	chlormequat	0,4	0.05*	Yes	
Grapes	India	chlormequat	0,2	0.05*	Yes	
Grapes	India	chlormequat	0,1	0.05*	Yes	
Grapes	India	chlormequat	0,4	0.05*	Yes	
Grapes	India	chlormequat	0,2	0.05*	Yes	
Grapes	India	chlormequat	0,08	0.05*	No	
Grapes	India	chlormequat	0,1	0.05*	Yes	
Grapes	India	chlormequat	0,1	0.05*	Yes	

Food	Country of Origin	Pesticides found	Residue found (mg/kg)	MRL (mg/kg)	Breach of the law after allowing measurement uncertainty	Reasons for non-compliance
Grapes	India	Inorganic bromide	106	50	Yes	Unknown - records supplied by grower indicate methyl bromide not used
Pears	UK	amitraz	0.07	0.05*	No	Original sample plus 2 follow-up samples from the same grower. Amitraz is not authorised for use on pears in the UK. Investigations are ongoing.
Pears	UK	amitraz	0,1	0.05*	No	
Pears	UK	amitraz	0,1	0.05*	No	
Potatoes	UK	chlorpropham	14	10	No	Initial enquiries suggested chlorpropham was used in-store in accordance with the UK authorisation or this use. The UK potato supply industry is looking into these findings
Potatoes	UK	chlorpropham	11	10	No	
Potatoes	UK	chlorpropham	18	10	No	
Pulses (dried moong beans)	UK	methomyl	0.03	0.02*	No	Unknown - however it is likely the food was grown outside the UK and only packaged for sale to consumers in the UK
Daikon	Italy	dithiocarbamates	0.5	0.05*	Yes	ALL samples of daikon were found to contain residues of dithiocarbamates as measured by CS2 method above the MRL. 2 separate sets of grower records showed no DTC pesticides were used. On balance the PRC were satisfied that these residues most likely occurred from natural CS2 precursors in this brassica crop. These samples were therefore not highlighted when brand-named.
Daikon	Italy	dithiocarbamates	0.5	0.05*	Yes	
Daikon	the Netherlands	dithiocarbamates	1,3	0.05*	Yes	
Daikon	Germany	dithiocarbamates	1,2	0.05*	Yes	
Pak Choi	UK	acetamiprid	0.04	0.01*	Yes	Grower failed to follow GAP

#### 50.4. Quality assurance

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
UK	UK SASA (Science and Advice for Scottish Agriculture)	SASA	18 July 1994 Successfully reassessed by UKAS every 3 year period.	UKAS	FAPAS 19-99, 19-104, 19-108, 19-113 EUPTSM02, EUPT-SRM05, EUPT-FV12
UK	Fera (the Food & Environment Research Agency) Formerly CSL (Central Science Laboratory)	Fera CSL	1996	UKAS	<ul style="list-style-type: none"> <li>• EUPT rounds C4, SRM5, FV12 &amp; SM02</li> <li>• FAPAS series 19 rounds 101, 103, 105, 110 &amp; 112</li> <li>• FAPAS series 9 rounds 63, 65, 67 &amp; 68</li> <li>• FAPAS series 5 rounds 70, 71 &amp; 74</li> </ul>
UK	Eurofins Laboratories Ltd	EUAL	Accredited since 06/10/1995, reviewed and assessed annually		FV12, FAPAS: Series 19, Rounds 103, 104, 105, 106, 109, 110, 111, 113
UK	LGC, Teddington, UK	LGC	01/04/1984	UKAS	FAPAS, EUPT 2010: AO 06, FV13
UK	AFBI (Agri-Food Biosciences Institute,)	AFBI	11/11/2010	UKAS	EUPT AO-05, FAPAS programme 2010 (animal products)

#### 50.5. Additional Information

The Pesticide Residues Committee has been abolished as UK government review of non-departmental public bodies. UK monitoring plans and results for 2011 onwards will be overseen by the Expert Committee on Pesticide Residues in Food (PRiF). The PRiF is made up of independent experts and will continue the PRC's practice of publishing regular reports about monitoring results including brand name information for all samples.

**APPENDIX III - OVERALL RESULTS REPORTED BY EACH REPORTING COUNTRY**

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**TABLE A: EU+NCP – SURVEILLANCE SAMPLING: PESTICIDES FOUND IN ANIMAL PRODUCTS CEREALS, FRUIT AND NUTS, VEGETABLES.**

**ANIMAL PRODUCTS**

Compound	Sought <sup>(a)</sup>	Found	% of samples with quantifiable residues	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number of countries testing	Included in the EU programme
Acetamiprid (sum animal products)	203	2	0.99	0.30	3.50	1	
Aldrin and Dieldrin	2881	22	0.76	0.51	1.15	19	
Amitraz (sum)	124	2	2	0.50	5.66	7	Y*
Azoxystrobin	580	2	0.34	0.11	1.24	9	
Bis(4-chlorophenyl) sulfone	1	1	100	22.36	100.00	1	
Boscalid (sum animal products)	320	6	2	0.88	4.02	1	
Buprofezin	344	1	0.29	0.07	1.60	7	
Carbendazim (sum animal products)	301	13	4.32	2.56	7.25	1	
Chlordane (sum)	2261	5	0.22	0.10	0.52	15	
Chlorpyrifos	3202	1	0.03	0.01	0.17	25	
Coumaphos	1011	3	0.30	0.11	0.86	8	
Cyfluthrin (sum)	2767	1	0.04	0.01	0.20	18	
Cypermethrin (sum)	3224	2	0.06	0.02	0.22	23	
DDT (sum)	3148	421	13.37	12.23	14.61	22	
Deltamethrin	3503	2	0.06	0.02	0.21	24	
Diazinon	2865	11	0.38	0.22	0.69	25	
Dimethoate (sum)	576	2	0.35	0.11	1.25	7	
Dimoxystrobin	147	2	1.36	0.42	4.80	2	
Disulfoton (sum)	153	1	0.65	0.16	3.56	2	
Endosulfan (sum)	3617	14	0.39	0.23	0.65	24	
Endrin	4265	2	0.05	0.01	0.17	26	
Fenhexamid	298	2	0.67	0.21	2.40	6	
Flusilazole (sum animal products)	102	2	1.96	0.60	6.84	2	
HCH (sum)	311	36	11.58	8.49	15.61	11	
HCH alpha	3560	33	0.93	0.66	1.30	26	
HCH beta	3439	30	0.87	0.61	1.24	26	
HCH delta	1275	2	0.16	0.05	0.57	7	
Heptachlor (sum)	2777	5	0.18	0.08	0.42	21	
Hexachlorobenzene	4026	319	7.92	7.13	8.80	25	
Imazalil	316	1	0.32	0.08	1.74	6	
Iprodione	290	3	1.03	0.38	2.98	9	
Kresoxim-methyl	510	1	0.20	0.05	1.09	11	
Lindane	4101	72	1.76	1.40	2.21	24	
Methoxychlor	3457	1	0.03	0.01	0.16	25	
Nicotine	127	1	0.79	0.19	4.28	1	
Nonachlor-Trans	456	2	0.44	0.14	1.57	4	
Permethrin (sum)	3350	1	0.03	0.01	0.17	24	
Pirimicarb (sum)	343	3	0.87	0.32	2.53	5	
Pirimiphos-methyl	2992	1	0.03	0.01	0.19	25	
Spinosad (sum)	115	1	0.87	0.21	4.71	4	

Compound	Sought <sup>(a)</sup>	Found	% of samples with quantifiable residues	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number of countries testing	Included in the EU programme
Thiabendazole (sum animal products)	150	3	2.00	0.73	5.70	1	
Thiacloprid	412	42	10.19	7.64	13.50	5	
Trifloxystrobin	381	2	0.52	0.16	1.88	8	
<b>Total</b>	<b>68281</b>	<b>1079</b>					

(a): Number of times the pesticide was sought in individual samples. Total: Total number of determinations

(b): Lower confidence limit ; (c): Upper confidence limit

(d): Y = not mandatory, Y\* = not mandatory for some commodities

**CEREALS**

Compound	Sought <sup>(a)</sup>	Found	% of samples with quantifiable residues	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number of countries testing	Included in the EU programme
2,4-D (sum)	891	1	0.11	0.03	0.62	10	Y
Acetamiprid	2665	4	0.15	0.06	0.38	24	
Atrazine	1870	1	0.05	0.01	0.30	18	
Azinphos-methyl	3351	1	0.03	0.01	0.17	26	
Azoxystrobin	3492	12	0.34	0.20	0.60	27	
Bendiocarb	591	1	0.17	0.04	0.94	8	
Bifenthrin	3539	6	0.17	0.08	0.37	27	
Biphenyl	1028	3	0.29	0.11	0.85	13	
Boscalid	2550	46	1.80	1.36	2.40	24	
Bromide ion	296	51	17.23	13.36	21.95	7	
Bromopropylate	3362	4	0.12	0.05	0.30	25	
Buprofezin	3036	2	0.07	0.02	0.24	25	
Carbendazim and benomyl	2845	13	0.46	0.27	0.78	38	
Chlormequat	1482	501	33.81	31.44	36.25	21	
Chlorpropham (sum)	1919	8	0.42	0.21	0.82	19	
Chlorpyrifos	3804	42	1.10	0.82	1.49	27	
Chlorpyrifos-methyl	3861	132	3.42	2.89	4.04	27	
Copper	1	1	100	22.36	100	1	
Cyfluthrin (sum)	2552	7	0	0.14	0.56	20	
Cymoxanil	1546	1	0.06	0.02	0.36	16	
Cypermethrin (sum)	3593	19	0.53	0.34	0.82	35	
Cyproconazole	2853	4	0.14	0.06	0.36	24	Y
Cyprodinil	3224	6	0.19	0.09	0.40	25	
DDT (sum)	2196	1	0.05	0.01	0.25	21	
Deltamethrin	3734	75	2.01	1.61	2.51	27	
Diazinon	3657	4	0.11	0.04	0.28	27	
Dichlorvos	3491	3	0.09	0.03	0.25	27	
Difenoconazole	3021	2	0.07	0.02	0.24	24	
Dimethoate (sum)	2784	1	0.04	0.01	0.20	25	
Diniconazole	1302	1	0.08	0.02	0.43	17	
Diphenylamine	2849	6	0.21	0.10	0.46	25	
Dithiocarbamates	595	6	1.01	0.47	2.18	21	
Endosulfan (sum)	3420	3	0.09	0.03	0.26	27	
Epoxiconazole	2778	21	0.76	0.50	1.15	25	
Ethephon	199	1	0.50	0.12	2.75	5	Y
Ethion	3145	1	0.03	0.01	0.18	25	
Fenarimol	3162	1	0.03	0.01	0.18	25	
Fenbutatin oxide	245	1	0.41	0.10	2.24	4	Y
Fenhexamid	3053	2	0.07	0.02	0.24	26	
Fenitrothion	3618	1	0.03	0.01	0.15	26	
Fenpropimorph	2471	9	0.36	0.19	0.69	23	

Compound	Sought <sup>(a)</sup>	Found	% of samples with quantifiable residues	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number of countries testing	Included in the EU programme
Fenvalerate and Esfenvalerate (Sum of RR and SS isomers)	1691	1	0.06	0.01	0.33	19	
Fenvalerate and Esfenvalerate (Sum of RS and SR isomers)	1202	1	0.08	0.02	0.46	12	
Fipronil (sum)	1407	3	0.21	0.08	0.62	15	
Fludioxonil	3023	1	0.03	0.01	0.18	24	
Flusilazole	2761	3	0.11	0.04	0.32	24	
Flutolanil	1009	7	0.69	0.34	1.42	12	
Glyphosate	878	75	8.54	6.87	10.58	15	
HCH (sum)	1838	1	0.05	0.01	0.30	20	
Hexaconazole	2952	2	0.07	0.02	0.24	24	
Hydrogen phosphide	46	8	17.39	9.15	30.81	2	
Imidacloprid	2398	17	0.71	0.45	1.13	24	
Isoprothiolane	466	25	5.36	3.67	7.80	6	
Kresoxim-methyl	3465	1	0.03	0.01	0.16	26	
Lambda-Cyhalothrin	3168	4	0.13	0.05	0.32	25	
Lindane	3184	1	0.03	0.01	0.17	24	
Linuron	2287	1	0.04	0.01	0.24	23	
Malathion (sum)	2807	13	0.46	0.27	0.79	26	
Mepiquat	1348	59	4.38	3.41	5.61	20	
Methidathion	3175	1	0.03	0.01	0.18	25	
Methoxychlor	2108	1	0.05	0.01	0.26	16	
Methyl bromide	40	3	7.50	2.72	19.92	1	
Myclobutanil	3180	1	0.03	0.01	0.18	25	
Orthophenylphenol	1605	8	0.50	0.26	0.98	16	
Pencycuron	1858	3	0.16	0.06	0.47	19	
Permethrin (sum)	3553	5	0.14	0.06	0.33	26	
Phosalone	3327	1	0.03	0.01	0.17	26	
Phosphines and phosphides	31	3	9.68	3.51	25.02	1	
Pirimicarb (sum)	2742	2	0.07	0.02	0.26	24	
Pirimiphos-Ethyl	1707	5	0.29	0.13	0.68	17	
Pirimiphos-methyl	3885	575	14.80	13.72	15.95	27	
Prochloraz (sum)	2180	2	0.09	0.03	0.33	21	
Procymidone	3551	1	0.03	0.01	0.16	27	
Propachlor (sum)	510	1	0.20	0.05	1.09	8	
Propamocarb (sum)	1221	1	0.08	0.02	0.46	18	Y
Propiconazole	3459	10	0.29	0.16	0.53	25	
Pyraclostrobin	2785	4	0.14	0.06	0.37	23	
Pyrethrins	841	1	0.12	0.03	0.66	11	Y
Pyrimethanil	3178	2	0.06	0.02	0.23	25	
Spiroxamine	2674	1	0.04	0.01	0.21	25	

Compound	Sought <sup>(a)</sup>	Found	% of samples with quantifiable residues	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number of countries testing	Included in the EU programme
Tebuconazole	3533	34	0.96	0.69	1.34	26	
Tebufenozide	2395	2	0.08	0.03	0.30	23	
Thiabendazole	3266	2	0.06	0.02	0.22	25	
Thiophanate-methyl	2130	1	0.05	0.01	0.26	23	
Tolclofos-methyl	3290	1	0.03	0.01	0.17	25	
Triazophos	3627	1	0.03	0.01	0.15	27	
Tricyclazole	445	14	3.15	1.89	5.21	8	
Trifloxystrobin	3196	4	0.13	0.05	0.32	25	
<b>Total</b>	<b>205493</b>	<b>1918</b>					

(a): Number of times the pesticide was sought in individual samples. Total: Total number of determinations

(b): Lower confidence limit ; (c): Upper confidence limit

(d): Y = not mandatory, Y\* = not mandatory for some commodities

**FRUITS AND NUTS**

Compound	Sought <sup>(a)</sup>	Found	% of samples with quantifiable residues	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number of countries testing	Included in the EU programme
1-naphthylacetamide	2715	1	0.04	0.01	0.20	1	
2,4-D (sum)	9708	236	2.43	2.14	2.76	27	Y
2,4-Dimethylphenylformamide	942	2	0.21	0.07	0.76	6	
2-Hydroxyethanephosphonic acid	462	28	6.06	4.23	8.62	1	
2-Naphthoxyacetic acid	2219	1	0.05	0.01	0.25	4	
3-keto-carbofuran	323	1	0.31	0.07	1.71	2	
4,4`-Dichlorobenzophenone	3868	6	0.16	0.07	0.34	6	
5-Hydroxy-Thiabendazole	135	1	0.74	0.18	4.03	2	
Abamectin (sum)	10430	24	0.23	0.16	0.34	23	
Acephate	22300	10	0.04	0.02	0.08	29	
Acetamiprid	21694	457	2.11	1.92	2.31	28	
Acrinathrin	21711	83	0.38	0.31	0.47	26	Y
Alachlor	7891	4	0.05	0.02	0.13	13	
Aldrin and Dieldrin	15762	1	0.01	0	0.04	18	
Ametryn	7766	1	0.01	0	0.07	11	
Amitraz (sum)	7842	15	0.19	0.12	0.32	29	Y*
Anthraquinone	2961	1	0.03	0.01	0.19	6	
Aspon	2076	3	0.14	0.05	0.42	2	
Atrazine	16474	4	0.02	0.01	0.06	22	
Azinphos-ethyl	21415	1	0.005	0	0.03	25	Y
Azinphos-methyl	24630	35	0.14	0.10	0.20	29	
Azoxystrobin	24496	953	3.89	3.66	4.14	28	
Benalaxyl	5138	1	0.02	0	0.11	13	
Benalaxyl (sum)	14962	1	0.01	0	0.04	14	
Bendiocarb	9966	2	0.02	0.01	0.07	12	
Benthiavalicarb	884	1	0.11	0.03	0.63	3	
Benthiavalicarb (sum)	2805	3	0.11	0.04	0.31	3	
Benthiavalicarb isopropyl	1418	1	0.07	0.02	0.39	1	
Benzyladenine	962	4	0.42	0.17	1.06	1	
Bifenazate	7356	31	0.42	0.30	0.60	10	
Bifenox	10515	1	0.01	0	0.05	10	
Bifenthrin	24511	366	1.49	1.35	1.65	28	
Biphenyl	9030	5	0.06	0.02	0.13	19	
Bitertanol	20921	145	0.69	0.59	0.81	29	
Bixafen	962	1	0.10	0.03	0.58	1	
Boscalid	21597	2741	12.69	12.25	13.14	27	
Bromide ion	336	53	15.77	12.27	20.06	9	
Bromopropylate	24849	45	0.18	0.14	0.24	29	
Bromuconazole (sum)	17065	1	0.01	0	0.03	26	
Bupirimate	21683	200	0.92	0.80	1.06	28	
Buprofezin	23347	93	0.40	0.33	0.49	29	
Captan	16381	603	3.68	3.40	3.98	29	

Compound	Sought <sup>(a)</sup>	Found	% of samples with quantifiable residues	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number of countries testing	Included in the EU programme
Captan/Folpet (sum)	6627	533	8.04	7.41	8.72	12	
Carbaryl	23449	58	0.25	0.19	0.32	29	
Carbendazim (sum animal products)	213	1	0.47	0.11	2.58	1	
Carbendazim and benomyl	20513	1147	5.59	5.29	5.91	43	
Carbofuran (sum)	18934	16	0.08	0.05	0.14	26	
Carbosulfan	14283	2	0.01	0	0.05	22	Y
Chlorantranilipole	2126	77	3.62	2.91	4.50	6	
Chlorfenapyr	15082	11	0.07	0.04	0.13	25	
Chlorfenvinphos	23327	2	0.01	0	0.03	29	
Chlormequat	2113	222	10.51	9.27	11.89	21	
Chlorobenzilate	12192	2	0.02	0.01	0.06	21	Y
Chloropropylate	8148	1	0.01	0	0.07	8	
Chlorothalonil	24169	197	0.82	0.71	0.94	29	
Chlorpropham (sum)	14688	12	0.08	0.05	0.14	20	
Chlorpyrifos	25530	3054	11.96	11.57	12.37	29	
Chlorpyrifos-methyl	25395	373	1.47	1.33	1.62	29	
Chlorthal-dimethyl	15149	3	0.02	0.01	0.06	16	
Clethodim	4649	1	0.02	0.01	0.12	6	
Clofentezine	17436	108	0.62	0.51	0.75	26	
Clofentezine (sum animal products/cereals)	1078	2	0.19	0.06	0.67	4	
Clothianidin	5424	18	0.33	0.21	0.52	21	
Copper	26	20	76.92	57.74	88.89	1	
Cyanophos	5905	3	0.05	0.02	0.15	5	
Cyazofamid	12433	41	0.33	0.24	0.45	16	
Cyfluthrin (sum)	20888	32	0.15	0.11	0.22	38	
Cyhalothrin	1042	8	0.77	0.40	1.51	2	
Cymoxanil	15475	6	0.04	0.02	0.08	17	
Cypermethrin (sum)	23984	494	2.06	1.89	2.25	42	
Cyproconazole	21336	44	0.21	0.15	0.28	28	Y
Cyprodinil	23959	2614	10.91	10.52	11.31	29	
Cyprodinil (sum animal products)	106	13	12.26	7.34	19.88	1	
DDT (sum)	18567	5	0.03	0.01	0.06	23	
Dalapon	963	1	0.10	0.03	0.58	2	
Deltamethrin	24356	88	0.36	0.29	0.44	28	
Desethyl-Terbuthylazine	1446	9	0.62	0.33	1.18	2	
Desmedipham	5618	1	0.02	0	0.10	9	
Desmethylformamido-Pirimicarb	2915	13	0.45	0.26	0.76	5	
Diazinon	25219	38	0.15	0.11	0.21	29	
Dichlofluanid	23633	1	0.004	0	0.02	28	
Dichlorprop incl. Dichlorprop-P	7200	15	0.21	0.13	0.34	8	
Dichlorvos	24150	25	0.10	0.07	0.15	28	

Compound	Sought <sup>(a)</sup>	Found	% of samples with quantifiable residues	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number of countries testing	Included in the EU programme
Dicloran	19753	3	0.02	0.01	0.04	27	
Dicofol (sum)	20126	85	0.42	0.34	0.52	25	
Diethofencarb	18597	4	0.02	0.01	0.06	21	
Difenoconazole	22855	222	0.97	0.85	1.11	28	
Diflubenzuron	14076	53	0.38	0.29	0.49	17	
Diflufenican	11599	2	0.02	0.01	0.06	11	
Dimethoate (sum)	30032	230	0.77	0.67	0.87	76	
Dimethomorph	20827	519	2.49	2.29	2.71	27	
Diniconazole	15706	5	0.03	0.01	0.07	19	
Dinocap (sum)	3311	4	0.12	0.05	0.31	15	
Dioxathion	10186	1	0.01	0.00	0.05	8	
Diphenylamine	21814	523	2.40	2	2.61	29	
Disulfoton	4963	1	0.02	0.00	0.11	15	
Dithianon	3537	152	4.30	4	5.02	7	
Dithiocarbamates	7445	1079	14.49	13.71	15.31	26	
Diuron	6523	3	0.05	0.02	0.13	7	
Dodine	6694	157	2.35	2.01	2.74	9	
EPN	14419	2	0.01	0.00	0.05	19	
Endosulfan (sum)	23670	34	0.14	0	0.20	28	
Epoxiconazole	20637	9	0.04	0.02	0.08	28	
Ethephon	1086	121	11.14	9	13.15	6	Y
Ethiofencarb	8475	1	0.01	0.00	0.07	15	
Ethion	23883	20	0.08	0	0.13	29	
Ethirimol	8922	48	0.54	0.41	0.71	11	
Ethoprophos	20220	2	0.01	0.00	0.04	25	Y
Ethoxyquin	9783	36	0.37	0	0.51	13	
Etofenprox	16681	294	1.76	1.57	1.97	22	Y
Etoxazole	8378	27	0.32	0.22	0.47	11	
Famoxadone	17137	153	0.89	0.76	1.05	19	
Fenamidone	15017	32	0.21	0.15	0.30	19	
Fenarimol	23456	31	0.13	0.09	0.19	29	
Fenazaquin	19998	75	0.38	0.30	0.47	26	
Fenbuconazole	18572	225	1.21	1.06	1.38	24	Y
Fenbutatin oxide	3902	161	4.13	3.55	4.80	7	Y
Fenclorphos	1806	1	0.06	0.01	0.31	12	
Fenhexamid	23443	2291	9.77	9.40	10.16	28	
Fenitrothion	24695	20	0.08	0.05	0.13	28	
Fenobucarb	4651	2	0.04	0.01	0.16	7	
Fenoxycarb	19674	129	0.66	0.55	0.78	26	
Fenpiclonil	7844	1	0.01	0.00	0.07	6	
Fenpropathrin	21725	35	0.16	0	0.22	27	Y
Fenpropidin	13417	1	0.01	0.00	0.04	18	
Fenpropidin (sum animal products)	1	1	100.00	22	100.00	1	



Compound	Sought <sup>(a)</sup>	Found	% of samples with quantifiable residues	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number of countries testing	Included in the EU programme
Fenpropimorph	19151	34	0.18	0.13	0	26	
Fenpyroximate	16611	93	0.56	0.46	0.69	17	
Fenthion (sum)	16840	34	0.20	0.14	0	21	
Fenvalerate and Esfenvalerate (Sum of RR and SS isomers)	17813	22	0.12	0.08	0.19	31	
Fenvalerate and Esfenvalerate (Sum of RS and SR isomers)	12834	9	0.07	0.04	0.13	15	
Fipronil (sum)	13347	7	0.05	0.03	0.11	18	
Fipronil-Desulfinyl	1094	1	0.09	0.02	0.51	2	
Flonicamid (sum)	4295	12	0.28	0.16	0.49	4	
Fluacrypyrim	2111	1	0.05	0.01	0.26	3	
Fluazifop	6387	16	0.25	0.16	0.41	9	Y
Fluazifop-P-butyl (sum)	7221	7	0.10	0.05	0.20	15	
Fluazinam	9933	1	0.01	0.00	0.06	15	
Fludioxonil	22679	2140	9.44	9	9.82	28	
Fenvalerate and Esfenvalerate (Sum of RR and SS isomers)	4205	1	0.02	0.01	0.13	5	
Flufenoxuron	17915	137	0.76	0.65	0.90	26	
Flumioxazine	3021	2	0.07	0.02	0.24	3	
Fluopicolide	5702	14	0.25	0.15	0.41	9	
Fluotrimazole	1405	1	0.07	0.02	0.40	3	
Fluquinconazole	19350	25	0.13	0.09	0.19	26	Y
Flusilazole	21130	31	0.15	0.10	0.21	27	
Flusilazole (sum animal products)	627	1	0.16	0.04	0.88	3	
Flusulfamide	962	1	0.10	0.03	0.58	1	
Flutolanil	12647	4	0.03	0.01	0.08	14	
Flutriafol	15770	20	0.13	0.08	0.20	26	Y
Fluvalinate	3145	11	0.35	0.20	0.62	8	
Folpet	17298	107	0.62	0.51	0.75	29	
Forchlorfenuron	1640	13	0.79	0.47	1.35	4	
Formetanate (sum)	9662	3	0.03	0.01	0.09	18	
Formothion	14401	1	0.01	0.00	0.04	22	
Fosetyl-Al	416	9	2.16	1	4.06	1	
Gibberellic acid	962	12	1.25	0.72	2.17	1	
Glyphosate	31	1	3.23	0.77	16.22	4	
Haloxypop including haloxypop-R	13817	6	0.04	0.02	0.09	28	
Hexaconazole	21887	14	0.06	0.04	0.11	27	
Hexythiazox	20472	142	0.69	0.59	0.82	27	
Hydrogen phosphide	59	1	1.69	0.41	8.94	1	
Imazalil	23836	3343	14.03	13.59	14.47	29	
Imazapyr	1602	1	0.06	0.02	0.35	3	
Imazaquin	2914	1	0.03	0.01	0.19	4	
Imidacloprid	20272	971	4.79	4.50	5.09	27	

Compound	Sought <sup>(a)</sup>	Found	% of samples with quantifiable residues	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number of countries testing	Included in the EU programme
Imidacloprid (sum)	1	1	100.00	22.36	100.00	1	
Indoxacarb	19348	370	1.91	1.73	2	26	
Iprobenfos	4806	1	0.02	0.01	0.12	5	
Iprodione	24527	1307	5.33	5.05	5.62	29	
Iprovalicarb	21970	202	0.92	0.80	1.05	28	
Isocarbophos	8880	1	0.01	0.00	0.06	11	
Isofenphos-Methyl	16447	1	0.01	0	0.03	23	
Isoproc carb	7515	1	0.01	0	0.07	10	
Isoxaben	4698	2	0.04	0	0.15	5	
Kresoxim-methyl	23859	311	1.30	1.17	1.46	28	
Lambda-Cyhalothrin	23381	566	2.42	2.23	2.63	27	
Lambda-cyhalothrin (sum animal products)	552	3	0.54	0.20	1.58	5	
Lenacil	8720	1	0.01	0.00	0.06	11	
Lindane	22463	1	0.004	0	0.02	26	
Linuron	19995	3	0.02	0	0.04	26	
Lufenuron	14640	54	0.37	0.28	0.48	22	
MCPA and MCPB	6548	3	0.05	0.02	0.13	9	
Malathion (sum)	19584	83	0.42	0.34	0.53	28	
Mandipropamid	4555	4	0.09	0.04	0.22	8	
Mepanipyrim (sum)	18289	149	0.81	0.69	0.96	31	
Mepiquat	1498	1	0.07	0.02	0.37	17	
Metaflumizone (sum)	2954	1	0.03	0.01	0.19	10	
Metalaxyl (sum)	23099	367	1.59	1.44	1.76	42	
Metamitron	11599	3	0.03	0.01	0.08	15	
Metazachlor	13204	1	0.01	0.00	0.04	17	
Metconazole	15966	2	0.01	0	0.05	27	Y
Methacrifos	13875	3	0.02	0	0.06	24	
Methamidophos	22762	8	0.04	0.02	0.07	29	
Methidathion	24872	164	0.66	0.57	0.77	29	
Methiocarb (sum)	18189	36	0.20	0.14	0.27	27	
Methomyl and Thiodicarb	18654	45	0.24	0.18	0.32	26	
Methoxyfenozide	17043	551	3.23	2.98	3.51	23	
Metrafenone	8654	38	0.44	0.32	0.60	12	
Metribuzin	20140	5	0.02	0.01	0.06	24	
Mevinphos	21448	1	0.005	0.00	0.03	25	
Monocrotophos	22608	4	0.02	0	0.05	28	
Myclobutanil	24121	921	3.82	3.58	4.07	29	
N,N-Diethyl-m-toluamid	1213	1	0.08	0.02	0.46	4	
N-2,4-Dimethylphenyl-N-methylformamidine	3406	1	0.03	0.01	0.16	7	
Nereistoxin	962	2	0.21	0.06	0.75	1	
Novaluron	3341	31	0.93	0.66	1.31	5	
Orthophenylphenol	17798	810	4.55	4.25	4.87	23	

Compound	Sought <sup>(a)</sup>	Found	% of samples with quantifiable residues	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number of countries testing	Included in the EU programme
Oxadixyl	22059	4	0.02	0.01	0.05	29	
Oxamyl	20096	1	0.00	0.00	0.03	27	
Oxamyl-Oxime	2856	3	0.11	0.04	0.31	9	
Oxydemeton-methyl (sum)	17713	6	0.03	0	0.07	25	
Oxyfluorfen	6289	1	0.02	0.00	0.09	10	
Paclobutrazol	15475	8	0.05	0.03	0.10	24	
Parathion	23799	1	0.00	0	0.02	28	
Parathion-methyl (sum)	18930	5	0.03	0.01	0.06	27	
Penconazole	24646	412	1.67	2	1.84	29	
Pencycuron	17479	4	0.02	0.01	0.06	21	
Pendimethalin	22564	21	0.09	0.06	0.14	27	
Permethrin (sum)	23741	23	0.10	0.06	0.15	27	
Phenmedipham	12543	10	0.08	0.04	0.15	15	
Phenthoate	17853	2	0.01	0.00	0.04	24	
Phosalone	25010	28	0.11	0.08	0.16	29	
Phosmet (sum)	17541	181	1.03	1	1.19	23	
Phoxim	10392	1	0.01	0.00	0.05	20	Y
Picoxystrobin	16260	1	0.01	0.00	0.03	18	
Piperonyl Butoxide	6	4	66.67	29	90.10	2	
Pirimicarb (sum)	18971	502	2.65	2	2.88	26	
Pirimiphos-methyl	24850	26	0.10	0.07	0.15	29	
Prochloraz (sum)	20517	680	3.31	3.08	3.57	38	
Procymidone	25206	123	0.49	0.41	0.58	29	
Profenofos	22591	19	0.08	0.05	0.13	28	
Profluralin	4037	1	0.02	0.01	0.14	5	
Prohexadione (sum)	1388	1	0.07	0.02	0.40	3	
Propamocarb (sum)	15543	13	0.08	0.05	0.14	29	Y
Propanil	7344	2	0.03	0.01	0.10	12	
Propargite	21461	250	1.16	1.03	1.32	29	
Propham	18379	2	0.01	0.00	0.04	24	
Propiconazole	23171	40	0.17	0.13	0.23	28	
Propoxur	17935	2	0.01	0	0.04	22	
Propyzamide	22763	7	0.03	0.02	0.06	28	
Proquinazid	5232	13	0.25	0	0.42	9	
Prothiofos	16896	6	0.04	0.02	0.08	22	
Pymetrozine	15585	7	0.04	0.02	0.09	20	
Pyraclostrobin	19680	1392	7.07	6.72	7.44	24	
Pyrethrins	8817	13	0.15	0.09	0.25	18	Y
Pyridaben	20227	100	0.49	0.41	0.60	27	
Pyridaphenthion	16615	1	0.01	0.00	0.03	17	
Pyridate (sum)	5631	2	0.04	0.01	0.13	7	
Pyrifenox	15830	1	0.01	0	0.04	19	
Pyrimethanil	23785	1265	5.32	5.04	5.61	29	
Pyriproxyfen	20518	419	2.04	2	2.24	27	

Compound	Sought <sup>(a)</sup>	Found	% of samples with quantifiable residues	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number of countries testing	Included in the EU programme
Quinalphos	22771	11	0.05	0.03	0.09	24	
Quinoxifen	21696	316	1.46	1.31	1.62	27	
Quintozene (sum)	20775	2	0.01	0.00	0.03	38	Y
Quizalofop (including Quizalofop-P)	4323	1	0.02	0.01	0.13	6	
Rotenone	5924	1	0.02	0.00	0.09	9	
Simazine	15028	1	0.01	0.00	0.04	20	
Spinetoram	1025	2	0.20	0	0.70	2	
Spinosad (sum)	17092	441	2.58	2	2.83	24	
Spirodiclofen	11446	124	1.08	1	1.29	13	
Spiromesifen	9275	8	0.09	0.04	0.17	11	
Spirotetramat	594	1	0.17	0.04	0.93	5	
Spiroxamine	20628	175	0.85	0.73	0.98	27	
Sulphur	597	15	2.51	1.54	4.10	2	
Tebuconazole	23256	862	3.71	3.47	3.96	29	
Tebufenozide	19209	94	0.49	0.40	0.60	26	
Tebufenpyrad	21185	149	0.70	0.60	0.83	27	
Teflubenzuron	17157	111	0.65	0.54	0.78	25	
Tefluthrin	16042	2	0.01	0.00	0.05	23	Y
Terbutylazine	15662	18	0.11	0.07	0.18	17	
Terbutryn	12537	1	0.01	0	0.04	13	
Tetraconazole	21411	106	0.50	0.41	0.60	27	
Tetradifon	22386	11	0.05	0	0.09	28	
Tetrahydrophthalimide	274	11	4.01	2.27	7.04	2	
Tetramethrin	10081	1	0.01	0	0.06	12	
Thiabendazole	22273	2386	10.71	10.31	11.13	28	
Thiabendazole (sum animal products)	233	21	9.01	6	13.39	3	
Thiacloprid	18873	1115	5.91	5.58	6.25	26	
Thiametoxam (sum)	15854	101	0.64	0.52	0.77	21	
Thiophanate-Ethyl	1075	1	0.09	0.02	0.52	3	
Thiophanate-methyl	18194	276	1.52	1.35	1.71	26	
Tolyfluanid (sum)	21866	21	0.10	0.06	0.15	45	
Triadimefon (sum)	20999	561	2.67	2.46	2.90	28	
Triazamate	5284	1	0.02	0.00	0.11	8	
Triazophos	24385	5	0.02	0.01	0.05	28	
Trichlorfon	16176	9	0.06	0	0.11	23	Y
Triclopyr	4684	6	0.13	0.06	0.28	4	
Tridemorph	3023	4	0.13	0.05	0.34	5	
Trifloxystrobin	22533	1193	5.29	5.01	5.59	27	
Trifloxysulfuron	1344	1	0.07	0.02	0.41	2	
Triflumizole	12835	3	0.02	0.01	0.07	13	
Triflumuron	13808	216	1.56	1.37	1.79	22	Y
Trifluralin	20272	1	0.00	0.00	0.03	26	

Compound	Sought <sup>(a)</sup>	Found	% of samples with quantifiable residues	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number of countries testing	Included in the EU programme
Triforine	9053	3	0.03	0.01	0.10	14	
Trinexapac-Ethyl	4300	3	0.07	0	0.20	6	
Triticonazole	15532	1	0.01	0.00	0.04	25	Y
Vinclozolin (sum)	23569	25	0.11	0.07	0.2	44	
Zoxamide	14982	73	0.49	0	0.61	20	Y
gamma-Cyhalothrin	99	4	4.04	1.64	9.93	2	
tau-Fluvalinate	16028	22	0.14	0.09	0.21	23	
<b>Total</b>	<b>3981310</b>	<b>49701</b>					

(a): Number of times the pesticide was sought in individual samples. Total: Total number of determinations

(b): Lower confidence limit

(c): Upper confidence limit

(d): Y = not mandatory, Y\* = not mandatory for some commodities

VEGETABLES

Compound	Sought <sup>(a)</sup>	Found	% of samples with quantifiable residues	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number of countries testing	Included in the EU programme
1-naphthylacetamide	2953	18	0.61	0.39	0.96	1	
2,4,6-Tribromophenol	2117	3	0.14	0.05	0.41	3	
2,4-D (sum)	9077	17	0.19	0.12	0.30	20	Y
2,4-Dimethylphenylformamide	1096	1	0.09	0.02	0.51	5	
2-Hydroxyethanephosphonic acid	319	28	8.78	6.15	12.40	1	
2-Naphthoxyacetic acid	2571	2	0.08	0.02	0.28	3	
3-Chloroaniline	84	7	8.33	4.15	16.23	7	
4,4'-Dichlorobenzophenone	4191	10	0.24	0.13	0.44	7	
4-Chlorophenoxy acetic acid	4729	5	0.11	0.05	0.25	5	
5-Hydroxy-Thiabendazole	122	2	1.64	0.51	5.75	2	
Abamectin (sum)	10385	10	0.10	0.05	0.18	17	
Acephate	23654	38	0.16	0.12	0.22	29	
Acetamiprid	22736	490	2.16	1.97	2.35	28	
Aclonifen	13628	5	0.04	0.02	0.09	15	
Acrinathrin	22908	24	0.10	0.07	0.16	26	Y
Aldicarb (sum)	19099	2	0.01	0	0.04	27	
Aldrin and Dieldrin	17568	25	0.14	0.10	0.21	18	
Ametryn	8748	2	0.02	0.01	0.08	11	
Amitraz (sum)	6740	12	0.18	0.10	0.31	11	Y*
Anthraquinone	4190	1	0.02	0.01	0.13	6	
Atrazine	18234	10	0.05	0.03	0.10	22	
Azadirachtin	2081	6	0.29	0.14	0.63	4	
Azinphos-ethyl	22499	1	0.004	0	0.02	26	Y
Azinphos-methyl	26098	6	0.02	0.01	0.05	29	
Aziprotryne	3933	2	0.05	0.02	0.18	3	
Azoxystrobin	25942	1188	4.58	4.33	4.84	28	
Benalaxyl	4974	6	0.12	0.06	0.26	13	
Benalaxyl (sum)	15427	15	0.10	0.06	0.16	15	
Bendiocarb	11393	2	0.02	0.01	0.06	13	
Benfluralin	9368	3	0.03	0.01	0.09	8	
Benzyladenine	1052	2	0.19	0.06	0.68	1	
Bifenazate	8539	36	0.42	0.31	0.58	9	
Bifenox	11234	1	0.01	0	0.05	10	
Bifenthrin	26123	242	0.93	0.82	1.05	28	
Biphenyl	10694	1	0.01	0	0.05	18	
Bitertanol	22532	60	0.27	0.21	0.34	29	
Boscalid	23474	1656	7.05	6.73	7.39	27	
Bromide ion	1534	441	28.75	26.54	31.07	17	
Bromopropylate	26692	21	0.08	0.05	0.12	29	
Bromoxynil	4994	4	0.08	0.03	0.20	4	
Bromoxynil (sum)	4433	3	0.07	0.02	0.20	7	

Compound	Sought <sup>(a)</sup>	Found	% of samples with quantifiable residues	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number of countries testing	Included in the EU programme
Bupirimate	23737	81	0.34	0.27	0.42	28	
Buprofezin	24930	79	0.32	0.25	0.39	29	
Cadusafos	19945	2	0.01	0	0.04	25	Y
Captan	19583	30	0.15	0.11	0.22	29	
Captan/Folpet (sum)	4866	1	0.02	0	0.11	11	
Carbaryl	24291	32	0.13	0.09	0.19	29	
Carbendazim and benomyl	21261	449	2.11	1.93	2.31	43	
Carbetamide	4968	1	0.02	0	0.11	6	
Carbofuran (sum)	20117	50	0.25	0.19	0.33	25	
Carbosulfan	15460	8	0.05	0.03	0.10	23	Y
Chlorantranilipole	2508	13	0.52	0.31	0.88	5	
Chlorbromuron	6767	1	0.01	0	0.08	8	
Chlordane (sum)	9076	2	0.02	0.01	0.08	20	
Chlordecone	2377	6	0.25	0.12	0.55	3	
Chlorfenapyr	16047	31	0.19	0.14	0.27	25	
Chlorfenvinphos	25336	9	0.04	0.02	0.07	29	
Chlorfluazuron	6971	1	0.01	0	0.08	9	
Chloridazon	7007	2	0.03	0.01	0.10	11	
Chlormequat	1707	57	3.34	2.59	4.30	14	
Chlorothalonil	25877	504	1.95	1.79	2.12	29	
Chlorpropham (sum)	14957	90	0.60	0.49	0.74	20	
Chlorpyrifos	27491	492	1.79	1.64	1.95	29	
Chlorpyrifos-methyl	27294	85	0.31	0.25	0.38	29	
Chlorthal	394	3	0.76	0.28	2.20	2	
Chlorthal-dimethyl	16117	33	0.20	0.15	0.29	17	
Clofentezine	18082	35	0.19	0.14	0.27	26	
Clofentezine (sum animal products/cereals)	1161	1	0.09	0.02	0.48	4	
Clomazone	10494	1	0.01	0	0.05	11	
Clothianidin	6539	45	0.69	0.52	0.92	21	
Cyazofamid	13159	8	0.06	0.03	0.12	16	
Cyflufenamid	4289	2	0.05	0.01	0.17	4	
Cyfluthrin (sum)	22831	35	0.15	0.11	0.21	38	
Cyhalothrin	780	5	0.64	0.28	1.49	2	
Cymoxanil	16187	10	0.06	0.03	0.11	17	
Cypermethrin (sum)	25627	527	2.06	1.89	2.24	43	
Cyproconazole	22556	35	0.16	0.11	0.22	28	Y
Cyprodinil	25609	911	3.56	3.34	3.79	29	
Cyromazine	11556	68	0.59	0.46	0.75	13	
DDT (sum)	19889	22	0.11	0.07	0.17	24	
Daminozide (sum)	375	1	0.27	0.06	1.47	2	
Deltamethrin	26330	188	0.71	0.62	0.82	28	
Desethyl-Terbuthylazine	1762	5	0.28	0.12	0.66	2	
Desisopropyl-Atrazine	2606	2	0.08	0.02	0.28	3	

Compound	Sought <sup>(a)</sup>	Found	% of samples with quantifiable residues	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number of countries testing	Included in the EU programme
Desmethylformamido-Pirimicarb	3099	2	0.06	0.02	0.23	5	
Diafenthiuron	4270	3	0.07	0.03	0.21	8	
Diazinon	27100	12	0.04	0.03	0.08	29	
Dichlofluanid	25191	2	0.01	0	0.03	28	
Dichlorobenzoic acid, 2,6-	2	1	50	9.43	90.57	1	
Dichlorvos	26034	22	0.08	0.06	0.13	28	
Dicloran	21087	25	0.12	0.08	0.17	27	
Dicofol (sum)	21554	25	0.12	0.08	0.17	26	
Dicrotophos	14768	6	0.04	0.02	0.09	16	
Diethofencarb	19576	21	0.1	0.07	0.16	21	
Difenoconazole	24597	522	2.12	1.95	2.31	28	
Diflubenzuron	14314	16	0.11	0.07	0.18	17	
Dikegulac	1052	1	0.10	0.02	0.53	1	
Dimethenamid-p (sum)	3705	1	0.03	0.01	0.15	6	
Dimethoate (sum)	32331	359	1.11	1.00	1.23	76	
Dimethomorph	21927	529	2.41	2.22	2.62	27	
Diniconazole	16452	12	0.07	0.04	0.13	19	
Dinocap (sum)	3284	2	0.06	0.02	0.22	14	
Dinotefuran	1959	4	0.20	0.08	0.52	1	
Diphenamid	2763	2	0.07	0.02	0.26	5	
Diphenylamine	23489	10	0.04	0.02	0.08	29	
Diquat	62	4	6.45	2.63	15.47	5	
Disulfoton (sum)	12777	1	0.01	0.00	0.04	13	
Dithianon	3464	1	0.03	0	0.16	5	
Dithiocarbamates	7854	1325	16.87	16.06	17.71	26	
Diuron	6455	2	0.03	0.01	0.11	7	
Diuron (sum)	7090	2	0.03	0.01	0.10	11	
Dodine	7213	10	0.14	0.08	0.25	9	
EPN	16081	5	0.03	0.01	0.07	19	
Endosulfan (sum)	25717	93	0.36	0.30	0.44	28	
Epoxiconazole	21660	19	0.09	0.06	0.14	28	
Ethephon	797	42	5.27	3.93	7.05	6	Y
Ethiofencarb	8168	11	0.13	0.08	0.24	15	
Ethiofencarb-Sulfon	3629	1	0.03	0.01	0.15	12	
Ethiofencarb-Sulfoxid	3261	1	0.03	0.01	0.17	12	
Ethion	25547	36	0.14	0.10	0.20	29	
Ethirimol	9886	7	0.07	0.03	0.15	11	
Ethofumesate (sum)	11264	9	0.08	0.04	0.15	12	
Ethoprophos	22123	11	0.05	0.03	0.09	25	Y
Ethylene oxide (sum)	7	1	14.29	3.19	52.65	1	
Etofenprox	17819	110	0.62	0.51	0.74	22	Y
Etoxazole	8935	5	0.06	0.02	0.13	11	
Etridiazole	12822	6	0.05	0.02	0.10	13	



Compound	Sought <sup>(a)</sup>	Found	% of samples with quantifiable residues	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number of countries testing	Included in the EU programme
Famoxadone	17106	80	0.47	0.38	0.58	19	
Fenamidone	16357	10	0.06	0.03	0.11	19	
Fenamiphos (sum)	15025	9	0.06	0.03	0.11	22	
Fenarimol	25731	22	0.09	0.06	0.13	29	
Fenazaquin	20508	16	0.08	0.05	0.13	26	
Fenbuconazole	19996	3	0.02	0.01	0.04	24	Y
Fenbutatin oxide	3616	24	0.66	0.45	0.99	7	Y
Fenhexamid	25045	255	1.02	0.90	1.15	28	
Fenitrothion	26380	4	0.02	0.01	0.04	28	
Fenobucarb	5534	3	0.05	0.02	0.16	8	
Fenoxaprop-P-Ethyl	3871	1	0.03	0.01	0.14	5	
Fenoxycarb	20853	2	0.01	0.00	0.03	26	
Fenpropathrin	23086	21	0.09	0	0.14	27	Y
Fenpropidin	13855	5	0.04	0.02	0.08	17	
Fenpropimorph	21108	30	0.14	0.10	0.20	26	
Fenpyroximate	17549	8	0.05	0.02	0.09	17	
Fensulfothion	8798	1	0.01	0.00	0.06	12	
Fenvalerate and Esfenvalerate (Sum of RR and SS isomers)	19042	10	0.05	0	0.10	32	
Fenvalerate and Esfenvalerate (Sum of RS and SR isomers)	13418	7	0.05	0.03	0.11	17	
Fipronil (sum)	14200	18	0.13	0.08	0.20	18	
Fipronil-Desulfinyl	1174	4	0.34	0.14	0.87	3	
Fipronil-Sulfide	1247	3	0.24	0.09	0.70	1	
Flonicamid (sum)	4529	19	0.42	0.27	0.65	4	
Fluazifop	6836	82	1.20	0.97	1.49	8	Y
Fluazifop-P-butyl (sum)	12488	45	0.36	0.27	0.48	23	
Fluazinam	10026	2	0.02	0.01	0.07	16	
Flubendiamide	1349	5	0.37	0.16	0.86	3	
Fludioxonil	24536	582	2.37	2.19	2.57	28	
Flufenacet	4540	1	0.02	0.01	0.12	5	
Flufenoxuron	18692	13	0.07	0.04	0.12	26	
Flumetralin	3108	1	0.03	0.01	0.18	4	
Fluopicolide	7163	13	0.18	0.11	0.31	9	
Fluotrimazole	1700	1	0.06	0.01	0.33	3	
Fluoxastrobin	7955	1	0.01	0.00	0.07	8	
Fluquinconazole	20512	1	0.005	0	0.03	26	Y
Flurochloridone	5589	1	0.02	0	0.10	8	
Flusilazole	22605	18	0.08	0	0.13	27	
Flutolanil	13302	21	0.16	0.10	0.24	14	
Flutriafol	17704	178	1.01	0.87	1.16	26	Y
Fluvalinate	2597	2	0.08	0.02	0.28	8	
Folpet	20841	53	0.25	0.19	0.33	29	

Compound	Sought <sup>(a)</sup>	Found	% of samples with quantifiable residues	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number of countries testing	Included in the EU programme
Formetanate (sum)	9948	20	0.20	0.13	0.31	18	
Formothion	15982	1	0.01	0.00	0.03	22	
Fosetyl-Al	314	5	1.59	1	3.67	2	
Fosthiazate	14549	5	0.03	0.02	0.08	21	Y
Furalaxyl	9190	1	0.01	0.00	0.06	11	
Glufosinate-ammonium	53	1	1.89	0	9.89	2	
HCH (sum)	13414	5	0.04	0.02	0.09	20	
HCH beta	3732	1	0.03	0.01	0.15	22	
Haloxyfop including haloxyfop-R	20653	30	0.15	0.10	0.21	41	
Heptachlor (sum)	14398	10	0.07	0.04	0.13	20	
Hexachlorobenzene	18325	5	0.03	0.01	0.06	24	
Hexaconazole	22914	14	0.06	0.04	0.10	27	
Hexaflumuron	8713	3	0.03	0.01	0.10	9	
Hexythiazox	21317	24	0.11	0.08	0.17	27	
Imazalil	25235	126	0.50	0.42	0.59	29	
Imazethapyr	2401	1	0.04	0.01	0.23	4	
Imidacloprid	21573	1069	4.96	4.67	5.25	27	
Indoxacarb	20474	321	1.57	1.41	1.75	26	
Iprodione	26192	1102	4.21	3.97	4.46	29	
Iprovalicarb	23089	10	0.04	0.02	0.08	28	
Isoprothiolane	3804	1	0.03	0.01	0.15	7	
Isoxaben	4900	1	0.02	0.00	0.11	5	
Kresoxim-methyl	25706	77	0.30	0	0.37	28	
Lambda-Cyhalothrin	25183	577	2.29	2.11	2.48	27	
Lambda-cyhalothrin (sum animal products)	665	3	0.45	0.16	1.31	5	
Lenacil	10124	7	0.07	0.03	0.14	11	
Linuron	21083	358	1.70	1.53	1.88	26	
Lufenuron	14729	45	0.31	0.23	0.41	22	
Malathion (sum)	21094	15	0.07	0.04	0.12	28	
Maleic hydrazide	411	42	10.22	7.66	13.53	5	
Mandipropamid	5185	87	1.68	1.36	2.07	8	
Mecarbam	22568	1	0.004	0.00	0.02	24	
Mepanipyrin (sum)	19106	32	0.17	0	0.24	22	
Mepiquat	1406	21	1.49	0.98	2.27	13	
Metaflumizone (sum)	3060	3	0.10	0.04	0.29	10	
Metalaxyl (sum)	24390	615	2.52	2.33	2.73	42	
Metaldehyde	653	1	0.15	0.04	0.85	2	
Metamitron	12114	14	0.12	0.07	0.19	15	
Metazachlor	14415	2	0.01	0.00	0.05	16	
Methabenzthiazuron	6508	5	0.08	0	0.18	7	
Methamidophos	24386	35	0.14	0.10	0.20	29	
Methazole	1	1	100.00	22.36	100.00	1	

Compound	Sought <sup>(a)</sup>	Found	% of samples with quantifiable residues	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number of countries testing	Included in the EU programme
Methidathion	26784	3	0.01	0.00	0	29	
Methiocarb (sum)	19277	37	0.19	0	0.26	27	
Metholachlor and metholachlor-S	7865	3	0.04	0.01	0.11	9	
Methomyl and Thiodicarb	19679	122	0.62	0.52	0.74	26	
Methoxychlor	18643	3	0.02	0.01	0.05	21	
Methoxyfenozide	18421	152	0.83	0.70	0.97	23	
Metobromuron	13858	7	0.05	0.02	0.10	16	
Metoxuron	8265	1	0.01	0.00	0.07	12	
Metrafenone	10701	3	0.03	0	0.08	12	
Metribuzin	20608	13	0.06	0.04	0.11	24	
Metsulfuron-methyl	5572	1	0.02	0.00	0.10	9	
Monocrotophos	23878	21	0.09	0	0.13	28	
Myclobutanil	25813	196	0.76	0.66	0.87	29	
N,N-Diethyl-m-toluamid	804	1	0.12	0.03	0.69	4	
N-2,4-Dimethylphenyl-N-methylformamidine	3641	2	0.05	0.02	0.20	6	
Napropamide	12478	2	0.02	0.00	0.06	13	
Nereistoxin	1052	3	0.29	0	0.83	1	
Nicotine	424	23	5.42	3.65	8.01	5	
Novaluron	3218	8	0.25	0.13	0.49	5	
Orthophenylphenol	18538	14	0.08	0.05	0.13	22	
Oxadiazon	6069	2	0.03	0.01	0.12	8	
Oxadixyl	23782	35	0.15	0.11	0.20	29	
Oxamyl	20905	31	0.15	0.10	0.21	27	
Oxamyl-Oxime	2888	21	0.73	0.48	1.11	10	
Oxycarboxin	5533	1	0.02	0.00	0.10	6	
Oxydemeton-methyl (sum)	18918	1	0.01	0.00	0.03	25	
Paclobutrazol	16721	3	0.02	0	0.05	24	
Parathion	25544	2	0.01	0	0.03	28	
Parathion-methyl (sum)	20539	1	0.005	0.00	0.03	27	
Penconazole	26318	61	0.23	0	0.30	29	
Pencycuron	18683	77	0.41	0	0.51	21	
Pendimethalin	23864	171	0.72	0.62	0.83	27	
Permethrin (sum)	25478	21	0.08	0.05	0.13	28	
Phenmedipham	13078	10	0.08	0.04	0.14	15	
Phenthoate	18639	3	0.02	0.01	0.05	25	
Phosalone	26899	8	0.03	0.02	0.06	29	
Phosmet (sum)	17883	2	0.01	0.00	0.04	23	
Phoxim	11462	1	0.01	0.00	0.05	20	Y
Pirimicarb (sum)	20188	150	0.74	1	0.87	26	
Pirimiphos-methyl	26884	31	0.12	0	0.16	29	
Prochloraz (sum)	21915	120	0.55	0.46	0.65	38	
Procymidone	26824	197	0.73	0.64	0.84	29	

Compound	Sought <sup>(a)</sup>	Found	% of samples with quantifiable residues	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number of countries testing	Included in the EU programme
Profenofos	24100	72	0.30	0.24	0.38	28	
Promecarb	12834	4	0.03	0.01	0.08	11	
Prometryn	16105	4	0.02	0.01	0.06	19	
Propamocarb (sum)	16713	1164	6.96	6.59	7.36	31	Y
Propanil	8192	1	0.01	0.00	0.07	11	
Propaquizafop	5409	1	0.02	0.00	0.10	8	
Propargite	22766	41	0.18	0	0.24	29	
Propiconazole	25089	60	0.24	0	0.31	28	
Propoxur	18622	4	0.02	0.01	0.05	22	
Propyzamide	24504	134	0.55	0.46	0.65	28	
Proquinazid	4929	1	0.02	0.00	0.11	8	
Prosulfocarb	12946	28	0.22	0.15	0.31	9	
Prothioconazole	10957	3	0.03	0	0.08	16	Y
Prothioconazole-Desthio	4855	1	0.02	0.00	0.11	8	
Prothiofos	17863	2	0.01	0.00	0.04	22	
Pymetrozine	17052	130	0.76	1	0.90	21	
Pyraclostrobin	20863	499	2.39	2	2.61	24	
Pyrethrins	10625	7	0.07	0.03	0.14	18	Y
Pyridaben	21721	85	0.39	0.32	0.48	27	
Pyridalyl	3108	2	0.06	0.02	0.23	3	
Pyridaphenthion	17075	2	0.01	0.00	0.04	17	
Pyridate (sum)	6759	2	0.03	0.01	0.11	7	
Pyrifenoxy	16837	3	0.02	0	0.05	19	
Pyrimethanil	25508	322	1.26	1.13	1.41	29	
Pyrimidifen	4558	3	0.07	0.02	0.19	2	
Pyriproxyfen	22194	102	0.46	0.38	0.56	27	
Quinalphos	23741	6	0.03	0.01	0.05	24	
Quinmerac	5108	1	0.02	0.00	0.11	7	
Quinoxifen	23269	7	0.03	0.01	0.06	27	
Quintozene (sum)	22737	16	0.07	0	0.11	41	Y
Quizalofop	3435	5	0.15	0.06	0.34	6	
Quizalofop (including Quizalofop-P)	5307	7	0.13	0.07	0.27	6	
Rotenone	6382	2	0.03	0.01	0.11	7	
Simazine	15549	1	0.01	0.00	0.04	20	
Spinetoram	1184	2	0.17	0.05	0.61	2	
Spinosad (sum)	18155	298	1.64	1	1.84	24	
Spirodiclofen	12513	4	0.03	0.01	0.08	13	
Spiromesifen	11313	121	1.07	0.90	1.28	10	
Spirotetramat	721	1	0.14	0.03	0.77	5	
Spiroxamine	21495	22	0.10	0.07	0.15	27	
Sulphur	427	26	6.09	4.20	8.77	2	
Tebuconazole	25320	521	2.06	1.89	2.24	29	
Tebufenozide	20451	32	0.16	0.11	0.22	26	

Compound	Sought <sup>(a)</sup>	Found	% of samples with quantifiable residues	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number of countries testing	Included in the EU programme
Tebufenpyrad	21909	26	0.12	0.08	0.17	27	
Teflubenzuron	18119	63	0.35	0.27	0.44	24	
Tefluthrin	18315	13	0.07	0.04	0.12	23	Y
Tepraloxymid	5121	3	0.06	0.02	0.17	5	
Terbufos Sulfoxide	1588	2	0.13	0.04	0.45	6	
Terbumeton	5444	1	0.02	0.00	0.10	5	
Terbuthylazine	16321	14	0.09	0.05	0.14	17	
Terbutryn	13106	1	0.01	0	0.04	13	
Tetraconazole	22613	44	0.19	0.15	0.26	27	
Tetradifon	24224	21	0.09	0	0.13	28	
Tetramethrin	11715	2	0.02	0.01	0.06	13	
Thiabendazole	23579	56	0.24	0.18	0.31	28	
Thiacloprid	19925	245	1.23	1.09	1.39	26	
Thiametoxam (sum)	16706	259	1.55	1.37	1.75	22	
Thiocyclam	1202	3	0.25	0.09	0.73	2	
Thiophanate-methyl	19032	81	0.43	0.34	0.53	26	
Tolclofos-methyl	26343	141	0.54	0.45	0.63	29	
Tolyfluanid (sum)	18963	7	0.04	0.02	0.08	24	
Tri-allate	8446	2	0.02	0.01	0.09	10	
Triadimefon (sum)	22871	259	1.13	1.00	1.28	28	
Triazophos	26102	31	0.12	0.08	0.17	28	
Trichlorfon	17584	7	0.04	0.02	0.08	23	Y
Tricyclazole	5935	1	0.02	0.00	0.09	8	
Trifloxystrobin	23692	93	0.39	0.32	0.48	27	
Triflumizole	13312	17	0.13	0	0.20	13	
Triflumuron	14387	1	0.01	0.00	0.04	22	Y
Trifluralin	21890	22	0.10	0.07	0.15	26	
Triforine	10113	2	0.02	0	0.07	15	
Trinexapac-Ethyl	4983	1	0.02	0.00	0.11	6	
Vinclozolin (sum)	24512	11	0.04	0.03	0.08	45	
Ziram	8	2	25	7	60.01	2	
Zoxamide	16427	6	0.04	0.02	0.08	20	Y
tau-Fluvalinate	18281	7	0.04	0.02	0.08	23	
<b>Total</b>	<b>4492386</b>	<b>24679</b>					

(a): Number of times the pesticide was sought in individual samples. Total: Total number of determinations

(b): Lower confidence limit ; (c): Upper confidence limit

(d): Y = not mandatory, Y\* = not mandatory for some commodities

**TABLE B: EU+NCP – SURVEILLANCE SAMPLING: RESULTS PER REPORTING COUNTRY.**

**ANIMAL PRODUCTS**

Country	No. of samples	No. of processed samples	No. of Compounds			Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
			Sought	Found	% found from sought	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Austria	498	1	133	3	2.26	488	97.99	96.3	98.9	10	2.01	1.1	3.7	0	0	0	0.6
Belgium	30		47	0	0	30	100	90.8	100	0	0	0	9.2	0	0	0	9.2
Cyprus	162	14	103	1	0.97	159	98.15	94.7	99.3	3	1.85	0.7	5.3	0	0	0	1.8
Czech Republic	67	67	35	2	5.71	46	68.66	56.7	78.5	21	31.34	21.5	43.3	0	0	0	4.3
Denmark	267	1	115	0	0	267	100	98.9	100	0	0	0	1.1	0	0	0	1.1
Estonia	30		48	3	6.25	28	93.33	78.6	98	2	6.67	2	21.4	0	0	0	9.2
Finland	32		39	0	0	32	100	91.3	100	0	0	0	8.7	0	0	0	8.7
France	3	2	291	0	0	3	100	47.3	100	0	0	0	52.7	0	0	0	52.7
Germany	1508	173	573	33	5.76	991	65.72	63.3	68.1	513	34.02	31.7	36.4	4	0.27	0.1	0.7
Greece	15		47	0	0	15	100	82.9	100	0	0	0	17.1	0	0	0	17.1
Hungary	2	2	1	0	0	2	100	36.8	100	0	0	0	63.2	0	0	0	63.2
Ireland	419		291	3	1.03	401	95.7	93.3	97.3	16	3.82	2.4	6.1	2	0.48	0.1	1.7
Italy	223	204	57	7	12.28	186	83.41	78	87.7	37	16.59	12.3	22	0	0	0	1.3
Latvia	31	7	33	0	0	31	100	91.1	100	0	0	0	8.9	0	0	0	8.9
Lithuania	18		34	0	0	18	100	85.4	100	0	0	0	14.6	0	0	0	14.6
Luxembourg	33		61	0	0	33	100	91.6	100	0	0	0	8.4	0	0	0	8.4
Malta	15		37	0	0	15	100	82.9	100	0	0	0	17.1	0	0	0	17.1
Netherlands	42		50	0	0	42	100	93.3	100	0	0	0	6.7	0	0	0	6.7
Norway	30		32	0	0	30	100	90.8	100	0	0	0	9.2	0	0	0	9.2
Poland	253	153	65	6	9.23	245	96.84	93.9	98.4	7	2.77	1.4	5.6	1	0.4	0.1	2.2
Romania	252		38	5	13.16	233	92.46	88.5	95.1	19	7.54	4.9	11.5	0	0	0	1.2
Slovakia	30		35	2	5.71	7	23.33	11.9	41.1	23	76.67	58.9	88.1	0	0	0	9.2
Slovenia	40	24	34	1	2.94	39	97.5	87.1	99.4	1	2.5	0.6	12.9	0	0	0	7
Spain	517	62	255	4	1.57	512	99.03	97.8	99.6	5	0.97	0.4	2.2	0	0	0	0.6
Sweden	61		54	1	1.85	60	98.36	91.3	99.6	1	1.64	0.4	8.7	0	0	0	4.7

Country	No. of samples	No. of processed samples	No. of Compounds			Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
			Sought	Found	% found from sought	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
United Kingdom	683	107	37	2	5.41	681	99.71	98.9	99.9	2	0.29	0.1	1.1	0	0	0	0.4
<b>Total</b>	<b>5261</b>	<b>817</b>				<b>4594</b>	<b>87.32</b>	<b>86.4</b>	<b>88.2</b>	<b>660</b>	<b>12.55</b>	<b>11.7</b>	<b>13.5</b>	<b>7</b>	<b>0.13</b>	<b>0.1</b>	<b>0.3</b>

(a): Lower confidence limit ; (b): Upper confidence limit

## CEREALS

Country	No. of samples	No. of processed samples	No. of Compounds			Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
			Sought	Found	% found from sought	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Austria	179	103	401	5	1.25	155	86.59	80.8	90.8	24	13.41	9.2	19.2	0	0	0.0	1.7
Belgium	22		286	12	4.20	5	22.73	10.2	43.7	16	72.73	51.6	86.8	1	4.55	1.1	21.9
Bulgaria	69	9	155	15	9.68	47	68.12	56.4	77.9	22	31.88	22.1	43.6	0	0	0.0	4.2
Cyprus	17	6	239	4	1.67	8	47.06	26.0	69.2	8	47.06	26.0	69.2	1	5.88	1.4	27.3
Czech Republic	159	34	261	13	4.98	107	67.30	59.7	74.1	51	32.08	25.3	39.7	1	0.63	0.2	3.4
Denmark	322	169	164	5	3.05	252	78.26	73.4	82.4	69	21.43	17.3	26.2	1	0.31	0.1	1.7
Estonia	16	1	259	5	1.93	10	62.50	38.3	81.6	6	37.50	18.4	61.7	0	0	0.0	16.2
Finland	105	19	264	9	3.41	67	63.81	54.3	72.4	37	35.24	26.8	44.8	1	0.95	0.2	5.1
France	408	138	328	20	6.10	250	61.27	56.5	65.9	155	37.99	33.4	42.8	3	0.74	0.3	2.1
Germany	444		758	27	3.56	295	66.44	61.9	70.7	133	29.95	25.9	34.4	16	3.60	2.2	5.8
Greece	22	7	248	2	0.81	16	72.73	51.6	86.8	5	22.73	10.2	43.7	1	4.55	1.1	21.9
Hungary	145	5	317	11	3.47	118	81.38	74.2	86.9	27	18.62	13.1	25.8	0	0	0.0	2.0
Ireland	108		294	9	3.06	78	72.22	63.1	79.8	29	26.85	19.4	35.9	1	0.93	0.2	5.0
Italy	654	632	318	15	4.72	498	76.15	72.7	79.3	154	23.55	20.5	27.0	2	0.31	0.1	1.1
Latvia	13	4	144	3	2.08	9	69.23	41.9	87.2	4	30.77	12.8	58.1	0	0	0.0	19.3
Lithuania	29	11	242	14	5.79	19	65.52	47.2	80.1	7	24.14	12.3	42.3	3	10.34	3.8	26.5
Luxembourg	15	15	341	6	1.76	6	40.00	19.8	64.6	9	60.00	35.4	80.2	0	0	0.0	17.1
Netherlands	270	137	249	32	12.85	123	45.56	39.7	51.5	141	52.22	46.3	58.1	6	2.22	1.0	4.8
Norway	114		265	11	4.15	85	74.56	65.8	81.7	27	23.68	16.8	32.3	2	1.75	0.5	6.1
Poland	150	21	129	7	5.43	135	90.00	84.1	93.8	15	10.00	6.2	15.9	0	0	0.0	2.0
Portugal	7		43	1	2.33	6	85.71	47.3	96.8	1	14.29	3.2	52.7	0	0	0.0	31.2
Romania	199	29	135	6	4.44	179	89.95	85.0	93.4	20	10.05	6.6	15.0	0	0	0.0	1.5
Slovakia	74	34	217	8	3.69	54	72.97	61.9	81.8	19	25.68	17.1	36.7	1	1.35	0.3	7.2



Country	No. of samples	No. of processed samples	No. of Compounds			Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
			Sought	Found	% found from sought	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Slovenia	36	1	256	6	2.34	26	72.22	55.9	84.1	9	25.00	13.8	41.2	1	2.78	0.7	14.2
Spain	74	42	421	7	1.66	46	62.16	50.7	72.4	27	36.49	26.4	47.9	1	1.35	0.3	7.2
Sweden	250	16	221	18	8.14	186	74.40	68.6	79.4	57	22.80	18.0	28.4	7	2.80	1.4	5.7
United Kingdom	299	216	66	12	18.18	83	27.76	23.0	33.1	204	68.23	62.7	73.2	12	4.01	2.30	6.90
<b>Total</b>	<b>4200</b>	<b>1649</b>				<b>2863</b>	<b>68.17</b>	<b>66.7</b>	<b>69.6</b>	<b>1276</b>	<b>30.38</b>	<b>29.0</b>	<b>31.8</b>	<b>61</b>	<b>1.45</b>	<b>1.1</b>	<b>1.9</b>

(a): Lower confidence limit ; (b): Upper confidence limit

**FRUIT AND NUTS**

Country	No. of samples	No. of processed samples	No. of compounds			Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
			Sought	Found	% found from sought	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Austria	519	45	397	105	26.45	124	23.89	20.4	27.7	372	71.68	67.6	75.4	23	4.43	3	6.6
Belgium	841	36	470	115	24.47	183	21.76	19.1	24.7	626	74.44	71.4	77.3	32	3.80	2.7	5.3
Bulgaria	238	5	155	46	29.68	145	60.92	54.6	66.9	89	37.39	31.5	43.7	4	1.68	0.7	4.2
Cyprus	192	8	241	54	22.41	68	35.42	29	42.4	108	56.25	49.2	63.1	16	8.33	5.2	13.1
Czech Republic	235	9	262	91	34.73	43	18.30	13.9	23.7	182	77.45	71.7	82.3	10	4.26	2.3	7.7
Denmark	930	37	235	73	31.06	276	29.68	26.8	32.7	627	67.42	64.3	70.4	27	2.90	2	4.2
Estonia	65	1	260	42	16.15	15	23.08	14.5	34.7	46	70.77	58.7	80.4	4	6.15	2.5	14.8
Finland	795	108	279	116	41.58	235	29.56	26.5	32.8	513	64.53	61.1	67.8	47	5.91	4.5	7.8
France	1763	447	332	101	30.42	835	47.36	45	49.7	878	49.80	47.5	52.1	50	2.84	2.2	3.7
Germany	7118	49	789	250	31.69	1661	23.34	22.4	24.3	5292	74.35	73.3	75.3	165	2.32	2	2.7
Greece	848	24	293	73	24.91	470	55.42	52.1	58.7	346	40.80	37.5	44.1	32	3.77	2.7	5.3
Hungary	1480	138	319	119	37.3	514	34.73	32.3	37.2	949	64.12	61.6	66.5	17	1.15	0.7	1.8
Iceland	116		61	19	31.15	41	35.34	27.2	44.4	72	62.07	53	70.4	3	2.59	0.9	7.3
Ireland	474	62	294	72	24.49	130	27.43	23.6	31.6	324	68.35	64	72.4	20	4.22	2.8	6.4
Italy	2833	2320	343	109	31.78	1669	58.91	57.1	60.7	1159	40.91	39.1	42.7	5	0.18	0.1	0.4
Latvia	99		142	26	18.31	58	58.59	48.7	67.8	35	35.35	26.6	45.2	6	6.06	2.9	12.6
Lithuania	213	10	241	77	31.95	23	10.80	7.3	15.7	162	76.06	69.9	81.3	28	5	9.3	18.4
Luxembourg	91		397	56	14.11	32	35.16	26.1	45.4	57	62.64	52.3	71.9	2	2.20	0.7	7.6
Malta	48		155	18	11.61	22	45.83	32.5	59.8	22	45.83	32.5	59.8	4	8.33	3.4	19.6
Netherlands	1858	289	411	127	30.9	450	24.22	22.3	26.2	1309	70.45	68.3	72.5	99	5.33	4.4	6.4
Norway	625	29	269	89	33.09	149	23.84	20.7	27.3	465	74.40	70.8	77.7	11	1.76	1	3.1
Poland	595	145	188	48	25.53	383	64.37	60.4	68.1	206	34.62	30.9	38.5	6	1.01	0.5	2.2
Portugal	367	3	240	50	20.83	144	39.24	34.4	44.3	206	56.13	51	61.1	17	4.63	2.9	7.3

Country	No. of samples	No. of processed samples	No. of compounds			Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
			Sought	Found	% found from sought	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Romania	1395	14	137	49	35.77	971	69.61	67.1	72	400	28.67	26.4	31.1	24	1.72	1.2	2.5
Slovakia	285	12	221	79	35.75	76	26.67	21.9	32.1	199	69.82	64.3	74.9	10	3.51	1.9	6.3
Slovenia	425	1	260	85	32.69	88	20.71	17.1	24.8	321	75.53	71.2	79.4	16	3.76	2.3	6
Spain	1074	56	491	103	20.98	363	33.80	31	36.7	672	62.57	59.6	65.4	39	3.63	2.7	4.9
Sweden	734	35	325	103	31.69	150	20.44	17.7	23.5	561	76.43	73.2	79.4	23	3.13	2.1	4.7
United Kingdom	961	18	349	96	27.51	183	19.04	16.7	21.6	749	77.94	75.2	80.4	29	3.02	2.1	4.3
<b>Total</b>	<b>27217</b>	<b>3901</b>				<b>9501</b>	<b>34.91</b>	<b>34.3</b>	<b>35.5</b>	<b>16947</b>	<b>62.27</b>	<b>61.7</b>	<b>62.8</b>	<b>769</b>	<b>2.83</b>	<b>2.6</b>	<b>3.0</b>

(a): Lower confidence limit ; (b): Upper confidence limit

VEGETABLES

Country	No. of samples	No. of processed samples	No. of compounds			Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
			Sought	Found	% found from sought	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Austria	740	32	397	85	21.41	482	65.14	61.6	68.5	234	31.62	28.4	35.1	24	3.24	2.2	4.8
Belgium	1025	31	493	115	23.33	408	39.80	36.9	42.8	565	55.12	52.1	58.1	52	5.07	3.9	6.6
Bulgaria	403	2	155	44	28.39	302	74.94	70.5	78.9	98	24.32	20.4	28.7	3	0.74	0.3	2.2
Cyprus	249	1	243	54	22.22	129	51.81	45.6	57.9	96	38.55	32.7	44.7	24	9.64	6.6	13.9
Czech Republic	593	20	261	97	37.16	185	31.20	27.6	35	391	65.94	62	69.6	17	2.87	1.8	4.5
Denmark	680		236	62	26.27	495	72.79	69.3	76	172	25.29	22.2	28.7	13	1.91	1.1	3.2
Estonia	150		361	33	9.14	81	54.00	46	61.8	65	43.33	35.7	51.3	4	2.67	1.1	6.6
Finland	768	63	278	110	39.57	394	51.30	47.8	54.8	324	42.19	38.7	45.7	50	6.51	5	8.5
France	2802	59	332	109	32.83	1977	70.56	68.8	72.2	717	25.59	24	27.2	108	3.85	3.2	4.6
Germany	7273	128	788	289	36.68	3603	49.54	48.4	50.7	3418	47.00	45.9	48.1	252	3.46	3.1	3.9
Greece	1245	20	278	75	26.98	1039	83.45	81.3	85.4	164	13.17	11.4	15.2	42	3.37	2.5	4.5
Hungary	1224	17	321	99	30.84	718	58.66	55.9	61.4	488	39.87	37.2	42.6	18	1.47	0.9	2.3
Iceland	157		61	8	13.11	140	89.17	83.3	93.1	17	10.83	6.9	16.7	0	0	0	1.9
Ireland	291	13	294	61	20.75	161	55.33	49.6	60.9	125	42.96	37.4	48.7	5	1.72	0.8	4
Italy	1931	1523	336	80	23.81	1619	83.84	82.1	85.4	298	15.43	13.9	17.1	14	0.73	0.4	1.2
Latvia	149		142	19	13.38	101	67.79	59.9	74.8	48	32.21	25.2	40.1	0	0	0	2
Lithuania	101		240	41	17.08	40	39.60	30.6	49.4	58	57.43	47.7	66.6	3	2.97	1.1	8.4
Luxembourg	126		367	30	8.17	99	78.57	70.6	84.8	26	20.63	14.5	28.5	1	0.79	0.2	4.3
Malta	81	8	172	11	6.4	75	92.59	84.8	96.5	4	4.94	2	12	2	2.47	0.8	8.5
Netherlands	2776	20	410	126	30.73	1384	49.86	48	51.7	1119	40.31	38.5	42.1	273	9.83	8.8	11
Norway	650	1	257	69	26.85	411	63.23	59.5	66.8	234	36.00	32.4	39.8	5	0.77	0.3	1.8
Poland	764	2	186	32	17.2	577	75.52	72.3	78.4	178	23.30	20.4	26.4	9	1.18	0.6	2.2
Portugal	361	14	239	36	15.06	217	60.11	55	65	134	37.12	32.3	42.2	10	2.77	1.5	5
Romania	1466		137	37	27.01	1345	91.75	90.2	93	119	8.12	6.8	9.6	2	0.14	0	0.5

Country	No. of samples	No. of processed samples	No. of compounds			Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
			Sought	Found	% found from sought	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Slovakia	184	6	217	43	19.82	114	61.96	54.8	68.7	67	36.41	29.8	43.6	3	1.63	0.6	4.7
Slovenia	622	3	260	82	31.54	357	57.40	53.5	61.2	243	39.07	35.3	43	22	3.54	2.4	5.3
Spain	692	17	469	91	19.4	377	54.48	50.8	58.2	282	40.75	37.2	44.5	33	4.77	3.4	6.6
Sweden	491	9	326	84	25.77	266	54.18	49.8	58.5	206	41.96	37.7	46.4	19	3.87	2.5	6
United Kingdom	1233	133	355	90	25.35	792	64.23	61.5	66.9	367	29.76	27.3	32.4	74	6.00	4.8	7.5
<b>Total</b>	<b>29227</b>	<b>2122</b>				<b>17888</b>	<b>61.20</b>	<b>60.6</b>	<b>61.8</b>	<b>10257</b>	<b>35.09</b>	<b>34.5</b>	<b>35.6</b>	<b>1082</b>	<b>3.70</b>	<b>3.5</b>	<b>3.9</b>

(a): Lower confidence limit ; (b): Upper confidence limit

**BABY FOOD**

Country	No. of samples	No. of compounds			Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		Sought	Found	% found from sought	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Austria	107	384	1	0.26	105	98.13	93.5	99.4	0	0	0	2.7	2	1.87	0.6	6.5
Belgium	91	466	0	0	91	100	96.8	100	0	0	0	3.2	0	0	0	3.2
Bulgaria	28	129	0	0	28	100	90.2	100	0	0	0	9.8	0	0	0	9.8
Cyprus	36	238	3	1.26	18	50	34.4	65.6	18	50	34.4	65.6	0	0	0	7.8
Czech Republic	58	258	6	2.33	52	89.66	79.2	95.1	6	10.34	4.9	20.8	0	0	0	5
Denmark	18	238	0	0	18	100	85.4	100	0	0	0	14.6	0	0	0	14.6
Estonia	15	273	0	0	15	100	82.9	100	0	0	0	17.1	0	0	0	17.1
Finland	39	245	0	0	39	100	92.8	100	0	0	0	7.2	0	0	0	7.2
France	11	290	0	0	11	100	77.9	100	0	0	0	22.1	0	0	0	22.1
Germany	273	733	21	2.86	226	82.78	77.9	86.8	46	16.85	12.9	21.8	1	0.37	0.1	2
Greece	17	227	0	0	17	100	84.7	100	0	0	0	15.3	0	0	0	15.3
Hungary	132	297	21	7.07	75	56.82	48.3	65	29	21.97	15.8	29.8	28	21.21	15.1	29
Ireland	12	290	0	0	12	100	79.4	100	0	0	0	20.6	0	0	0	20.6
Italy	53	273	1	0.37	52	98.11	90.1	99.5	1	1.89	0.5	9.9	0	0	0	5.4
Latvia	3	140	0	0	3	100	47.3	100	0	0	0	52.7	0	0	0	52.7
Lithuania	11	239	1	0.42	10	90.91	61.5	97.9	0	0	0	22.1	1	9.09	2.1	38.5
Luxembourg	10	377	0	0	10	100	76.2	100	0	0	0	23.8	0	0	0	23.8
Malta	10	143	0	0	10	100	76.2	100	0	0	0	23.8	0	0	0	23.8
Netherlands	80	403	6	1.49	72	90	81.5	94.8	8	10	5.2	18.5	0	0	0	3.6
Norway	43	254	0	0	43	100	93.4	100	0	0	0	6.6	0	0	0	6.6
Poland	181	115	2	1.74	178	98.34	95.3	99.4	3	1.66	0.6	4.7	0	0	0	1.6
Portugal	13	231	1	0.43	11	84.62	57.2	95.3	0	0	0	19.3	2	15.38	4.7	42.8
Romania	183	75	0	0	183	100	98.4	100	0	0	0	1.6	0	0	0	1.6
Slovakia	60	147	9	6.12	52	86.67	75.8	93	7	11.67	5.8	22.2	1	1.67	0.4	8.8
Slovenia	60	263	0	0	60	100	95.2	100	0	0	0	4.8	0	0	0	4.8
Spain	178	383	1	0.26	177	99.44	96.9	99.9	0	0	0	1.7	1	0.56	0.1	3.1
Sweden	34	338	0	0	34	100	91.8	100	0	0	0	8.2	0	0	0	8.2
United Kingdom	72	144	0	0	72	100	96	100	0	0	0	4	0	0	0	4
<b>Total</b>	<b>1828</b>				<b>1674</b>	<b>91.58</b>	<b>90.2</b>	<b>92.8</b>	<b>118</b>	<b>6.46</b>	<b>5.4</b>	<b>7.7</b>	<b>36</b>	<b>1.97</b>	<b>1.4</b>	<b>2.7</b>

(a): Lower confidence limit ; (b): Upper confidence limit

**OTHER PLANT PRODUCTS**

Country	No. of samples	No. of processed samples	No. of compounds			Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
			Sought	Found	% found from sought	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Austria	351	325	384	12	3.13	310	88.32	84.5	91.3	38	10.83	8	14.5	3	0.85	0.3	2.5
Belgium	77	22	460	18	3.91	47	61.04	49.8	71.2	23	29.87	20.8	40.9	7	9.09	4.5	17.6
Cyprus	21	20	223	0	0	19	90.48	70.8	97.1	2	9.52	2.9	29.2	0	0	0	12.7
Czech Republic	28	14	256	18	7.03	19	67.86	49.2	82.1	9	32.14	17.9	50.8	0	0	0	9.8
Denmark	19	5	231	5	2.16	15	78.95	56.3	91.3	3	15.79	5.7	37.9	1	5.26	1.2	24.9
Estonia	9		256	2	0.78	7	77.78	44.4	93.3	2	22.22	6.7	55.6	0	0	0	25.9
Finland	168	23	250	25	10	112	66.67	59.2	73.4	44	26.19	20.1	33.3	12	7.14	4.2	12.1
France	188	40	318	34	10.69	150	79.79	73.5	84.9	29	15.43	11	21.3	9	4.79	2.6	8.8
Germany	602		752	79	10.51	376	62.46	58.5	66.2	208	34.55	30.9	38.4	18	2.99	1.9	4.7
Greece	233	187	222	8	3.6	216	92.7	88.6	95.4	14	6.01	3.6	9.8	3	1.29	0.5	3.7
Hungary	78	27	293	23	7.85	47	60.26	49.1	70.4	30	38.46	28.4	49.6	1	1.28	0.3	6.9
Ireland	1		290	1	0.34	0	0	0	77.6	1	100	22.4	100	0	0	0	77.6
Italy	366	353	322	33	10.25	274	74.86	70.2	79	90	24.59	20.5	29.3	2	0.55	0.2	2
Latvia	5		139	1	0.72	3	60	22.3	88.2	1	20	4.3	64.1	1	20	4.3	64.1
Lithuania	11	7	239	13	5.44	8	72.73	42.8	90.1	2	18.18	5.5	48.4	1	9.09	2.1	38.5
Luxembourg	10	10	112	0	0	10	100	76.2	100	0	0	0	23.8	0	0	0	23.8
Netherlands	95	4	407	22	5.41	53	55.79	45.7	65.4	40	42.11	32.7	52.2	2	2.11	0.6	7.3
Norway	30		245	9	3.67	18	60	42.2	75.5	9	30	16.7	48	3	10	3.6	25.8
Portugal	4		83	0	0	4	100	54.9	100	0	0	0	45.1	0	0	0	45.1
Romania	40	32	135	1	0.74	38	95	83.5	98.5	2	5	1.5	16.5	0	0	0	7
Slovakia	13	4	207	7	3.38	12	92.31	66.1	98.2	0	0	0	19.3	1	7.69	1.8	33.9
Slovenia	4	2	164	0	0	4	100	54.9	100	0	0	0	45.1	0	0	0	45.1
Spain	60	48	320	3	0.94	55	91.67	81.9	96.3	4	6.67	2.7	15.9	1	1.67	0.4	8.8
Sweden	37	36	300	0	0	37	100	92.4	100	0	0	0	7.6	0	0	0	7.6
United Kingdom	100	95	280	10	3.57	94	94	87.5	97.2	2	2	0.6	7	4	4	1.6	9.8
<b>Total</b>	<b>2550</b>	<b>1254</b>				<b>1928</b>	<b>75.61</b>	<b>73.9</b>	<b>77.2</b>	<b>553</b>	<b>21.69</b>	<b>20.1</b>	<b>23.3</b>	<b>69</b>	<b>2.71</b>	<b>2.1</b>	<b>3.4</b>

(a): Lower confidence limit ; (b): Upper confidence limit

**TABLE C: EU+NCP – SURVEILLANCE AND ENFORCEMENT SAMPLING: NUMBER OF PESTICIDES FOUND IN THE SAME SAMPLE OF FRUIT AND NUTS, VEGETABLES AND CEREALS PER REPORTING COUNTRY.**

Country	Number of samples analysed	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	23	26	Samples with multiple residues	
																										Number	%
Austria	2421	1674	292	178	115	84	31	28	10	2	3	4														455	18.79
Belgium	2086	805	426	265	165	134	107	62	48	30	25	9	7	1	1	1										855	40.99
Bulgaria	738	522	131	55	18	8	2	2																		85	11.52
Cyprus	677	421	117	60	37	20	14	3	2	2							1									139	20.53
Czech Republic	1145	458	236	163	108	56	42	31	23	11	6	3	4	3	1											451	39.39
Denmark	2236	1323	420	264	118	65	32	9	4	1																493	22.05
Estonia	285	157	70	24	18	4	6	3	1	1		1														58	20.35
Finland	1926	904	304	229	185	126	79	41	27	14	6	7	1	2	1											718	37.28
France	5177	3229	886	485	264	167	78	31	22	7	2	4	1	1												1062	20.51
Germany	17218	7152	3209	2252	1512	1111	749	496	287	167	100	67	41	28	24	5	8	3	1		2		1	1		6857	39.82
Greece	2380	1775	279	124	87	53	22	20	7	5	4		1	1	1		1									326	13.7
Hungary	3155	1547	790	392	204	118	44	23	17	8	4	3	3	2												818	25.93
Iceland	273	181	48	35	7	2																				44	16.12
Ireland	1305	790	190	113	84	66	42	6	7	2	2	3														325	24.9
Italy	7960	5389	1499	573	235	142	63	21	17	13	4	3	1													1072	13.47
Latvia	300	205	69	18	5	3																				26	8.67
Lithuania	383	120	69	54	54	35	27	9	5	4	3	1	1	1												194	50.65
Luxembourg	285	190	28	13	14	12	8	9	4	3	3		1													67	23.51
Malta	154	122	20	5	5	1	1																			12	7.79
Netherlands	5151	2142	1165	725	453	289	171	91	42	28	14	8	9	3	2	1	3			1	1	1		1		1844	35.8
Norway	1492	738	287	205	112	76	45	16	8	3	1		1													467	31.3
Poland	1943	1518	312	88	13	7	2	3																		113	5.82
Portugal	752	382	208	106	37	11	5	1	2																	162	21.54
Romania	3538	2951	430	111	33	9	4																			157	4.44
Slovakia	646	315	150	73	48	28	20	7	3	1												1				181	28.02



Country	Number of samples analysed	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	23	26	Samples with multiple residues		
																										Number	%	
Slovenia	1232	596	260	144	103	54	30	24	9	5	2	3	1	1													376	30.52
Spain	2647	1598	489	257	142	69	38	22	14	10	4	2	2														560	21.16
Sweden	1607	733	300	230	169	84	50	18	9	3	2	5		1	2			1									574	35.72
United Kingdom	3701	2256	554	369	204	140	76	55	24	10	9	2	2														891	24.07
<b>Total</b>	<b>72813</b>	<b>40193</b>	<b>13238</b>	<b>7610</b>	<b>4549</b>	<b>2974</b>	<b>1788</b>	<b>1031</b>	<b>592</b>	<b>330</b>	<b>194</b>	<b>125</b>	<b>76</b>	<b>44</b>	<b>32</b>	<b>7</b>	<b>13</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>19382</b>	<b>26.62</b>

**TABLE D: EUCP – RESULTS OF THE ELEVEN COMMODITIES ANALYSED BY REPORTING COUNTRY.**

Country	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Austria	154	79	51.3	43.5	59.1	70	45.45	37.8	53.3	5	3.25	1.4	7.4
Belgium	142	70	49.3	41.2	57.4	72	50.7	42.6	58.8	0	0	0	2.1
Bulgaria	243	167	68.72	62.6	74.2	75	30.86	25.4	36.9	1	0.41	0.1	2.3
Cyprus	193	116	60.1	53.1	66.8	68	35.23	28.8	42.2	9	4.66	2.5	8.6
Czech Republic	316	87	27.53	22.9	32.7	219	69.3	64	74.1	10	3.16	1.7	5.7
Denmark	524	367	70.04	66	73.8	155	29.58	25.8	33.6	2	0.38	0.1	1.4
Estonia	160	85	53.13	45.4	60.7	75	46.88	39.3	54.6	0	0	0	1.8
Finland	362	156	43.09	38.1	48.2	205	56.63	51.5	61.6	1	0.28	0.1	1.5
France	1100	518	47.09	44.2	50	540	49.09	46.1	52	42	3.82	2.8	5.1
Germany	1618	411	25.4	23.3	27.6	1186	73.3	71.1	75.4	21	1.3	0.9	2
Greece	546	350	64.1	60	68	183	33.52	29.7	37.6	13	2.38	1.4	4
Hungary	87	36	41.38	31.6	51.9	51	58.62	48.1	68.4	0	0	0	3.3
Iceland	70	51	72.86	61.4	81.9	19	27.14	18.1	38.6	0	0	0	4.1
Ireland	303	147	48.51	42.9	54.1	155	51.16	45.5	56.7	1	0.33	0.1	1.8
Italy	217	150	69.12	62.7	74.9	66	30.41	24.7	36.8	1	0.46	0.1	2.5
Latvia	217	143	65.9	59.4	71.9	74	34.1	28.1	40.6	0	0	0	1.4
Lithuania	147	55	37.41	30	45.5	91	61.9	53.8	69.4	1	0.68	0.2	3.7
Luxembourg	149	82	55.03	47	62.8	64	42.95	35.3	51	3	2.01	0.7	5.7
Malta	122	91	74.59	66.2	81.5	25	20.49	14.3	28.5	6	4.92	2.3	10.3
Netherlands	763	252	33.03	29.8	36.4	498	65.27	61.8	68.6	13	1.7	1	2.9
Norway	206	110	53.4	46.6	60.1	95	46.12	39.4	52.9	1	0.49	0.1	2.7
Poland	468	327	69.87	65.6	73.9	135	28.85	24.9	33.1	6	1.28	0.6	2.8
Portugal	394	228	57.87	52.9	62.6	156	39.59	34.9	44.5	10	2.54	1.4	4.6
Romania	930	746	80.22	77.5	82.6	176	18.92	16.5	21.6	8	0.86	0.4	1.7
Slovakia	169	70	41.42	34.3	49	96	56.8	49.3	64	3	1.78	0.6	5.1
Slovenia	453	183	40.4	36	45	262	57.84	53.2	62.3	8	1.77	0.9	3.4
Spain	368	144	39.13	34.3	44.2	217	58.97	53.9	63.9	7	1.9	0.9	3.9
Sweden	413	142	34.38	30	39.1	265	64.16	59.4	68.6	6	1.45	0.7	3.1
United Kingdom	1334	806	60.42	57.8	63	509	38.16	35.6	40.8	19	1.42	0.9	2.2
<b>Total</b>	<b>12168</b>	<b>6169</b>	<b>50.7</b>	<b>49.8</b>	<b>51.6</b>	<b>5802</b>	<b>47.68</b>	<b>46.8</b>	<b>48.6</b>	<b>197</b>	<b>1.62</b>	<b>1.41</b>	<b>1.9</b>

(a): Lower confidence limit ; (b): Upper confidence limit

**TABLE E: EUCP – RESULTS ACCORDING TO THE PESTICIDES ANALYSED.**

Compound	No. of samples <sup>(a)</sup>	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		Number	%	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number	%	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number	%	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>
2,4-D (sum)	3883	3883	100	99.9	100	0	0	0	0.1	0	0	0	0.1
Abamectin (sum)	4358	4349	99.79	99.6	99.9	9	0.21	0.1	0.4	0	0	0	0.1
Acephate	8831	8830	99.99	99.9	100	0	0	0	0	1	0.01	0	0.1
Acetamiprid	8599	8364	97.27	96.9	97.6	225	2.62	2.3	3	10	0.12	0.1	0.2
Acrinathrin	8016	7982	99.58	99.4	99.7	32	0.4	0.3	0.6	2	0.02	0	0.1
Aldicarb (sum)	7376	7375	99.99	99.9	100	1	0.01	0	0.1	0	0	0	0
Aldrin and Dieldrin	789	789	100	99.6	100	0	0	0	0.4	0	0	0	0.4
Amitraz (sum)	388	382	98.45	96.7	99.3	1	0.26	0.1	1.4	5	1.29	0.6	3
Amitrole	228	228	100	98.7	100	0	0	0	1.3	0	0	0	1.3
Azinphos-ethyl	972	972	100	99.7	100	0	0	0	0.3	0	0	0	0.3
Azinphos-methyl	9704	9687	99.82	99.7	99.9	16	0.16	0.1	0.3	1	0.01	0	0.1
Azoxystrobin	9596	9233	96.22	95.8	96.6	361	3.76	3.4	4.2	2	0.02	0	0.1
Benfuracarb	4755	4755	100	99.9	100	0	0	0	0.1	0	0	0	0.1
Bifenthrin	10916	10701	98.03	97.8	98.3	212	1.94	1.7	2.2	3	0.03	0	0.1
Bitertanol	8477	8421	99.34	99.1	99.5	56	0.66	0.5	0.9	0	0	0	0
Boscalid	8361	7286	87.14	86.4	87.8	1074	12.9	12.1	13.6	1	0.01	0	0.1
Bromide ion	1481	1106	74.68	72.4	76.8	370	25	22.8	27.3	5	0.34	0.1	0.8
Bromopropylate	9723	9718	99.95	99.9	100	2	0.02	0	0.1	3	0.03	0	0.1
Bromuconazole (sum)	6551	6551	100	100	100	0	0	0	0	0	0	0	0
Bupirimate	8629	8498	98.48	98.2	98.7	130	1.51	1.3	1.8	1	0.01	0	0.1
Buprofezin	9129	9107	99.76	99.6	99.8	22	0.24	0.2	0.4	0	0	0	0
Cadusafos	6795	6795	100	100	100	0	0	0	0	0	0	0	0
Camphechlor (sum)	184	184	100	98.4	100	0	0	0	1.6	0	0	0	1.6
Captan	3764	3752	99.68	99.4	99.8	6	0.16	0.1	0.3	6	0.16	0.1	0.3
Captan/Folpet (sum)	1778	1624	91.34	89.9	92.6	153	8.61	7.4	10	1	0.06	0	0.3
Carbaryl	9165	9155	99.89	99.8	99.9	10	0.11	0.1	0.2	0	0	0	0
Carbendazim and benomyl	8111	7828	96.51	96.1	96.9	271	3.34	3	3.8	12	0.15	0.1	0.3

Compound	No. of samples <sup>(a)</sup>	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		Number	%	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number	%	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number	%	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>
Carbofuran (sum)	7198	7197	99.99	99.9	100	1	0.01	0	0.1	0	0	0	0
Carbosulfan	6002	6002	100	100	100	0	0	0	0	0	0	0	0
Chlordane (sum)	739	739	100	99.6	100	0	0	0	0.4	0	0	0	0.4
Chlorfenapyr	6293	6291	99.97	99.9	100	2	0.03	0	0.1	0	0	0	0
Chlorfenvinphos	8942	8941	99.99	99.9	100	1	0.01	0	0.1	0	0	0	0
Chlormequat	392	205	52.30	47.4	57.2	173	44.1	39.3	49.1	14	3.57	2.2	5.9
Chlorobenzilate	981	981	100	99.7	100	0	0	0	0.3	0	0	0	0.3
Chlorothalonil	9721	9500	97.73	97.4	98	214	2.2	1.9	2.5	7	0.07	0	0.1
Chlorpropham (sum)	5534	5531	99.95	99.8	100	3	0.05	0	0.2	0	0	0	0.1
Chlorpyrifos	11355	10829	95.37	95	95.7	520	4.58	4.2	5	6	0.05	0	0.1
Chlorpyrifos-methyl	11209	11078	98.83	98.6	99	131	1.17	1	1.4	0	0	0	0
Clofentezine	6142	6097	99.27	99	99.5	45	0.73	0.5	1	0	0	0	0
Clofentezine (sum animal products/cereals)	86	86	100	96.6	100	0	0	0	3.4	0	0	0	3.4
Clothianidin	2998	2990	99.73	99.5	99.9	8	0.27	0.1	0.5	0	0	0	0.1
Cyfluthrin (sum)	9792	9774	99.82	99.7	99.9	18	0.18	0.1	0.3	0	0	0	0
Cypermethrin (sum)	10729	10571	98.53	98.3	98.7	155	1.44	1.2	1.7	3	0.03	0	0.1
Cyproconazole	8231	8205	99.68	99.5	99.8	24	0.29	0.2	0.4	2	0.02	0	0.1
Cyprodinil	9440	8511	90.16	89.5	90.7	928	9.83	9.2	10.4	1	0.01	0	0.1
DDT (sum)	804	753	93.66	91.8	95.1	51	6.34	4.9	8.2	0	0	0	0.4
Deltamethrin	11028	10951	99.30	99.1	99.4	75	0.68	0.5	0.9	2	0.02	0	0.1
Diazinon	11220	11213	99.94	99.9	100	4	0.04	0	0.1	3	0.03	0	0.1
Dichlofluanid	9224	9224	100	100	100	0	0	0	0	0	0	0	0
Dichlorvos	9768	9763	99.95	99.9	100	0	0	0	0	5	0.05	0	0.1
Dicloran	7392	7389	99.96	99.9	100	2	0.03	0	0.1	1	0.01	0	0.1
Dicofol (sum)	7493	7487	99.92	99.8	100	3	0.04	0	0.1	3	0.04	0	0.1
Difenoconazole	9110	8988	98.66	98.4	98.9	120	1.32	1.1	1.6	2	0.02	0	0.1

Compound	No. of samples <sup>(a)</sup>	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		Number	%	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number	%	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number	%	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>
Dimethoate (sum)	11983	11929	99.55	99.4	99.7	41	0.34	0.3	0.5	13	0.11	0.1	0.2
Dimethomorph	7849	7712	98.25	97.9	98.5	135	1.72	1.5	2	2	0.03	0	0.1
Dinocap (sum)	1615	1615	100.00	99.8	100	0	0	0	0.2	0	0	0	0.2
Diphenylamine	9009	8737	97	96.6	97.3	272	3.02	2.7	3.4	0	0	0	0
Dithiocarbamates	5481	4339	79.16	78.1	80.2	1134	20.7	19.6	21.8	8	0.15	0.1	0
Endosulfan (sum)	10800	10786	99.87	99.8	99.9	10	0.09	0.1	0.2	4	0.04	0	0.1
Endrin	1248	1248	100.00	99.8	100	0	0	0	0.2	0	0	0	0.2
Epoxiconazole	8171	8155	100	99.7	99.9	16	0.2	0.1	0.3	0	0	0	0
Ethephon	606	591	97.52	96	98.5	12	1.98	1.1	3.4	3	0.5	0.2	1
Ethion	9512	9510	99.98	99.9	100	0	0	0	0	2	0.02	0	0.1
Ethoprophos	7887	7886	99.99	99.9	100	1	0.01	0	0	0	0	0	0
Etofenprox	6360	6244	98.18	97.8	98.5	116	1.82	2	2.2	0	0	0	0
Fenamiphos (sum)	5384	5382	99.96	99.9	100	2	0.04	0	0.1	0	0	0	0
Fenarimol	9310	9307	99.97	99.9	100	3	0.03	0	0.1	0	0	0	0
Fenazaquin	7177	7156	99.71	99.6	99.8	21	0.29	0.2	0.4	0	0	0	0
Fenbuconazole	7049	6956	98.68	98.4	98.9	93	1.32	1.1	1.6	0	0	0	0
Fenbutatin oxide	1473	1460	99.12	98.5	99.5	13	0.88	0.5	1.5	0	0	0	0
Fenhexamid	9213	8737	94.83	94.4	95.3	476	5.17	4.7	5.6	0	0	0	0
Fenitrothion	9711	9708	99.97	99.9	100	2	0.02	0	0.1	1	0.01	0	0
Fenoxycarb	7377	7343	99.54	99.4	99.7	34	0.46	0.3	0.6	0	0	0	0
Fenpropathrin	8498	8492	99.93	99.8	100	4	0.05	0	0.1	2	0.02	0	0
Fenpropimorph	7602	7582	99.74	99.6	99.8	20	0.26	0.2	0.4	0	0	0	0
Fenthion (sum)	6435	6433	99.97	99.9	100	0	0	0	0	2	0.03	0	0
Fenvalerate and Esfenvalerate (Sum of RR and SS isomers)	8250	8247	99.96	99.9	100	3	0.04	0	0	0	0	0	0
Fenvalerate and Esfenvalerate (Sum of RS and SR isomers)	5085	5085	100.00	99.9	100	0	0	0	0.1	0	0	0	0
Fipronil (sum)	4497	4497	100	99.9	100	0	0	0	0.1	0	0	0	0.1

Compound	No. of samples <sup>(a)</sup>	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		Number	%	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number	%	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number	%	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>
Fluazifop-P-butyl (sum)	4387	4377	100	99.6	99.9	10	0.23	0.1	0.4	0	0	0	0.1
Fludioxonil	8732	7982	91.41	90.8	92	748	8.57	8	9.2	2	0.02	0	0.1
Flufenoxuron	6570	6540	99.54	99.3	99.7	30	0.46	0.3	0.7	0	0	0	0
Fluquinconazole	7606	7601	99.93	99.8	100	5	0.07	0	0.2	0	0	0	0
Flusilazole	8363	8354	99.89	99.8	99.9	9	0.11	0.1	0.2	0	0	0	0
Flutriafol	6366	6358	99.87	99.8	99.9	8	0.13	0.1	0.2	0	0	0	0
Folpet	3994	3986	99.80	99.6	99.9	6	0.15	0.1	0.3	2	0.05	0	0
Formetanate (sum)	3340	3339	99.97	99.8	100	1	0.03	0	0.2	0	0	0	0.1
Fosthiazate	5539	5539	100.00	99.9	100	0	0	0	0.1	0	0	0	0.1
Glyphosate	258	225	87	82.6	90.7	33	12.8	9.3	17.4	0	0	0	1.1
HCH alpha	991	991	100.00	99.7	100	0	0	0	0.3	0	0	0	0.3
HCH beta	956	953	100	99.1	99.9	3	0.31	0.1	0.9	0	0	0	0.3
Haloxyfop including haloxyfop-R	6829	6829	100.00	100	100	0	0	0	0	0	0	0	0
Haloxyfop-R (animal products)	30	30	100	90.8	100	0	0	0	9	0	0	0	9
Heptachlor (sum)	823	821	100	99.1	99.9	2	0.24	0.1	0.9	0	0	0	0.4
Hexachlorobenzene	1098	1059	96.45	95.2	97.4	39	3.55	2.6	4.8	0	0	0	0.3
Hexaconazole	8172	8168	99.95	99.9	100	3	0.04	0	0.1	1	0.01	0	0.1
Hexythiazox	7708	7676	99.58	99.4	99.7	32	0.42	0.3	0.6	0	0	0	0
Imazalil	9389	9333	99.40	99.2	99.5	55	0.59	0.5	0.8	1	0.01	0	0
Imidacloprid	8082	7804	96.56	96.1	96.9	278	3.44	3.1	3.9	0	0	0	0
Indoxacarb	7355	7182	97.65	97.3	98	172	2.34	2	2.7	1	0.01	0	0
Iprodione	9710	9031	93.01	92.5	93.5	670	6.9	6.4	7.4	9	0.09	0	0.2
Iprovalicarb	8330	8327	99.96	99.9	100	3	0.04	0	0.1	0	0	0	0
Kresoxim-methyl	9474	9398	99.20	99	99.4	75	0.79	0.6	1	1	0.01	0	0
Lambda-Cyhalothrin	9236	8993	97.37	97	97.7	242	2.62	2.3	3	1	0.01	0	0.1
Lindane	1175	1167	99.32	98.7	99.6	8	0.68	0.4	1.3	0	0	0	0.3
Linuron	7701	7687	99.82	99.7	99.9	13	0.17	0.1	0.3	1	0.01	0	0.1

Compound	No. of samples <sup>(a)</sup>	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		Number	%	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number	%	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number	%	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>
Lufenuron	5557	5525	99.42	99.2	99.6	32	0.58	0.4	0.8	0	0	0	0.1
Malathion (sum)	8030	8027	99.96	99.9	100	3	0.04	0	0.1	0	0	0	0
Mepanipyrim (sum)	6614	6525	98.65	98.3	98.9	88	1.33	1.1	1.6	1	0.02	0	0
Mepiquat	381	347	91.08	87.8	93.5	34	8.92	6.5	12.2	0	0	0	0.8
Metalaxyl (sum)	9224	9090	98.55	98.3	98.8	134	1.45	1.2	1.7	0	0	0	0
Metconazole	6996	6996	100.00	100	100	0	0	0	0	0	0	0	0
Methamidophos	9147	9146	100	99.9	100	0	0	0	0	1	0.01	0	0
Methidathion	10991	10988	99.97	99.9	100	3	0.03	0	0	0	0	0	0
Methiocarb (sum)	7294	7276	99.75	99.6	99.8	17	0.23	0.1	0.4	1	0.01	0	0
Methomyl and Thiodicarb	6778	6774	99.94	99.8	100	1	0.01	0	0.1	3	0.04	0	0.1
Methoxychlor	1150	1150	100.00	99.7	100	0	0	0	0.3	0	0	0	0.3
Methoxyfenozide	6345	6186	97	97.1	97.9	158	2.49	2.1	2.9	1	0.02	0	0.1
Monocrotophos	8985	8984	99.99	99.9	100	0	0	0	0	1	0.01	0	0.1
Myclobutanil	9521	9344	98.14	97.8	98.4	176	1.85	1.6	2	1	0.01	0	0.1
Oxadixyl	8789	8774	99.83	99.7	99.9	12	0.14	0.1	0.2	3	0.03	0	0.1
Oxamyl	7695	7691	99.95	99.9	100	2	0.03	0	0.1	2	0.03	0	0.1
Oxydemeton-methyl (sum)	6736	6735	99.99	99.9	100	0	0	0	0	1	0.01	0	0.1
Paclobutrazol	6237	6237	100.00	100	100	0	0	0	0	0	0	0	0
Parathion	10214	10214	100.00	100	100	0	0	0	0	0	0	0	0
Parathion-methyl (sum)	8560	8560	100	100	100	0	0	0	0	0	0	0	0
Penconazole	9519	9423	99	98.8	99.2	96	1.01	0.8	1	0	0	0	0
Pencycuron	6513	6488	100	99.4	99.7	22	0.34	0.2	1	3	0.05	0	0
Pendimethalin	8551	8526	99.71	99.6	99.8	24	0.28	0.2	0.4	1	0.01	0	0
Permethrin (sum)	1133	1132	99.91	99.5	100	1	0.09	0	0.5	0	0	0	0.3
Phenthoate	6756	6756	100.00	100	100	0	0	0	0	0	0	0	0
Phosalone	9867	9863	99.96	99.9	100	3	0.03	0	0.1	1	0.01	0	0.1
Phosmet (sum)	6207	6145	99	98.7	99.2	60	0.97	0.8	1	2	0.03	0	0

Compound	No. of samples <sup>(a)</sup>	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		Number	%	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number	%	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number	%	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>
Phoxim	4728	4728	100.00	99.9	100	0	0	0	0.1	0	0	0	0.1
Pirimicarb (sum)	6890	6675	96.88	96.4	97.3	215	3.12	2.7	3.6	0	0	0	0
Pirimiphos-methyl	11145	11069	99	99.1	99.5	76	0.68	0.5	0.9	0	0	0	0
Prochloraz (sum)	7445	7437	99.89	99.8	99.9	8	0.11	0.1	0.2	0	0	0	0
Procymidone	10038	9980	99.42	99.3	99.6	50	0.5	0.4	0.7	8	0.08	0	0
Profenofos	9800	9796	99.96	99.9	100	3	0.03	0	0.1	1	0.01	0	0
Propamocarb (sum)	5890	5674	96.33	95.8	96.8	216	3.67	3.2	4.2	0	0	0	0.1
Propargite	8588	8475	98.68	98.4	98.9	112	1.3	1.1	1.6	1	0.01	0	0.1
Propiconazole	8925	8922	99.97	99.9	100	3	0.03	0	0.1	0	0	0	0
Propyzamide	9284	9224	99.35	99.2	99.5	60	0.65	0.5	0.8	0	0	0	0
Prothioconazole-Desthio	1762	1762	100.00	99.8	100	0	0	0	0.2	0	0	0	0
Pyraclostrobin	7772	7228	93.00	92.4	93.5	541	6.96	6.4	7.5	3	0.04	0	0
Pyrazophos	836	836	100	99.6	100	0	0	0	0.4	0	0	0	0.4
Pyrethrins	3872	3869	99.92	99.8	100	3	0.08	0	0.2	0	0	0	0.1
Pyridaben	7671	7630	99	99.3	99.6	41	0.53	0.4	0.7	0	0	0	0
Pyrimethanil	9178	8824	96.14	95.7	96.5	353	3.85	3.5	4.3	1	0.01	0	0.1
Pyriproxyfen	7960	7913	99.41	99.2	99.6	47	0.59	0.4	0.8	0	0	0	0
Quinoxifen	8254	8227	99.67	99.5	99.8	27	0.33	0.2	0.5	0	0	0	0
Quintozene (sum)	1074	1074	100.00	99.7	100	0	0	0	0.3	0	0	0	0
Resmethrin (sum)	931	931	100.00	99.7	100	0	0	0	0.3	0	0	0	0
Spinosad (sum)	6755	6505	96	95.8	96.7	247	3.66	3.2	4.1	3	0.04	0	0.1
Spiroxamine	7948	7944	100	99.9	100	2	0.03	0	0.1	2	0.03	0	0.1
Tebuconazole	9340	8895	95.24	94.8	95.6	444	4.75	4.3	5.2	1	0.01	0	0.1
Tebufenozide	7363	7335	99.62	99.5	99.7	28	0.38	0.3	0.5	0	0	0	0
Tebufenpyrad	7833	7794	99.50	99.3	99.6	39	0.5	0.4	0.7	0	0	0	0
Tecnazene	894	894	100.00	99.7	100	0	0	0	0.3	0	0	0	0
Teflubenzuron	6595	6553	99.36	99.1	99.5	42	0.64	0.5	0.9	0	0	0	0



Compound	No. of samples <sup>(a)</sup>	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		Number	%	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number	%	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>	Number	%	LCL <sup>(b)</sup>	UCL <sup>(c)</sup>
Tefluthrin	5988	5988	100	99.9	100	0	0	0	0.1	0	0	0	0.1
Tetraconazole	7861	7818	99.45	99.3	99.6	43	0.55	0.4	0.7	0	0	0	0
Tetradifon	8839	8835	100	99.9	100	4	0.05	0	0.1	0	0	0	0
Thiabendazole	8941	8732	97.66	97.3	98	208	2.33	2	2.7	1	0.01	0	0
Thiacloprid	7093	6706	94.54	94	95	385	5.43	4.9	6	2	0.03	0	0
Thiametoxam (sum)	5252	5190	98.82	98.5	99.1	61	1.16	0.9	1.5	1	0.02	0	0.1
Thiophanate-methyl	7266	7167	98.64	98.3	98.9	96	1.32	1.1	1.6	3	0.04	0	0.1
Tolclofos-methyl	9463	9409	99.43	99.3	99.6	54	0.57	0.4	0.7	0	0	0	0
Tolylfluanid (sum)	8737	8731	99.93	99.9	100	6	0.07	0	0.1	0	0	0	0
Triadimefon (sum)	8251	8183	99.18	99	99.3	66	0.8	0.6	1	2	0.02	0	0
Triazophos	10772	10771	99.99	99.9	100	1	0.01	0	0.1	0	0	0	0
Trichlorfon	5913	5912	99.98	99.9	100	1	0.02	0	0.1	0	0	0	0.1
Trifloxystrobin	8609	8416	97.76	97.4	98	193	2.24	2	2.6	0	0	0	0
Triflumuron	5639	5542	98.28	97.9	98.6	97	1.72	1	2.1	0	0	0	0.1
Trifluralin	7713	7712	99.99	99.9	100	1	0.01	0	0.1	0	0	0	0
Triticonazole	6259	6259	100.00	100	100	0	0	0	0	0	0	0	0
Vinclozolin (sum)	9576	9571	99.95	99.9	100	2	0.02	0	0.1	3	0.03	0	0
Zoxamide	5655	5654	100	99.9	100	1	0.02	0	0	0	0	0	0
tau-Fluvalinate	6600	6592	99.88	99.8	99.9	7	0.11	0.1	0.2	1	0.02	0	0.1
<b>Total</b>	<b>1189166</b>	<b>1174022</b>	<b>98.73</b>	<b>98.71</b>	<b>98.75</b>	<b>14931</b>	<b>1.26</b>	<b>1.24</b>	<b>1.28</b>	<b>213</b>	<b>0.018</b>	<b>0.016</b>	<b>0.020</b>

(a): Number of times the pesticide was sought in individual samples. For pesticides with complex residue definitions as some of the reporting countries did not analyse for all individual components covered by the residue definition, the numbers for samples fully compliant with the residue definition and those which only cover part of the residue definition were aggregated. Total: Total number of determinations.

(b): Lower confidence limit ; (c): Upper confidence limit

**TABLE F: EUCP – RESULTS BY COMMODITY AND REPORTING COUNTRY.**

**APPLES**

Country	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Austria	15	3	20	7.3	45.6	12	80	54.4	92.7	0	0	0	17.1
Belgium	15	2	13.33	4	38.3	13	86.67	61.7	96	0	0	0	17.1
Bulgaria	35	26	74.29	57.8	85.8	9	25.71	14.2	42.2	0	0	0	8
Cyprus	28	9	32.14	17.9	50.8	17	60.71	42.3	76.5	2	7.14	2.2	22.8
Czech Republic	53	6	11.32	5.4	22.6	45	84.91	72.9	92.1	2	3.77	1.2	12.7
Denmark	72	30	41.67	31	53.2	42	58.33	46.8	69	0	0	0	4
Estonia	17	3	17.65	6.4	41.4	14	82.35	58.6	93.6	0	0	0	15.3
Finland	102	16	15.69	9.9	24	86	84.31	76	90.1	0	0	0	2.9
France	135	44	32.59	25.3	40.9	90	66.67	58.3	74.1	1	0.74	0.2	4
Germany	204	28	13.73	9.7	19.1	176	86.27	80.9	90.3	0	0	0	1.5
Greece	90	33	36.67	27.4	47	54	60	49.6	69.5	3	3.33	1.2	9.3
Iceland	16	8	50	27.8	72.2	8	50	27.8	72.2	0	0	0	16.2
Ireland	89	15	16.85	10.5	26	74	83.15	74	89.5	0	0	0	3.3
Italy	56	37	66.07	52.9	77.1	19	33.93	22.9	47.1	0	0	0	5.1
Latvia	29	17	58.62	40.6	74.5	12	41.38	25.5	59.4	0	0	0	9.5
Lithuania	20	8	40	21.8	61.6	12	60	38.4	78.2	0	0	0	13.3
Luxembourg	20	2	10	3	30.4	17	85	63.7	94.6	1	5	1.2	23.8
Malta	15	9	60	35.4	80.2	6	40	19.8	64.6	0	0	0	17.1
Netherlands	132	17	12.88	8.2	19.7	114	86.36	79.5	91.2	1	0.76	0.2	4.1
Norway	18	10	55.56	33.5	75.6	8	44.44	24.4	66.5	0	0	0	14.6
Poland	61	26	42.62	31	55.2	35	57.38	44.8	69	0	0	0	4.7
Portugal	63	16	25.4	16.3	37.4	42	66.67	54.3	77.1	5	7.94	3.5	17.3
Romania	296	214	72.3	66.9	77.1	76	25.68	21	30.9	6	2.03	1	4.3
Slovakia	20	8	40	21.8	61.6	12	60	38.4	78.2	0	0	0	13.3
Slovenia	76	8	10.53	5.5	19.4	68	89.47	80.6	94.5	0	0	0	3.8
Spain	88	12	13.64	8	22.4	74	84.09	75	90.2	2	2.27	0.7	7.9

Country	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Sweden	149	16	10.74	6.7	16.7	130	87.25	80.9	91.7	3	2.01	0.7	5.7
United Kingdom	143	28	19.58	13.9	26.9	114	79.72	72.4	85.5	1	0.7	0.2	3.8
<b>Total</b>	<b>2057</b>	<b>651</b>	<b>31.6</b>	<b>29.7</b>	<b>33.7</b>	<b>1379</b>	<b>67.0</b>	<b>65.0</b>	<b>69.0</b>	<b>27</b>	<b>1.3</b>	<b>0.9</b>	<b>1.9</b>

(a): Lower confidence limit ; (b): Upper confidence limit

**HEAD CABBAGE**

Country	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Austria	15	11	73.33	47.6	89	3	20	7.3	45.6	1	6.67	1.6	30.2
Belgium	15	13	86.67	61.7	96	2	13.33	4	38.3	0	0	0	17.1
Bulgaria	32	26	81.25	64.5	91	6	18.75	9	35.5	0	0	0	8.7
Czech Republic	39	10	25.64	14.6	41.2	28	71.79	56.1	83.4	1	2.56	0.6	13.2
Denmark	24	23	95.83	79.6	99	1	4.17	1	20.4	0	0	0	11.3
Estonia	19	10	52.63	31.5	72.8	9	47.37	27.2	68.5	0	0	0	13.9
Finland	16	14	87.5	63.6	96.2	2	12.5	3.8	36.4	0	0	0	16.2
France	64	59	92.19	83	96.5	2	3.13	1	10.7	3	4.69	1.7	12.9
Germany	184	75	40.76	33.9	48	109	59.24	52	66.1	0	0	0	1.6
Greece	27	27	100	89.9	100	0	0	0	10.1	0	0	0	10.1
Hungary	10	10	100	76.2	100	0	0	0	23.8	0	0	0	23.8
Iceland	10	9	90	58.7	97.7	1	10	2.3	41.3	0	0	0	23.8
Ireland	16	12	75	50.1	89.7	4	25	10.3	49.9	0	0	0	16.2
Latvia	30	22	73.33	55.4	85.8	8	26.67	14.2	44.6	0	0	0	9.2
Lithuania	17	7	41.18	21.5	64.3	9	52.94	30.8	74	1	5.88	1.4	27.3
Luxembourg	14	10	71.43	44.9	88.2	3	21.43	7.8	48.1	1	7.14	1.7	31.9
Malta	15	15	100	82.9	100	0	0	0	17.1	0	0	0	17.1
Netherlands	71	65	91.55	82.7	96	6	8.45	4	17.3	0	0	0	4.1
Norway	19	19	100	86.1	100	0	0	0	13.9	0	0	0	13.9
Poland	60	47	78.33	66.3	86.8	13	21.67	13.2	33.7	0	0	0	4.8
Portugal	63	35	55.56	43.3	67.2	27	42.86	31.4	55.2	1	1.59	0.4	8.4
Romania	99	99	100	97	100	0	0	0	3	0	0	0	3
Slovakia	15	4	26.67	11	52.4	10	66.67	41.3	84.8	1	6.67	1.6	30.2
Slovenia	30	16	53.33	36	69.8	14	46.67	30.2	64	0	0	0	9.2
Spain	5	2	40	11.8	77.7	3	60	22.3	88.2	0	0	0	39.3
Sweden	18	12	66.67	43.4	83.7	6	33.33	16.3	56.6	0	0	0	14.6

Country	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
United Kingdom	72	52	72.22	60.9	81.2	20	27.78	18.8	39.1	0	0	0	4
<b>Total</b>	<b>999</b>	<b>704</b>	<b>70.5</b>	<b>67.6</b>	<b>73.2</b>	<b>286</b>	<b>28.6</b>	<b>25.9</b>	<b>31.5</b>	<b>9</b>	<b>0.9</b>	<b>0.5</b>	<b>1.7</b>

(a): Lower confidence limit ; (b): Upper confidence limit

LEEK

Country	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Austria	15	11	73.33	47.6	89	3	20	7.3	45.6	1	6.67	1.6	30.2
Belgium	15	4	26.67	11	52.4	11	73.33	47.6	89	0	0	0	17.1
Bulgaria	37	32	86.49	71.9	94	5	13.51	6	28.1	0	0	0	7.6
Cyprus	14	10	71.43	44.9	88.2	4	28.57	11.8	55.1	0	0	0	18.1
Czech Republic	26	4	15.38	6.3	33.7	21	80.77	61.9	91.4	1	3.85	0.9	19
Denmark	22	20	90.91	72	97.2	2	9.09	2.8	28	0	0	0	12.2
Estonia	15	9	60	35.4	80.2	6	40	19.8	64.6	0	0	0	17.1
Finland	17	10	58.82	35.7	78.5	7	41.18	21.5	64.3	0	0	0	15.3
France	79	54	68.35	57.4	77.6	25	31.65	22.4	42.6	0	0	0	3.7
Germany	191	25	13.09	9	18.6	163	85.34	79.6	89.6	3	1.57	0.6	4.5
Greece	28	27	96.43	82.2	99.2	1	3.57	0.8	17.8	0	0	0	9.8
Iceland	7	5	71.43	34.9	91.5	2	28.57	8.5	65.1	0	0	0	31.2
Ireland	15	10	66.67	41.3	84.8	5	33.33	15.2	58.7	0	0	0	17.1
Italy	13	8	61.54	35.1	82.3	5	38.46	17.7	64.9	0	0	0	19.3
Latvia	25	14	56	36.9	73.4	11	44	26.6	63.1	0	0	0	10.9
Lithuania	15	4	26.67	11	52.4	11	73.33	47.6	89	0	0	0	17.1
Luxembourg	9	8	88.89	55.5	97.5	1	11.11	2.5	44.5	0	0	0	25.9
Malta	15	15	100	82.9	100	0	0	0	17.1	0	0	0	17.1
Netherlands	56	25	44.64	32.4	57.6	30	53.57	40.7	66	1	1.79	0.4	9.4
Norway	22	15	68.18	47.1	83.6	6	27.27	13.2	48.4	1	4.55	1.1	21.9
Poland	50	30	60	46.1	72.4	20	40	27.6	53.9	0	0	0	5.7
Portugal	65	47	72.31	60.4	81.7	15	23.08	14.5	34.7	3	4.62	1.7	12.7
Romania	25	25	100	89.1	100	0	0	0	10.9	0	0	0	10.9
Slovakia	15	8	53.33	29.9	75.3	7	46.67	24.7	70.1	0	0	0	17.1
Slovenia	25	17	68	48.2	82.8	8	32	17.2	51.8	0	0	0	10.9
Spain	24	13	54.17	34.9	72.2	11	45.83	27.8	65.1	0	0	0	11.3
Sweden	25	14	56	36.9	73.4	11	44	26.6	63.1	0	0	0	10.9

Country	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
United Kingdom	96	81	84.38	75.8	90.3	15	15.63	9.7	24.2	0	0	0	3
<b>Total</b>	<b>961</b>	<b>545</b>	<b>56.7</b>	<b>53.6</b>	<b>59.8</b>	<b>406</b>	<b>42.2</b>	<b>39.2</b>	<b>45.4</b>	<b>10</b>	<b>1.0</b>	<b>0.6</b>	<b>1.9</b>

(a): Lower confidence limit ; (b): Upper confidence limit

LETTUCE

Country	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Austria	15	3	20	7.3	45.6	12	80	54.4	92.7	0	0	0	17.1
Belgium	15	6	40	19.8	64.6	9	60	35.4	80.2	0	0	0	17.1
Bulgaria	29	19	65.52	47.2	80.1	10	34.48	19.9	52.8	0	0	0	9.5
Cyprus	27	20	74.07	55.1	86.8	4	14.81	6.1	32.7	3	11.11	4	28.2
Czech Republic	40	6	15	7.2	29.2	34	85	70.8	92.8	0	0	0	7
Denmark	57	43	75.44	62.8	84.7	14	24.56	15.3	37.2	0	0	0	5
Estonia	13	8	61.54	35.1	82.3	5	38.46	17.7	64.9	0	0	0	19.3
Finland	47	22	46.81	33.3	60.8	25	53.19	39.2	66.7	0	0	0	6.1
France	312	98	31.41	26.5	36.8	190	60.9	55.4	66.1	24	7.69	5.2	11.2
Germany	175	14	8	4.8	13	155	88.57	83	92.5	6	3.43	1.6	7.3
Greece	78	47	60.26	49.1	70.4	26	33.33	23.9	44.4	5	6.41	2.8	14.2
Hungary	14	1	7.14	1.7	31.9	13	92.86	68.1	98.3	0	0	0	18.1
Iceland	8	8	100	71.7	100	0	0	0	28.3	0	0	0	28.3
Ireland	38	8	21.05	11.1	36.5	29	76.32	60.7	87	1	2.63	0.6	13.5
Italy	17	14	82.35	58.6	93.6	2	11.76	3.6	34.7	1	5.88	1.4	27.3
Latvia	27	16	59.26	40.6	75.5	11	40.74	24.5	59.4	0	0	0	10.1
Lithuania	14	3	21.43	7.8	48.1	11	78.57	51.9	92.2	0	0	0	18.1
Luxembourg	18	9	50	28.9	71.1	9	50	28.9	71.1	0	0	0	14.6
Malta	15	14	93.33	69.8	98.4	0	0	0	17.1	1	6.67	1.6	30.2
Netherlands	156	40	25.64	19.4	33	115	73.72	66.3	80	1	0.64	0.2	3.5
Norway	21	2	9.52	2.9	29.2	19	90.48	70.8	97.1	0	0	0	12.7
Poland	50	36	72	58.3	82.5	12	24	14.3	37.5	2	4	1.2	13.5
Portugal	41	24	58.54	43.3	72.3	16	39.02	25.6	54.4	1	2.44	0.6	12.6
Romania	74	57	77.03	66.2	85.1	15	20.27	12.7	30.8	2	2.7	0.8	9.3
Slovakia	15	3	20	7.3	45.6	12	80	54.4	92.7	0	0	0	17.1
Slovenia	75	37	49.33	38.3	60.4	35	46.67	35.8	57.9	3	4	1.5	11.1
Spain	46	30	65.22	50.7	77.3	14	30.43	19.1	44.9	2	4.35	1.3	14.5
Sweden	35	16	45.71	30.4	61.9	18	51.43	35.5	67.1	1	2.86	0.7	14.5
United Kingdom	96	61	63.54	53.5	72.5	35	36.46	27.5	46.5	0	0	0	3
<b>Total</b>	<b>1568</b>	<b>665</b>	<b>42.4</b>	<b>40.0</b>	<b>44.9</b>	<b>850</b>	<b>54.2</b>	<b>51.7</b>	<b>56.7</b>	<b>53</b>	<b>3.4</b>	<b>2.6</b>	<b>4.4</b>

(a): Lower confidence limit ; (b): Upper confidence limit



**MILK**

Country	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Austria	17	17	100	84.7	100	0	0	0	15.3	0	0	0	15.3
Belgium	15	15	100	82.9	100	0	0	0	17.1	0	0	0	17.1
Cyprus	5	5	100	60.7	100	0	0	0	39.3	0	0	0	39.3
Denmark	15	15	100	82.9	100	0	0	0	17.1	0	0	0	17.1
Estonia	15	14	93.33	69.8	98.4	1	6.67	1.6	30.2	0	0	0	17.1
Finland	16	16	100	83.8	100	0	0	0	16.2	0	0	0	16.2
Germany	94	59	62.77	52.6	71.9	35	37.23	28.1	47.4	0	0	0	3.1
Ireland	68	68	100	95.8	100	0	0	0	4.2	0	0	0	4.2
Latvia	8	8	100	71.7	100	0	0	0	28.3	0	0	0	28.3
Lithuania	10	10	100	76.2	100	0	0	0	23.8	0	0	0	23.8
Luxembourg	18	18	100	85.4	100	0	0	0	14.6	0	0	0	14.6
Netherlands	22	22	100	87.8	100	0	0	0	12.2	0	0	0	12.2
Norway	15	15	100	82.9	100	0	0	0	17.1	0	0	0	17.1
Poland	1	1	100	22.4	100	0	0	0	77.6	0	0	0	77.6
Romania	38	32	84.21	69.5	92.5	6	15.79	7.5	30.5	0	0	0	7.4
Slovakia	15	0	0	0	17.1	15	100	82.9	100	0	0	0	17.1
Slovenia	1	1	100	22.4	100	0	0	0	77.6	0	0	0	77.6
Spain	16	16	100	83.8	100	0	0	0	16.2	0	0	0	16.2
Sweden	30	30	100	90.8	100	0	0	0	9.2	0	0	0	9.2
United Kingdom	235	235	100	98.7	100	0	0	0	1.3	0	0	0	1.3
<b>Total</b>	<b>654</b>	<b>597</b>	<b>91.3</b>	<b>88.9</b>	<b>93.2</b>	<b>57</b>	<b>8.7</b>	<b>6.8</b>	<b>11.1</b>	<b>0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.5</b>

(a): Lower confidence limit ; (b): Upper confidence limit

OATS

Country	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Austria	4	4	100	54.9	100	0	0	0	45.1	0	0	0	45.1
Belgium	5	0	0	0	39.3	5	100	60.7	100	0	0	0	39.3
Bulgaria	1	1	100	22.4	100	0	0	0	77.6	0	0	0	77.6
Czech Republic	15	12	80	54.4	92.7	3	20	7.3	45.6	0	0	0	17.1
Denmark	11	10	90.91	61.5	97.9	0	0	0	22.1	1	9.09	2.1	38.5
Estonia	6	3	50	18.4	81.6	3	50	18.4	81.6	0	0	0	34.8
France	52	16	30.77	19.9	44.3	36	69.23	55.7	80.1	0	0	0	5.5
Greece	3	3	100	47.3	100	0	0	0	52.7	0	0	0	52.7
Hungary	8	5	62.5	29.9	86.3	3	37.5	13.7	70.1	0	0	0	28.3
Ireland	22	20	90.91	72	97.2	2	9.09	2.8	28	0	0	0	12.2
Italy	3	2	66.67	19.4	93.2	1	33.33	6.8	80.6	0	0	0	52.7
Lithuania	4	3	75	28.4	94.7	1	25	5.3	71.6	0	0	0	45.1
Netherlands	1	1	100	22.4	100	0	0	0	77.6	0	0	0	77.6
Norway	9	7	77.78	44.4	93.3	2	22.22	6.7	55.6	0	0	0	25.9
Portugal	3	3	100	47.3	100	0	0	0	52.7	0	0	0	52.7
Slovakia	4	4	100	54.9	100	0	0	0	45.1	0	0	0	45.1
Slovenia	11	8	72.73	42.8	90.1	3	27.27	9.9	57.2	0	0	0	22.1
Spain	4	4	100	54.9	100	0	0	0	45.1	0	0	0	45.1
United Kingdom	80	6	7.5	3.5	15.4	62	77.5	67.2	85.2	12	15	8.8	24.4
<b>Total</b>	<b>246</b>	<b>112</b>	<b>45.5</b>	<b>39.4</b>	<b>51.8</b>	<b>121</b>	<b>49.2</b>	<b>43.0</b>	<b>55.4</b>	<b>13</b>	<b>5.3</b>	<b>3.1</b>	<b>8.8</b>

(a): Lower confidence limit ; (b): Upper confidence limit

PEACHES

Country	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		Number	%	LCL(a)	UCL(b)	Number	%	LCL(a)	UCL(b)	Number	%	LCL(a)	UCL(b)
Austria	17	1	5.88	1.4	27.3	16	94.12	72.7	98.6	0	0	0	15.3
Belgium	15	4	26.67	11	52.4	11	73.33	47.6	89	0	0	0	17.1
Bulgaria	36	16	44.44	29.5	60.5	20	55.56	39.5	70.5	0	0	0	7.8
Cyprus	27	12	44.44	27.5	62.8	14	51.85	33.9	69.4	1	3.7	0.9	18.3
Czech Republic	28	1	3.57	0.8	17.8	25	89.29	72.6	96.1	2	7.14	2.2	22.8
Denmark	53	12	22.64	13.5	35.6	41	77.36	64.4	86.5	0	0	0	5.4
Estonia	12	0	0	0	20.6	12	100	79.4	100	0	0	0	20.6
Finland	16	0	0	0	16.2	16	100	83.8	100	0	0	0	16.2
France	88	23	26.14	18.1	36.2	64	72.73	62.6	80.9	1	1.14	0.3	6.1
Germany	188	14	7.45	4.5	12.1	171	90.96	86	94.3	3	1.6	0.6	4.6
Greece	61	25	40.98	29.5	53.6	33	54.1	41.7	66	3	4.92	1.8	13.5
Hungary	16	10	62.5	38.3	81.6	6	37.5	18.4	61.7	0	0	0	16.2
Iceland	9	6	66.67	34.8	87.8	3	33.33	12.2	65.2	0	0	0	25.9
Ireland	20	7	35	18.1	57	13	65	43	81.9	0	0	0	13.3
Italy	27	12	44.44	27.5	62.8	15	55.56	37.2	72.5	0	0	0	10.1
Latvia	24	18	75	54.9	87.9	6	25	12.1	45.1	0	0	0	11.3
Lithuania	14	0	0	0	18.1	14	100	81.9	100	0	0	0	18.1
Luxembourg	15	3	20	7.3	45.6	11	73.33	47.6	89	1	6.67	1.6	30.2
Malta	15	3	20	7.3	45.6	9	60	35.4	80.2	3	20	7.3	45.6
Netherlands	70	11	15.71	9	26	59	84.29	74	91	0	0	0	4.1
Norway	22	4	18.18	7.5	38.8	18	81.82	61.2	92.5	0	0	0	12.2
Poland	50	23	46	32.9	59.7	26	52	38.5	65.2	1	2	0.5	10.4
Portugal	33	22	66.67	49.5	80.3	11	33.33	19.7	50.5	0	0	0	8.4
Romania	56	37	66.07	52.9	77.1	19	33.93	22.9	47.1	0	0	0	5.1
Slovakia	14	3	21.43	7.8	48.1	10	71.43	44.9	88.2	1	7.14	1.7	31.9
Slovenia	60	9	15	8.2	26.2	50	83.33	71.9	90.6	1	1.67	0.4	8.8
Spain	35	9	25.71	14.2	42.2	25	71.43	54.8	83.7	1	2.86	0.7	14.5

Country	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		Number	%	LCL(a)	UCL(b)	Number	%	LCL(a)	UCL(b)	Number	%	LCL(a)	UCL(b)
Sweden	31	4	12.9	5.3	29	25	80.65	63.6	90.7	2	6.45	2	20.8
United Kingdom	148	35	23.65	17.5	31.1	111	75	67.4	81.3	2	1.35	0.4	4.8
<b>Total</b>	<b>1200</b>	<b>324</b>	<b>27.0</b>	<b>24.6</b>	<b>29.6</b>	<b>854</b>	<b>71.2</b>	<b>68.5</b>	<b>73.7</b>	<b>22</b>	<b>1.8</b>	<b>1.2</b>	<b>2.8</b>

(a): Lower confidence limit ; (b): Upper confidence limit

**PEARS**

Country	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Czech Republic	10	10	100	76.2	100	0	0	0	23.8	0	0	0	23.8
Finland	6	6	100	65.2	100	0	0	0	34.8	0	0	0	34.8
France	120	119	99.17	95.5	99.8	0	0	0	2.4	1	0.83	0.2	4.5
Greece	26	26	100	89.5	100	0	0	0	10.5	0	0	0	10.5
Italy	1	0	0	0	77.6	1	100	22.4	100	0	0	0	77.6
Luxembourg	9	9	100	74.1	100	0	0	0	25.9	0	0	0	25.9
Norway	15	15	100	82.9	100	0	0	0	17.1	0	0	0	17.1
Slovakia	14	14	100	81.9	100	0	0	0	18.1	0	0	0	18.1
Slovenia	31	31	100	91.1	100	0	0	0	8.9	0	0	0	8.9
Spain	7	7	100	68.8	100	0	0	0	31.2	0	0	0	31.2
United Kingdom	149	145	97.32	93.3	98.9	0	0	0	2	4	2.68	1.1	6.7
<b>Total</b>	<b>388</b>	<b>382</b>	<b>98.5</b>	<b>96.7</b>	<b>99.3</b>	<b>1</b>	<b>0.3</b>	<b>0.1</b>	<b>1.4</b>	<b>5</b>	<b>1.3</b>	<b>0.6</b>	<b>3.0</b>

(a): Lower confidence limit ; (b): Upper confidence limit

**RYE**

Country	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		Number	%	LCL(a)	UCL(b)	Number	%	LCL(a)	UCL(b)	Number	%	LCL(a)	UCL(b)
Austria	9	9	100	74.1	100	0	0	0	25.9	0	0	0	25.9
Belgium	3	0	0	0	52.7	3	100	47.3	100	0	0	0	52.7
Bulgaria	5	2	40	11.8	77.7	3	60	22.3	88.2	0	0	0	39.3
Czech Republic	36	23	63.89	47.5	77.5	13	36.11	22.5	52.5	0	0	0	7.8
Denmark	26	25	96.15	81	99.1	1	3.85	0.9	19	0	0	0	10.5
Estonia	7	5	71.43	34.9	91.5	2	28.57	8.5	65.1	0	0	0	31.2
Finland	29	19	65.52	47.2	80.1	10	34.48	19.9	52.8	0	0	0	9.5
France	31	17	54.84	37.7	70.9	14	45.16	29.1	62.3	0	0	0	8.9
Germany	92	47	51.09	41	61.1	45	48.91	38.9	59	0	0	0	3.2
Greece	2	2	100	36.8	100	0	0	0	63.2	0	0	0	63.2
Hungary	7	5	71.43	34.9	91.5	2	28.57	8.5	65.1	0	0	0	31.2
Italy	1	1	100	22.4	100	0	0	0	77.6	0	0	0	77.6
Latvia	9	6	66.67	34.8	87.8	3	33.33	12.2	65.2	0	0	0	25.9
Lithuania	12	10	83.33	54.6	95	2	16.67	5	45.4	0	0	0	20.6
Netherlands	8	4	50	21.2	78.8	4	50	21.2	78.8	0	0	0	28.3
Norway	7	1	14.29	3.2	52.7	6	85.71	47.3	96.8	0	0	0	31.2
Poland	50	50	100	94.3	100	0	0	0	5.7	0	0	0	5.7
Portugal	4	3	75	28.4	94.7	1	25	5.3	71.6	0	0	0	45.1
Romania	11	9	81.82	51.6	94.5	2	18.18	5.5	48.4	0	0	0	22.1
Slovakia	12	7	58.33	31.6	80.8	4	33.33	13.9	61.4	1	8.3	1.9	36
Slovenia	9	6	66.67	34.8	87.8	3	33.33	12.2	65.2	0	0	0	25.9
Spain	5	5	100	60.7	100	0	0	0	39.3	0	0	0	39.3
Sweden	28	10	35.71	20.7	54.3	18	64.29	45.7	79.3	0	0	0	9.8
United Kingdom	3	1	33.33	6.8	80.6	2	66.67	19.4	93.2	0	0	0	52.7
<b>Total</b>	<b>406</b>	<b>267</b>	<b>65.8</b>	<b>61.0</b>	<b>70.2</b>	<b>138</b>	<b>34.0</b>	<b>29.6</b>	<b>38.7</b>	<b>1</b>	<b>0.2</b>	<b>0.1</b>	<b>1.4</b>

(a): Lower confidence limit ; (b): Upper confidence limit

**STRAWBERRIES**

Country	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Austria	15	2	13.33	4	38.3	12	80	54.4	92.7	1	6.7	1.6	30.2
Belgium	14	5	35.71	16.3	61.6	9	64.29	38.4	83.7	0	0	0	18.1
Bulgaria	31	21	67.74	50	81.4	9	29.03	16.1	46.7	1	3.2	0.8	16.2
Cyprus	27	11	40.74	24.5	59.4	13	48.15	30.6	66.1	3	11.1	4	28.2
Czech Republic	18	3	16.67	6.1	39.6	15	83.33	60.4	93.9	0	0	0	14.6
Denmark	60	18	30	19.9	42.6	41	68.33	55.7	78.7	1	1.7	0.4	8.8
Estonia	24	11	45.83	27.8	65.1	13	54.17	34.9	72.2	0	0	0	11.3
Finland	50	12	24	14.3	37.5	37	74	60.4	84.1	1	2.0	0.5	10.4
France	97	22	22.68	15.5	32	66	68.04	58.2	76.5	9	9.3	5	16.7
Germany	199	21	10.55	7	15.6	174	87.44	82.1	91.3	4	2.0	0.8	5
Greece	53	29	54.72	41.4	67.4	22	41.51	29.2	55	2	3.8	1.2	12.7
Hungary	15	2	13.33	4	38.3	13	86.67	61.7	96	0	0	0	17.1
Iceland	5	2	40	11.8	77.7	3	60	22.3	88.2	0	0	0	39.3
Ireland	17	2	11.76	3.6	34.7	15	88.24	65.3	96.4	0	0	0	15.3
Italy	30	21	70	52	83.3	9	30	16.7	48	0	0	0	9.2
Latvia	22	10	45.45	26.8	65.5	12	54.55	34.5	73.2	0	0	0	12.2
Lithuania	19	0	0	0	13.9	19	100	86.1	100	0	0	0	13.9
Luxembourg	15	2	13.33	4	38.3	13	86.67	61.7	96	0	0	0	17.1
Malta	14	7	50	26.6	73.4	6	42.86	21.3	67.7	1	7.1	1.7	31.9
Netherlands	97	10	10.31	5.7	18	80	82.47	73.7	88.7	7	7.2	3.6	14.2
Norway	19	1	5.26	1.2	24.9	18	94.74	75.1	98.8	0	0	0	13.9
Poland	49	32	65.31	51.2	77.1	16	32.65	21.2	46.7	1	2.0	0.5	10.6
Portugal	53	35	66.04	52.5	77.3	18	33.96	22.7	47.5	0	0	0	5.4
Romania	94	78	82.98	74.1	89.2	16	17.02	10.8	25.9	0	0	0	3.1
Slovakia	13	3	23.08	8.4	50.8	10	76.92	49.2	91.6	0	0	0	19.3
Slovenia	60	16	26.67	17.1	39.1	40	66.67	54	77.3	4	6.7	2.7	15.9
Spain	32	17	53.13	36.4	69.2	15	46.88	30.8	63.6	0	0	0	8.7

Country	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Sweden	34	4	11.76	4.8	26.7	30	88.24	73.3	95.2	0	0	0	8.2
United Kingdom	96	11	11.46	6.6	19.4	85	88.54	80.6	93.4	0	0	0	3
<b>Total</b>	<b>1272</b>	<b>408</b>	<b>32.1</b>	<b>29.6</b>	<b>34.7</b>	<b>829</b>	<b>65.2</b>	<b>62.5</b>	<b>67.7</b>	<b>35</b>	<b>2.8</b>	<b>2.0</b>	<b>3.8</b>

(a): Lower confidence limit ; (b): Upper confidence limit



SWINE MEAT

Country	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Austria	16	15	93.75	71.3	98.5	1	6.25	1.5	28.7	0	0	0	16.2
Belgium	15	15	100	82.9	100	0	0	0	17.1	0	0	0	17.1
Cyprus	36	36	100	92.2	100	0	0	0	7.8	0	0	0	7.8
Denmark	120	120	100	97.6	100	0	0	0	2.4	0	0	0	2.4
Estonia	15	14	93.33	69.8	98.4	1	6.67	1.6	30.2	0	0	0	17.1
Finland	16	16	100	83.8	100	0	0	0	16.2	0	0	0	16.2
Germany	98	83	84.69	76.2	90.5	15	15.3	9.5	23.8	0	0	0	3
Greece	15	15	100	82.9	100	0	0	0	17.1	0	0	0	17.1
Italy	2	2	100	36.8	100	0	0	0	63.2	0	0	0	63.2
Latvia	16	16	100	83.8	100	0	0	0	16.2	0	0	0	16.2
Lithuania	8	8	100	71.7	100	0	0	0	28.3	0	0	0	28.3
Luxembourg	15	15	100	82.9	100	0	0	0	17.1	0	0	0	17.1
Malta	15	15	100	82.9	100	0	0	0	17.1	0	0	0	17.1
Netherlands	20	20	100	86.7	100	0	0	0	13.3	0	0	0	13.3
Norway	15	15	100	82.9	100	0	0	0	17.1	0	0	0	17.1
Poland	47	47	100	93.9	100	0	0	0	6.1	0	0	0	6.1
Slovakia	15	7	46.67	24.7	70.1	8	53.3	29.9	75.3	0	0	0	17.1
Slovenia	15	15	100	82.9	100	0	0	0	17.1	0	0	0	17.1
Sweden	16	16	100	83.8	100	0	0	0	16.2	0	0	0	16.2
United Kingdom	108	108	100	97.3	100	0	0	0	2.7	0	0	0	2.7
<b>Total</b>	<b>623</b>	<b>598</b>	<b>96.0</b>	<b>94.1</b>	<b>97.3</b>	<b>25</b>	<b>4.0</b>	<b>2.7</b>	<b>5.9</b>	<b>0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.5</b>

(a): Lower confidence limit ; (b): Upper confidence limit

**TOMATOES**

Country	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Austria	16	3	18.8	6.8	43.4	11	68.75	44	85.8	2	12.5	3.8	36.4
Belgium	15	6	40	19.8	64.6	9	60	35.4	80.2	0	0	0	17.1
Bulgaria	37	24	64.9	48.6	78.2	13	35.14	21.8	51.4	0	0	0	7.6
Cyprus	29	13	44.8	28.3	62.6	16	55.17	37.4	71.7	0	0	0	9.5
Czech Republic	51	12	23.5	14	36.8	35	68.63	54.9	79.7	4	7.84	3.2	18.5
Denmark	64	51	79.7	68.2	87.7	13	20.31	12.3	31.8	0	0	0	4.5
Estonia	17	8	47.1	26	69.2	9	52.94	30.8	74	0	0	0	15.3
Finland	47	25	53.2	39.2	66.7	22	46.81	33.3	60.8	0	0	0	6.1
France	122	66	54.1	45.2	62.7	53	43.44	35	52.3	3	2.46	0.9	7
Germany	193	45	23.3	17.9	29.8	143	74.09	67.5	79.8	5	2.59	1.1	5.9
Greece	163	116	71.2	63.8	77.6	47	28.83	22.4	36.2	0	0	0	1.8
Hungary	17	3	17.7	6.4	41.4	14	82.35	58.6	93.6	0	0	0	15.3
Iceland	15	13	86.7	61.7	96	2	13.33	4	38.3	0	0	0	17.1
Ireland	18	5	27.8	12.6	51.2	13	72.22	48.8	87.4	0	0	0	14.6
Italy	67	53	79.1	67.9	87.1	14	20.9	12.9	32.1	0	0	0	4.3
Latvia	27	16	59.3	40.6	75.5	11	40.74	24.5	59.4	0	0	0	10.1
Lithuania	14	2	14.3	4.3	40.5	12	85.71	59.5	95.7	0	0	0	18.1
Luxembourg	16	6	37.5	18.4	61.7	10	62.5	38.3	81.6	0	0	0	16.2
Malta	18	13	72.2	48.8	87.4	4	22.22	9.1	45.6	1	5.56	1.3	26
Netherlands	130	37	28.5	21.4	36.8	90	69.23	60.8	76.5	3	2.31	0.8	6.5
Norway	24	6	25	12.1	45.1	18	75	54.9	87.9	0	0	0	11.3
Poland	50	35	70	56.2	80.9	13	26	15.9	39.6	2	4	1.2	13.5
Portugal	69	43	62.3	50.5	72.8	26	37.68	27.2	49.5	0	0	0	4.2
Romania	237	195	82.3	76.9	86.6	42	17.72	13.4	23.1	0	0	0	1.3
Slovakia	17	9	52.9	30.8	74	8	47.06	26	69.2	0	0	0	15.3
Slovenia	60	19	31.7	21.3	44.3	41	68.33	55.7	78.7	0	0	0	4.8
Spain	106	29	27.4	19.8	36.6	75	70.75	61.5	78.6	2	1.89	0.6	6.6

Country	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	Number	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Sweden	47	20	42.6	29.5	56.8	27	57.45	43.2	70.5	0	0	0	6.1
United Kingdom	108	43	39.8	31.1	49.3	65	60.19	50.7	68.9	0	0	0	2.7
<b>Total</b>	<b>1794</b>	<b>916</b>	<b>51.1</b>	<b>48.7</b>	<b>53.4</b>	<b>856</b>	<b>47.7</b>	<b>45.4</b>	<b>50.0</b>	<b>22</b>	<b>1.2</b>	<b>0.8</b>	<b>1.8</b>

(a): Lower confidence limit ; (b): Upper confidence limit

**TABLE G: EU+NCP – ENFORCEMENT SAMPLING: RESULTS PER REPORTING COUNTRY FOR ANIMAL PRODUCTS, BABY FOOD, CEREALS, FRUIT AND NUTS, VEGETABLES AND OTHER PLANT PRODUCTS.**

**ANIMAL PRODUCTS**

Country	No. of samples	No. of processed samples	Samples with no measurable residues		Samples with residues below or at the MRL		Samples with residues above the MRL	
			Number	%	Number	%	Number	%
Austria	11		10	90.91	1	9.09	0	0
Germany	13		2	15.38	11	84.62	0	0
Hungary	1		0	0	1	100	0	0
<b>Total</b>	<b>25</b>	<b>0</b>	<b>12</b>	<b>48</b>	<b>13</b>	<b>52</b>	<b>0</b>	<b>0</b>

**CEREALS**

Country	No. of samples	No. of processed samples	Samples with no measurable residues		Samples with residues below or at the MRL		Samples with residues above the MRL	
			Number	%	Number	%	Number	%
Austria	1	1	1	100	0	0	0	0
Belgium	1		1	100	0	0	0	0
Cyprus	9	5	7	77.78	0	0	2	22.22
Finland	2		2	100	0	0	0	0
Germany	2		2	100	0	0	0	0
Greece	1	1	0	0	1	100	0	0
Hungary	1		0	0	1	100	0	0
Italy	63	63	39	61.9	23	36.51	1	1.59
Poland	1		0	0	0	0	1	100
<b>Total</b>	<b>81</b>	<b>70</b>	<b>52</b>	<b>64.2</b>	<b>25</b>	<b>30.9</b>	<b>4</b>	<b>4.9</b>

**FRUIT AND NUTS**

Country	No. of samples	No. of processed samples	Samples with no measurable residues		Samples with residues below or at the MRL		Samples with residues above the MRL	
			Number	%	Number	%	Number	%
Austria	24	4	9	37.5	14	58.33	1	4.17
Belgium	217		150	69.12	62	28.57	5	2.3
Bulgaria	2		2	100	0	0	0	0
Denmark	42		2	4.76	20	47.62	20	47.62
Finland	90	2	6	6.67	66	73.33	18	20
Germany	206	1	52	25.24	146	70.87	8	3.88
Greece	69	1	24	34.78	41	59.42	4	5.8
Hungary	18	2	11	61.11	7	38.89	0	0
Iceland	2		0	0	2	100	0	0
Ireland	4		0	0	3	75	1	25
Italy	211	211	121	57.35	90	42.65	0	0
Luxembourg	1		1	100	0	0	0	0
Malta	13		4	30.77	8	61.54	1	7.69
Netherlands	24	4	6	25	14	58.33	4	16.67
Poland	2		2	100	0	0	0	0
Romania	13		4	30.77	2	15.38	7	53.85

Country	No. of samples	No. of processed samples	Samples with no measurable residues		Samples with residues below or at the MRL		Samples with residues above the MRL	
			Number	%	Number	%	Number	%
Slovakia	4		0	0	0	0	4	100
Spain	82		60	73.17	15	18.29	7	8.54
Sweden	22	1	12	54.55	8	36.36	2	9.09
<b>Total</b>	<b>1046</b>	<b>226</b>	<b>466</b>	<b>44.6</b>	<b>498</b>	<b>47.6</b>	<b>82</b>	<b>7.8</b>

### VEGETABLES

Country	No. of samples	No. of processed samples	Samples with no measurable residues		Samples with residues below or at the MRL		Samples with residues above the MRL	
			Number	%	Number	%	Number	%
Austria	23	3	11	47.83	8	34.78	4	17.39
Belgium	526		222	42.21	204	38.78	100	19.01
Bulgaria	1677		1621	96.66	27	1.61	29	1.73
Czech Republic	3		2	66.67	0	0	1	33.33
Denmark	20		10	50	7	35	3	15
Estonia	1		1	100	0	0	0	0
Finland	103	1	47	45.63	34	33.01	22	21.36
Germany	138	3	52	37.68	70	50.72	16	11.59
Greece	90	2	40	44.44	35	38.89	15	16.67
Hungary	28	1	13	46.43	13	46.43	2	7.14
Ireland	6		3	50	3	50	0	0
Italy	149	149	117	78.52	28	18.79	4	2.68
Luxembourg	4		4	100	0	0	0	0
Malta	2		1	50	1	50	0	0
Netherlands	8		2	25	6	75	0	0
Norway	46		27	58.7	9	19.57	10	21.74
Poland	12	1	7	58.33	5	41.67	0	0
Slovakia	6	4	3	50	3	50	0	0
Slovenia	7		7	100	0	0	0	0
Spain	34	1	18	52.94	13	38.24	3	8.82
Sweden	76		31	40.79	27	35.53	18	23.68
<b>Total</b>	<b>2959</b>	<b>165</b>	<b>2239</b>	<b>75.7</b>	<b>493</b>	<b>16.7</b>	<b>227</b>	<b>7.7</b>

### BABY FOOD

Country	No. of samples	No. of processed samples	Samples with no measurable residues		Samples with residues below or at the MRL		Samples with residues above the MRL	
			Number	%	Number	%	Number	%
Germany	2		2	100	0	0	0	0
<b>Total</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**OTHER PLANT PRODUCTS**

Country	No. of samples	No. of processed samples	Samples with no measurable residues		Samples with residues below or at the MRL		Samples with residues above the MRL	
			Number	%	Number	%	Number	%
Austria	15	15	10	66.67	5	33.33	0	0
Cyprus	4		4	100	0	0	0	0
Germany	6		4	66.67	2	33.33	0	0
Greece	4	2	3	75	1	25	0	0
Hungary	7	6	3	42.86	4	57.14	0	0
Italy	39	39	34	87.18	5	12.82	0	0
Poland	2	1	2	100	0	0	0	0
Slovakia	1		0	0	1	100	0	0
Spain	22	22	21	95.45	1	4.55	0	0
Sweden	2		0	0	0	0	2	100
<b>Total</b>	<b>102</b>	<b>85</b>	<b>81</b>	<b>79.4</b>	<b>19</b>	<b>18.6</b>	<b>2</b>	<b>2.0</b>

**TABLE H: EU+NCP – SURVEILLANCE SAMPLING: COMPARISON OF ORGANIC AND OTHER PRODUCTION RESULTS IN COUNTRIES REPORTING ORGANIC SAMPLES OF ANIMAL PRODUCTS, BABY FOOD, CEREALS, FRUIT AND NUTS, VEGETABLES AND OTHER PLANT PRODUCTS.**

**ANIMAL PRODUCTS**

Country	Organic	No. of samples	Samples with no measurable residues	Samples with residues below or at the MRL	Samples with residues above the MRL			
					No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Austria	Organic	29	29	0	0	0	0.0	9.5
	Other production	480	469	11	0	0	0.0	0.6
Belgium	Organic	2	2	0	0	0	0.0	63.2
	Other production	28	28	0	0	0	0.0	9.8
Denmark	Organic	4	4	0	0	0	0.0	45.1
	Other production	263	263	0	0	0	0.0	1.1
Finland	Organic	1	1	0	0	0	0.0	77.6
	Other production	31	31	0	0	0	0.0	8.9
Germany	Organic	85	41	44	0	0	0.0	3.4
	Other production	1436	952	480	4	0.3	0.1	0.7
Italy	Organic	4	0	4	0	0	0.0	45.1
	Other production	219	186	33	0	0	0.0	1.4
Latvia	Organic	1	1	0	0	0	0.0	77.6
	Other production	30	30	0	0	0	0.0	9.2
Netherlands	Organic	4	4	0	0	0	0.0	45.1
	Other production	38	38	0	0	0	0.0	7.4
Poland	Organic	3	2	0	1	33	6.8	80.6
	Other production	250	243	7	0	0	0.0	1.2
Romania	Organic	1	1	0	0	0	0.0	77.6
	Other production	251	232	19	0	0	0.0	1.2
Sweden	Organic	7	7	0	0	0	0.0	31.2
	Other production	54	53	1	0	0	0.0	5.3
United Kingdom	Organic	85	85	0	0	0	0.0	3.4
	Other production	598	596	2	0	0	0.0	0.5

(a): Lower confidence limit ; (b): Upper confidence limit

**CEREALS**

Country	Organic	No. of samples	Samples with no measurable residues	Samples with residues below or at the MRL	Samples with residues above the MRL			
					No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Austria	Organic	86	86	0	0	0.0	0.0	3.4
	Other production	94	70	24	0	0.0	0.0	3.1
Bulgaria	Organic	1	1	0	0	0.0	0.0	77.6
	Other production	68	46	22	0	0.0	0.0	4.3
Czech Republic	Organic	44	38	6	0	0.0	0.0	6.4
	Other production	115	69	45	1	0.9	0.2	4.7
Denmark	Organic	40	40	0	0	0.0	0.0	7.1
	Other production	282	212	69	1	0.4	0.1	2.0
Estonia	Organic	2	2	0	0	0.0	0.0	63.2
	Other production	14	8	6	0	0.0	0.0	18.1
Finland	Organic	19	19	0	0	0.0	0.0	13.9
	Other production	88	50	37	1	1.1	0.3	6.1
France	Organic	98	95	3	0	0.0	0.0	3.0
	Other production	310	155	152	3	1.0	0.4	2.8
Germany	Organic	121	108	13	0	0.0	0.0	2.4
	Other production	325	189	120	16	4.9	3.1	7.9
Greece	Organic	2	1	0	1	50.0	9.4	90.6
	Other production	21	15	6	0	0.0	0.0	12.7
Ireland	Organic	3	3	0	0	0.0	0.0	52.7
	Other production	105	75	29	1	1.0	0.2	5.1
Italy	Organic	30	29	0	1	3.3	0.8	16.7
	Other production	687	508	177	2	0.3	0.1	1.1
Latvia	Organic	3	3	0	0	0.0	0.0	52.7
	Other production	10	6	4	0	0.0	0.0	23.8
Lithuania	Organic	3	3	0	0	0.0	0.0	52.7
	Other production	26	16	7	3	11.5	4.2	29.2
Luxembourg	Organic	4	4	0	0	0.0	0.0	45.1
	Other production	11	2	9	0	0.0	0.0	22.1
Netherlands	Organic	46	33	13	0	0.0	0.0	6.2
	Other production	224	90	128	6	2.7	1.3	5.7
Poland	Organic	12	11	1	0	0.0	0.0	20.6
	Other production	139	124	14	1	0.7	0.2	3.9
Slovakia	Organic	5	4	1	0	0.0	0.0	39.3
	Other production	69	50	18	1	1.5	0.4	7.7
Slovenia	Organic	12	11	1	0	0.0	0.0	20.6
	Other production	24	15	8	1	4.2	1.0	20.4
Spain	Organic	8	8	0	0	0.0	0.0	28.3
	Other production	66	38	27	1	1.5	0.4	8.0
Sweden	Organic	12	11	1	0	0.0	0.0	20.6
	Other production	238	175	56	7	2.9	1.5	5.9
United Kingdom	Organic	7	3	4	0	0.0	0.0	31.2



Country	Organic	No. of samples	Samples with no measurable residues	Samples with residues below or at the MRL	Samples with residues above the MRL			
					No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
	Other production	292	80	200	12	4.1	2.4	7.0

(a): Lower confidence limit ; (b): Upper confidence limit

#### FRUIT AND NUTS

Country	Organic	No. of samples	Samples with no measurable residues	Samples with residues below or at the MRL	Samples with residues above the MRL			
					No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Austria	Organic	47	39	8	0	0.0	0.0	6.1
	Other production	496	94	378	24	4.8	3.3	7.1
Belgium	Organic	1	1	0	0	0.0	0.0	77.6
	Other production	1057	332	688	37	3.5	2.6	4.8
Cyprus	Organic	5	4	1	0	0.0	0.0	39.3
	Other production	187	64	107	16	8.6	5.4	13.5
Czech Republic	Organic	16	14	2	0	0.0	0.0	16.2
	Other production	219	29	180	10	4.6	2.5	8.2
Denmark	Organic	44	42	2	0	0.0	0.0	6.4
	Other production	928	236	645	47	5.1	3.8	6.7
Estonia	Organic	3	3	0	0	0.0	0.0	52.7
	Other production	62	12	46	4	6.5	2.6	15.5
Finland	Organic	38	34	3	1	2.6	0.6	13.5
	Other production	847	207	576	64	7.6	6.0	9.5
France	Organic	173	159	9	5	2.9	1.3	6.6
	Other production	1590	676	869	45	2.8	2.1	3.8
Germany	Organic	407	335	70	2	0.5	0.2	1.8
	Other production	6917	1378	5368	171	2.5	2.1	2.9
Greece	Organic	27	24	3	0	0.0	0.0	10.2
	Other production	890	470	384	36	4.0	2.9	5.6
Iceland	Organic	5	5	0	0	0.0	0.0	39.3
	Other production	113	36	74	3	2.7	1.0	7.5
Ireland	Organic	11	9	1	1	9.1	2.1	38.5
	Other production	467	121	326	20	4.3	2.8	6.5
Italy	Organic	61	60	1	0	0.0	0.0	4.7
	Other production	2983	1730	1248	5	0.2	0.1	0.4
Lithuania	Organic	5	5	0	0	0.0	0.0	39.3
	Other production	208	18	162	28	13.5	9.5	18.8
Luxembourg	Organic	5	5	0	0	0.0	0.0	39.3
	Other production	87	28	57	2	2.3	0.7	8.0
Malta	Organic	2	2	0	0	0.0	0.0	63.2
	Other production	59	24	30	5	8.5	3.8	18.4
Netherlands	Organic	63	55	8	0	0.0	0.0	4.6

Country	Organic	No. of samples	Samples with no measurable residues	Samples with residues below or at the MRL	Samples with residues above the MRL			
					No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
	Other production	1819	401	1315	103	5.7	4.7	6.8
Norway	Organic	34	33	1	0	0.0	0.0	8.2
	Other production	591	116	464	11	1.9	1.1	3.3
Poland	Organic	1	1	0	0	0.0	0.0	77.6
	Other production	596	384	206	6	1.0	0.5	2.2
Portugal	Organic	3	2	1	0	0.0	0.0	52.7
	Other production	364	142	205	17	4.7	3.0	7.4
Slovakia	Organic	6	6	0	0	0.0	0.0	34.8
	Other production	283	70	199	14	5.0	3.0	8.1
Slovenia	Organic	6	5	1	0	0.0	0.0	34.8
	Other production	419	83	320	16	3.8	2.4	6.1
Spain	Organic	6	4	2	0	0.0	0.0	34.8
	Other production	1150	419	685	46	4.0	3.0	5.3
Sweden	Organic	23	23	0	0	0.0	0.0	11.7
	Other production	733	139	569	25	3.4	2.3	5.0
United Kingdom	Organic	21	21	0	0	0.0	0.0	12.7
	Other production	940	162	749	29	3.1	2.2	4.4

(a): Lower confidence limit ; (b): Upper confidence limit

VEGETABLES

Country	Organic	No. of samples	Samples with no measurable residues	Samples with residues below or at the MRL	Samples with residues above the MRL			
					No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Austria	Organic	46	43	3	0	0.0	0.0	6.2
	Other production	717	450	239	28	3.9	2.7	5.6
Belgium	Organic	6	6	0	0	0.0	0.0	34.8
	Other production	1545	624	769	152	9.8	8.5	11.4
Bulgaria	Organic	9	9	0	0	0.0	0.0	25.9
	Other production	2071	1914	125	32	1.6	1.1	2.2
Cyprus	Organic	7	6	1	0	0.0	0.0	31.2
	Other production	242	123	95	24	9.9	6.8	14.3
Czech Republic	Organic	34	28	5	1	2.9	0.7	14.9
	Other production	562	159	386	17	3.0	1.9	4.8
Denmark	Organic	44	44	0	0	0.0	0.0	6.4
	Other production	656	461	179	16	2.4	1.5	3.9
Estonia	Organic	5	5	0	0	0.0	0.0	39.3
	Other production	146	77	65	4	2.7	1.1	6.8
Finland	Organic	18	14	3	1	5.6	1.3	26.0
	Other production	853	427	355	71	8.3	6.7	10.4
France	Organic	131	120	11	0	0.0	0.0	2.2
	Other production	2671	1857	706	108	4.0	3.4	4.9
Germany	Organic	539	442	96	1	0.2	0.0	1.0
	Other production	6872	3213	3392	267	3.9	3.5	4.4
Greece	Organic	50	45	4	1	2.0	0.5	10.5
	Other production	1285	1034	195	56	4.4	3.4	5.6
Iceland	Organic	4	4	0	0	0.0	0.0	45.1
	Other production	153	136	17	0	0.0	0.0	1.9
Ireland	Organic	13	13	0	0	0.0	0.0	19.3
	Other production	284	151	128	5	1.8	0.8	4.1
Italy	Organic	60	51	3	6	10.0	4.7	20.2
	Other production	2020	1685	323	13	0.6	0.4	1.1
Latvia	Organic	1	1	0	0	0.0	0.0	77.6
	Other production	148	100	48	0	0.0	0.0	2.0
Lithuania	Organic	2	2	0	0	0.0	0.0	63.2
	Other production	99	38	58	3	3.0	1.1	8.5
Luxembourg	Organic	31	30	1	0	0.0	0.0	8.9
	Other production	99	73	25	1	1.0	0.2	5.5
Malta	Organic	5	5	0	0	0.0	0.0	39.3
	Other production	78	71	5	2	2.6	0.8	8.9
Netherlands	Organic	110	107	2	1	0.9	0.2	4.9
	Other production	2674	1279	1123	272	10.2	9.1	11.4
Norway	Organic	69	65	3	1	1.5	0.4	7.7
	Other production	627	373	240	14	2.2	1.3	3.7
Poland	Organic	8	7	1	0	0.0	0.0	28.3
	Other production	768	577	182	9	1.2	0.6	2.2

Country	Organic	No. of samples	Samples with no measurable residues	Samples with residues below or at the MRL	Samples with residues above the MRL			
					No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Portugal	Organic	5	3	2	0	0.0	0.0	39.3
	Other production	356	214	132	10	2.8	1.6	5.1
Slovakia	Organic	2	1	1	0	0.0	0.0	63.2
	Other production	188	116	69	3	1.6	0.6	4.6
Slovenia	Organic	8	7	1	0	0.0	0.0	28.3
	Other production	621	357	242	22	3.5	2.4	5.3
Spain	Organic	4	3	0	1	25.0	5.3	71.6
	Other production	722	392	295	35	4.9	3.5	6.7
Sweden	Organic	13	11	0	2	15.4	4.7	42.8
	Other production	554	286	233	35	6.3	4.6	8.7
United Kingdom	Organic	52	50	2	0	0.0	0.0	5.5
	Other production	1181	742	365	74	6.3	5.0	7.8

(a): Lower confidence limit ; (b): Upper confidence limit

**BABY FOOD**

Country	Organic	No. of samples	Samples with no measurable residues	Samples with residues below or at the MRL	Samples with residues above the MRL			
					No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Austria	Organic	83	81	0	2	2.4	0.7	8.3
	Other production	24	24	0	0	0.0	0.0	11.3
Cyprus	Organic	2	1	1	0	0.0	0.0	63.2
	Other production	34	17	17	0	0.0	0.0	8.2
Czech Republic	Organic	21	20	1	0	0.0	0.0	12.7
	Other production	37	32	5	0	0.0	0.0	7.6
Denmark	Organic	16	16	0	0	0.0	0.0	16.2
	Other production	2	2	0	0	0.0	0.0	63.2
Estonia	Organic	1	1	0	0	0.0	0.0	77.6
	Other production	14	14	0	0	0.0	0.0	18.1
Finland	Organic	17	17	0	0	0.0	0.0	15.3
	Other production	22	22	0	0	0.0	0.0	12.2
France	Organic	5	5	0	0	0.0	0.0	39.3
	Other production	6	6	0	0	0.0	0.0	34.8
Germany	Organic	116	92	24	0	0.0	0.0	2.5
	Other production	159	136	22	1	0.6	0.2	3.4
Italy	Organic	6	6	0	0	0.0	0.0	34.8
	Other production	47	46	1	0	0.0	0.0	6.1
Luxembourg	Organic	1	1	0	0	0.0	0.0	77.6
	Other production	9	9	0	0	0.0	0.0	25.9
Norway	Organic	1	1	0	0	0.0	0.0	77.6
	Other production	42	42	0	0	0.0	0.0	6.7
Slovakia	Organic	5	4	1	0	0.0	0.0	39.3
	Other production	55	48	6	1	1.8	0.4	9.6
Sweden	Organic	4	4	0	0	0.0	0.0	45.1
	Other production	30	30	0	0	0.0	0.0	9.2
United Kingdom	Organic	19	19	0	0	0.0	0.0	13.9
	Other production	53	53	0	0	0.0	0.0	5.4

(a): Lower confidence limit ; (b): Upper confidence limit

**OTHER PLANT PRODUCTS**

Country	Organic	No. of samples	Samples with no measurable residues	Samples with residues below or at the MRL	Samples with residues above the MRL			
					No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Austria	Organic	53	51	2	0	0.0	0.0	5.4
	Other production	313	269	41	3	1.0	0.4	2.8
Czech Republic	Organic	9	8	1	0	0.0	0.0	25.9
	Other production	19	11	8	0	0.0	0.0	13.9
Denmark	Organic	9	7	2	0	0.0	0.0	25.9
	Other production	10	8	1	1	10.0	2.3	41.3
Finland	Organic	20	17	1	2	10.0	3.1	30.4
	Other production	148	95	43	10	6.8	3.7	12.0
France	Organic	35	35	0	0	0.0	0.0	8.0
	Other production	153	115	29	9	5.9	3.2	10.8
Germany	Organic	69	55	14	0	0.0	0.0	4.2
	Other production	539	325	196	18	3.3	2.1	5.2
Greece	Organic	17	14	3	0	0.0	0.0	15.3
	Other production	220	205	12	3	1.4	0.5	3.9
Italy	Organic	8	7	1	0	0.0	0.0	28.3
	Other production	397	301	94	2	0.5	0.2	1.8
Lithuania	Organic	2	1	1	0	0.0	0.0	63.2
	Other production	9	7	1	1	11.1	2.5	44.5
Netherlands	Organic	8	4	4	0	0.0	0.0	28.3
	Other production	87	49	36	2	2.3	0.7	8.0
Norway	Organic	4	4	0	0	0.0	0.0	45.1
	Other production	26	14	9	3	11.5	4.2	29.2
Slovakia	Organic	1	1	0	0	0.0	0.0	77.6
	Other production	13	11	1	1	7.7	1.8	33.9
Spain	Organic	1	1	0	0	0.0	0.0	77.6
	Other production	81	75	5	1	1.2	0.3	6.6
Sweden	Organic	3	3	0	0	0.0	0.0	52.7
	Other production	36	34	0	2	5.6	1.7	18.2
United Kingdom	Organic	6	6	0	0	0.0	0.0	34.8
	Other production	94	88	2	4	4.3	1.7	10.4

(a): Lower confidence limit ; (b): Upper confidence limit

**TABLE I: EU+NCP – SURVEILLANCE SAMPLING: RESULTS BY PRODUCTION TYPE FOR ANIMAL PRODUCTS, BABY FOOD, CEREALS, FRUIT, VEGETABLES AND OTHER PLANT PRODUCTS.**

**ANIMAL PRODUCTS**

Production type	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Battery production	13	13	100	80.7	100	0	0	0	19.3	0	0	0	19.3
Domestic or cultivated	56	54	96.43	87.9	98.9	2	3.57	1.1	12.1	0	0	0	5.1
Free range production	69	68	98.55	92.3	99.7	1	1.45	0.3	7.7	0	0	0	4.2
Industrial production	214	194	90.65	86	93.9	20	9.35	6.1	14	0	0	0	1.4
Non-organic production	1287	1226	95.26	94	96.3	61	4.74	3.7	6	0	0	0	0.2
Organic production	229	180	78.6	72.8	83.4	48	21	16.2	26.7	1	0.44	0.1	2.4
Other production method	1	1	100	22.4	100	0	0	0	77.6	0	0	0	77.6
Production method unknown	3335	2803	84.05	82.8	85.3	526	15.8	14.6	17	6	0.18	0.1	0.4
Traditional production	55	54	98.18	90.4	99.6	1	1.82	0.4	9.6	0	0	0	5.2
Wild or gathered	2	1	50	9.4	90.6	1	50	9.4	90.6	0	0	0	63.2
<b>Total</b>	<b>5261</b>	<b>4594</b>	<b>87.3</b>	<b>86.4</b>	<b>88.2</b>	<b>660</b>	<b>12.5</b>	<b>11.7</b>	<b>13.5</b>	<b>7</b>	<b>0.1</b>	<b>0.1</b>	<b>0.3</b>

(a): Lower confidence limit ; (b): Upper confidence limit

**CEREALS**

Production type	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Industrial production	6	5	83.33	42.1	96.3	1	16.67	3.7	57.9	0	0	0	34.8
Integrated Pest Management	20	16	80	58.1	91.8	4	20	8.2	41.9	0	0	0	13.3
Non-organic production	1654	1054	63.72	61.4	66	580	35.07	32.8	37.4	20	1.21	0.8	1.9
Organic production	554	509	91.88	89.3	93.9	43	7.76	5.8	10.3	2	0.36	0.1	1.3
Outdoor / Open-air growing condition	88	64	72.73	62.6	80.9	23	26.14	18.1	36.2	1	1.14	0.3	6.1

Production type	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Production method unknown	1501	935	62.29	59.8	64.7	535	35.6 4	33.3	38.1	31	2.07	1.5	2.9
Traditional production	367	273	74.39	69.7	78.6	87	23.7 1	19.6	28.3	7	1.91	0.9	3.9
Wild or gathered	10	7	70	39	89.1	3	30	10.9	61	0	0	0	23.8
<b>Total</b>	<b>4200</b>	<b>2863</b>	<b>68.2</b>	<b>66.7</b>	<b>69.6</b>	<b>1276</b>	<b>30.4</b>	<b>29.0</b>	<b>31.8</b>	<b>61</b>	<b>1.5</b>	<b>1.1</b>	<b>1.9</b>

(a): Lower confidence limit ; (b): Upper confidence limit

#### FRUIT, VEGETABLES AND OTHER PLANT PRODUCTS

Production type	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Domestic or cultivated	3	3	100	47.3	100	0	0	0	52.7	0	0	0	52.7
Industrial production	80	75	93.8	86.2	97.2	4	5	2	12.2	1	1.3	0.3	6.7
Integrated Pest Management	377	176	46.7	41.7	51.7	193	51.2	46.2	56.2	8	2.1	1.1	4.1
Non-organic production	24204	12723	52.6	51.9	53.2	10455	43.2	42.6	43.8	1026	4.2	4	4.5
Organic production	2482	2189	88.2	86.9	89.4	269	10.8	9.7	12.1	24	1	0.7	1.4
Other production method	1	0	0	0	77.6	1	100	22.4	100	0	0	0	77.6
Outdoor / Open-air growing condition	1613	825	51.2	48.7	53.6	732	45.4	43	47.8	56	3.5	2.7	4.5
Production method unknown	27922	12097	43.3	42.7	43.9	15068	54	53.4	54.5	757	2.7	2.5	2.9
Traditional production	1842	944	51.3	49	53.5	856	46.5	44.2	48.8	42	2.3	1.7	3.1
Under glass / protected growing condition	425	246	57.9	53.1	62.5	173	40.7	36.1	45.4	6	1.4	0.7	3
Wild or gathered	45	39	86.7	73.7	93.7	6	13.3	6.3	26.3	0	0	0	6.3
<b>Total</b>	<b>58994</b>	<b>29317</b>	<b>49.7</b>	<b>49.3</b>	<b>50.1</b>	<b>27757</b>	<b>47.1</b>	<b>46.6</b>	<b>47.5</b>	<b>1920</b>	<b>3.3</b>	<b>3.1</b>	<b>3.4</b>

(a): Lower confidence limit ; (b): Upper confidence limit



**BABY FOOD**

Production type	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Industrial production	252	252	100	98.8	100	0	0	0	1.2	0	0	0	1.2
Non-organic production	365	327	89.59	86	92.3	36	9.86	7.2	13.4	2	0.55	0.2	2
Organic production	297	268	90.24	86.3	93.1	27	9.09	6.3	12.9	2	0.67	0.2	2.4
Other production method	2	2	100	36.8	100	0	0	0	63.2	0	0	0	63.2
Production method unknown	878	791	90.09	87.9	91.9	55	6.26	4.8	8.1	32	3.64	2.6	5.1
Traditional production	34	34	100	91.8	100	0	0	0	8.2	0	0	0	8.2
<b>Total</b>	<b>1828</b>	<b>1674</b>	<b>91.6</b>	<b>90.2</b>	<b>92.8</b>	<b>118</b>	<b>6.5</b>	<b>5.4</b>	<b>7.7</b>	<b>36</b>	<b>2.0</b>	<b>1.4</b>	<b>2.7</b>

(a): Lower confidence limit ; (b): Upper confidence limit

**TABLE J: EU+NCP – SURVEILLANCE SAMPLING: RESULTS BY TREATMENT FOR ANIMAL PRODUCTS, BABY FOOD, CEREALS, FRUIT AND NUTS, VEGETABLES AND OTHER PLANT PRODUCTS.**

**ANIMAL PRODUCTS**

Treatment	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Churning	248	161	64.92	58.8	70.6	84	33.87	28.3	40.0	3	1.21	0.4	3.5
Cooked	28	27	96.43	82.2	99.2	1	3.57	0.9	17.8	0	0	0.0	9.8
Freezing	70	65	92.86	84.3	96.8	5	7.14	3.2	15.7	0	0	0.0	4.1
Heating	4	4	100	54.9	100	0	0	0.0	45.1	0	0	0.0	45.1
Processed	265	261	98.49	96.2	99.4	4	1.51	0.6	3.8	0	0	0.0	1.1
Production of alcoholic beverages	2	2	100	36.8	100	0	0	0.0	63.2	0	0	0.0	63.2
Smoking	20	20	100	86.7	100	0	0	0.0	13.3	0	0	0.0	13.3
Unknown	250	229	91.60	87.5	94.4	21	8.40	5.6	12.5	0	0	0.0	1.2
Unprocessed	4374	3825	87.45	86.4	88.4	545	12.46	11.5	13.5	4	0.09	0.0	0.2

(a): Lower confidence limit ; (b): Upper confidence limit

CEREALS

Treatment	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Canning	1	1	100	22.4	100	0	0	0.0	77.6	0	0	0.0	77.6
Cooked	1	1	100	22.4	100	0	0	0.0	77.6	0	0	0.0	77.6
Cooking in air (Baking)	48	35	72.92	58.9	83.4	13	27.08	16.6	41.1	0	0	0.0	5.9
Decortication	37	36	97.30	86.2	99.4	1	2.70	0.6	13.8	0	0	0.0	7.6
Dehydration	13	10	76.92	49.2	91.6	3	23.08	8.4	50.8	0	0	0.0	19.3
Flaking	13	7	53.85	28.9	77.0	6	46.15	23.0	71.1	0	0	0.0	19.3
Freezing	3	3	100	47.3	100	0	0	0.0	52.7	0	0	0.0	52.7
Heating	1	1	100	22.4	100	0	0	0.0	77.6	0	0	0.0	77.6
Milling	497	309	62.17	57.8	66.3	187	37.63	33.5	42.0	1	0.20	0.1	1.1
Milling - bran production	10	5	50	23.4	76.6	5	50	23.4	76.6	0	0	0.0	23.8
Milling - refined flour	89	52	58.43	48.0	68.1	37	41.57	31.9	52.0	0	0	0.0	3.3
Milling - unprocessed flour	31	25	80.65	63.6	90.7	5	16.13	7.2	32.8	1	3.23	0.8	16.2
Oil production	4	2	50.00	14.7	85.3	2	50.00	14.7	85.3	0	0	0.0	45.1
Oil production - Virgin oil after cold press	1	1	100	22.4	100	0	0	0.0	77.6	0	0	0.0	77.6
Peeling (inedible peel)	34	33	97.06	85.1	99.3	1	2.94	0.7	14.9	0	0	0.0	8.2
Polishing	44	36	81.82	68.0	90.4	5	11.36	5.1	24.1	3	6.82	2.5	18.3
Processed	342	159	46.49	41.3	51.8	181	52.92	47.6	58.2	2	0.58	0.2	2.1
Production of alcoholic beverages	9	9	100	74.1	100	0	0	0.0	25.9	0	0	0.0	25.9
Unknown	468	367	78.42	74.5	81.9	100	21.37	17.9	25.3	1	0.21	0.1	1.2
Unprocessed	2548	1767	69.35	67.5	71.1	728	28.57	26.9	30.4	53	2.08	1.6	2.7
Wine production	6	4	66.67	29.0	90.1	2	33.33	9.9	71.0	0	0	0.0	34.8

(a): Lower confidence limit ; (b): Upper confidence limit

FRUIT AND NUTS

Treatment	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Canning	40	33	82.50	67.9	91.2	6	15.00	7.2	29.2	1	2.50	0.6	12.9
Cooked	2	2	100	36.8	100	0	0.00	0.0	63.2	0	0.00	0.0	63.2
Decortication	2	2	100	36.8	100	0	0.00	0.0	63.2	0	0.00	0.0	63.2
Dehydration	194	69	35.57	29.2	42.5	114	58.76	51.7	65.5	11	5.67	3.2	9.9
Freezing	225	90	40	33.8	46.5	128	56.89	50.4	63.2	7	3.11	1.5	6.3
Heating	1	1	100	22.4	100	0	0.00	0.0	77.6	0	0.00	0.0	77.6
Juicing	497	381	76.66	72.7	80.2	112	22.54	19.1	26.4	4	0.80	0.3	2.0
Milling	7	7	100	68.8	100	0	0.00	0.0	31.2	0	0.00	0.0	31.2
Oil production	6	5	83.33	42.1	96.3	1	16.67	3.7	57.9	0	0.00	0.0	34.8
Peeling (edible peel)	23	7	30.43	15.6	51.1	16	69.57	48.9	84.4	0	0.00	0.0	11.7
Peeling (inedible peel)	203	144	70.94	64.3	76.7	59	29.06	23.3	35.7	0	0.00	0.0	1.5
Pickling	9	9	100	74.1	100	0	0.00	0.0	25.9	0	0.00	0.0	25.9
Preserving	69	46	66.67	54.9	76.7	21	30.43	20.9	42.1	2	2.90	0.9	9.9
Processed	233	155	66.52	60.2	72.3	78	33.48	27.7	39.8	0	0.00	0.0	1.3
Production of alcoholic beverages	30	25	83.33	66.3	92.6	2	6.67	2.0	21.4	3	10.00	3.6	25.8
Unknown	1714	1118	65.23	62.9	67.5	591	34.48	32.3	36.8	5	0.29	0.1	0.7
Unprocessed	23091	6969	30.18	29.6	30.8	15388	66.64	66.0	67.3	734	3.18	3.0	3.4
Wine production	508	221	43.50	39.3	47.9	286	56.30	52.0	60.6	1	0.20	0.1	1.1
Wine production - red wine cold process	226	147	65.04	58.6	71.0	79	34.96	29.0	41.4	0	0.00	0.0	1.3
Wine production - red wine warm process	3	3	100	47.3	100	0	0.00	0.0	52.7	0	0.00	0.0	52.7
Wine production - white wine	134	67	50	41.6	58.4	66	49.25	40.9	57.6	1	0.75	0.2	4.1

(a): Lower confidence limit ; (b): Upper confidence limit

VEGETABLES

Treatment	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL				
		No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	
Canning	134	105	78.36	70.6	84.5	24	17.9	1	12.4	25.3	5	3.73	1.7	8.4
Cooked	3	3	100	47.3	100.0	0	0	0	0.0	52.7	0	0	0.0	52.7
Cooking in water	9	7	77.78	44.4	93.3	2	22.2	2	6.7	55.6	0	0	0.0	25.9
Cooking with a grill or barbecue	16	16	100	83.8	100.0	0	0	0	0.0	16.2	0	0	0.0	16.2
Dehydration	168	58	34.52	27.8	42.0	81	48.2	1	40.8	55.7	29	17.26	12.3	23.7
Freezing	221	165	74.66	68.5	79.9	53	23.9	8	18.8	30.0	3	1.36	0.5	3.9
Juicing	144	134	93.06	87.7	96.2	10	6.94	3.9	12.3	0	0	0.0	2.0	
Milling	1	0	0	0.0	77.6	1	100	22.4	100.0	0	0	0.0	77.6	
Oil production	7	7	100	68.8	100.0	0	0	0.0	31.2	0	0	0.0	31.2	
Peeling (edible peel)	5	2	40	11.8	77.7	3	60	22.3	88.2	0	0	0.0	39.3	
Peeling (inedible peel)	151	132	87.42	81.2	91.8	18	11.9	2	7.7	18.1	1	0.66	0.2	3.6
Pickling	26	6	23.08	11.1	42.3	19	73.0	8	53.7	86.3	1	3.85	0.9	19.0
Polishing	1	1	100	22.4	100.0	0	0	0.0	77.6	0	0	0.0	77.6	
Preserving	41	32	78.05	63.2	88.0	8	19.5	1	10.3	34.1	1	2.44	0.6	12.6
Processed	64	51	79.69	68.2	87.7	13	20.3	1	12.3	31.8	0	0	0.0	4.5
Unknown	1350	1141	84.52	82.5	86.4	201	14.8	9	13.1	16.9	8	0.59	0.3	1.2
Unprocessed	26884	16026	59.61	59.0	60.2	9824	36.5	4	36.0	37.1	1034	3.85	3.6	4.1
Wine production	2	2	100	36.8	100.0	0	0	0.0	63.2	0	0	0.0	63.2	

(a): Lower confidence limit ; (b): Upper confidence limit

**BABY FOOD**

Treatment	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Canning	14	14	100	81.9	100	0	0	0.0	18.1	0	0	0.0	18.1
Cooked	18	18	100	85.4	100	0	0	0.0	14.6	0	0	0.0	14.6
Cooking in air (Baking)	2	2	100	36.8	100	0	0	0.0	63.2	0	0	0.0	63.2
Dehydration	1	1	100	22.4	100	0	0	0.0	77.6	0	0	0.0	77.6
Juicing	38	36	94.74	82.7	98.4	0	0	0.0	7.4	2	5.26	1.6	17.3
Milling - refined flour	1	1	100	22.4	100	0	0	0.0	77.6	0	0	0.0	77.6
Peeling (inedible peel)	1	1	100	22.4	100	0	0	0.0	77.6	0	0	0.0	77.6
Preserving	131	123	93.89	88.4	96.8	8	6.11	3.2	11.6	0	0	0.0	2.2
Processed	1452	1310	90.22	88.6	91.6	110	7.58	6.3	9.1	32	2.20	1.6	3.1
Unknown	29	29	100	90.5	100	0	0	0.0	9.5	0	0	0.0	9.5
Unprocessed	141	139	98.58	95.0	99.6	0	0	0.0	2.1	2	1.42	0.4	5.0

(a): Lower confidence limit ; (b): Upper confidence limit

**OTHER PLANT PRODUCTS**

Treatment	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Cooked	1	1	100	22.36	100	0	0	0	77.64	0	0	0	77.64
Decortication	12	11	91.67	63.97	98.08	1	8.33	1.92	36.03	0	0	0	20.58
Dehydration	60	49	81.67	70.02	89.4	10	16.67	9.36	28.09	1	1.67	0.4	8.8
Extrusion	1	1	100	22.36	100	0	0	0	77.64	0	0	0	77.64
Heating	13	13	100	80.74	100	0	0	0	19.26	0	0	0	19.26
Infusion / extractions	24	14	58.33	38.67	75.6	10	41.67	24.4	61.33	0	0	0	11.29
Juicing	6	3	50	18.41	81.59	3	50	18.41	81.59	0	0	0	34.82
Milling	17	12	70.59	46.52	86.66	5	29.41	13.34	53.48	0	0	0	15.33
Milling - unprocessed flour	1	1	100	22.36	100	0	0	0	77.64	0	0	0	77.64
Oil production	620	503	81.13	77.86	84.01	117	18.87	15.99	22.14	0	0	0	0.48
Oil production - Cold press	1	1	100	22.36	100	0	0	0	77.64	0	0	0	77.64
Oil production - Solvent Extraction	5	4	80	35.88	95.67	1	20	4.33	64.12	0	0	0	39.3
Oil production - Virgin oil after cold press	74	69	93.24	85.12	97.01	5	6.76	2.99	14.88	0	0	0	3.92
Oil production - Warm press	2	2	100	36.84	100	0	0	0	63.16	0	0	0	63.16
Oil production - refined oils	10	9	90	58.72	97.72	1	10	2.28	41.28	0	0	0	23.84
Peeling (edible peel)	1	1	100	22.36	100	0	0	0	77.64	0	0	0	77.64
Peeling (inedible peel)	55	54	98.18	90.45	99.56	1	1.82	0.44	9.55	0	0	0	5.21
Pickling	1	1	100	22.36	100	0	0	0	77.64	0	0	0	77.64
Preserving	12	9	75	46.19	90.91	2	16.67	5.04	45.45	1	8.33	1.92	36.03
Processed	195	191	97.95	94.86	99.17	3	1.54	0.56	4.41	1	0.51	0.12	2.81
Production of alcoholic beverages	2	2	100	36.84	100	0	0	0	63.16	0	0	0	63.16
Sugar production	1	1	100	22.36	100	0	0	0	77.64	0	0	0	77.64
Sugar production - refined	2	2	100	36.84	100	0	0	0	63.16	0	0	0	63.16
Unknown	138	125	91	84.5	94.4	11	8	4.5	13.7	2	1	0.5	5.1
Unprocessed	1296	849	66	62.9	68.1	383	30	27.1	32.1	64	5	3.9	6.3

(a): Lower confidence limit ; (b): Upper confidence limit

**TABLE K: EU+NCP – ENFORCEMENT AND SURVEILLANCE SAMPLING: RESULTS BY COUNTRY OF ORIGIN.**

**ENFORCEMENT**

Country of origin	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Argentina	53	31	58.49	45.0	70.8	16	30	19.5	43.6	6	11.32	5.4	22.6
Austria	29	22	75.86	57.7	87.7	7	24.14	12.3	42.3	0	0	0.0	9.5
Bangladesh	3	1	33.33	6.8	80.6	2	66.67	19.4	93.2	0	0	0.0	52.7
Belarus	1	1	100	22.4	100.0	0	0	0.0	77.6	0	0	0.0	77.6
Belgium	20	10	50	29.8	70.2	9	45.00	25.7	66.0	1	5	1.2	23.8
Brazil	32	22	68.75	51.3	82.0	9	28.13	15.6	45.5	1	3.13	0.7	15.8
Burundi	2	1	50	9.4	90.6	0	0	0.0	63.2	1	50	9.4	90.6
Canada	4	4	100	54.9	100.0	0	0	0.0	45.1	0	0	0.0	45.1
Chile	20	9	45	25.7	66.0	10	50	29.8	70.2	1	5	1.2	23.8
China	9	3	33.33	12.2	65.3	5	55.56	26.2	81.3	1	11.11	2.5	44.5
Colombia	8	1	12.50	2.8	48.3	5	62.50	29.9	86.3	2	25	7.5	60.0
Costa Rica	12	2	16.67	5.0	45.5	10	83.33	54.6	95.0	0	0	0.0	20.6
Cuba	1	0	0	0.0	77.6	1	100	22.4	100.0	0	0	0.0	77.6
Cyprus	9	7	77.78	44.4	93.3	0	0	0.0	25.9	2	22.22	6.7	55.6
Czech Republic	2	1	50	9.4	90.6	1	50	9.4	90.6	0	0	0.0	63.2
Dominican Republic	477	246	51.57	47.1	56.0	182	38.16	33.9	42.6	49	10.27	7.9	13.3
Ecuador	5	0	0	0.0	39.3	5	100	60.7	100.0	0	0	0.0	39.3
Egypt	185	64	34.59	28.1	41.7	100	54.05	46.9	61.1	21	11.35	7.6	16.7
France	4	1	25	5.3	71.6	3	75	28.4	94.7	0	0	0.0	45.1
Germany	125	43	34.40	26.7	43.1	80	64.00	55.3	71.9	2	1.60	0.5	5.6
Greece	95	44	46.32	36.6	56.3	46	48.42	38.6	58.4	5	5.26	2.3	11.7
Hungary	77	42	54.55	43.4	65.2	33	42.86	32.4	54.0	2	2.60	0.8	9.0
India	78	24	30.77	21.6	41.8	25	32.05	22.8	43.1	29	37.18	27.3	48.3
Iran	1	0	0	0.0	77.6	1	100	22.4	100.0	0	0	0.0	77.6
Ireland	6	3	50	18.4	81.6	3	50	18.4	81.6	0	0	0.0	34.8



Country of origin	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Israel	21	7	33.33	17.2	54.9	13	61.90	40.7	79.3	1	4.76	1.1	22.8
Italy	513	334	65.11	60.9	69.1	171	33.33	29.4	37.5	8	1.56	0.8	3.0
Jordan	1	0	0	0.0	77.6	1	100	22.4	100.0	0	0	0.0	77.6
Kenya	9	5	55.56	26.2	81.3	3	33.33	12.2	65.3	1	11.11	2.5	44.5
Lithuania	3	3	100	47.3	100.0	0	0	0.0	52.7	0	0	0.0	52.7
Malta	15	5	33.33	15.2	58.7	9	60	35.4	80.3	1	6.67	1.6	30.2
Mexico	1	1	100	22.4	100.0	0	0	0.0	77.6	0	0	0.0	77.6
Morocco	7	1	14.29	3.2	52.7	5	71.43	34.9	91.5	1	14.29	3.2	52.7
Namibia	2	0	0	0.0	63.2	2	100	36.8	100.0	0	0	0.0	63.2
Netherlands	28	8	28.57	15.3	47.2	16	57.14	38.9	73.6	4	14.29	5.9	31.7
New Zealand	7	6	85.71	47.4	96.8	1	14.29	3.2	52.7	0	0	0.0	31.2
Non domestic, import	19	7	36.84	19.1	59.2	12	63.16	40.8	80.9	0	0	0.0	13.9
Pakistan	1	1	100	22.4	100.0	0	0	0.0	77.6	0	0	0.0	77.6
Palestinian territory, occupied	5	1	20	4.3	64.1	4	80	35.9	95.7	0	0	0.0	39.3
Peru	5	3	60	22.3	88.2	2	40	11.8	77.7	0	0	0.0	39.3
Poland	11	8	72.73	42.8	90.1	1	9.09	2.1	38.5	2	18.18	5.5	48.4
Portugal	1	0	0	0.0	77.6	1	100	22.4	100.0	0	0	0.0	77.6
Romania	13	4	30.77	12.8	58.1	2	15.38	4.7	42.8	7	53.85	28.9	77.0
Russia	1	1	100	22.4	100.0	0	0	0.0	77.6	0	0	0.0	77.6
Serbia	1	1	100	22.4	100.0	0	0	0.0	77.6	0	0	0.0	77.6
Slovakia	1	1	100	22.4	100.0	0	0	0.0	77.6	0	0	0.0	77.6
Slovenia	7	7	100	68.8	100.0	0	0	0.0	31.2	0	0	0.0	31.2
South Africa	7	5	71.43	34.9	91.5	2	28.57	8.5	65.1	0	0	0.0	31.2
Spain	65	19	29.23	19.6	41.3	42	64.62	52.4	75.1	4	6.15	2.5	14.8
Sri Lanka	1	1	100	22.4	100.0	0	0	0.0	77.6	0	0	0.0	77.6
Sweden	2	2	100	36.8	100.0	0	0	0.0	63.2	0	0	0.0	63.2
Switzerland	1	1	100	22.4	100.0	0	0	0.0	77.6	0	0	0.0	77.6

Country of origin	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Thailand	370	184	49.73	44.7	54.8	101	27.30	23.0	32.1	85	22.97	19.0	27.5
Tunisia	1	0	0	0.0	77.6	1	100	22.4	100.0	0	0	0.0	77.6
Turkey	1763	1652	93.70	92.5	94.7	64	3.63	2.9	4.6	47	2.67	2.0	3.5
Uganda	33	1	3.03	0.7	15.3	8	24.24	12.9	41.2	24	72.73	55.6	84.9
Ukraine	3	1	33.33	6.8	80.6	2	66.67	19.4	93.2	0	0	0.0	52.7
United States	2	2	100	36.8	100.0	0	0	0.0	63.2	0	0	0.0	63.2
Unknown	62	18	29.03	19.2	41.4	38	61.29	48.8	72.4	6	9.68	4.6	19.6
Uruguay	4	1	25	5.3	71.6	3	75	28.4	94.7	0	0	0.0	45.1
Vietnam	17	1	5.88	1.4	27.3	11	64.71	41.0	82.7	5	29.41	13.3	53.5
Zimbabwe	1	1	100	22.4	100.0	0	0	0.0	77.6	0	0	0.0	77.6

(a): Lower confidence limit ; (b): Upper confidence limit

**SURVEILLANCE**

Country of origin	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Afghanistan	1	1	100	22.4	100.0	0	0	0.0	77.6	0	0	0.0	77.6
Albania	8	6	75	40.0	92.5	2	25.00	7.5	60.0	0	0	0.0	28.3
Algeria	1	1	100	22.4	100.0	0	0	0.0	77.6	0	0	0.0	77.6
Antigua And Barbuda	17	16	94.12	72.7	98.6	1	5.88	1.4	27.3	0	0	0.0	15.3
Argentina	731	252	34.47	31.1	38.0	458	62.65	59.1	66.1	21	2.87	1.9	4.4
Australia	34	27	79.41	63.1	89.6	7	20.59	10.4	36.9	0	0	0.0	8.2
Austria	1280	1063	83.05	80.9	85.0	211	16.48	14.6	18.6	6	0.47	0.2	1.0
Azerbaijan	1	1	100	22.4	100.0	0	0	0.0	77.6	0	0	0.0	77.6
Bangladesh	9	5	55.56	26.2	81.3	0	0	0.0	25.9	4	44.44	18.7	73.8
Belarus	12	10	83.33	54.6	95.0	2	16.67	5.0	45.5	0	0	0.0	20.6
Belgium	1714	626	36.52	34.3	38.8	1051	61.32	59.0	63.6	37	2.16	1.6	3.0
Belize	3	0	0	0.0	52.7	3	100	47.3	100.0	0	0	0.0	52.7
Benin	1	1	100	22.4	100.0	0	0	0.0	77.6	0	0	0.0	77.6
Bolivia	9	5	55.56	26.2	81.3	1	11.11	2.5	44.5	3	33.33	12.2	65.3
Bosnia And Herzegovina	14	8	57.14	32.3	78.7	5	35.71	16.3	61.6	1	7.14	1.7	32.0
Brazil	688	138	20.06	17.2	23.2	511	74.27	70.9	77.4	39	5.67	4.2	7.7
Bulgaria	628	450	71.66	68.0	75.0	170	27.07	23.7	30.7	8	1.27	0.7	2.5
Burkina Faso	11	11	100	77.9	100.0	0	0	0.0	22.1	0	0	0.0	22.1
Burundi	9	5	55.56	26.2	81.3	2	22.22	6.7	55.6	2	22.22	6.7	55.6
Cambodia	2	1	50	9.4	90.6	0	0	0.0	63.2	1	50	9.4	90.6
Cameroon	22	8	36.36	19.7	57.3	14	63.64	42.7	80.3	0	0	0.0	12.2
Canada	82	55	67.07	56.3	76.3	24	29.27	20.5	39.9	3	3.66	1.3	10.2
Central African Republic	4	3	75	28.4	94.7	1	25.00	5.3	71.6	0	0	0.0	45.1
Chile	784	155	19.77	17.1	22.7	615	78.44	75.4	81.2	14	1.79	1.1	3.0
China	607	322	53.05	49.1	57.0	215	35.42	31.7	39.3	70	11.53	9.2	14.3
Colombia	253	57	22.53	17.8	28.1	185	73.12	67.3	78.2	11	4.35	2.5	7.6

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		No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Congo	1	1	100	22.4	100.0	0	0	0.0	77.6	0	0	0.0	77.6
Cook Islands	1	0	0	0.0	77.6	1	100	22.4	100.0	0	0	0.0	77.6
Costa Rica	520	149	28.65	24.9	32.7	367	70.58	66.5	74.3	4	0.77	0.3	2.0
Cote D'Ivoire	91	56	61.54	51.2	70.9	35	38.46	29.1	48.8	0	0	0.0	3.2
Croatia	31	18	58.06	40.6	73.6	11	35.48	21.1	53.2	2	6.45	2.0	20.8
Cuba	10	3	30	10.9	61.0	7	70	39.0	89.1	0	0	0.0	23.8
Cyprus	574	328	57.14	53.1	61.1	207	36.06	32.2	40.1	39	6.79	5.0	9.2
Czech Republic	499	253	50.70	46.3	55.1	239	47.90	43.5	52.3	7	1.40	0.7	2.9
Denmark	838	729	86.99	84.5	89.1	104	12.41	10.4	14.8	5	0.60	0.3	1.4
Dominica	88	88	100	96.7	100.0	0	0	0.0	3.3	0	0	0.0	3.3
Dominican Republic	733	349	47.61	44.0	51.2	301	41.06	37.6	44.7	83	11.32	9.2	13.8
EEA	38	25	65.79	49.8	78.8	13	34.21	21.2	50.2	0	0	0.0	7.4
Ecuador	274	116	42.34	36.6	48.3	151	55.11	49.2	60.9	7	2.55	1.3	5.2
Egypt	714	316	44.26	40.7	47.9	314	43.98	40.4	47.6	84	11.76	9.6	14.3
El Salvador	19	14	73.68	50.9	88.1	5	26.32	11.9	49.1	0	0	0.0	13.9
Equatorial Guinea	1	1	100	22.4	100.0	0	0	0.0	77.6	0	0	0.0	77.6
Eritrea	1	1	100	22.4	100.0	0	0	0.0	77.6	0	0	0.0	77.6
Estonia	210	140	66.67	60.0	72.7	67	31.90	26.0	38.5	3	1.43	0.5	4.1
Ethiopia	29	13	44.83	28.3	62.6	14	48.28	31.3	65.7	2	6.90	2.1	22.1
European Union	107	91	85.05	77.1	90.6	16	14.95	9.5	22.9	0	0	0.0	2.7
Finland	324	236	72.84	67.7	77.4	87	26.85	22.3	31.9	1	0.31	0.1	1.7
France	4473	2665	59.58	58.13	61.01	1693	37.85	36.44	39.28	115	2.57	2.2	3.1
Gambia	1	0	0	0.0	77.6	1	100	22.4	100.0	0	0	0.0	77.6
Georgia	1	1	100	22.4	100.0	0	0	0.0	77.6	0	0	0.0	77.6
Germany	8297	4360	52.55	51.5	53.6	3853	46.44	45.4	47.5	84	1.01	0.8	1.3
Ghana	128	60	46.88	38.4	55.5	60	46.88	38.4	55.5	8	6.25	3.2	11.9
Greece	2643	1778	67.27	65.5	69.0	808	30.57	28.8	32.4	57	2.16	1.7	2.8

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Guatemala	19	4	21.05	8.7	43.7	14	73.68	50.9	88.1	1	5.26	1.2	24.9
Guinea	3	0	0	0.0	52.7	3	100	47.3	100.0	0	0	0.0	52.7
Guyana	3	3	100	47.3	100.0	0	0	0.0	52.7	0	0	0.0	52.7
Haiti	1	1	100	22.4	100.0	0	0	0.0	77.6	0	0	0.0	77.6
Honduras	49	15	30.61	19.5	44.6	33	67.35	53.3	78.8	1	2.04	0.5	10.7
Hongkong	23	5	21.74	9.8	42.2	7	30.43	15.6	51.1	11	47.83	29.1	67.2
Hungary	1963	1137	57.92	55.7	60.1	811	41.31	39.2	43.5	15	0.76	0.5	1.3
Iceland	64	64	100	95.5	100.0	0	0	0.0	4.5	0	0	0.0	4.5
India	548	202	36.86	32.9	41.0	191	34.85	31.0	38.9	155	28.28	24.7	32.2
Indonesia	14	10	71.43	44.9	88.2	3	21.43	7.8	48.1	1	7.14	1.7	32.0
Iran	28	14	50	32.5	67.5	8	28.57	15.3	47.2	6	21.43	10.3	39.7
Ireland	708	588	83.05	80.1	85.6	114	16.10	13.6	19.0	6	0.85	0.4	1.8
Israel	710	284	40	36.5	43.7	387	54.51	50.8	58.1	39	5.49	4.1	7.4
Italy	10456	5997	57.35	56.4	58.3	4357	41.67	40.7	42.6	102	0.98	0.8	1.2
Jamaica	4	3	75	28.4	94.7	1	25.00	5.3	71.6	0	0	0.0	45.1
Japan	10	7	70.00	39.0	89.1	3	30	10.9	61.0	0	0	0.0	23.8
Jordan	83	36	43.37	33.2	54.1	29	34.94	25.6	45.7	18	21.69	14.2	31.7
Kazakhstan	15	15	100	82.9	100.0	0	0	0.0	17.1	0	0	0.0	17.1
Kenya	282	107	37.94	32.5	43.7	126	44.68	39.0	50.5	49	17.38	13.4	22.2
Korea (North)	1	1	100	22.4	100.0	0	0	0.0	77.6	0	0	0.0	77.6
Korea (South)	2	0	0	0.0	63.2	2	100	36.8	100.0	0	0	0.0	63.2
Laos	3	0	0	0.0	52.7	3	100	47.3	100.0	0	0	0.0	52.7
Latvia	137	102	74.45	66.5	81.0	34	24.82	18.4	32.7	1	0.73	0.2	4.0
Lebanon	19	13	68.42	45.7	84.6	4	21.05	8.7	43.7	2	10.53	3.2	31.7
Lithuania	116	66	56.90	47.8	65.6	47	40.52	32.0	49.6	3	2.59	0.9	7.3
Luxembourg	101	73	72.28	62.8	80.1	28	27.72	19.9	37.2	0	0	0.0	2.9
Macedonia, The Former Yugoslav	127	95	74.80	66.6	81.5	27	21.26	15.1	29.2	5	3.94	1.7	8.9

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Republic of Madagascar	19	17	89.47	68.3	96.8	1	5.26	1.2	24.9	1	5.26	1.2	24.9
Malaysia	44	16	36.36	23.8	51.2	21	47.73	33.7	62.1	7	15.91	8.0	29.5
Mali	5	3	60	22.3	88.2	2	40	11.8	77.7	0	0	0.0	39.3
Malta	115	91	79.13	70.8	85.5	18	15.65	10.2	23.4	6	5.22	2.5	10.9
Mauritius	5	3	60	22.3	88.2	1	20	4.3	64.1	1	20	4.3	64.1
Mexico	122	33	27.05	20.0	35.6	84	68.85	60.1	76.4	5	4.10	1.8	9.2
Moldova	31	31	100	91.1	100.0	0	0	0.0	8.9	0	0	0.0	8.9
Mongolia	2	1	50	9.4	90.6	0	0	0.0	63.2	1	50	9.4	90.6
Montenegro	1	1	100	22.4	100.0	0	0	0.0	77.6	0	0	0.0	77.6
Morocco	659	225	34.14	30.6	37.9	397	60.24	56.5	63.9	37	5.61	4.1	7.6
Mozambique	4	1	25	5.3	71.6	3	75.00	28.4	94.7	0	0	0.0	45.1
Myanmar	4	4	100	54.9	100.0	0	0	0.0	45.1	0	0	0.0	45.1
Namibia	35	6	17.14	8.2	32.8	29	82.86	67.2	91.8	0	0	0.0	8.0
Nepal	1	1	100	22.4	100.0	0	0	0.0	77.6	0	0	0.0	77.6
Netherlands	3321	1653	49.77	48.1	51.5	1636	49.26	47.6	51.0	32	0.96	0.7	1.4
New Zealand	345	248	71.88	66.9	76.4	94	27.25	22.8	32.2	3	0.87	0.3	2.5
Nicaragua	4	4	100	54.9	100.0	0	0	0.0	45.1	0	0	0.0	45.1
Niger	2	1	50	9.4	90.6	1	50	9.4	90.6	0	0	0.0	63.2
Nigeria	5	0	0	0.0	39.3	5	100	60.7	100.0	0	0	0.0	39.3
Non EEA	46	27	58.70	44.3	71.7	16	34.78	22.7	49.3	3	6.52	2.4	17.5
Non domestic, import	485	248	51.13	46.7	55.6	215	44.33	40.0	48.8	22	4.54	3.0	6.8
Norway	498	371	74.50	70.5	78.1	127	25.50	21.9	29.5	0	0	0.0	0.6
Pakistan	80	61	76.25	65.8	84.2	13	16.25	9.8	25.9	6	7.50	3.6	15.4
Palestinian territory, occupied	2	0	0	0.0	63.2	2	100	36.8	100.0	0	0	0.0	63.2
Panama	50	11	22	12.8	35.3	39	78	64.7	87.2	0	0	0.0	5.7
Paraguay	1	1	100	22.4	100.0	0	0	0.0	77.6	0	0	0.0	77.6

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Peru	320	160	50	44.6	55.5	152	47.50	42.1	53.0	8	2.50	1.3	4.9
Philippines	7	6	85.71	47.4	96.8	1	14.29	3.2	52.7	0	0	0.0	31.2
Poland	1896	1437	75.79	73.8	77.7	435	22.94	21.1	24.9	24	1.27	0.9	1.9
Portugal	854	438	51.29	47.9	54.6	386	45.20	41.9	48.6	30	3.51	2.5	5.0
Puerto Rico	8	1	12.50	2.8	48.3	7	87.50	51.8	97.2	0	0	0.0	28.3
Romania	2220	1876	84.50	82.9	86.0	322	14.50	13.1	16.0	22	0.99	0.7	1.5
Russia	18	14	77.78	54.4	90.9	4	22.22	9.2	45.6	0	0	0.0	14.6
Saint Lucia	1	1	100	22.4	100.0	0	0	0.0	77.6	0	0	0.0	77.6
Saotome And Principe	1	1	100	22.4	100.0	0	0	0.0	77.6	0	0	0.0	77.6
Saudi Arabia	2	2	100	36.8	100.0	0	0	0.0	63.2	0	0	0.0	63.2
Senegal	33	7	21.21	10.8	37.9	24	72.73	55.6	84.9	2	6.06	1.9	19.7
Serbia	76	38	50	39.0	61.0	37	48.68	37.8	59.7	1	1.32	0.3	7.0
Sierra Leone	3	0	0	0.0	52.7	3	100	47.3	100.0	0	0	0.0	52.7
Slovakia	270	130	48.15	42.3	54.1	110	40.74	35.1	46.7	30	11.11	7.9	15.4
Slovenia	511	286	55.97	51.6	60.2	209	40.90	36.7	45.2	16	3.13	2.0	5.0
South Africa	1196	267	22.32	20.1	24.8	908	75.92	73.4	78.3	21	1.76	1.2	2.7
Spain	7720	3159	40.92	39.8	42.0	4434	57.44	56.3	58.5	127	1.65	1.4	2.0
Sri Lanka	64	53	82.81	71.7	90.1	8	12.50	6.5	22.8	3	4.69	1.7	12.9
Suriname	109	60	55.05	45.7	64.1	43	39.45	30.8	48.9	6	5.50	2.6	11.5
Swaziland	18	4	22.22	9.2	45.6	14	77.78	54.4	90.9	0	0	0.0	14.6
Sweden	583	433	74.27	70.6	77.7	149	25.56	22.2	29.3	1	0.17	0.0	1.0
Switzerland	63	59	93.65	84.8	97.4	4	6.35	2.6	15.2	0	0	0.0	4.6
Syria	26	17	65.38	46.0	80.6	6	23.08	11.1	42.3	3	11.54	4.2	29.2
Taiwan	5	2	40	11.8	77.7	3	60	22.3	88.2	0	0	0.0	39.3
Tanzania	9	4	44.44	18.7	73.8	5	55.56	26.2	81.3	0	0	0.0	25.9
Thailand	1230	665	54.07	51.3	56.8	308	25.04	22.7	27.5	257	20.89	18.7	23.3
Togo	2	1	50	9.4	90.6	1	50	9.4	90.6	0	0	0.0	63.2

Country of origin	No. of samples	Samples with no measurable residues				Samples with residues below or at the MRL				Samples with residues above the MRL			
		No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>	No.	%	LCL <sup>(a)</sup>	UCL <sup>(b)</sup>
Tunisia	44	24	54.55	40.0	68.3	17	38.64	25.7	53.5	3	6.82	2.5	18.3
Turkey	1578	702	44.49	42.1	47.0	772	48.92	46.5	51.4	104	6.59	5.5	7.9
Uganda	55	26	47.27	34.7	60.3	16	29.09	18.8	42.2	13	23.64	14.4	36.4
Ukraine	9	7	77.78	44.4	93.3	2	22.22	6.7	55.6	0	0	0.0	25.9
United Arab Emirates	1	1	100	22.4	100.0	0	0	0.0	77.6	0	0	0.0	77.6
United Kingdom	2052	1420	69.20	67.2	71.2	600	29.24	27.3	31.3	32	1.56	1.1	2.2
United States	380	144	37.89	33.2	42.9	217	57.11	52.1	62.0	19	5.00	3.2	7.7
Unknown	2300	1575	68.48	66.6	70.3	687	29.87	28.0	31.8	38	1.65	1.2	2.3
Uruguay	64	11	17.19	9.9	28.3	48	75.00	63.1	84.0	5	7.81	3.5	17.1
Venezuela	3	3	100	47.3	100.0	0	0	0.0	52.7	0	0	0.0	52.7
Vietnam	76	17	22.37	14.5	33.0	48	63.16	51.9	73.1	11	14.47	8.3	24.1
Zambia	7	4	57.14	24.5	84.3	3	42.86	15.7	75.5	0	0	0.0	31.2
Zimbabwe	53	23	43.40	30.9	56.8	24	45.28	32.6	58.6	6	11.32	5.4	22.6

(a): Lower confidence limit ; (b): Upper confidence limit



## APPENDIX IV – RESULTS OF THE DIETARY EXPOSURE ASSESSMENT

### Short-term exposure assessment

For each relevant pesticide/crop combination where a HRM was derived (see section 5.1 of the report) the short-term exposure was calculated for all consumer groups for which food consumption data have been submitted in the framework of the development of the EFSA PRIMo. The calculated exposures for the highest residue measured were expressed in percent of the ARfD or the ADI. For a total of 17 pesticides lacking an ARfD the exposure was compared with the ADI which is considered as a more conservative approach.

In addition, for each food commodity concerned, EFSA calculated the threshold residue levels ( $TRL_{RAC}$ ) (see in “Threshold residue level” in the glossary) for the most critical diet included in the EFSA PRIMo. Residues at this threshold level correspond to 100% of the ARfD and represent therefore the maximum residue concentrations for which a consumer risk can be excluded.

Residue concentrations exceeding the calculated threshold residue level ( $TRL_{RAC}$ ) are an indication for a potential consumer health concern.

The results of the acute exposure assessments are reported individually for each pesticide in an exposure assessment summary report. In these calculation reports, for each pesticide/crop combination the following information is reported:

- the EU MRL in place on 01/01/2010
- the total number of samples analysed for the given pesticide/crop combination
- the percentage of the samples with detectable residues below or at the EU MRL
- the percentage of the samples above the EU MRL
- the Highest Residue Measured (HRM)
- the number of samples exceeding the toxicological threshold level ( $TRL_{RAC}$ )
- the maximum acute exposure for the most critical diet represented in the EFSA PRIMo, expressed in percent of the ARfD
- the most critical diet for which the highest consumer exposure was calculated
- comments, where applicable

### Long-term exposure assessment

For each pesticide, the chronic risk assessment was performed for all 27 diets included in the EFSA PRIMo model. The results of the TMDI calculations are reported separately for each pesticide in calculation spreadsheets in which:

- for each of the 27 diets, the three commodities representing the largest proportion of the ADI exhaustion are reported

- for each of the three main food items contributing to the total intake, the dietary intake for that commodity - expressed in % of the ADI - is reported. If the ADI was not exceeded in any diet, a chronic consumer risk is considered negligible
- a chart which presents the contribution of the residues measured in individual crops to the overall dietary exposure is reported for each of the 27 diets include in the PRMo.

2,4-D			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:	Yes	Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.05	ARfD (mg/kg bw):	n.n.
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2001	Year of evaluation:	2011

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)		2nd contributor to MS diet (in % of ADI)		3rd contributor to MS diet (in % of ADI)	
		Commodity / group of commodities	Commodity / group of commodities	Commodity / group of commodities	Commodity / group of commodities	Commodity / group of commodities	Commodity / group of commodities
0.12	DE child	0.09	Oranges	0.02	Table grapes	0.01	Carrots
0.09	NL child	0.07	Oranges	0.01	Table grapes	0.01	Carrots
0.08	FR toddler	0.05	Oranges	0.03	Carrots	0.00	Table grapes
0.06	UK toddler	0.05	Oranges	0.01	Carrots	0.00	Table grapes
0.05	FR infant	0.03	Carrots	0.02	Oranges	0.00	Table grapes
0.05	ES child	0.05	Oranges	0.00	Carrots	0.00	Table grapes
0.05	UK infant	0.03	Oranges	0.02	Carrots	0.00	Table grapes
0.04	NL (GP)	0.03	Oranges	0.00	Table grapes	0.00	Carrots
0.03	IE adult	0.02	Oranges	0.00	Carrots	0.00	Table grapes
0.03	ES adult	0.03	Oranges	0.00	Carrots	0.00	Table grapes
0.03	WHO cluster diet B	0.02	Oranges	0.00	Table grapes	0.00	Carrots
0.03	SE (GP)	0.02	Oranges	0.01	Carrots	0.00	Aubergines (egg plants)
0.03	WHO Cluster diet F	0.02	Oranges	0.01	Carrots	0.00	Table grapes
0.03	PT (GP)	0.01	Oranges	0.01	Carrots	0.00	Table grapes
0.02	FI adult	0.02	Oranges	0.00	Carrots	0.00	Table grapes
0.02	UK vegetarian	0.02	Oranges	0.00	Carrots	0.00	Table grapes
0.02	DK child	0.02	Carrots	0.00	Oranges	0.00	Table grapes
0.02	WHO regional diet	0.01	Oranges	0.00	Carrots	0.00	Table grapes
0.02	WHO cluster diet E	0.01	Oranges	0.01	Carrots	0.00	Table grapes
0.02	UK adult	0.01	Oranges	0.00	Carrots	0.00	Table grapes
0.02	IT child/toddler	0.01	Oranges	0.00	Carrots	0.00	Table grapes
0.01	IT adult	0.01	Oranges	0.00	Carrots	0.00	Table grapes
0.01	FR (GP)	0.01	Oranges	0.00	Carrots	0.00	Table grapes
0.01	WHO cluster diet D	0.01	Oranges	0.00	Carrots	0.00	Table grapes
0.01	DK adult	0.01	Carrots	0.00	Oranges	0.00	Table grapes
0.01	PL (GP)	0.00	Table grapes	0.00	Carrots	0.00	Oranges
0.00	LT adult	0.00	Carrots	0.00	Oranges	0.00	Aubergines (egg plants)

## Acute risk assessment

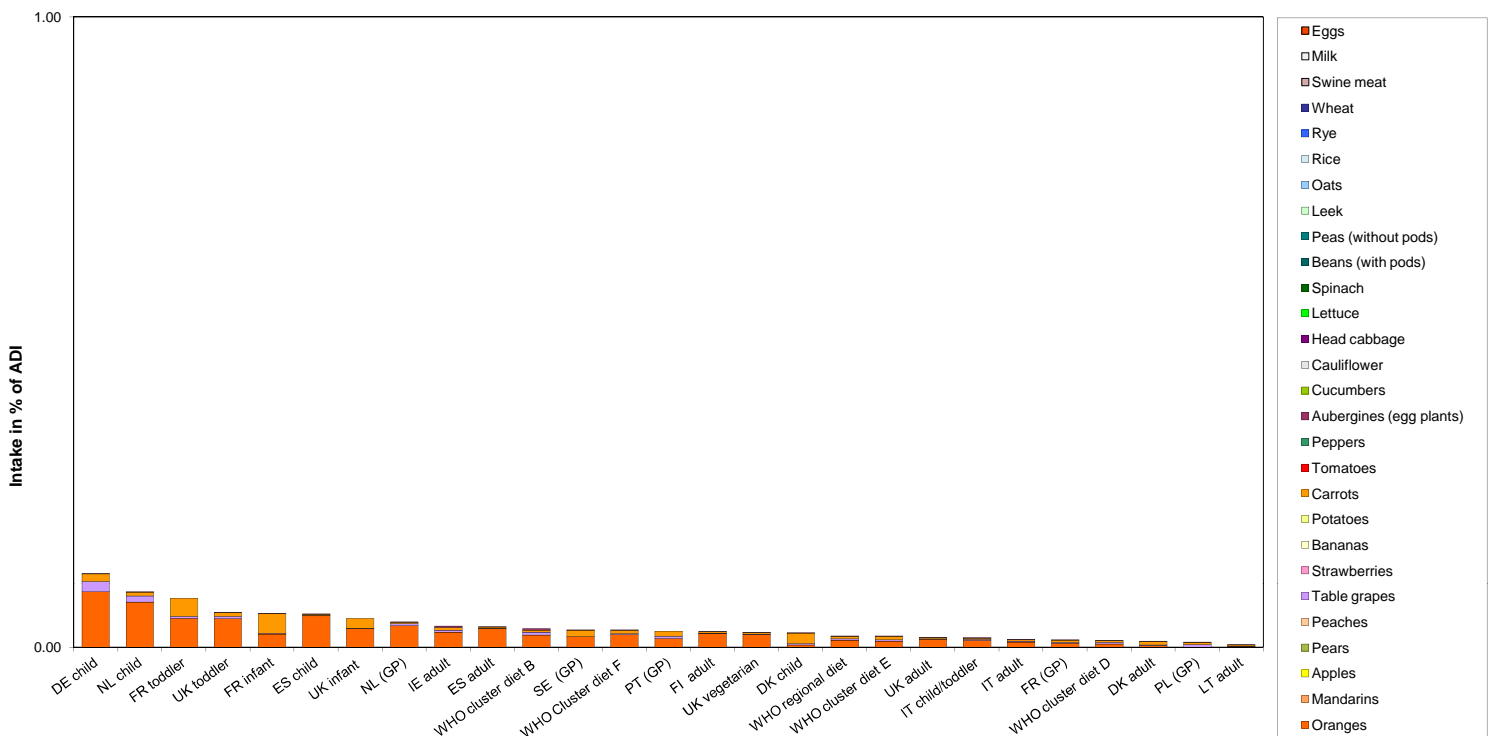
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	387							
2010	Peaches	0.05	208							
2010	Strawberries	0.05	243							
2010	Tomatoes	0.05	271							
2010	Head cabbage	0.05	155							
2010	Lettuce	0.05	336							
2010	Leek	0.05	160							
2010	Oats	0.05	66							
2010	Rye	0.05	158							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

c) TRL: toxicological threshold level

## Chronic risk assessment: 2,4-D



## 2,4-D

Acute exposure: 2,4-D / Apples



Intake in % of the ARfD

Acute exposure: 2,4-D / Peaches



Intake in % of the ARfD

Acute exposure: 2,4-D / Strawberries



Intake in % of the ARfD

Acute exposure: 2,4-D / Tomatoes



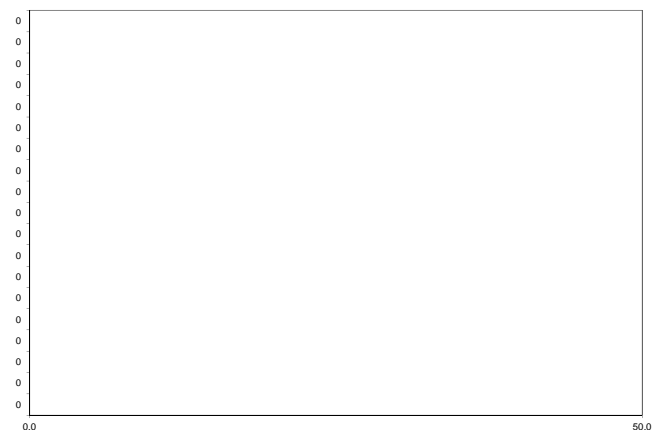
Intake in % of the ARfD

Acute exposure: 2,4-D / Head cabbage



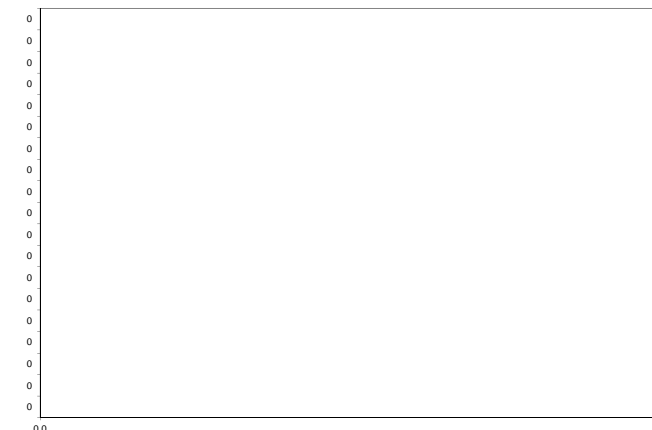
Intake in % of the ARfD

Acute exposure: 2,4-D / Lettuce



Intake in % of the ARfD

Acute exposure: 2,4-D / Leek



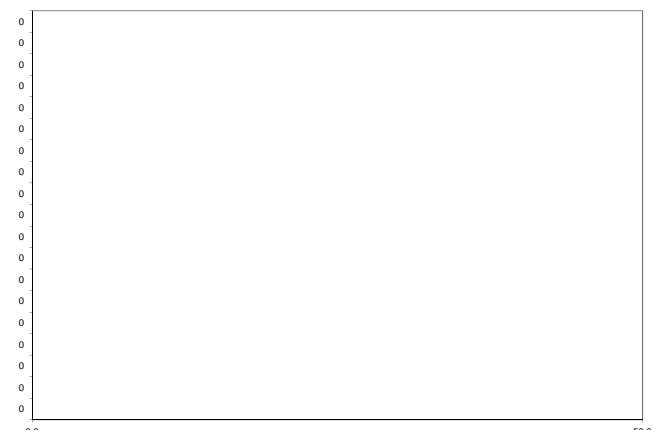
Intake in % of the ARfD

Acute exposure: 2,4-D / Oats



Intake in % of the ARfD

Acute exposure: 2,4-D / Rye



Intake in % of the ARfD

## Abamectin

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.0025	ARfD (mg/kg bw):	0.005
Source of ADI:	Efsa	Source of ARfD:	COM
Year of evaluation:	2008	Year of evaluation:	2008

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum

1

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.83	FR toddler	0.38	Beans (with pods)	0.35	Strawberries	0.10	Mandarins
0.64	NL child	0.28	Mandarins	0.17	Beans (with pods)	0.13	Strawberries
0.62	FR infant	0.29	Beans (with pods)	0.28	Strawberries	0.05	Mandarins
0.61	WHO cluster diet B	0.22	Lettuce	0.12	Mandarins	0.12	Beans (with pods)
0.56	IE adult	0.21	Mandarins	0.14	Strawberries	0.09	Aubergines (egg plants)
0.52	ES adult	0.34	Lettuce	0.08	Beans (with pods)	0.05	Mandarins
0.49	DE child	0.28	Strawberries	0.15	Mandarins	0.04	Lettuce
0.45	ES child	0.26	Lettuce	0.08	Beans (with pods)	0.06	Mandarins
0.42	IT adult	0.24	Lettuce	0.06	Mandarins	0.05	Beans (with pods)
0.41	WHO regional diet	0.24	Lettuce	0.07	Beans (with pods)	0.05	Strawberries
0.39	IT child/toddler	0.18	Lettuce	0.08	Mandarins	0.07	Strawberries
0.31	SE (GP)	0.17	Mandarins	0.09	Strawberries	0.03	Beans (with pods)
0.30	WHO Cluster diet F	0.19	Lettuce	0.07	Mandarins	0.04	Strawberries
0.29	NL (GP)	0.09	Beans (with pods)	0.08	Mandarins	0.08	Lettuce
0.27	WHO cluster diet E	0.10	Beans (with pods)	0.06	Mandarins	0.06	Lettuce
0.25	UK toddler	0.11	Strawberries	0.11	Mandarins	0.02	Beans (with pods)
0.24	FR (GP)	0.07	Mandarins	0.06	Lettuce	0.05	Strawberries
0.18	DK child	0.09	Lettuce	0.06	Strawberries	0.03	Mandarins
0.18	UK vegetarian	0.09	Lettuce	0.04	Strawberries	0.02	Beans (with pods)
0.15	FI adult	0.05	Lettuce	0.04	Strawberries	0.04	Mandarins
0.14	UK infant	0.12	Strawberries	0.02	Beans (with pods)		FRUIT (FRESH OR FROZEN)
0.14	UK adult	0.07	Lettuce	0.03	Strawberries	0.02	Mandarins
0.07	LT adult	0.04	Lettuce	0.02	Strawberries	0.01	Aubergines (egg plants)
0.07	WHO cluster diet D	0.03	Mandarins	0.02	Strawberries	0.01	Aubergines (egg plants)
0.06	DK adult	0.03	Mandarins	0.02	Strawberries	0.01	Beans (with pods)
0.05	PT (GP)	0.03	Mandarins	0.02	Strawberries	0.01	FRUIT (FRESH OR FROZEN)
0.04	PL (GP)	0.01	Mandarins	0.01	Strawberries	0.01	Lettuce

## Acute risk assessment

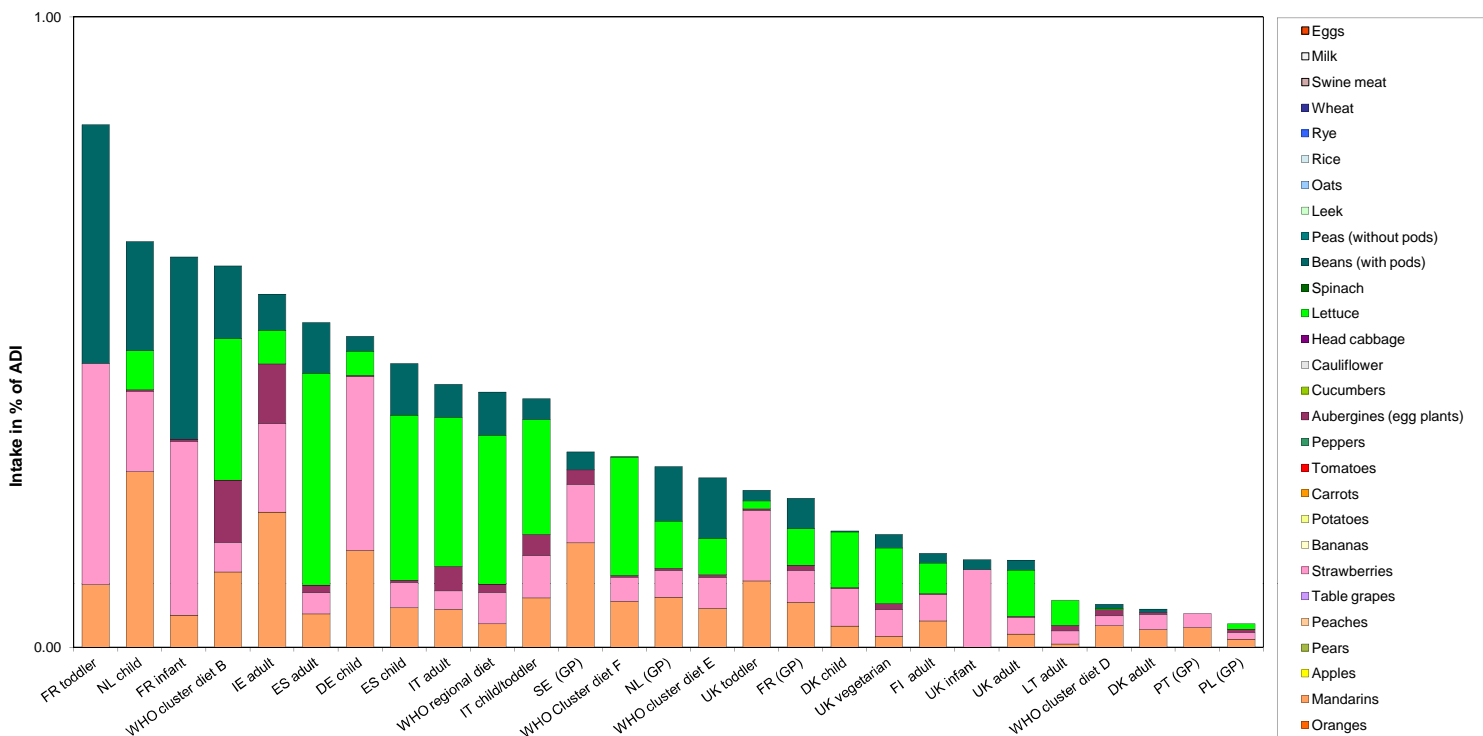
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.01	1613							
2010	Peaches	0.01	752							
2010	Strawberries	0.1	1243	1.37		0.05		16.21	DE child	
2010	Tomatoes	0.02	1029							
2010	Head cabbage	0.01	601							
2010	Lettuce	0.1	1096	0.09		0.06		29.59	DE child	
2010	Leek	0.01	503							
2010	Oats	0.01	67							
2010	Rye	0.01	279							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

c) TRL: toxicological threshold level

## Chronic risk assessment: Abamectin



**Abamectin**

Acute exposure: Abamectin / Apples



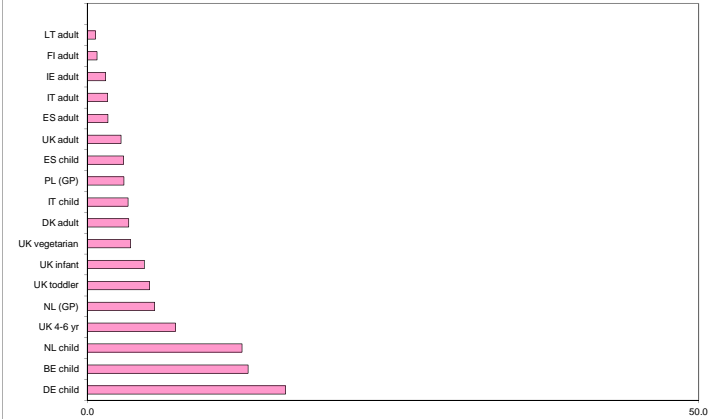
Intake in % of the ARfD

Acute exposure: Abamectin / Peaches



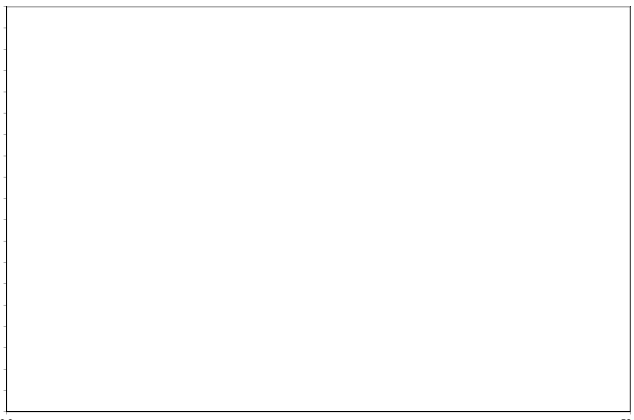
Intake in % of the ARfD

Acute exposure: Abamectin / Strawberries



Intake in % of the ARfD

Acute exposure: Abamectin / Tomatoes



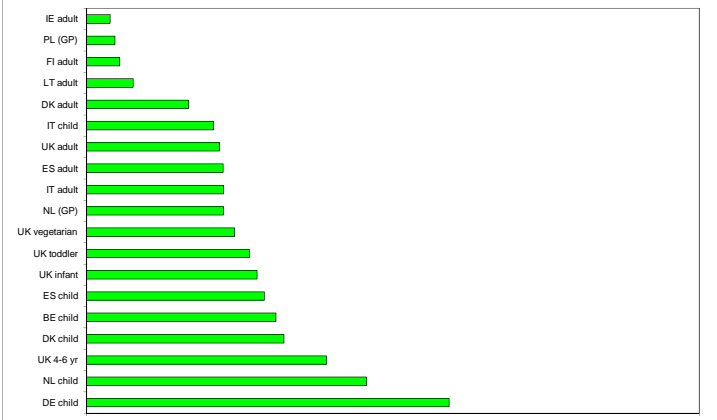
Intake in % of the ARfD

Acute exposure: Abamectin / Head cabbage



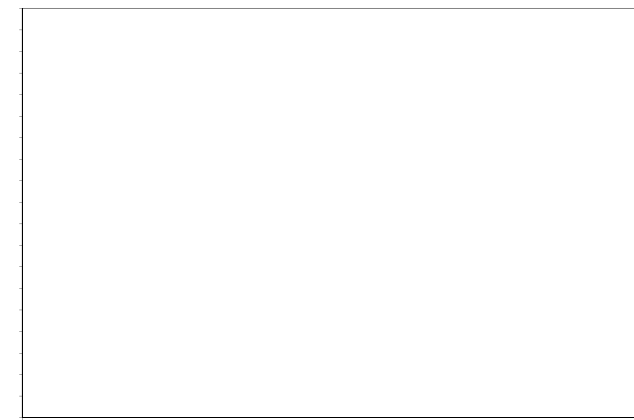
Intake in % of the ARfD

Acute exposure: Abamectin / Lettuce



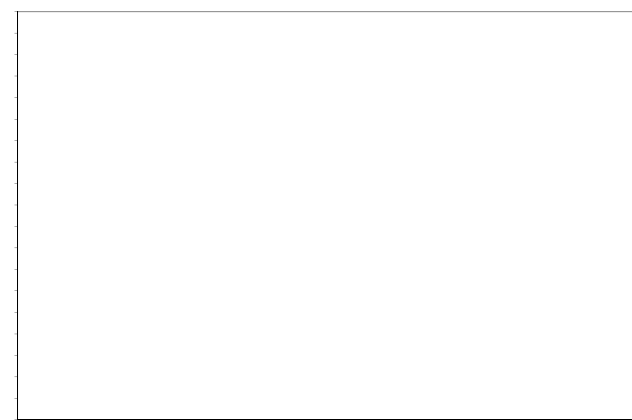
Intake in % of the ARfD

Acute exposure: Abamectin / Leek



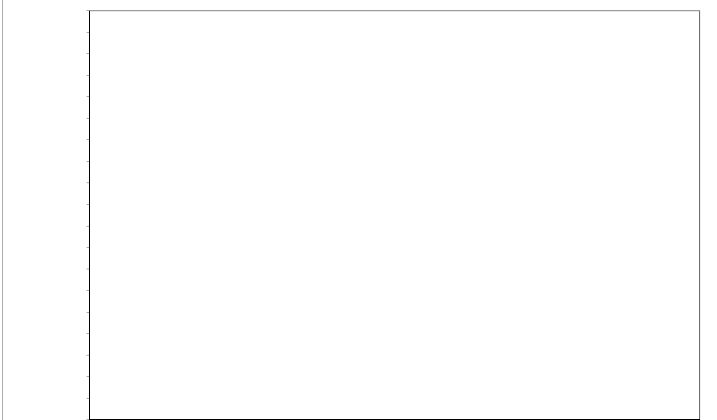
Intake in % of the ARfD

Acute exposure: Abamectin / Oats



Intake in % of the ARfD

Acute exposure: Abamectin / Rye



Intake in % of the ARfD

<b>Acephate</b>			
Status of the active substance:	<b>Excluded</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.03</b>	ARfD (mg/kg bw):	<b>0.1</b>
Source of ADI:	<b>JMPR</b>	Source of ARfD:	<b>JMPR</b>
Year of evaluation:	<b>2005</b>	Year of evaluation:	<b>2005</b>

### Chronic risk assessment

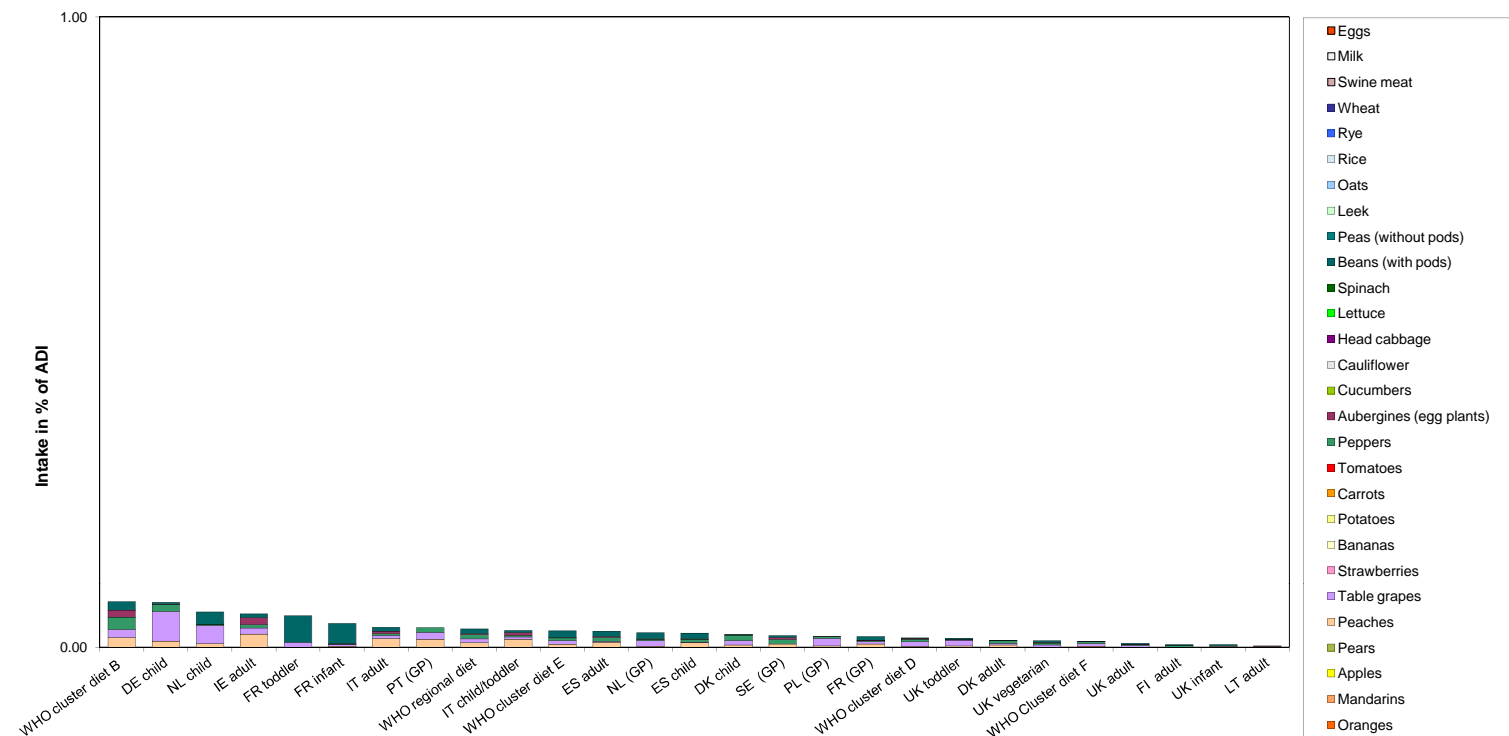
		Exposure (range) in % of ADI minimum - maximum					
		No of diets exceeding ADI:		---			
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.07	WHO cluster diet B	0.02	Peppers	0.02	Peaches	0.01	Table grapes
0.07	DE child	0.05	Table grapes	0.01	Peppers	0.01	Peaches
0.06	NL child	0.03	Table grapes	0.02	Beans (with pods)	0.01	Peaches
0.05	IE adult	0.02	Peaches	0.01	Aubergines (egg)	0.01	Table grapes
0.05	FR toddler	0.04	Beans (with pods)	0.01	Table grapes	0.00	Peaches
0.04	FR infant	0.03	Beans (with pods)	0.00	Table grapes	0.00	Peaches
0.03	IT adult	0.01	Peaches	0.01	Beans (with pods)	0.00	Table grapes
0.03	PT (GP)	0.01	Peaches	0.01	Table grapes	0.01	Peppers
0.03	WHO regional diet	0.01	Peaches	0.01	Beans (with pods)	0.01	Peppers
0.03	IT child/toddler	0.01	Peaches	0.00	Table grapes	0.00	Aubergines (egg plants)
0.03	WHO cluster diet E	0.01	Beans (with pods)	0.01	Table grapes	0.01	Peaches
0.03	ES adult	0.01	Beans (with pods)	0.01	Peaches	0.01	Peppers
0.02	NL (GP)	0.01	Beans (with pods)	0.01	Table grapes	0.00	Peppers
0.02	ES child	0.01	Beans (with pods)	0.01	Peaches	0.00	Peppers
0.02	DK child	0.01	Peppers	0.01	Table grapes	0.00	Peaches
0.02	SE (GP)	0.01	Peppers	0.01	Peaches	0.00	Beans (with pods)
0.02	PL (GP)	0.01	Table grapes	0.00	Peppers	0.00	Peaches
0.02	FR (GP)	0.01	Beans (with pods)	0.01	Peaches	0.00	Table grapes
0.02	WHO cluster diet D	0.01	Table grapes	0.00	Peppers	0.00	Peaches
0.01	UK toddler	0.01	Table grapes	0.00	Peaches	0.00	Beans (with pods)
0.01	DK adult	0.00	Peppers	0.00	Peaches	0.00	Table grapes
0.01	UK vegetarian	0.00	Peppers	0.00	Table grapes	0.00	Beans (with pods)
0.01	WHO Cluster diet F	0.00	Table grapes	0.00	Peppers	0.00	Peaches
0.01	UK adult	0.00	Table grapes	0.00	Beans (with pods)	0.00	Peppers
0.00	FI adult	0.00	Peppers	0.00	Beans (with pods)	0.00	Table grapes
0.00	UK infant	0.00	Beans (with pods)	0.00	Peaches	0.00	Table grapes
0.00	LT adult	0.00	Aubergines (egg)	0.00	Peppers	0.00	Table grapes

### Acute risk assessment

Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.02	2893	0.03		0.01		0.98	UK infant DE child	
2010	Peaches	0.02	1400		0.07	0.03		1.72		
2010	Strawberries	0.02	2224							
2010	Tomatoes	0.02	2356							
2010	Head cabbage	0.02	1116							
2010	Lettuce	0.02	2206							
2010	Leek	0.02	901							
2010	Oats	0.02	133							
2010	Rye	0.02	409							
2010	Swine Meat									
2010	Milk									

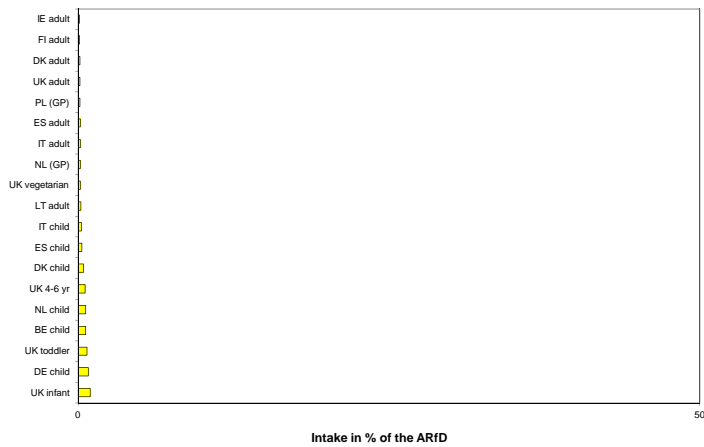
<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
<sup>b)</sup> MRL in place on 01/01/2010  
<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Acephate

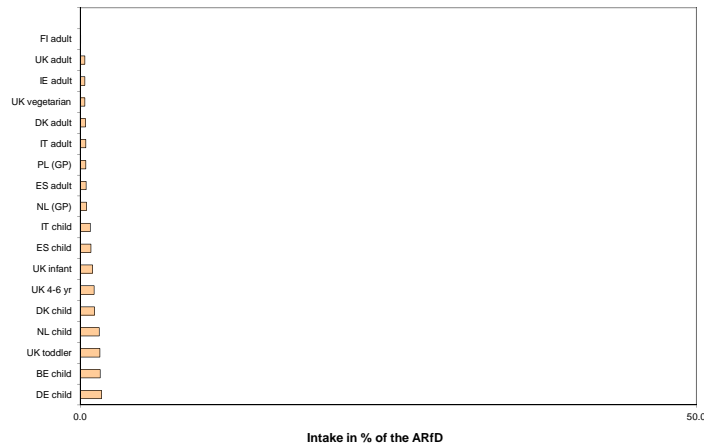


**Acephate**

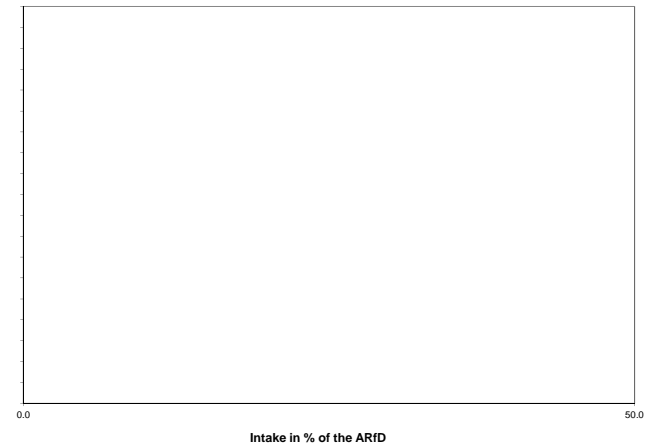
Acute exposure: Acephate / Apples



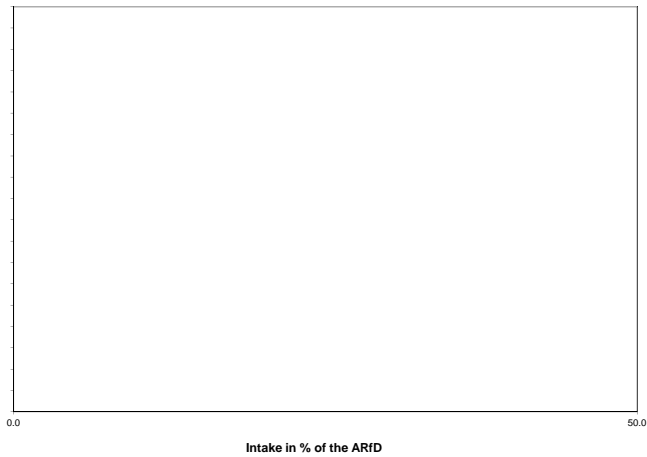
Acute exposure: Acephate / Peaches



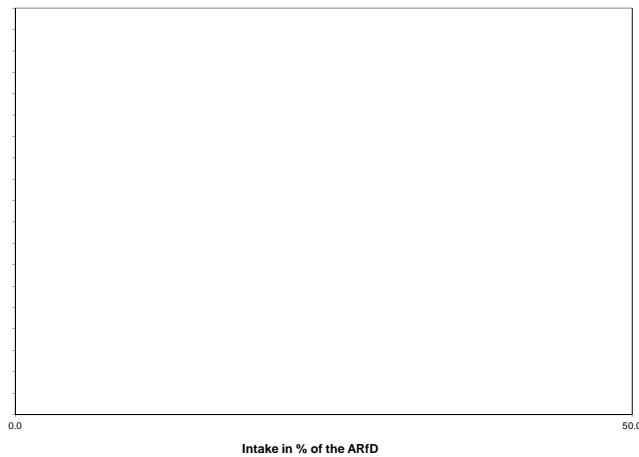
Acute exposure: Acephate / Strawberries



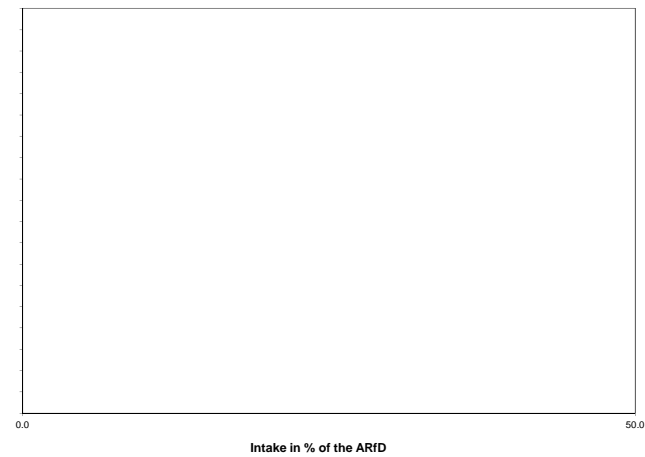
Acute exposure: Acephate / Tomatoes



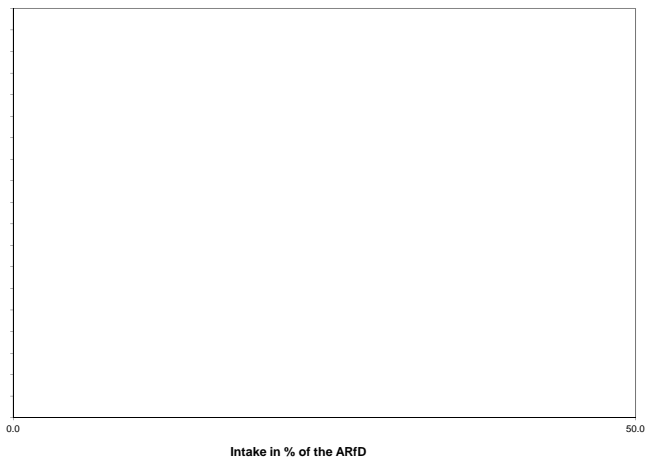
Acute exposure: Acephate / Head cabbage



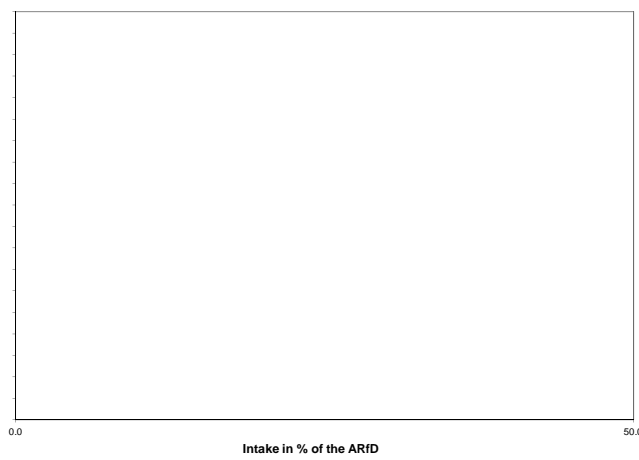
Acute exposure: Acephate / Lettuce



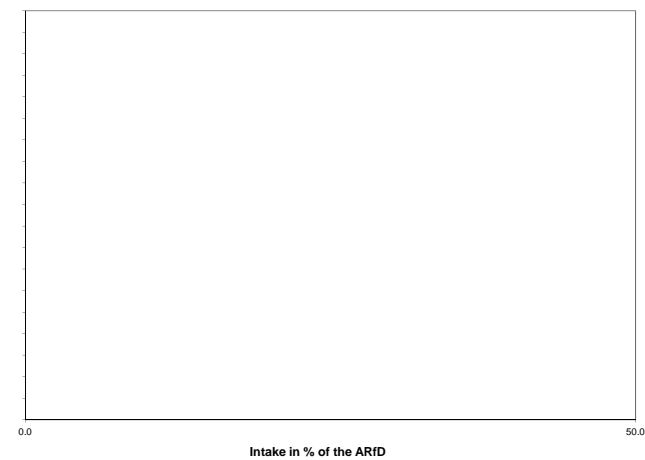
Acute exposure: Acephate / Leek



Acute exposure: Acephate / Oats



Acute exposure: Acephate / Rye





## Acetamiprid

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.07	ARfD (mg/kg bw):	0.1
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	1999	Year of evaluation:	1999

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.35	DE child	0.19	Apples	0.05	Oranges	0.02	Table grapes
0.23	NL child	0.10	Apples	0.04	Oranges	0.01	Mandarins
0.17	FR toddler	0.04	Apples	0.03	Carrots	0.03	Oranges
0.15	WHO cluster diet B	0.05	Tomatoes	0.02	Apples	0.01	Oranges
0.13	FR infant	0.04	Apples	0.03	Carrots	0.01	Oranges
0.12	DK child	0.04	Apples	0.03	Cucumbers	0.02	Carrots
0.11	ES child	0.03	Oranges	0.02	Apples	0.02	Tomatoes
0.10	UK toddler	0.03	Oranges	0.03	Apples	0.01	Tomatoes
0.09	SE (GP)	0.02	Apples	0.01	Tomatoes	0.01	Carrots
0.09	IE adult	0.02	Oranges	0.01	Apples	0.01	Pears
0.08	UK infant	0.03	Apples	0.02	Oranges	0.02	Carrots
0.08	ES adult	0.02	Oranges	0.01	Lettuce	0.01	Tomatoes
0.08	PT (GP)	0.02	Apples	0.01	Tomatoes	0.01	Rice
0.08	IT child/toddler	0.02	Tomatoes	0.01	Apples	0.01	Lettuce
0.08	NL (GP)	0.02	Oranges	0.02	Apples	0.01	Tomatoes
0.08	WHO regional diet	0.02	Tomatoes	0.01	Apples	0.01	Lettuce
0.07	IT adult	0.02	Tomatoes	0.01	Apples	0.01	Lettuce
0.07	PL (GP)	0.03	Apples	0.01	Tomatoes	0.00	Head cabbage
0.07	WHO Cluster diet F	0.01	Oranges	0.01	Tomatoes	0.01	Apples
0.06	LT adult	0.03	Apples	0.01	Tomatoes	0.01	Cucumbers
0.06	WHO cluster diet E	0.01	Apples	0.01	Tomatoes	0.01	Oranges
0.06	WHO cluster diet D	0.02	Tomatoes	0.01	Apples	0.01	Rice
0.05	UK vegetarian	0.01	Oranges	0.01	Tomatoes	0.01	Apples
0.04	FI adult	0.01	Oranges	0.01	Tomatoes	0.01	Apples
0.04	DK adult	0.01	Apples	0.01	Tomatoes	0.01	Carrots
0.04	FR (GP)	0.01	Apples	0.01	Tomatoes	0.00	Oranges
0.04	UK adult	0.01	Oranges	0.01	Tomatoes	0.01	Apples

## Acute risk assessment

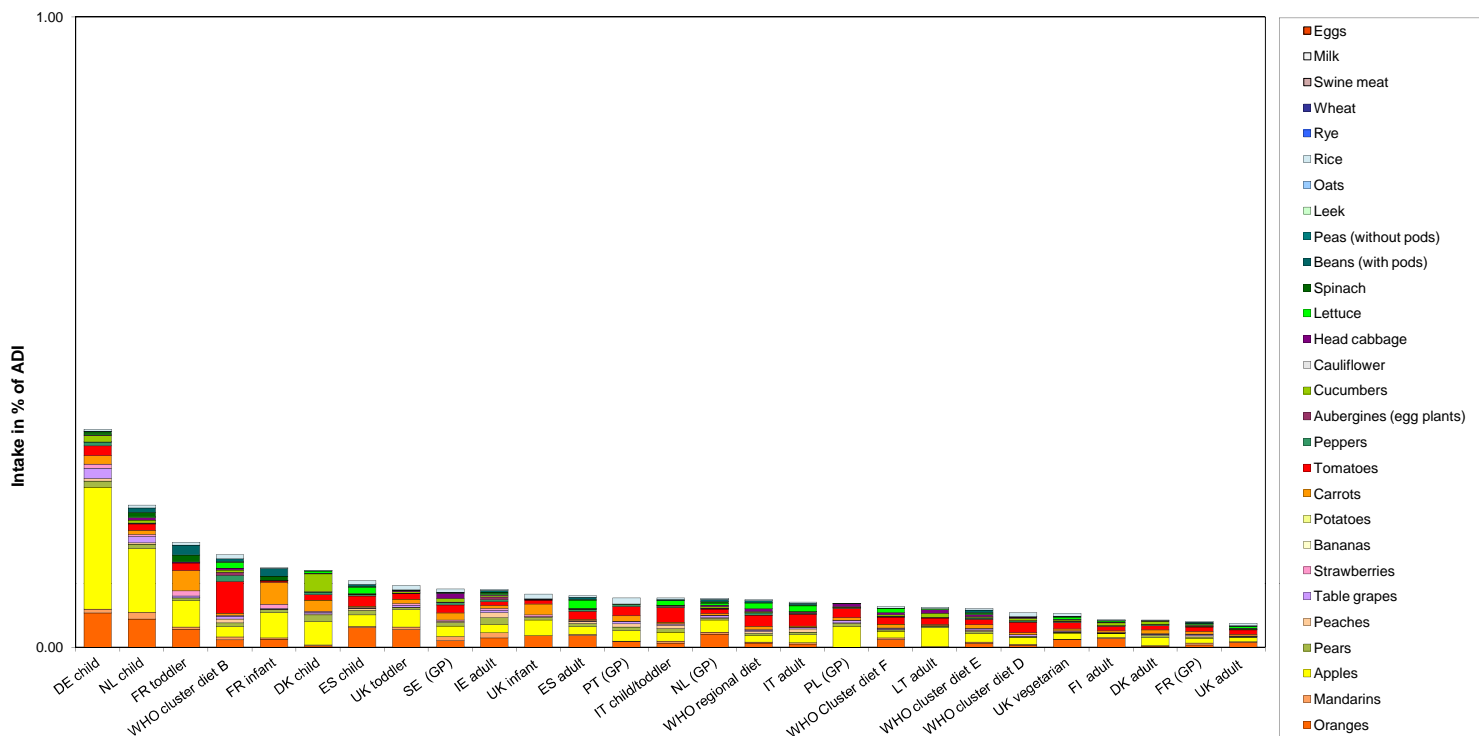
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.1	2864	4.99		0.10		9.70	UK infant	
2010	Peaches	0.1	1371	2.19		0.09		5.46	DE child	
2010	Strawberries	0.01	2138		0.19	0.07		1.09	DE child	
2010	Tomatoes	0.1	2235	1.88	0.27	0.67		38.96	BE child	
2010	Head cabbage	0.01	1103	0.09		0.01		0.42	NL child	
2010	Lettuce	5	2145	5.03		1.61		43.40	DE child	
2010	Leek	0.01	863							
2010	Oats	0.01	169							
2010	Rye	0.01	402							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

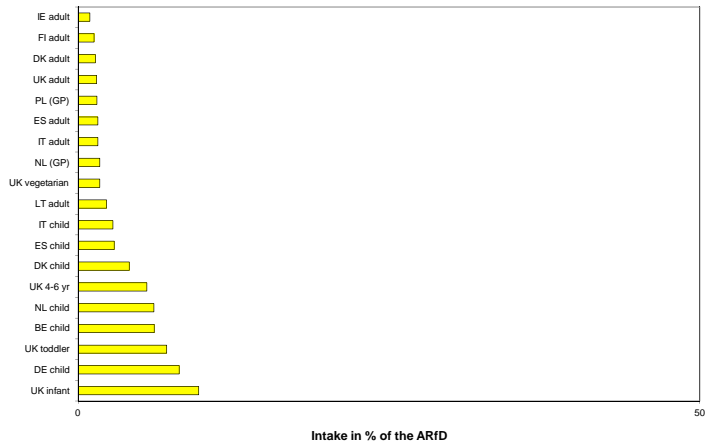
c) TRL: toxicological threshold level

## Chronic risk assessment: Acetamiprid

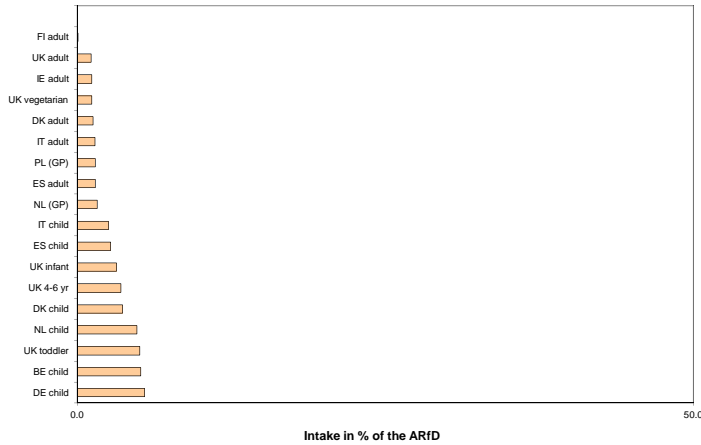


**Acetamiprid**

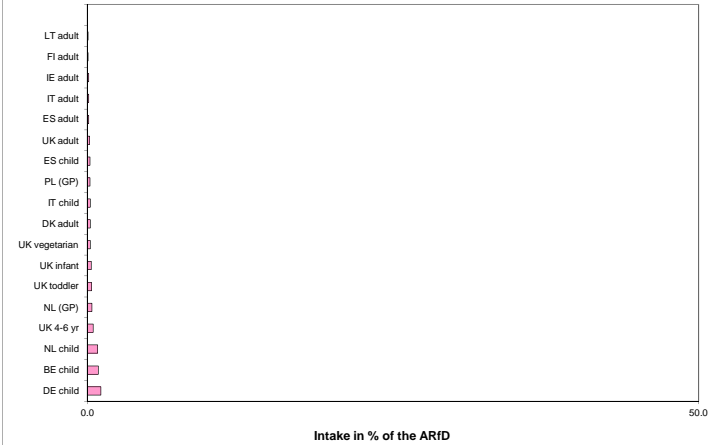
Acute exposure: Acetamiprid / Apples



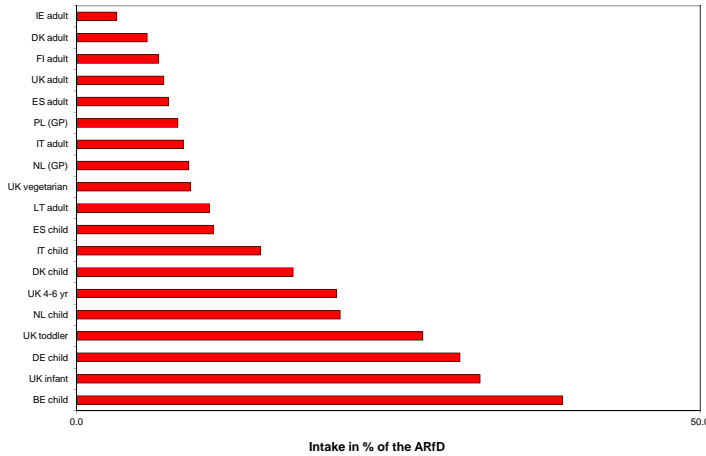
Acute exposure: Acetamiprid / Peaches



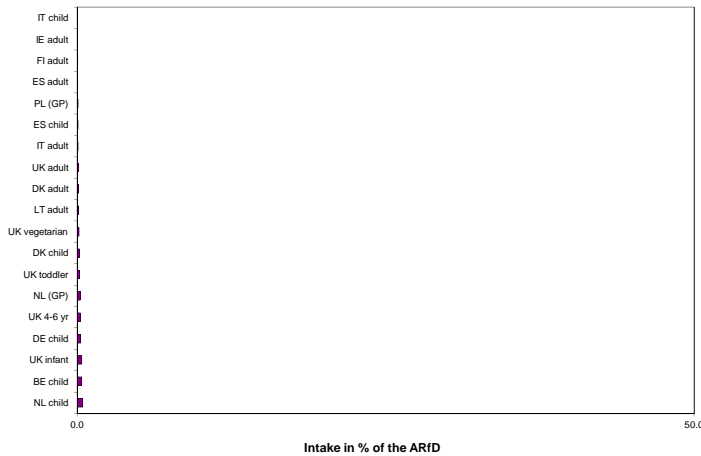
Acute exposure: Acetamiprid / Strawberries



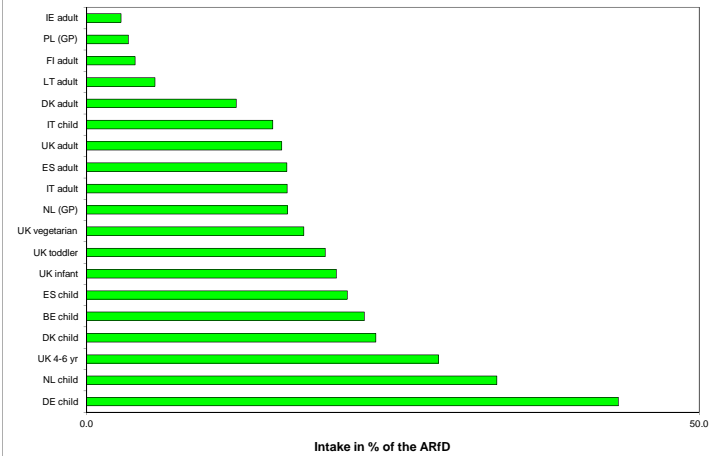
Acute exposure: Acetamiprid / Tomatoes



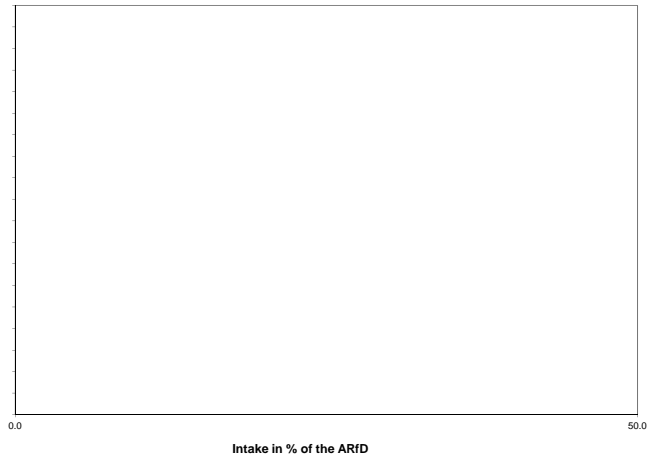
Acute exposure: Acetamiprid / Head cabbage



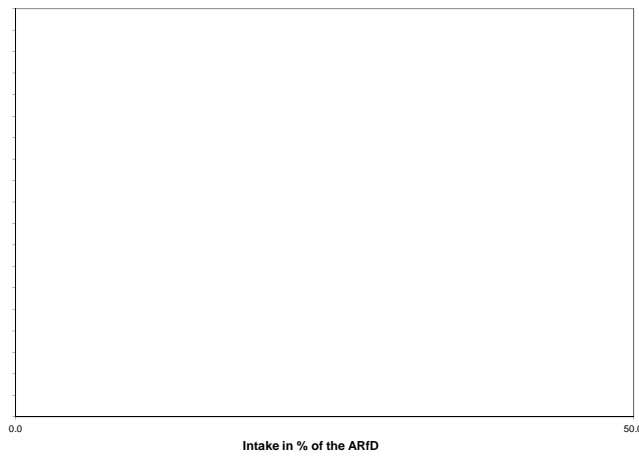
Acute exposure: Acetamiprid / Lettuce



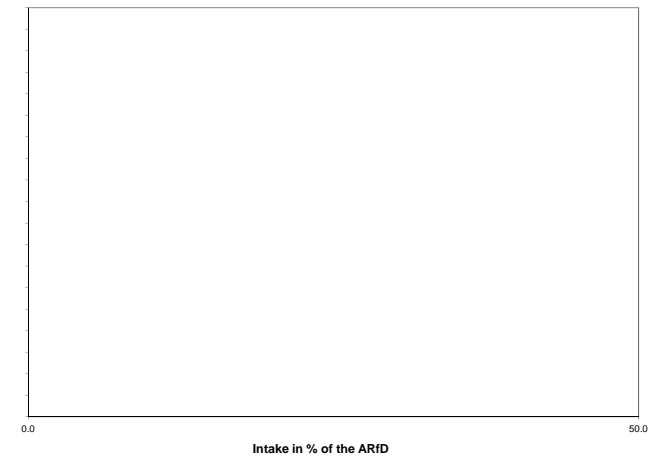
Acute exposure: Acetamiprid / Leek



Acute exposure: Acetamiprid / Oats



Acute exposure: Acetamiprid / Rye



Acrinathrin			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:	Yes	Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.01	ARfD (mg/kg bw):	0.01
Source of ADI:	EFSA	Source of ARfD:	EFSA
Year of evaluation:	2010	Year of evaluation:	2010

**Chronic risk assessment**

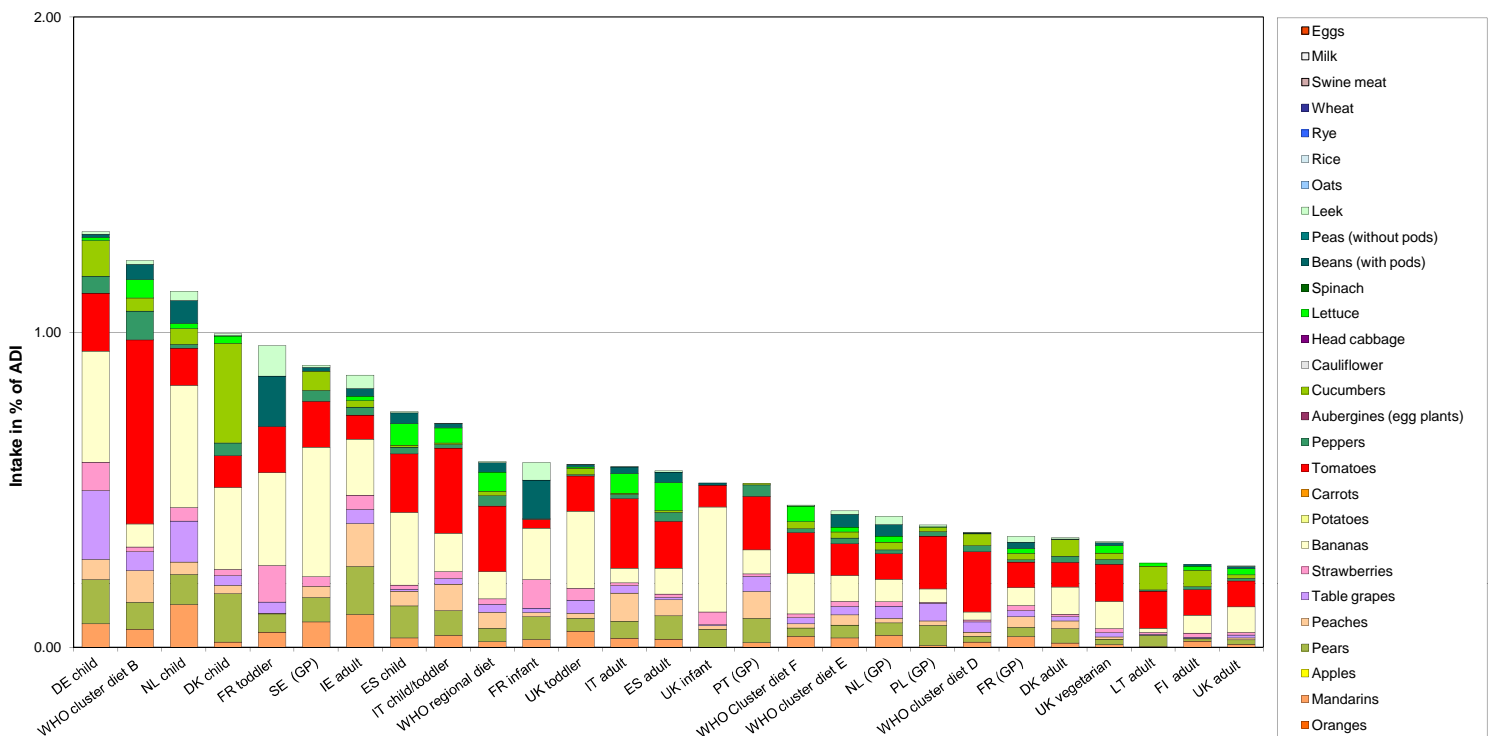
		Exposure (range) in % of ADI minimum - maximum					
		1					
		No of diets exceeding ADI: ---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
1.32	DE child	0.35	Bananas	0.22	Table grapes	0.18	Tomatoes
1.23	WHO cluster diet B	0.58	Tomatoes	0.10	Peaches	0.09	Peppers
1.13	NL child	0.39	Bananas	0.14	Mandarins	0.13	Table grapes
0.99	DK child	0.32	Cucumbers	0.26	Bananas	0.15	Pears
0.96	FR toddler	0.29	Bananas	0.16	Beans (with pods)	0.15	Tomatoes
0.90	SE (GP)	0.41	Bananas	0.14	Tomatoes	0.08	Mandarins
0.86	IE adult	0.18	Bananas	0.15	Pears	0.14	Peaches
0.75	ES child	0.23	Bananas	0.19	Tomatoes	0.10	Pears
0.71	IT child/toddler	0.27	Tomatoes	0.12	Bananas	0.08	Peaches
0.59	WHO regional diet	0.21	Tomatoes	0.09	Bananas	0.06	Lettuce
0.59	FR infant	0.16	Bananas	0.12	Beans (with pods)	0.09	Strawberries
0.58	UK toddler	0.25	Bananas	0.11	Tomatoes	0.05	Mandarins
0.57	IT adult	0.22	Tomatoes	0.09	Peaches	0.06	Lettuce
0.56	ES adult	0.15	Tomatoes	0.09	Lettuce	0.08	Bananas
0.52	UK infant	0.33	Bananas	0.07	Tomatoes	0.06	Pears
0.52	PT (GP)	0.17	Tomatoes	0.09	Peaches	0.08	Bananas
0.45	WHO Cluster diet F	0.13	Tomatoes	0.13	Bananas	0.05	Lettuce
0.43	WHO cluster diet E	0.10	Tomatoes	0.08	Bananas	0.04	Beans (with pods)
0.42	NL (GP)	0.08	Tomatoes	0.07	Bananas	0.04	Pears
0.39	PL (GP)	0.17	Tomatoes	0.06	Pears	0.05	Table grapes
0.36	WHO cluster diet D	0.19	Tomatoes	0.04	Cucumbers	0.03	Table grapes
0.35	FR (GP)	0.08	Tomatoes	0.06	Bananas	0.03	Mandarins
0.35	DK adult	0.09	Bananas	0.08	Tomatoes	0.05	Cucumbers
0.34	UK vegetarian	0.12	Tomatoes	0.09	Bananas	0.02	Lettuce
0.27	LT adult	0.12	Tomatoes	0.08	Cucumbers	0.04	Pears
0.26	FI adult	0.08	Tomatoes	0.06	Bananas	0.05	Cucumbers
0.26	UK adult	0.08	Tomatoes	0.08	Bananas	0.02	Lettuce

**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.1	2640							
2010	Peaches	0.2	1292	1.70		0.11		65.26	DE child	
2010	Strawberries	0.2	2024	1.43		0.24		37.42	DE child	
2010	Tomatoes	0.1	2096	0.19		0.08		45.94	BE child	
2010	Head cabbage	0.05	1036		0.09					
2010	Lettuce	0.05	2164	0.05		0.08		21.52	DE child	
2010	Leek	0.05	827		0.12			94.32	BE child	
2010	Oats	0.05	167			0.16				
2010	Rye	0.05	369							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Acrinathrin**



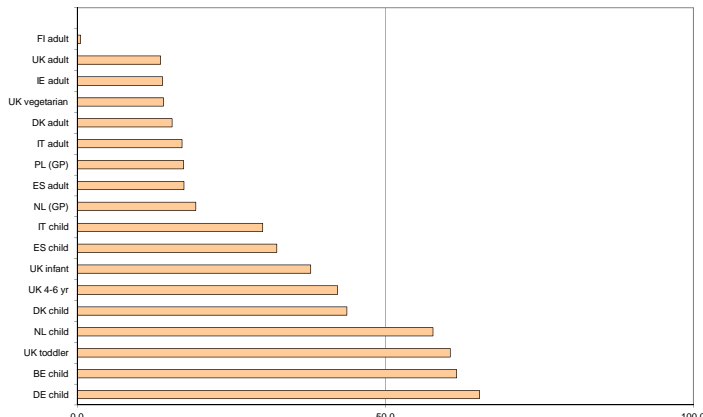
**Acrinathrin**

Acute exposure: Acrinathrin / Apples



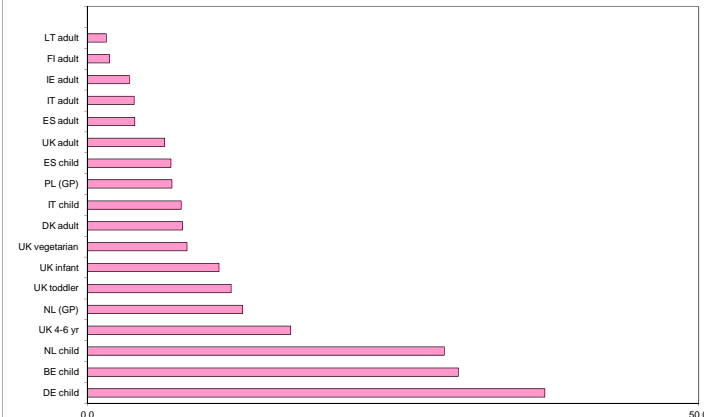
Intake in % of the ARfD

Acute exposure: Acrinathrin / Peaches



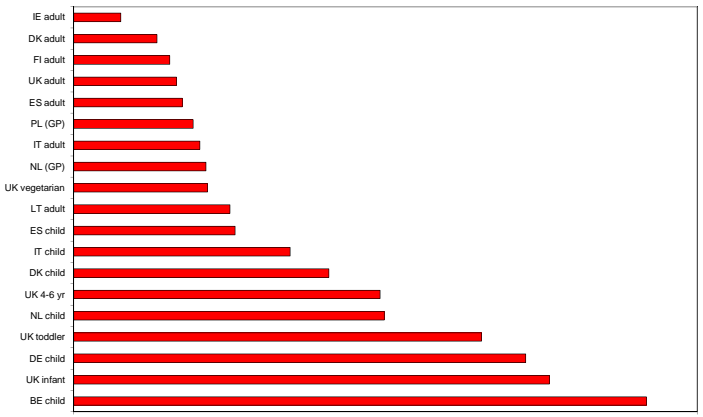
Intake in % of the ARfD

Acute exposure: Acrinathrin / Strawberries



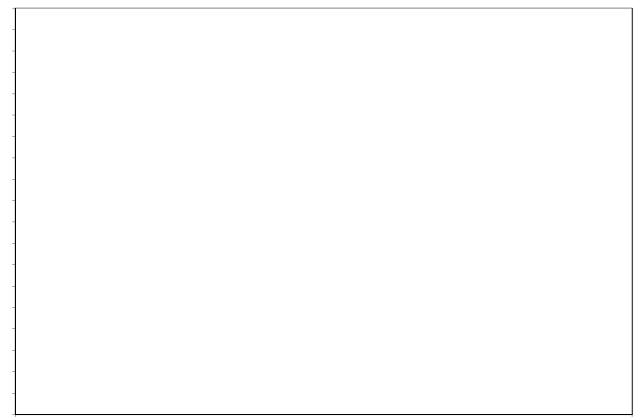
Intake in % of the ARfD

Acute exposure: Acrinathrin / Tomatoes



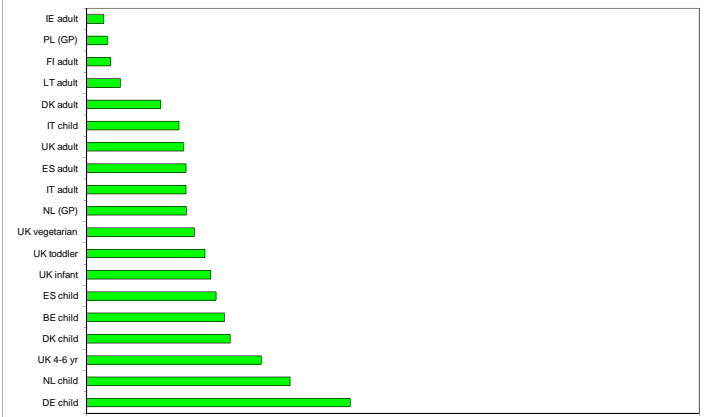
Intake in % of the ARfD

Acute exposure: Acrinathrin / Head cabbage



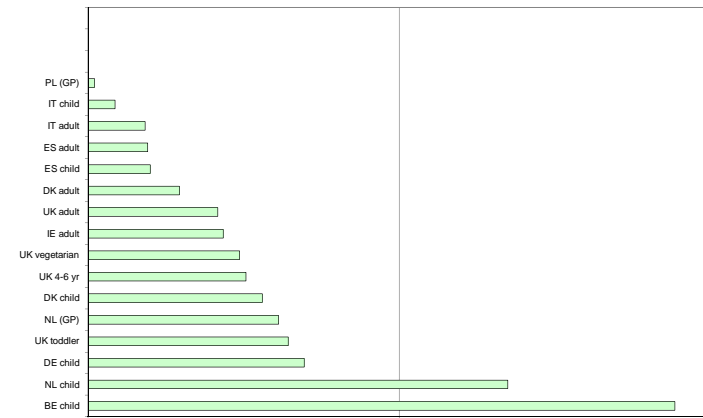
Intake in % of the ARfD

Acute exposure: Acrinathrin / Lettuce



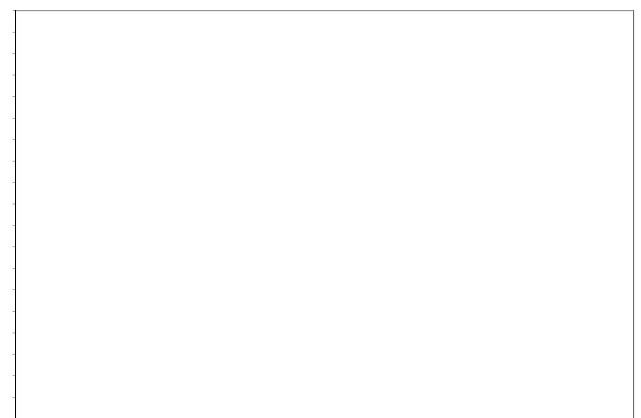
Intake in % of the ARfD

Acute exposure: Acrinathrin / Leek



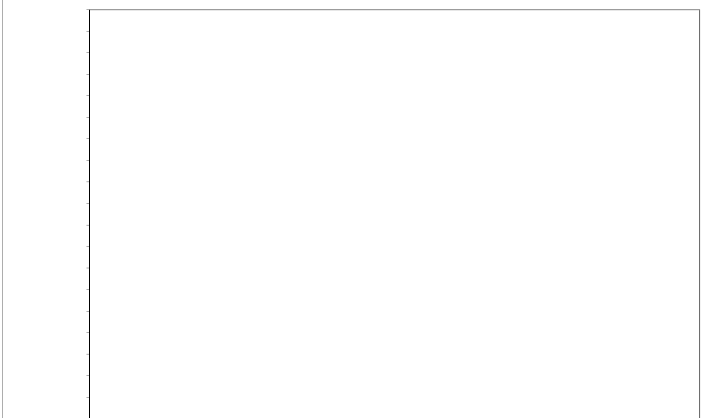
Intake in % of the ARfD

Acute exposure: Acrinathrin / Oats



Intake in % of the ARfD

Acute exposure: Acrinathrin / Rye



Intake in % of the ARfD

## Aldicarb

Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.003	ARfD (mg/kg bw):	0.003
Source of ADI:	JMPR	Source of ARfD:	JMPR
Year of evaluation:	2001	Year of evaluation:	2001

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.20	SE (GP)	0.20	Head cabbage		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.13	LT adult	0.13	Head cabbage		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.12	PL (GP)	0.12	Head cabbage		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.12	WHO regional diet	0.12	Head cabbage		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.10	NL child	0.10	Head cabbage		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.09	WHO Cluster diet F	0.09	Head cabbage		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.08	WHO cluster diet E	0.08	Head cabbage		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.08	WHO cluster diet B	0.08	Head cabbage		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.07	NL (GP)	0.07	Head cabbage		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.06	WHO cluster diet D	0.06	Head cabbage		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.04	IE adult	0.04	Head cabbage		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.03	UK infant	0.03	Head cabbage		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.03	UK vegetarian	0.03	Head cabbage		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.03	UK toddler	0.03	Head cabbage		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.03	DE child	0.03	Head cabbage		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.03	FR toddler	0.03	Head cabbage		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.02	FI adult	0.02	Head cabbage		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.02	DK child	0.02	Head cabbage		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.02	UK adult	0.02	Head cabbage		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.02	DK adult	0.02	Head cabbage		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.02	ES child	0.02	Head cabbage		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.02	FR (GP)	0.02	Head cabbage		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.01	ES adult	0.01	Head cabbage		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.01	IT adult	0.01	Head cabbage		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.00	FR infant	0.00	Head cabbage		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.00	IT child/toddler	0.00	Head cabbage		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
	PT (GP)		FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)

## Acute risk assessment

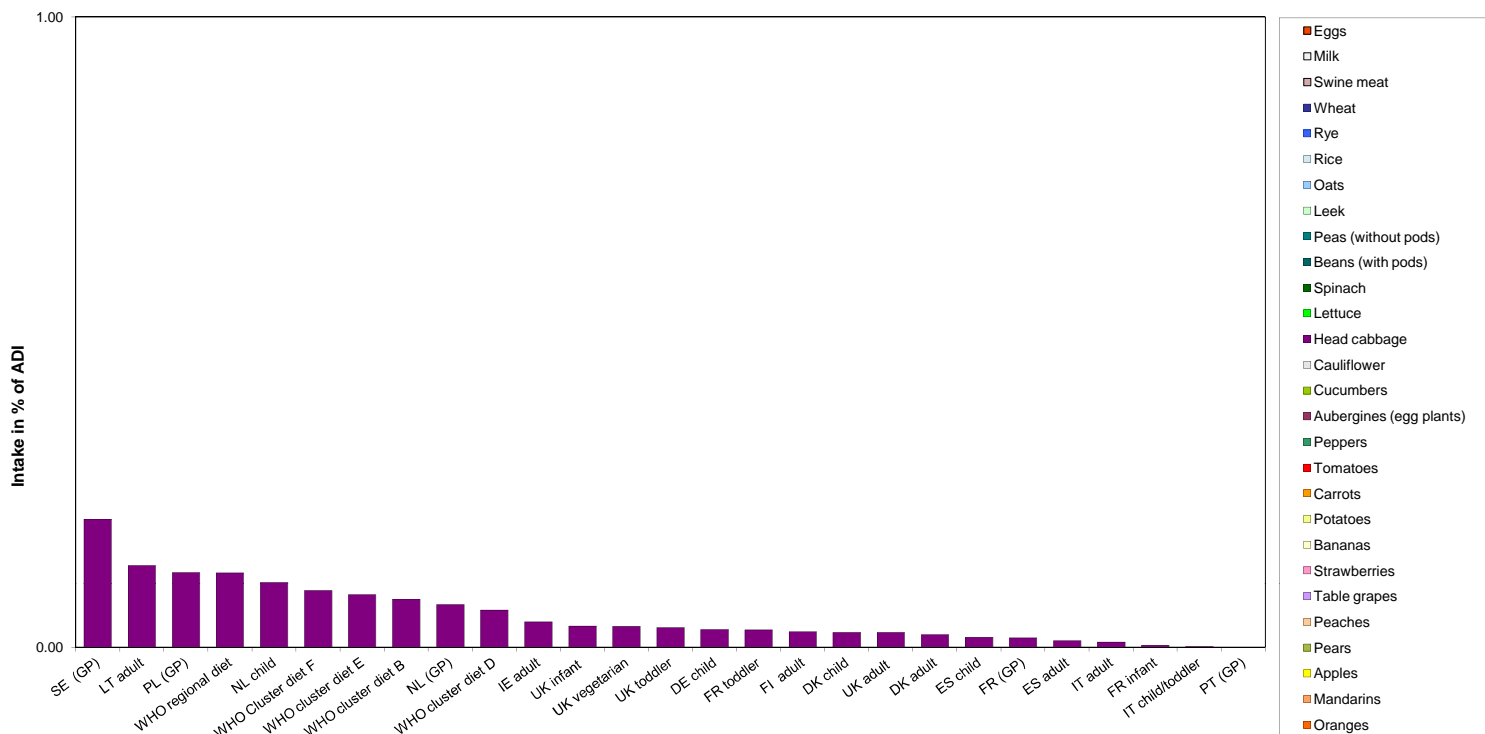
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.02	2399							
2010	Peaches	0.02	1242							
2010	Strawberries	0.02	1911							
2010	Tomatoes	0.02	1839							
2010	Head cabbage	0.02	972	0.10		0.00		5.26	NL child	
2010	Lettuce	0.02	1936							
2010	Leek	0.02	795							
2010	Oats	0.05	150							
2010	Rye	0.05	385							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

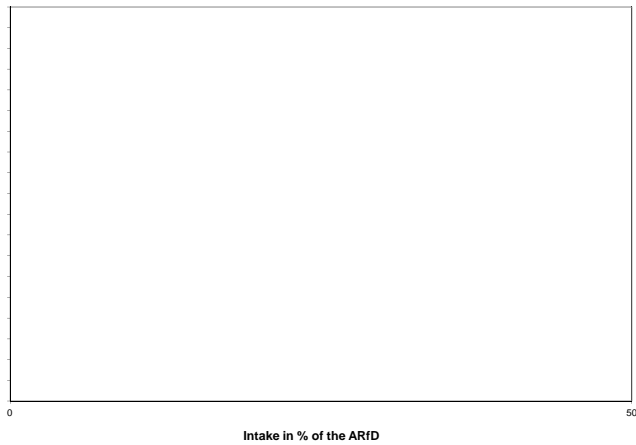
c) TRL: toxicological threshold level

## Chronic risk assessment: Aldicarb

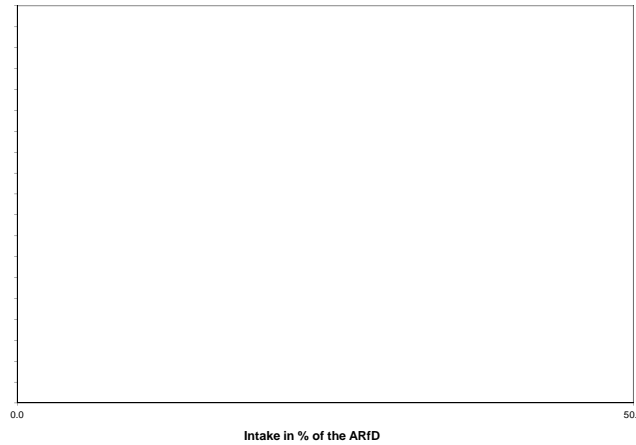


**Aldicarb**

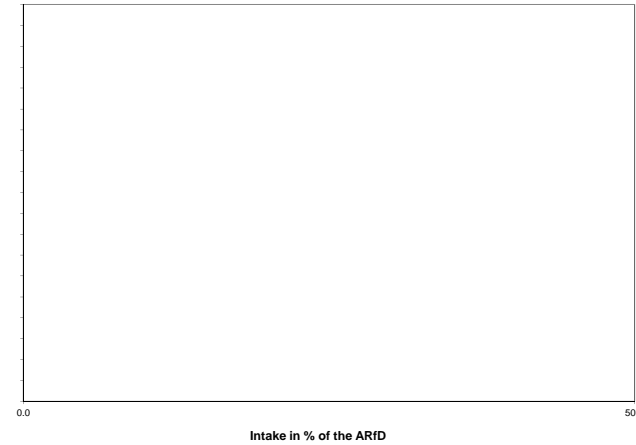
Acute exposure: Aldicarb / Apples



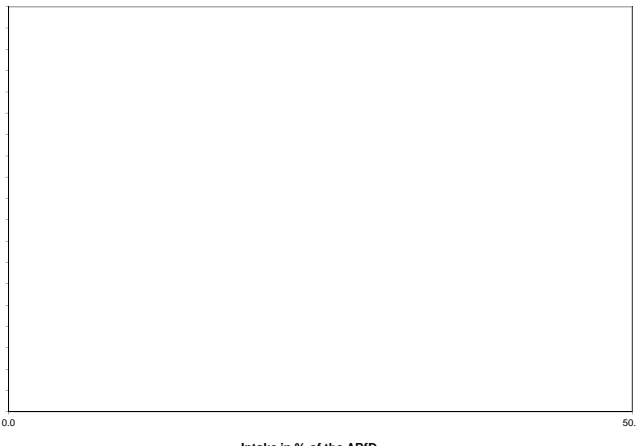
Acute exposure: Aldicarb / Peaches



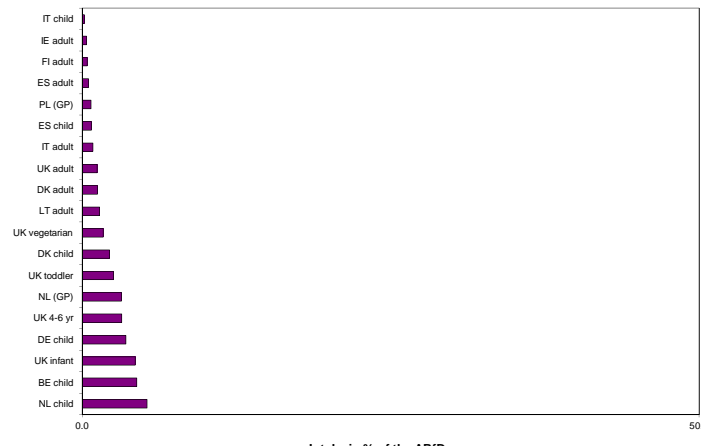
Acute exposure: Aldicarb / Strawberries



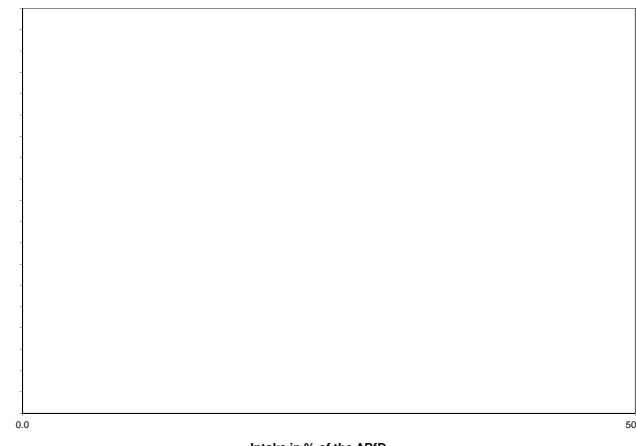
Acute exposure: Aldicarb / Tomatoes



Acute exposure: Aldicarb / Head cabbage



Acute exposure: Aldicarb / Lettuce



Acute exposure: Aldicarb / Leek



Acute exposure: Aldicarb / Oats



Acute exposure: Aldicarb / Rye



## Aldrin and Dieldrin

Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	A
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.0001	ARfD (mg/kg bw):	0.003
Source of ADI:	JMPR	Source of ARfD:	EFSA
Year of evaluation:	1994	Year of evaluation:	2007

For aldrin and dieldrin the same ADI is applicable (JMPR, 1977).

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
8

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
7.52	UK infant	7.52	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
6.23	DE child	6.23	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
5.70	FR toddler	5.70	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
4.98	UK toddler	4.98	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
4.94	SE (GP)	4.94	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
4.83	DK child	4.83	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
4.05	ES child	4.05	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
3.52	WHO cluster diet E	3.52	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
3.49	WHO regional diet	3.49	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
3.30	NL child	3.30	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
2.77	WHO cluster diet B	2.77	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
2.60	ES adult	2.60	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
2.55	WHO Cluster diet F	2.55	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
2.48	FR infant	2.48	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
2.28	WHO cluster diet D	2.28	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
2.05	DK adult	2.05	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
1.95	UK vegetarian	1.95	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
1.83	LT adult	1.83	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
1.71	UK adult	1.71	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
1.68	FR (GP)	1.68	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
1.64	NL (GP)	1.64	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
1.52	IE adult	1.52	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
1.26	FI adult	1.26	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	IT adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	IT adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	IT adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	IT adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)

## Acute risk assessment

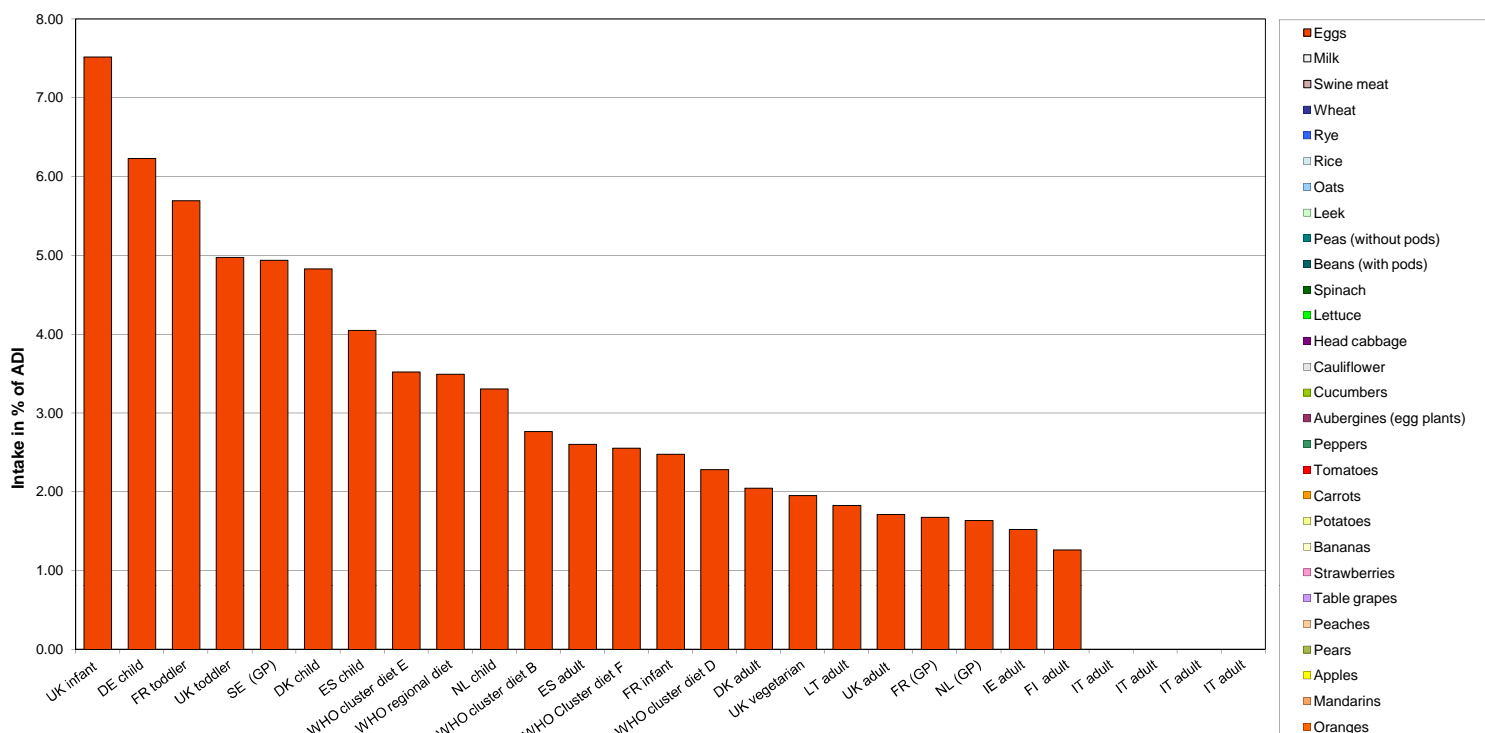
Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples									
2010	Peaches									
2010	Strawberries									
2010	Tomatoes									
2010	Head cabbage									
2010	Lettuce									
2010	Leek									
2010	Oats									
2010	Rye									
2010	Swine Meat	0.2	466							
2010	Milk	0.006	536							

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

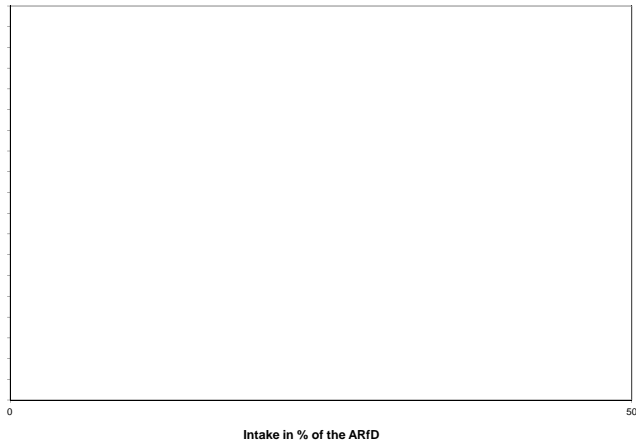
c) TRL: toxicological threshold level

## Chronic risk assessment: Aldrin and Dieldrin

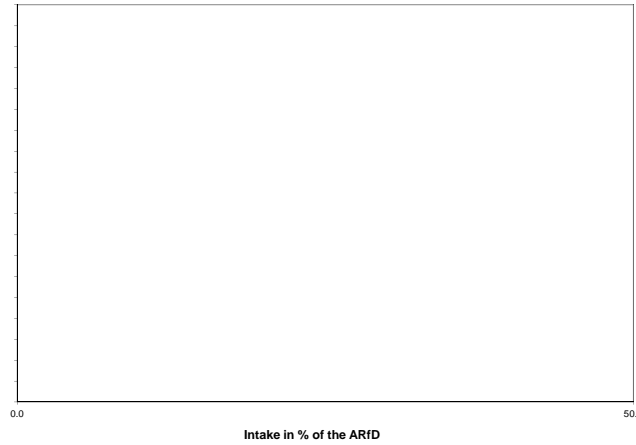


**Aldrin and Dieldrin**

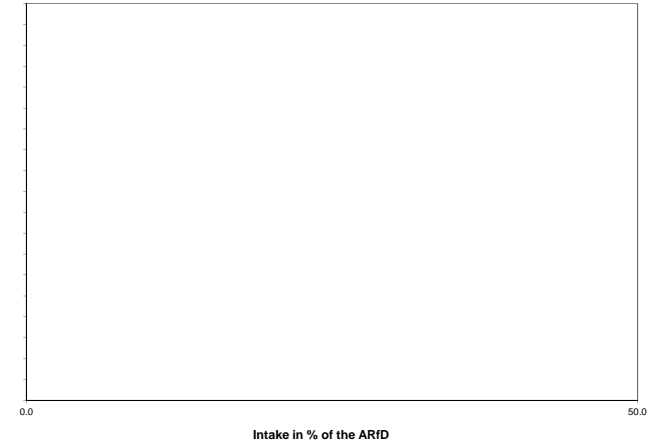
Acute exposure: Aldrin and Dieldrin / Apples



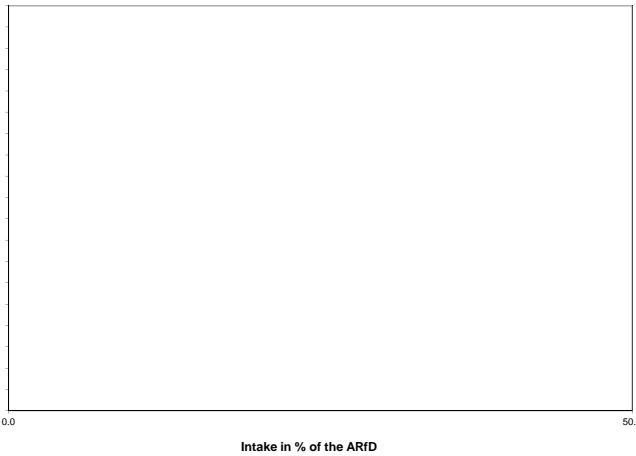
Acute exposure: Aldrin and Dieldrin / Peaches



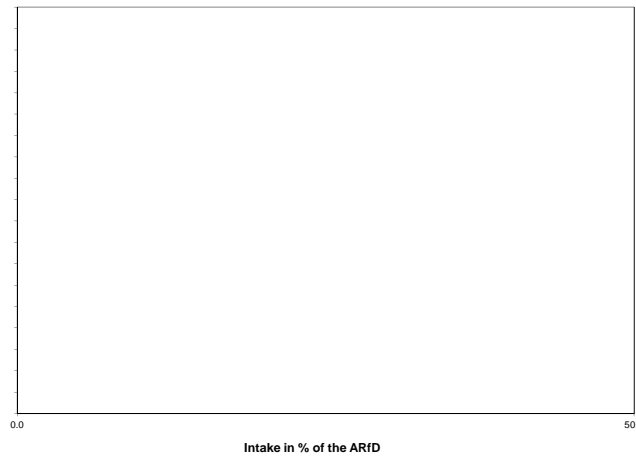
Acute exposure: Aldrin and Dieldrin / Strawberries



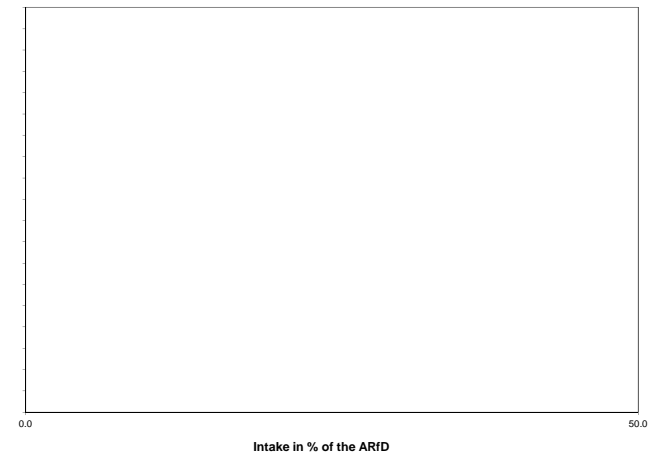
Acute exposure: Aldrin and Dieldrin / Tomatoes



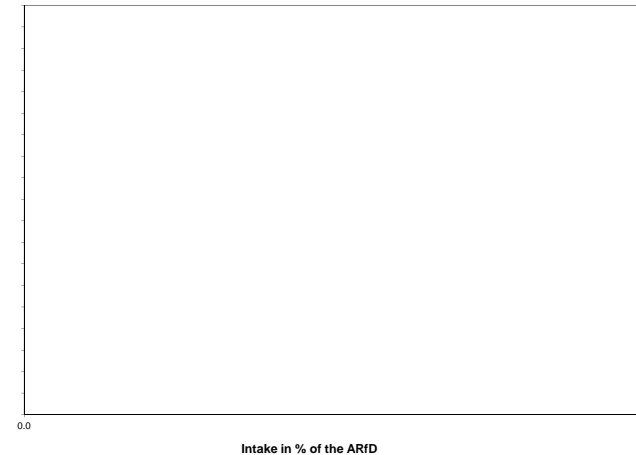
Acute exposure: Aldrin and Dieldrin / Head cabbage



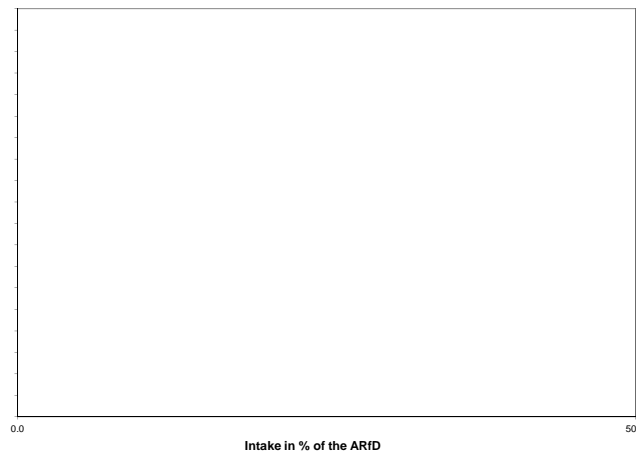
Acute exposure: Aldrin and Dieldrin / Lettuce



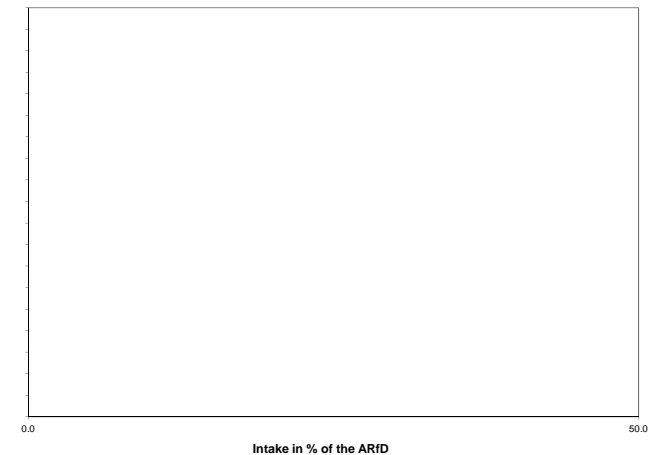
Acute exposure: Aldrin and Dieldrin / Leek



Acute exposure: Aldrin and Dieldrin / Oats



Acute exposure: Aldrin and Dieldrin / Rye





## Amitraz

Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:	obligatory on pears only	Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0,003	ARfD (mg/kg bw):	0,01
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2003	Year of evaluation:	2003

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum

1

No of diets exceeding ADI:

---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0,79	DK child	0,79	Pears		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0,78	IE adult	0,78	Pears		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0,72	DE child	0,72	Pears		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0,52	ES child	0,52	Pears		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0,49	NL child	0,49	Pears		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0,43	WHO cluster diet B	0,43	Pears		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0,40	IT child/toddler	0,40	Pears		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0,40	SE (GP)	0,40	Pears		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0,39	PT (GP)	0,39	Pears		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0,38	ES adult	0,38	Pears		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0,37	FR infant	0,37	Pears		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0,33	PL (GP)	0,33	Pears		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0,30	FR toddler	0,30	Pears		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0,29	UK infant	0,29	Pears		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0,27	IT adult	0,27	Pears		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0,24	DK adult	0,24	Pears		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0,22	WHO regional diet	0,22	Pears		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0,21	WHO cluster diet E	0,21	Pears		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0,21	UK toddler	0,21	Pears		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0,20	NL (GP)	0,20	Pears		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0,18	LT adult	0,18	Pears		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0,15	FR (GP)	0,15	Pears		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0,13	WHO Cluster diet F	0,13	Pears		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0,09	WHO cluster diet D	0,09	Pears		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0,09	UK vegetarian	0,09	Pears		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0,07	UK adult	0,07	Pears		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0,03	FI adult	0,03	Pears		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)

## Acute risk assessment

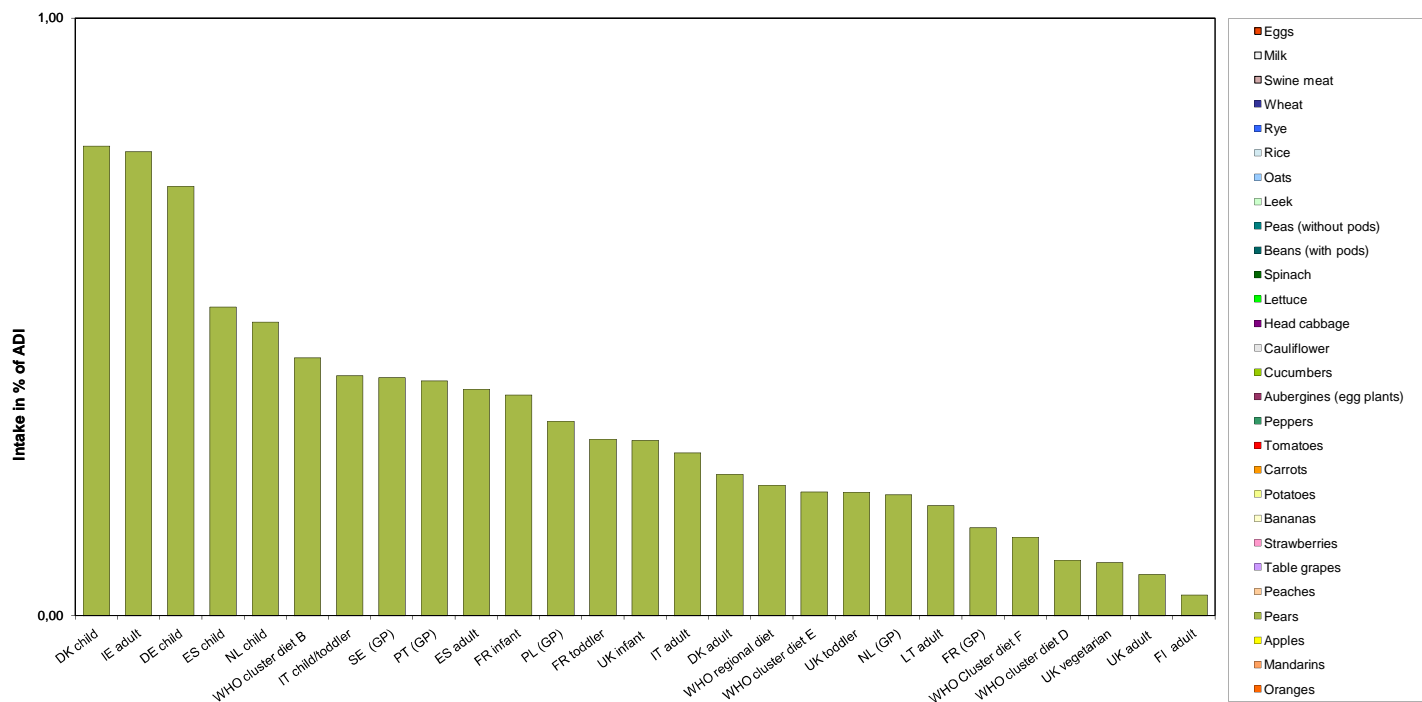
Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Pears	0,05	625	0,32	0,96	0,22	2	200,40	DE child	

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

c) TRL: toxicological threshold level

## Chronic risk assessment: Amitraz



**Amitraz**

Acute exposure: Amitraz / Apples



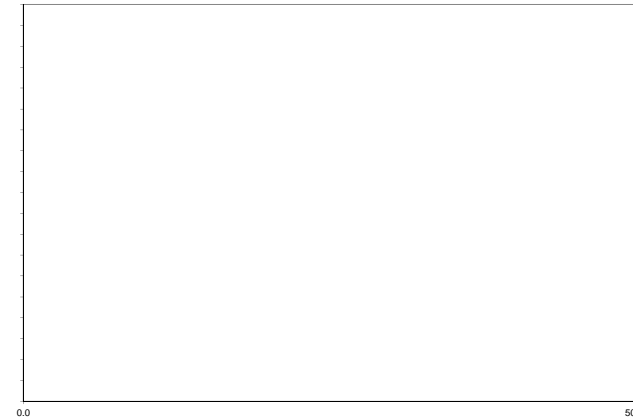
Intake in % of the ARfD

Acute exposure: Amitraz / Peaches



Intake in % of the ARfD

Acute exposure: Amitraz / Strawberries



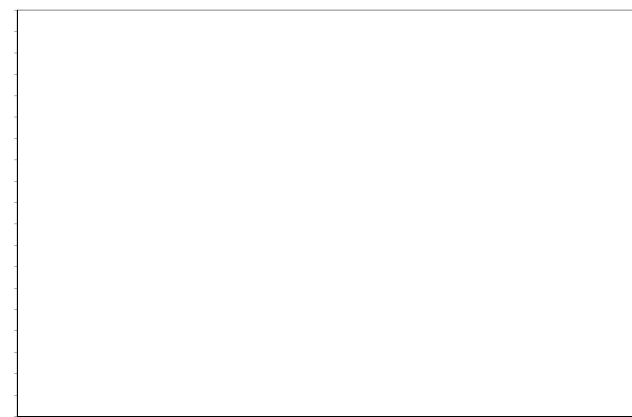
Intake in % of the ARfD

Acute exposure: Amitraz / Tomatoes



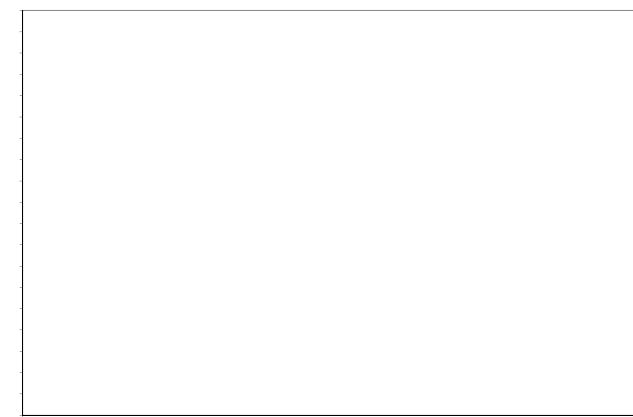
Intake in % of the ARfD

Acute exposure: Amitraz / Head cabbage



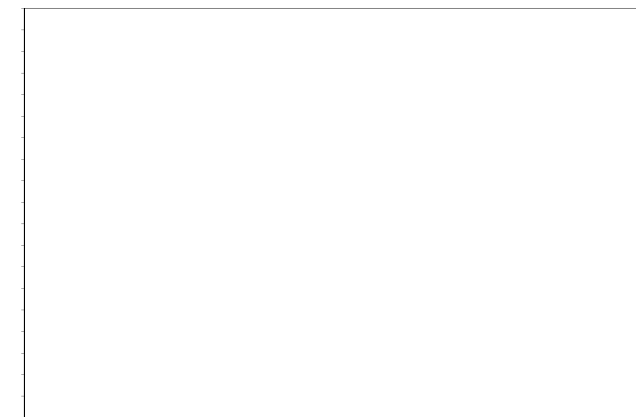
Intake in % of the ARfD

Acute exposure: Amitraz / Lettuce



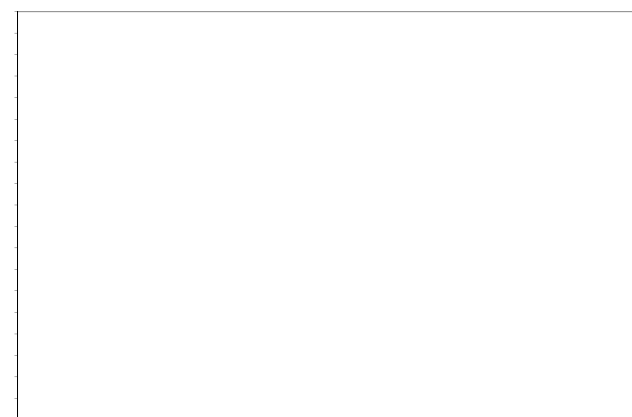
Intake in % of the ARfD

Acute exposure: Amitraz / Leek



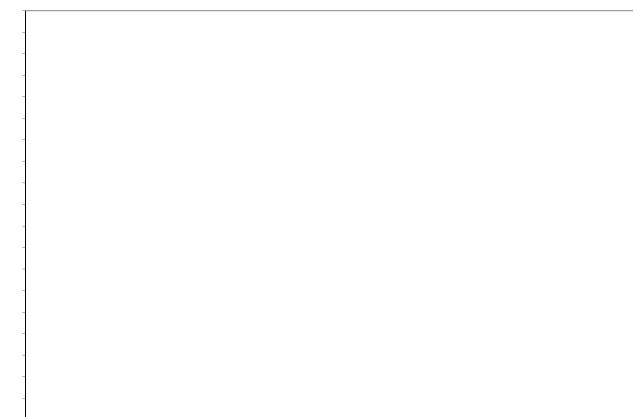
Intake in % of the ARfD

Acute exposure: Amitraz / Oats



Intake in % of the ARfD

Acute exposure: Amitraz / Rye



Intake in % of the ARfD

Amitrole			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:	Yes	Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.001	ARfD (mg/kg bw):	n.n.
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2001	Year of evaluation:	2001

**Chronic risk assessment**

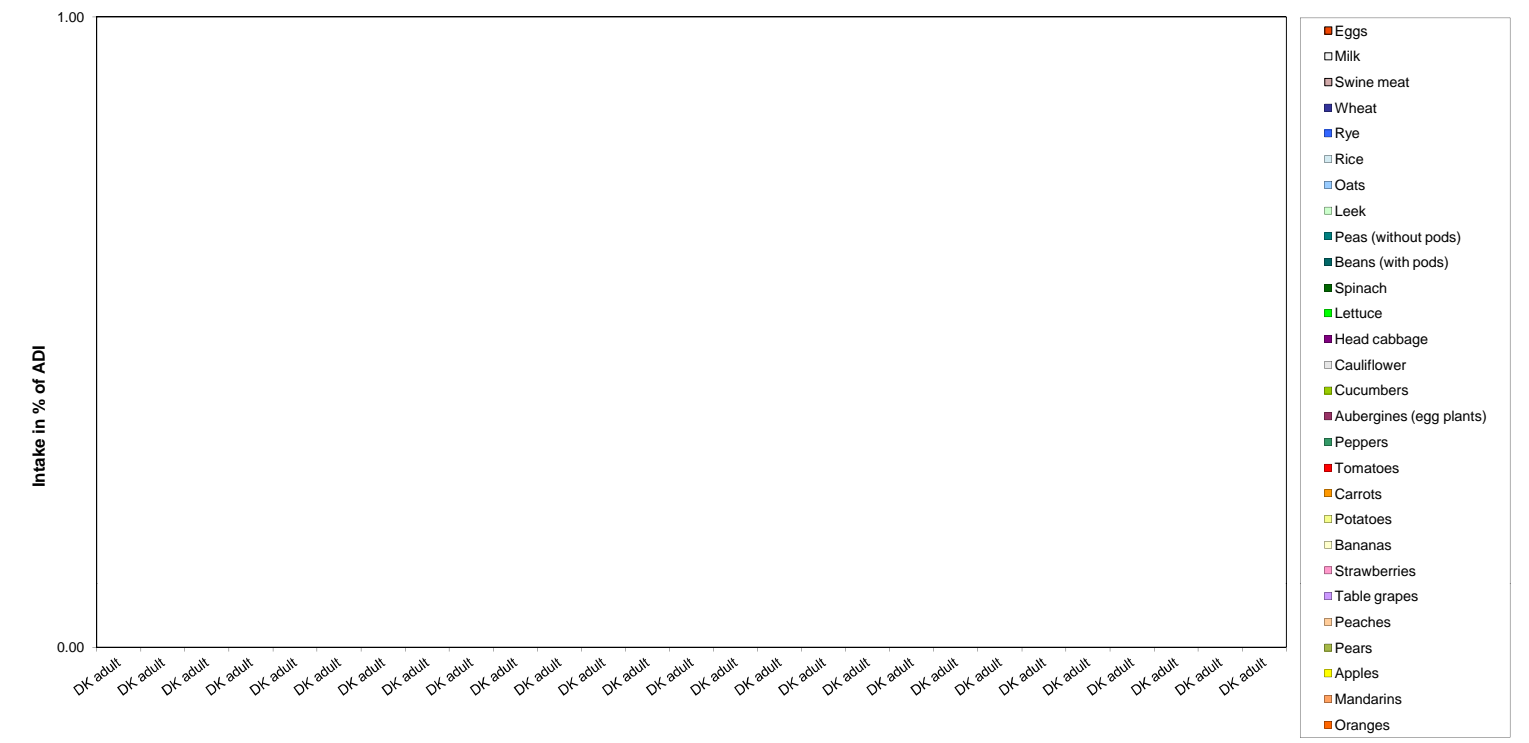
Highest calculated exposure in % of ADI		Exposure (range) in % of ADI minimum - maximum		No of diets exceeding ADI:			
MS Diet		Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
DK adult			FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
DK adult			FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
DK adult			FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
DK adult			FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
DK adult			FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
DK adult			FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
DK adult			FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
DK adult			FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
DK adult			FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
DK adult			FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
DK adult			FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
DK adult			FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
DK adult			FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
DK adult			FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
DK adult			FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
DK adult			FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
DK adult			FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
DK adult			FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
DK adult			FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
DK adult			FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
DK adult			FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
DK adult			FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
DK adult			FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
DK adult			FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
DK adult			FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
DK adult			FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
DK adult			FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
DK adult			FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)

**Acute risk assessment**

Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.01	32							
2010	Peaches	0.01	28							
2010	Strawberries	0.01	27							
2010	Tomatoes	0.01	50							
2010	Head cabbage	0.01	32							
2010	Lettuce	0.01	37							
2010	Leek	0.01	28							
2010	Oats	0.01	8							
2010	Rye	0.01	13							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Amitrole**



**Amitrole**

Acute exposure: Amitrole / Apples



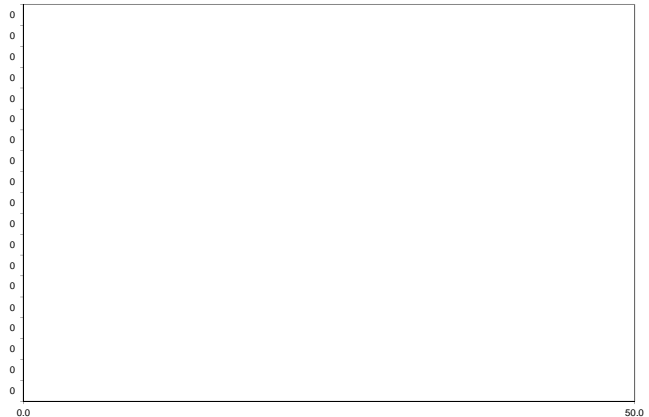
Intake in % of the ARfD

Acute exposure: Amitrole / Peaches



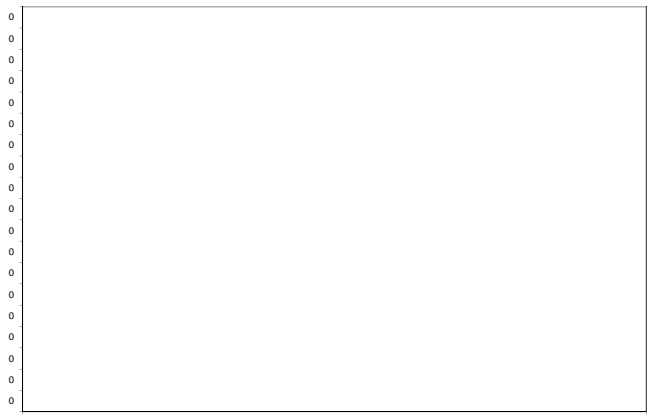
Intake in % of the ARfD

Acute exposure: Amitrole / Strawberries



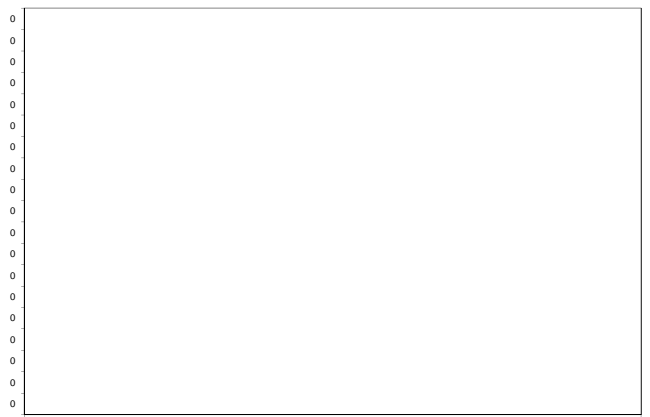
Intake in % of the ARfD

Acute exposure: Amitrole / Tomatoes



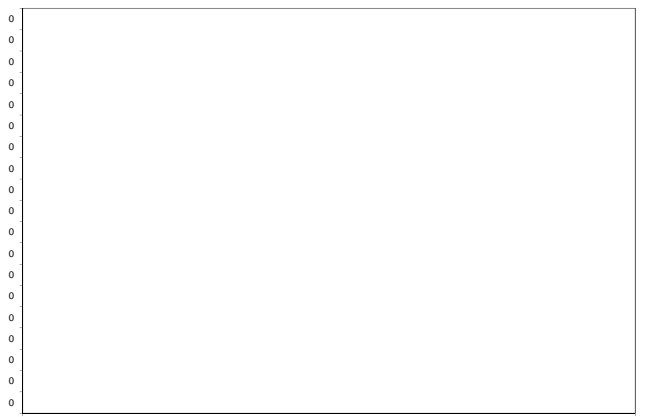
Intake in % of the ARfD

Acute exposure: Amitrole / Head cabbage



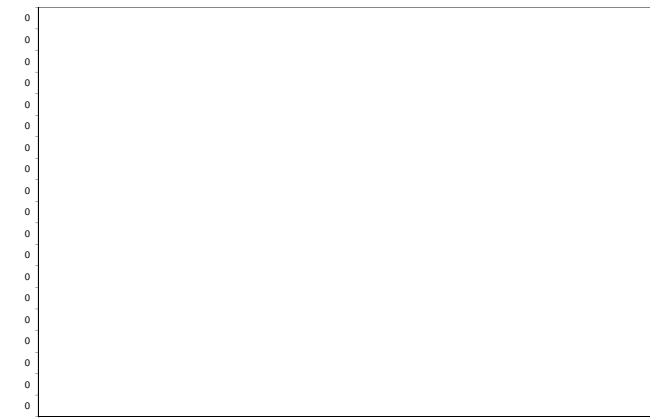
Intake in % of the ARfD

Acute exposure: Amitrole / Lettuce



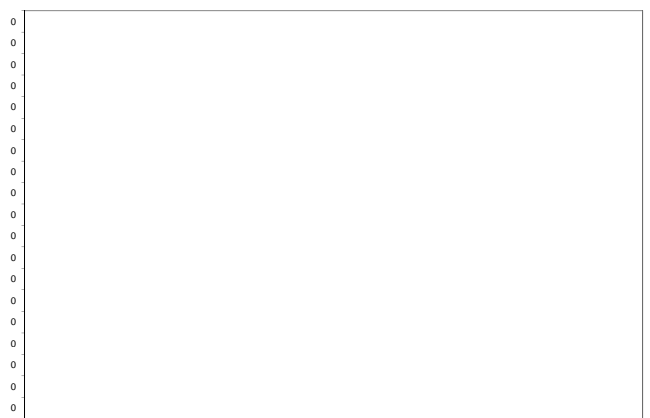
Intake in % of the ARfD

Acute exposure: Amitrole / Leek



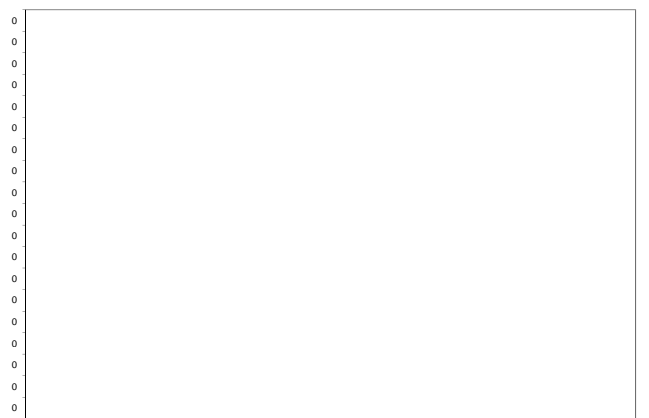
Intake in % of the ARfD

Acute exposure: Amitrole / Oats



Intake in % of the ARfD

Acute exposure: Amitrole / Rye



Intake in % of the ARfD

Azinphos-ethyl			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:	Yes	Analysed on animal (A) or plant (P) products:	A
Toxicological end points			
ADI (mg/kg bw/day):		ARfD (mg/kg bw):	
Source of ADI:	JMPR	Source of ARfD:	
Year of evaluation:	1976	Year of evaluation:	

No ADI was assigned by JMPR. Active substance was not assessed regarding the setting of an ARfD.

**Chronic risk assessment**

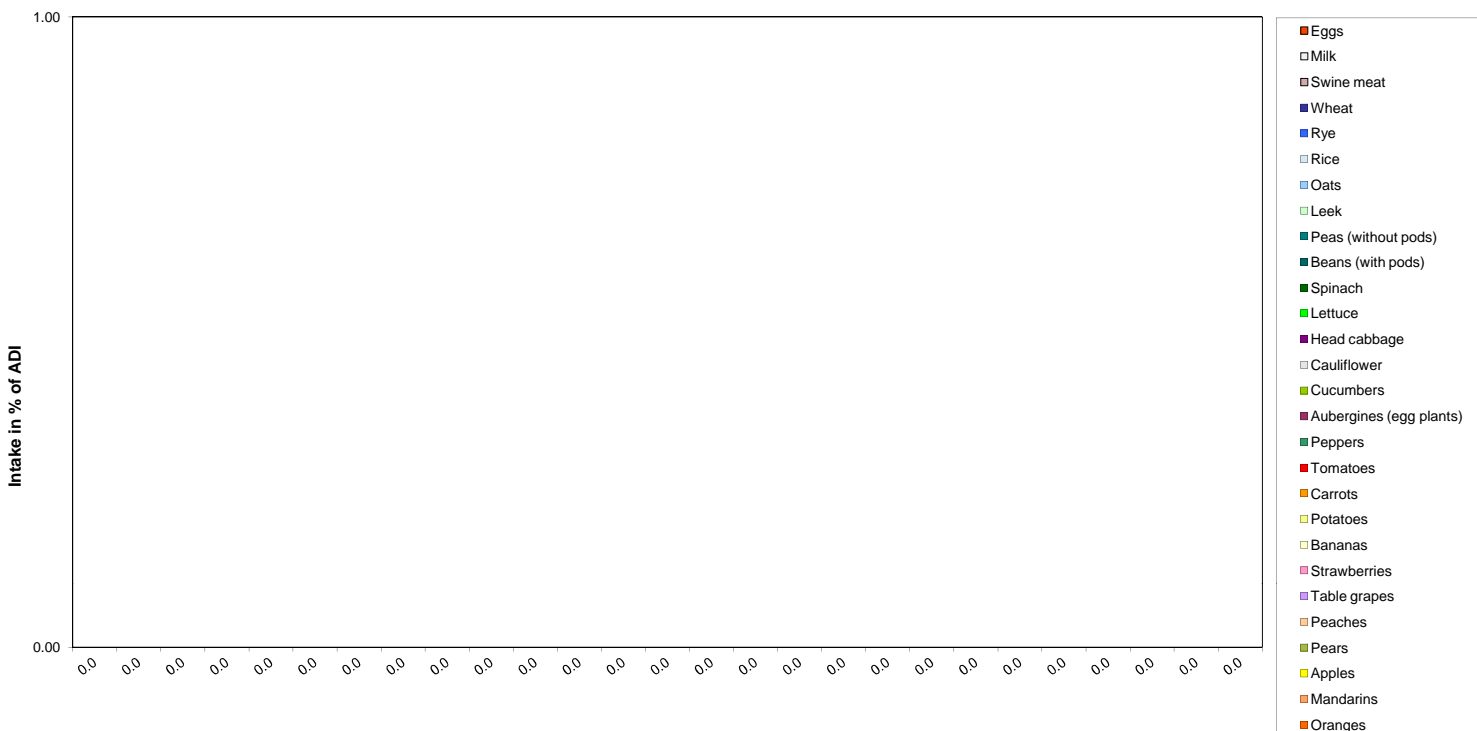
Exposure (range) in % of ADI minimum - maximum		#DIV/0!													
No of diets exceeding ADI: ---															
Highest calculated exposure in % of ADI		MS Diet		Highest contributor to MS diet (in % of ADI)		Commodity / group of commodities		2nd contributor to MS diet (in % of ADI)		Commodity / group of commodities		3rd contributor to MS diet (in % of ADI)		Commodity / group of commodities	
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**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples									
2010	Peaches									
2010	Strawberries									
2010	Tomatoes									
2010	Head cabbage									
2010	Lettuce									
2010	Leek									
2010	Oats									
2010	Rye									
2010	Swine Meat	0.01	423							
2010	Milk	0.01	682							

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Azinphos-ethyl**



**Azinphos-ethyl**

Acute exposure: Azinphos-ethyl / Apples



Intake in % of the ARfD

Acute exposure: Azinphos-ethyl / Peaches



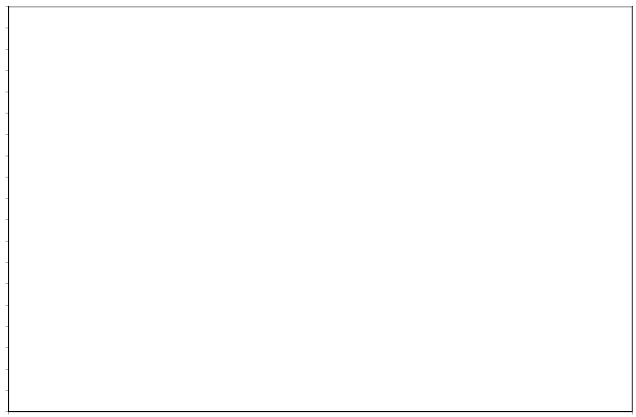
Intake in % of the ARfD

Acute exposure: Azinphos-ethyl / Strawberries



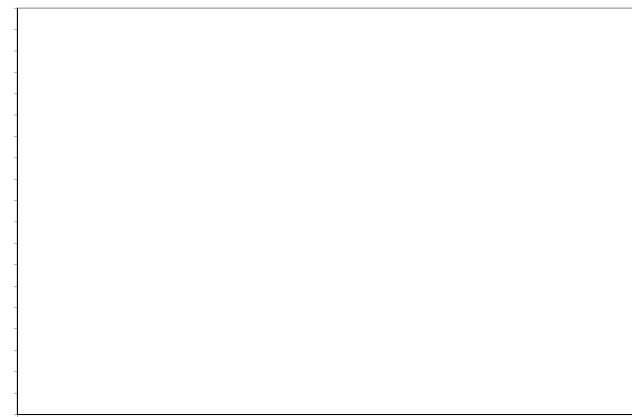
Intake in % of the ARfD

Acute exposure: Azinphos-ethyl / Tomatoes



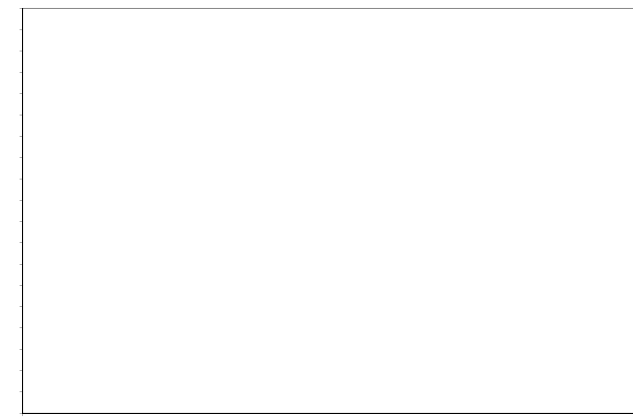
Intake in % of the ARfD

Acute exposure: Azinphos-ethyl / Head cabbage



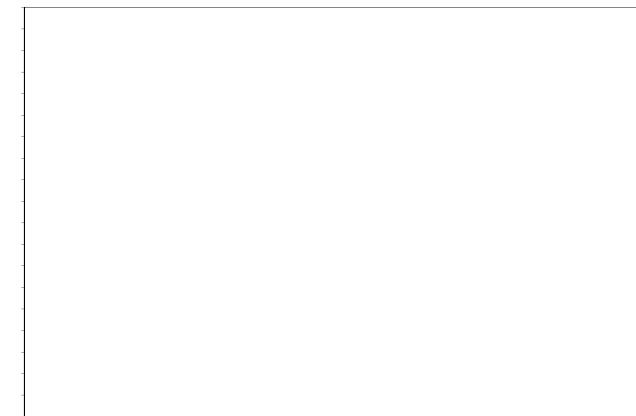
Intake in % of the ARfD

Acute exposure: Azinphos-ethyl / Lettuce



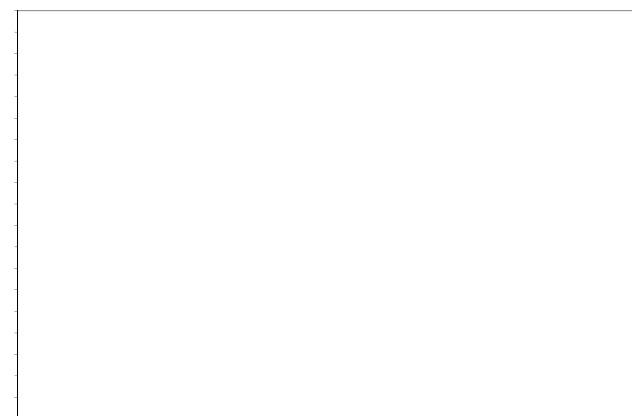
Intake in % of the ARfD

Acute exposure: Azinphos-ethyl / Leek



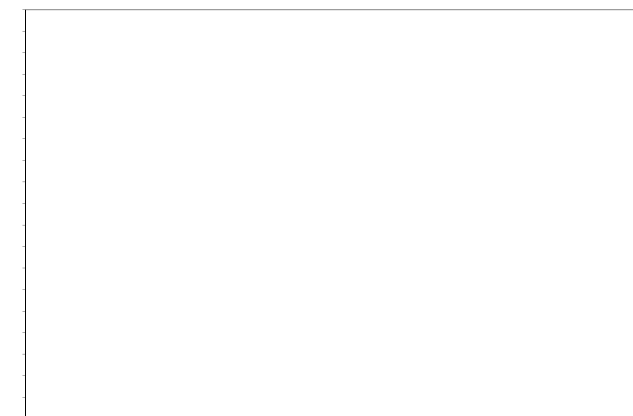
Intake in % of the ARfD

Acute exposure: Azinphos-ethyl / Oats



Intake in % of the ARfD

Acute exposure: Azinphos-ethyl / Rye



Intake in % of the ARfD

## Azinphos-methyl

Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.005	ARfD (mg/kg bw):	0.01
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2006	Year of evaluation:	2006

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
6

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
5.52	DE child	4.46	Apples	0.55	Bananas	0.22	Pears
3.34	NL child	2.34	Apples	0.60	Bananas	0.15	Pears
1.84	FR toddler	0.97	Apples	0.46	Bananas	0.23	Leek
1.67	DK child	0.86	Apples	0.40	Bananas	0.24	Pears
1.48	FR infant	0.92	Apples	0.25	Bananas	0.14	Leek
1.38	SE (GP)	0.64	Bananas	0.39	Apples	0.12	Pears
1.36	UK infant	0.58	Apples	0.52	Bananas	0.15	Rice
1.25	UK toddler	0.63	Apples	0.38	Bananas	0.14	Rice
1.23	IE adult	0.30	Apples	0.28	Bananas	0.24	Pears
1.18	ES child	0.42	Apples	0.36	Bananas	0.16	Pears
1.11	WHO cluster diet B	0.37	Apples	0.17	Peppers	0.16	Peaches
1.02	PT (GP)	0.39	Apples	0.19	Rice	0.14	Peaches
0.99	PL (GP)	0.76	Apples	0.10	Pears	0.07	Bananas
0.84	IT child/toddler	0.33	Apples	0.19	Bananas	0.13	Peaches
0.83	LT adult	0.69	Apples	0.06	Pears	0.05	Rice
0.76	NL (GP)	0.44	Apples	0.11	Bananas	0.06	Leek
0.73	ES adult	0.28	Apples	0.13	Bananas	0.12	Pears
0.67	WHO cluster diet E	0.31	Apples	0.13	Bananas	0.06	Pears
0.66	IT adult	0.29	Apples	0.14	Peaches	0.08	Pears
0.65	WHO regional diet	0.25	Apples	0.13	Bananas	0.08	Peaches
0.60	DK adult	0.29	Apples	0.13	Bananas	0.07	Pears
0.59	WHO Cluster diet F	0.24	Apples	0.20	Bananas	0.05	Rice
0.52	UK vegetarian	0.22	Apples	0.13	Bananas	0.09	Rice
0.51	WHO cluster diet D	0.25	Apples	0.13	Rice	0.04	Bananas
0.45	FR (GP)	0.18	Apples	0.09	Bananas	0.05	Peaches
0.42	UK adult	0.15	Apples	0.13	Bananas	0.09	Rice
0.29	FI adult	0.15	Apples	0.09	Bananas	0.03	Rice

## Acute risk assessment

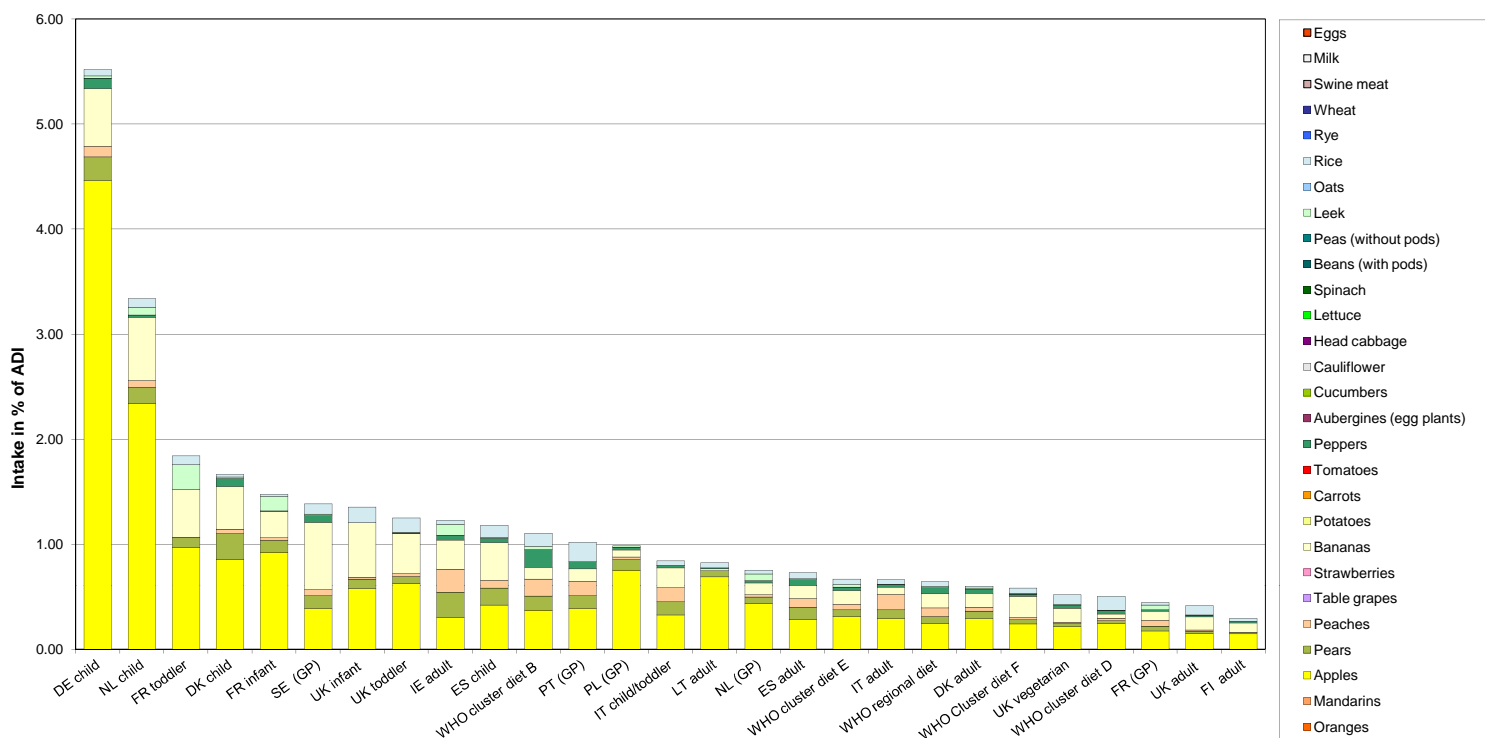
Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	3072	0.52	0.03	0.07		66.62	UK infant	
2010	Peaches	0.05	1500	0.27		0.05		27.89	DE child	
2010	Strawberries	0.05	2331	0.04		0.02		3.12	DE child	
2010	Tomatoes	0.05	2524							
2010	Head cabbage	0.05	1211							
2010	Lettuce	0.05	2401							
2010	Leek	0.05	951	0.11		0.01		6.48	BE child	
2010	Oats	0.05	184							
2010	Rye	0.05	475							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

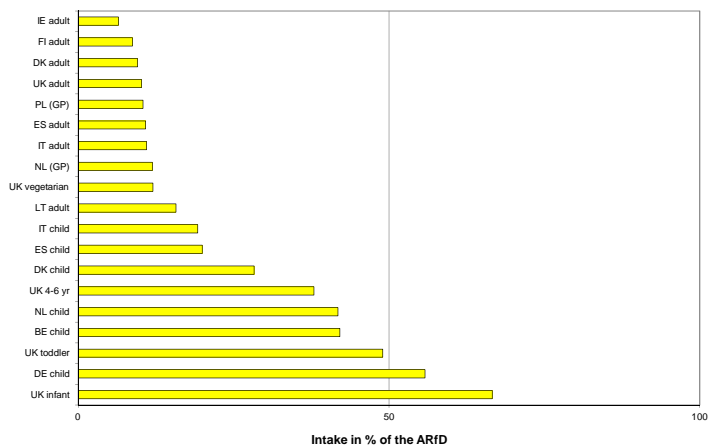
c) TRL: toxicological threshold level

## Chronic risk assessment: Azinphos-methyl

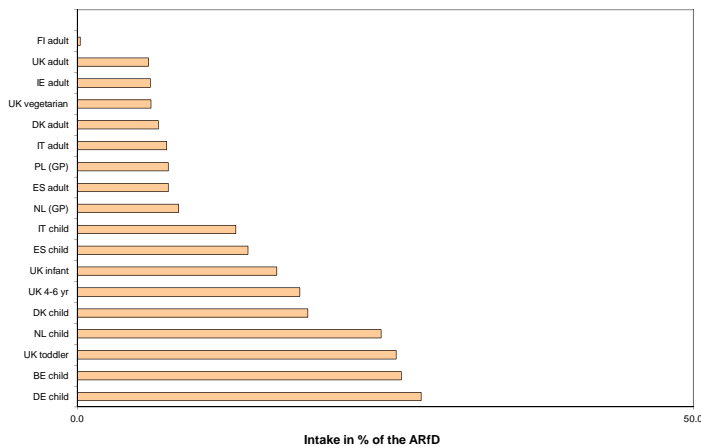


**Azinphos-methyl**

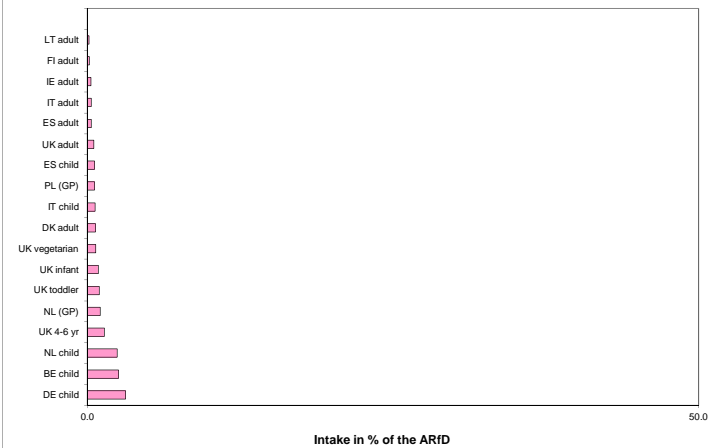
Acute exposure: Azinphos-methyl / Apples



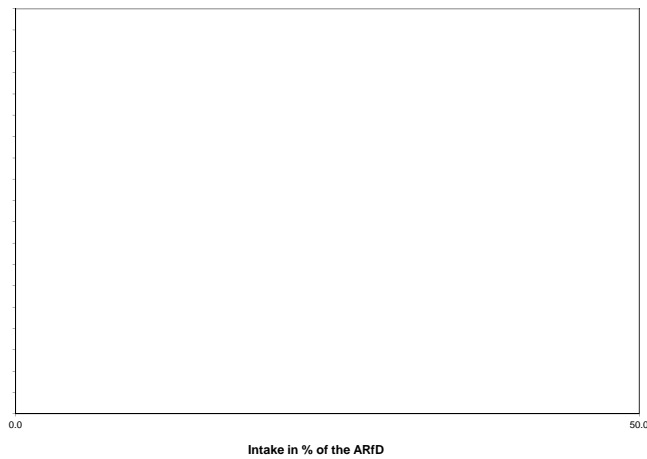
Acute exposure: Azinphos-methyl / Peaches



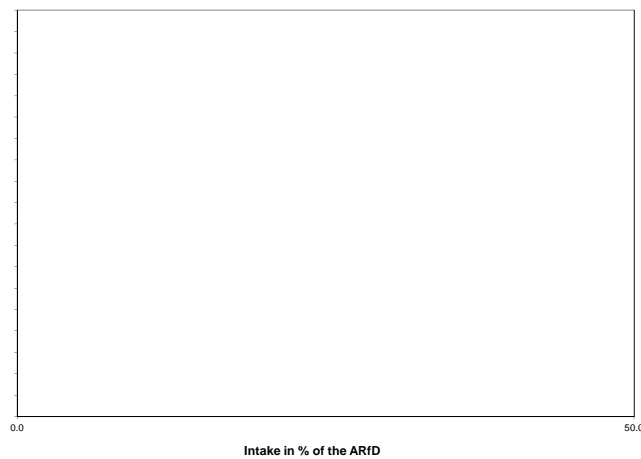
Acute exposure: Azinphos-methyl / Strawberries



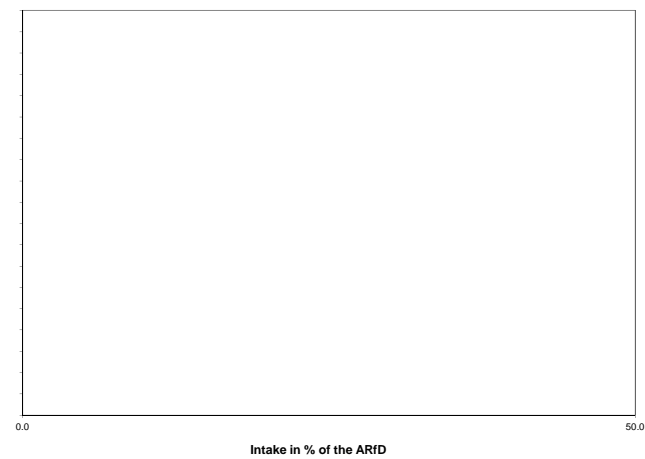
Acute exposure: Azinphos-methyl / Tomatoes



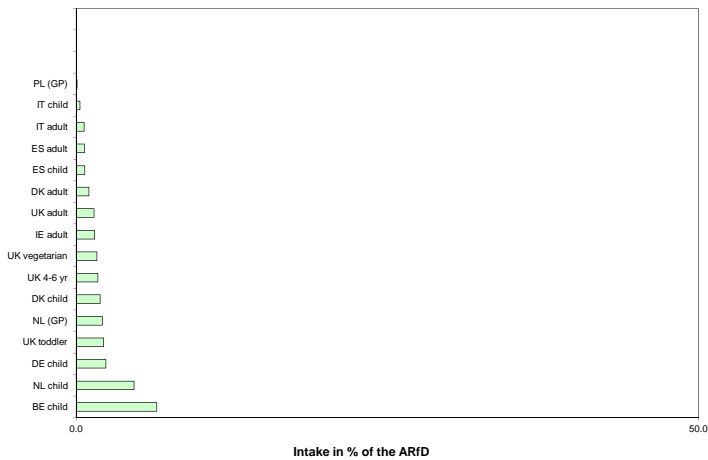
Acute exposure: Azinphos-methyl / Head cabbage



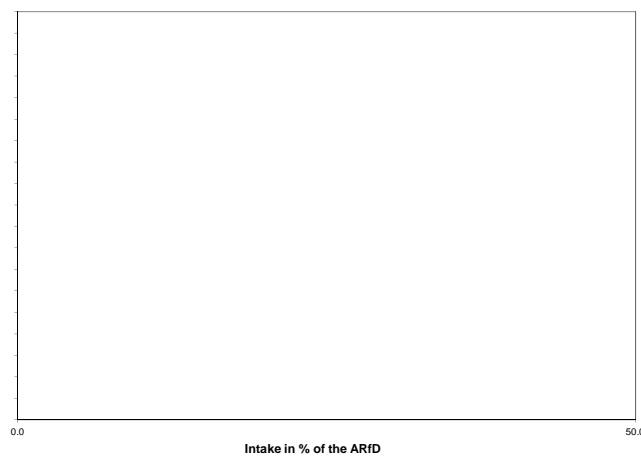
Acute exposure: Azinphos-methyl / Lettuce



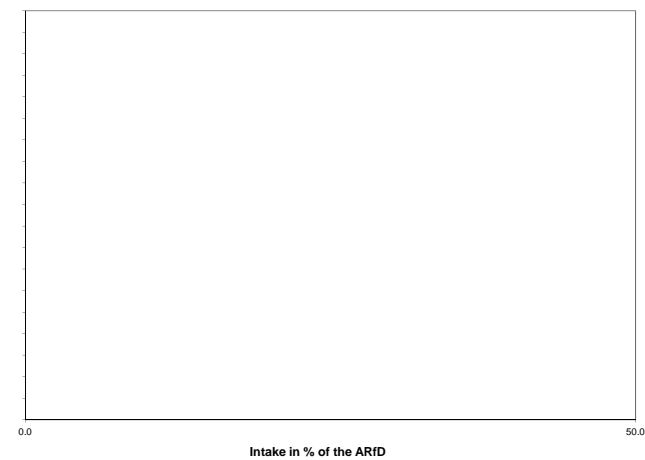
Acute exposure: Azinphos-methyl / Leek



Acute exposure: Azinphos-methyl / Oats



Acute exposure: Azinphos-methyl / Rye





## Azoxystrobin

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.2	ARfD (mg/kg bw):	n.n.
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2011	Year of evaluation:	2011

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.24	DE child	0.08	Apples	0.03	Oranges	0.03	Wheat
0.21	NL child	0.04	Apples	0.04	Potatoes	0.03	Wheat
0.17	FR toddler	0.03	Potatoes	0.02	Carrots	0.02	Apples
0.16	WHO cluster diet B	0.06	Wheat	0.03	Tomatoes	0.02	Potatoes
0.15	DK child	0.04	Wheat	0.03	Rye	0.02	Cucumbers
0.12	SE (GP)	0.03	Potatoes	0.02	Bananas	0.02	Wheat
0.11	UK toddler	0.03	Wheat	0.02	Potatoes	0.01	Oranges
0.11	FR infant	0.03	Potatoes	0.02	Carrots	0.02	Apples
0.11	ES child	0.03	Wheat	0.02	Oranges	0.01	Potatoes
0.10	PT (GP)	0.03	Potatoes	0.03	Wheat	0.01	Tomatoes
0.10	UK infant	0.02	Potatoes	0.02	Wheat	0.02	Bananas
0.10	WHO cluster diet D	0.04	Wheat	0.03	Potatoes	0.01	Tomatoes
0.10	IT child/toddler	0.04	Wheat	0.01	Tomatoes	0.01	Bananas
0.09	WHO regional diet	0.03	Potatoes	0.02	Wheat	0.01	Tomatoes
0.09	WHO Cluster diet F	0.02	Wheat	0.02	Potatoes	0.01	Bananas
0.09	WHO cluster diet E	0.03	Wheat	0.02	Potatoes	0.01	Apples
0.09	IE adult	0.02	Wheat	0.01	Potatoes	0.01	Bananas
0.08	NL (GP)	0.02	Potatoes	0.01	Wheat	0.01	Oranges
0.07	IT adult	0.03	Wheat	0.01	Tomatoes	0.01	Lettuce
0.07	ES adult	0.02	Wheat	0.01	Lettuce	0.01	Oranges
0.07	LT adult	0.02	Potatoes	0.01	Apples	0.01	Wheat
0.06	PL (GP)	0.02	Potatoes	0.01	Apples	0.01	Tomatoes
0.06	UK vegetarian	0.01	Wheat	0.01	Potatoes	0.01	Oranges
0.06	FR (GP)	0.02	Wheat	0.01	Potatoes	0.00	Tomatoes
0.05	DK adult	0.01	Wheat	0.01	Potatoes	0.01	Apples
0.05	UK adult	0.01	Wheat	0.01	Potatoes	0.00	Bananas
0.05	FI adult	0.01	Potatoes	0.01	Oranges	0.01	Wheat

## Acute risk assessment

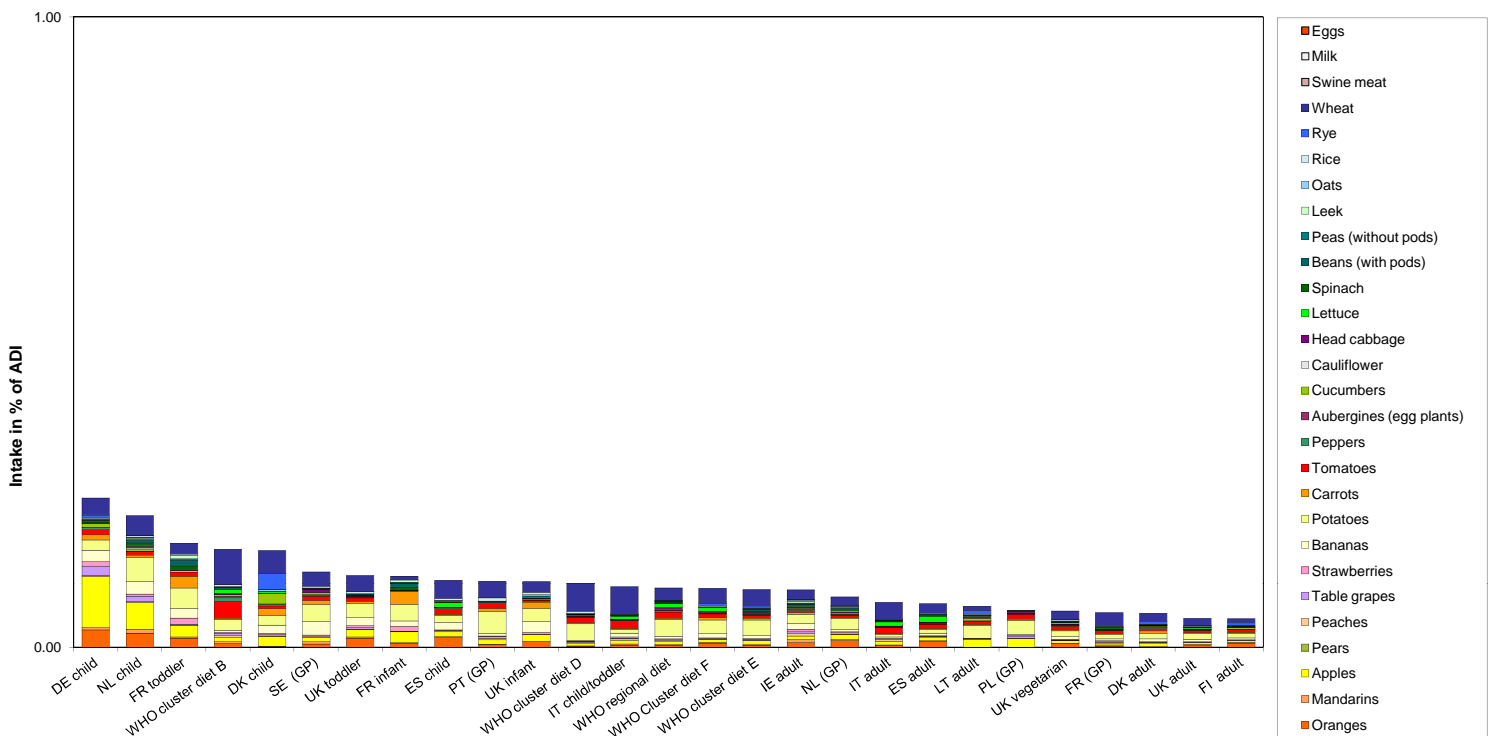
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	3056	0.07		0.03				
2010	Peaches		1509	0.27		0.04				
2010	Strawberries		2301	19.04		1.20				
2010	Tomatoes		2506	5.15		0.65				
2010	Head cabbage		1270	1.02		0.73				
2010	Lettuce	3	2293	6.72	0.13	10.90				
2010	Leek		988	5.16		0.99				
2010	Oats		259	1.54		0.02				
2010	Rye	0.3	455	0.44		0.01				
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

c) TRL: toxicological threshold level

## Chronic risk assessment: Azoxystrobin



**Azoxystrobin**

Acute exposure: Azoxystrobin / Apples



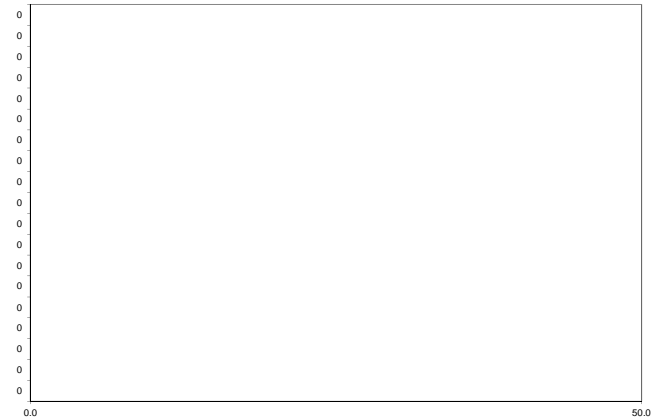
Intake in % of the ARfD

Acute exposure: Azoxystrobin / Peaches



Intake in % of the ARfD

Acute exposure: Azoxystrobin / Strawberries



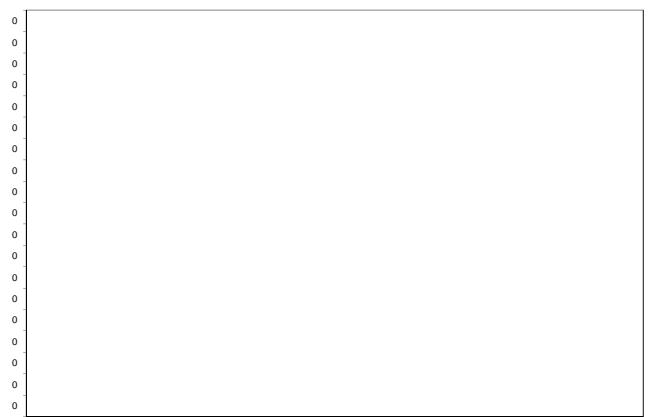
Intake in % of the ARfD

Acute exposure: Azoxystrobin / Tomatoes



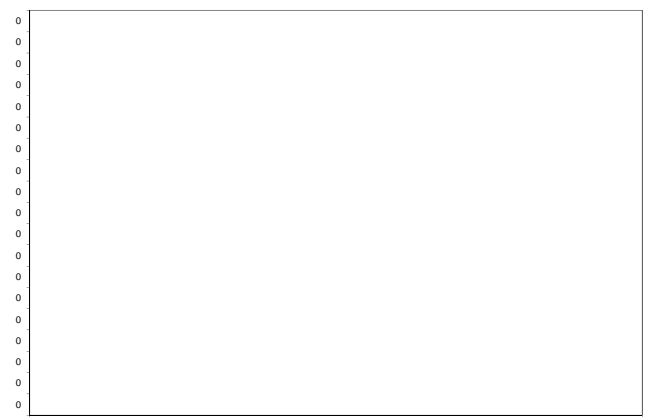
Intake in % of the ARfD

Acute exposure: Azoxystrobin / Head cabbage



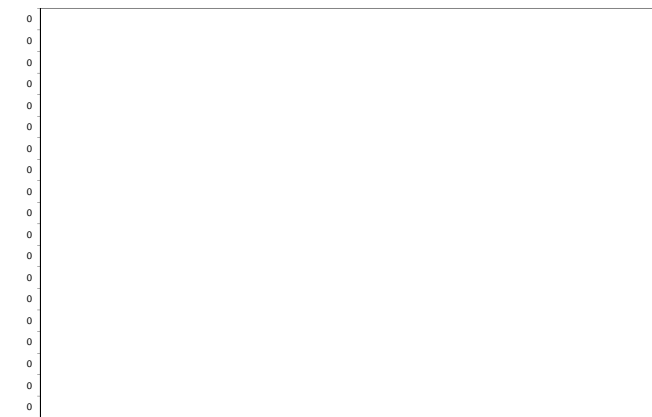
Intake in % of the ARfD

Acute exposure: Azoxystrobin / Lettuce



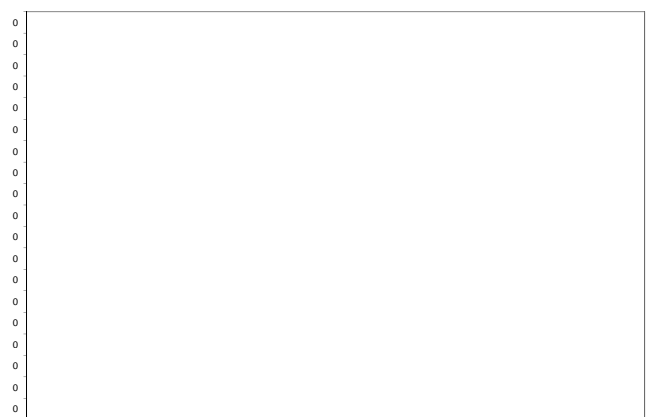
Intake in % of the ARfD

Acute exposure: Azoxystrobin / Leek



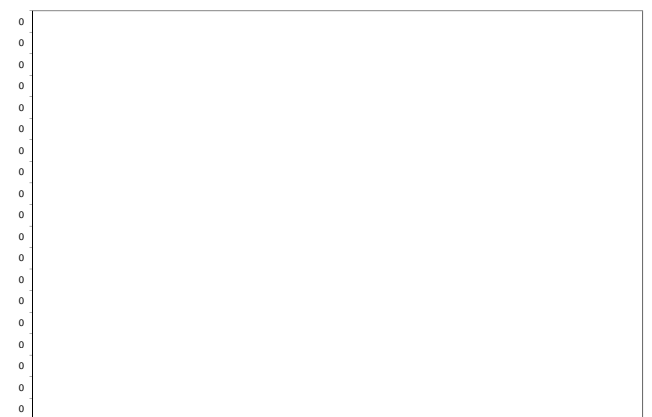
Intake in % of the ARfD

Acute exposure: Azoxystrobin / Oats



Intake in % of the ARfD

Acute exposure: Azoxystrobin / Rye



Intake in % of the ARfD

Benfuracarb			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:	Yes	Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.01	ARfD (mg/kg bw):	0.02
Source of ADI:	EFSA	Source of ARfD:	EFSA
Year of evaluation:	2009	Year of evaluation:	2009

**Chronic risk assessment**

Exposure (range) in % of ADI minimum - maximum		#N/A		#N/A			
No of diets exceeding ADI: ---							
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
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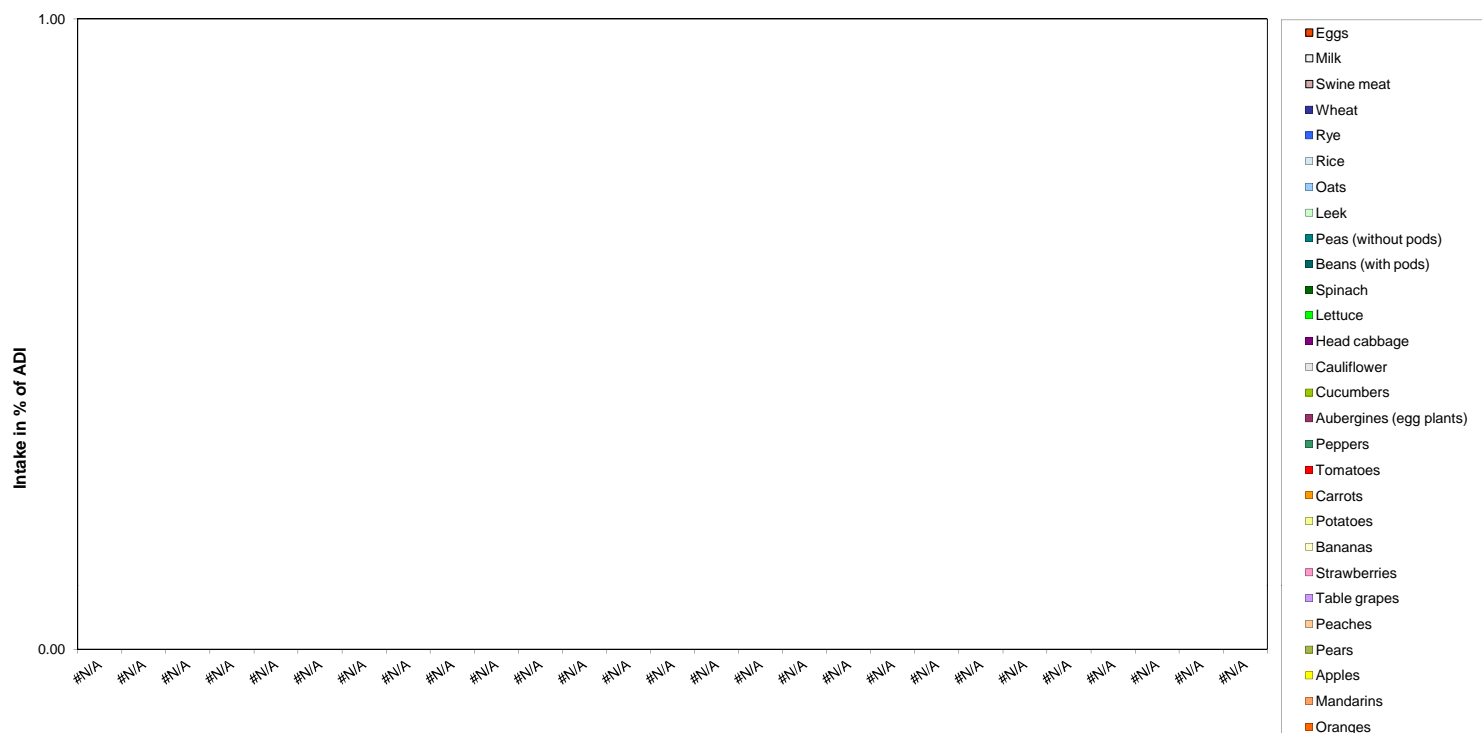
**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	1235							
2010	Peaches	0.05	614							
2010	Strawberries	0.05	1063							
2010	Tomatoes	0.05	1020							
2010	Head cabbage	0.05	577							
2010	Lettuce	0.05	1074							
2010	Leek	0.05	505							
2010	Oats	0.05	82							
2010	Rye	0.05	238							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

c) TRL: toxicological threshold level

**Chronic risk assessment: Benfuracarb**

**Benfuracarb**

Acute exposure: Benfuracarb / Apples



Intake in % of the ARfD

Acute exposure: Benfuracarb / Peaches



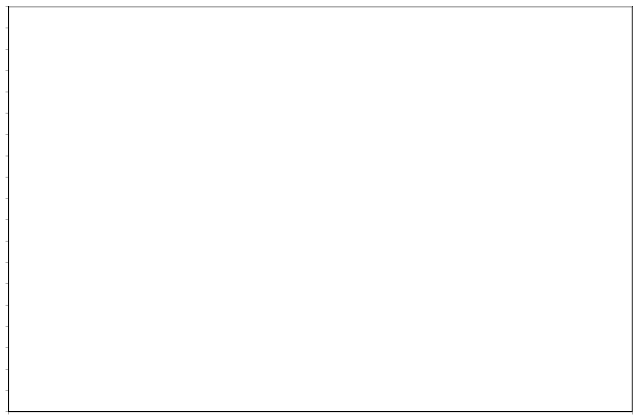
Intake in % of the ARfD

Acute exposure: Benfuracarb / Strawberries



Intake in % of the ARfD

Acute exposure: Benfuracarb / Tomatoes



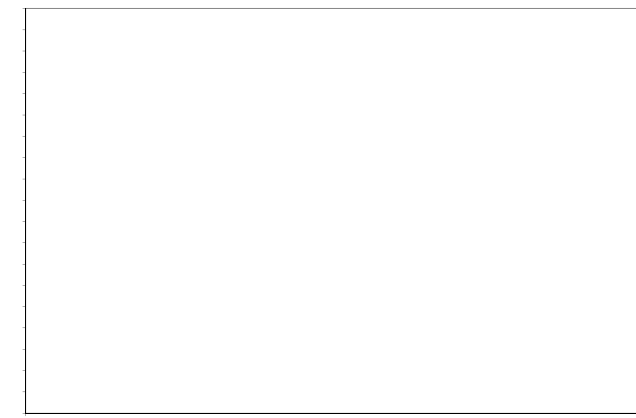
Intake in % of the ARfD

Acute exposure: Benfuracarb / Head cabbage



Intake in % of the ARfD

Acute exposure: Benfuracarb / Lettuce



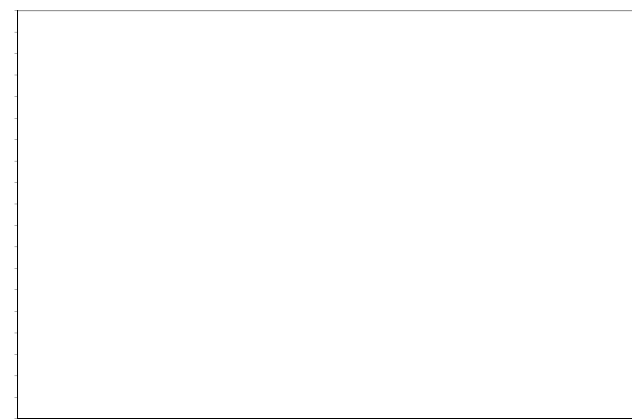
Intake in % of the ARfD

Acute exposure: Benfuracarb / Leek



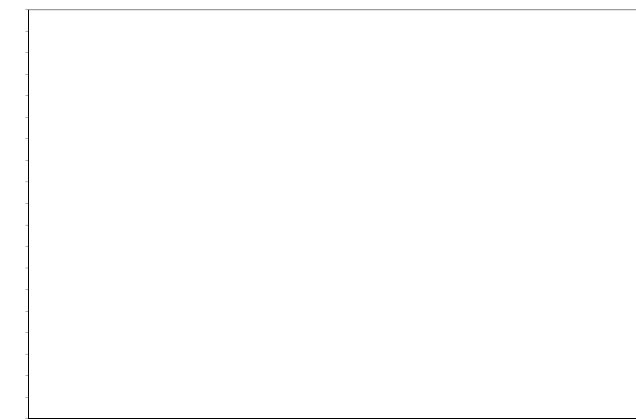
Intake in % of the ARfD

Acute exposure: Benfuracarb / Oats



Intake in % of the ARfD

Acute exposure: Benfuracarb / Rye



Intake in % of the ARfD

Bifenthrin			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P and A
Toxicological end points			
ADI (mg/kg bw/day):	0.015	ARfD (mg/kg bw):	0.03
Source of ADI:	EFSA	Source of ARfD:	EFSA
Year of evaluation:	2011	Year of evaluation:	2011

### Chronic risk assessment

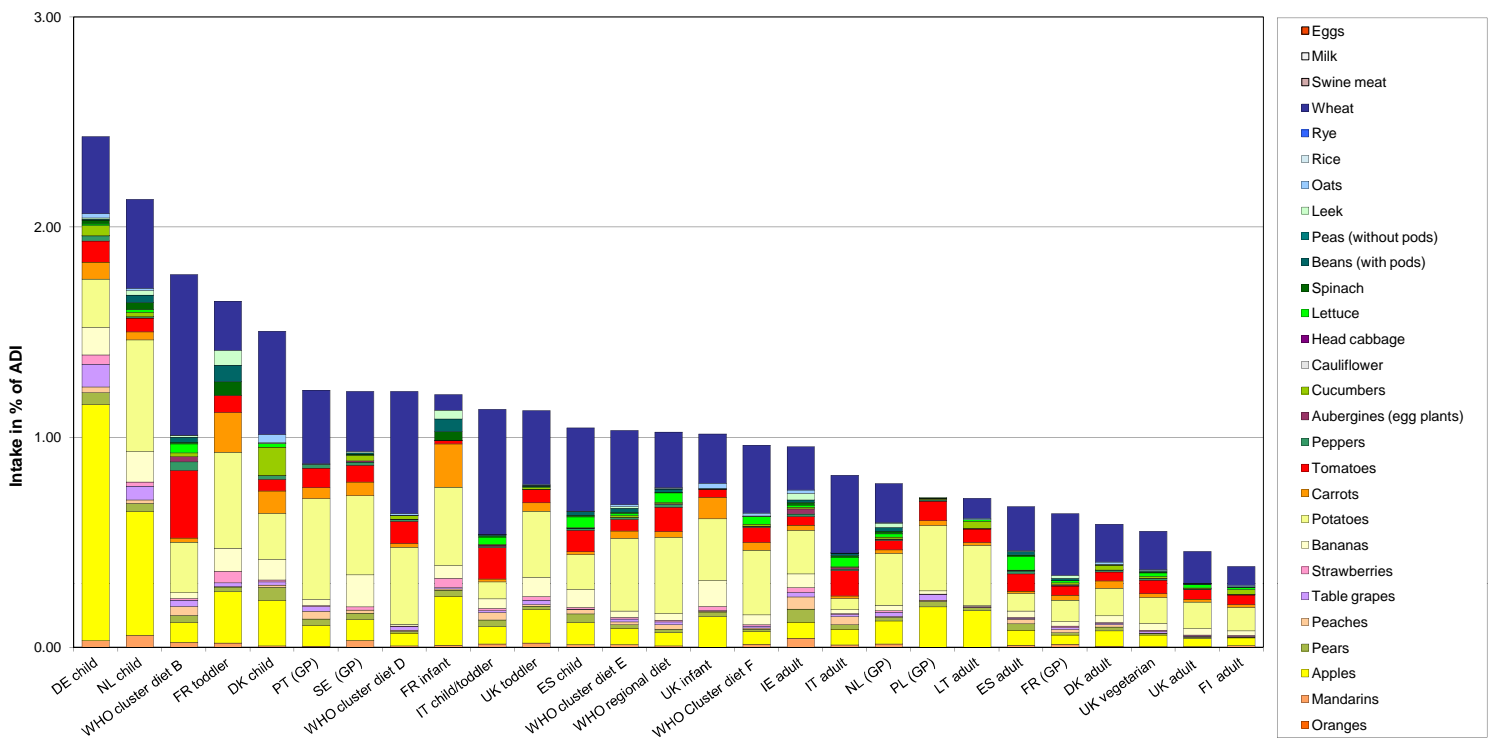
		Exposure (range) in % of ADI minimum - maximum					
		2					
		No of diets exceeding ADI: ---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
2.43	DE child	1.12	Apples	0.37	Wheat	0.23	Potatoes
2.13	NL child	0.59	Apples	0.53	Potatoes	0.42	Wheat
1.77	WHO cluster diet B	0.76	Wheat	0.32	Tomatoes	0.24	Potatoes
1.65	FR toddler	0.46	Potatoes	0.24	Apples	0.23	Wheat
1.50	DK child	0.49	Wheat	0.22	Potatoes	0.22	Apples
1.23	PT (GP)	0.48	Potatoes	0.35	Wheat	0.10	Apples
1.22	SE (GP)	0.38	Potatoes	0.29	Wheat	0.15	Bananas
1.22	WHO cluster diet D	0.58	Wheat	0.37	Potatoes	0.11	Tomatoes
1.20	FR infant	0.37	Potatoes	0.23	Apples	0.21	Carrots
1.13	IT child/toddler	0.59	Wheat	0.15	Tomatoes	0.08	Apples
1.13	UK toddler	0.35	Wheat	0.32	Potatoes	0.16	Apples
1.05	ES child	0.40	Wheat	0.17	Potatoes	0.11	Apples
1.03	WHO cluster diet E	0.35	Wheat	0.35	Potatoes	0.08	Apples
1.03	WHO regional diet	0.36	Potatoes	0.27	Wheat	0.11	Tomatoes
1.02	UK infant	0.29	Potatoes	0.23	Wheat	0.15	Apples
0.96	WHO Cluster diet F	0.32	Wheat	0.31	Potatoes	0.07	Tomatoes
0.95	IE adult	0.21	Potatoes	0.21	Wheat	0.08	Apples
0.82	IT adult	0.37	Wheat	0.12	Tomatoes	0.07	Apples
0.78	NL (GP)	0.25	Potatoes	0.19	Wheat	0.11	Apples
0.71	PL (GP)	0.31	Potatoes	0.19	Apples	0.09	Tomatoes
0.71	LT adult	0.29	Potatoes	0.17	Apples	0.09	Wheat
0.67	ES adult	0.21	Wheat	0.08	Potatoes	0.08	Tomatoes
0.64	FR (GP)	0.29	Wheat	0.10	Potatoes	0.05	Tomatoes
0.59	DK adult	0.18	Wheat	0.13	Potatoes	0.07	Apples
0.55	UK vegetarian	0.18	Wheat	0.12	Potatoes	0.06	Tomatoes
0.46	UK adult	0.15	Wheat	0.13	Potatoes	0.05	Tomatoes
0.38	FI adult	0.11	Potatoes	0.09	Wheat	0.04	Tomatoes

### Acute risk assessment

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.3	3160	1.52		0.16		51.27	UK infant	
2010	Peaches	0.2	1532	3.92	0.07	0.25		49.44	DE child	
2010	Strawberries	0.5	2317	2.03		0.15		7.80	DE child	
2010	Tomatoes	0.2	2613	1.95	0.08	0.30		58.15	BE child	
2010	Head cabbage	1	1266							
2010	Lettuce	2	2389	3.47		1.25	2	112.10	DE child	
2010	Leek	0.05	1008	0.10		0.01		1.96	BE child	
2010	Oats	0.5	265	0.38		0.01		0.16	DE child	
2010	Rye	0.05	450							
2010	Swine Meat	0.05	479							
2010	Milk	0.01	593							

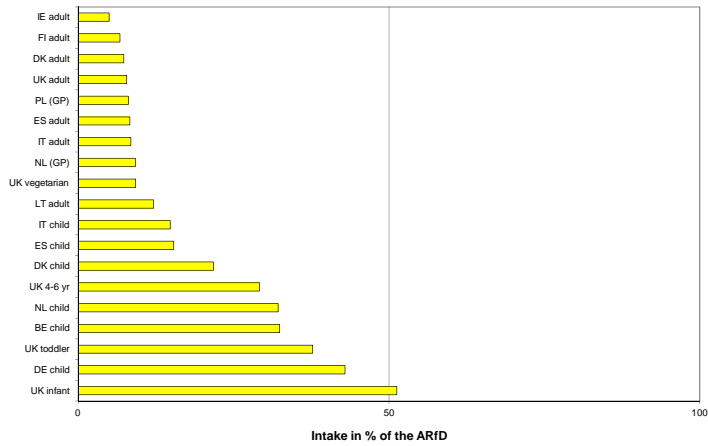
a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

### Chronic risk assessment: Bifenthrin

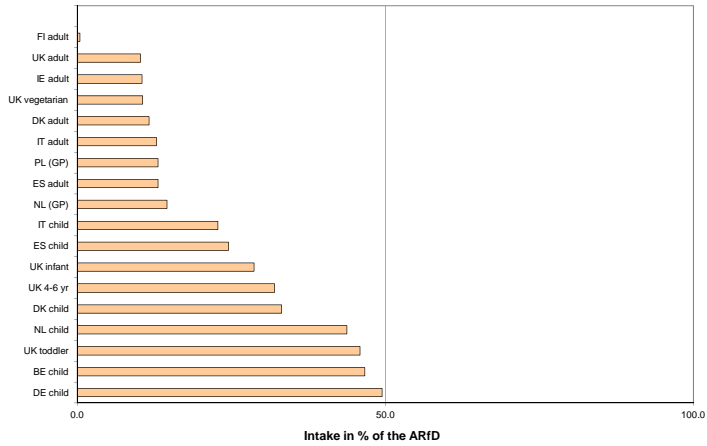


**Bifenthrin**

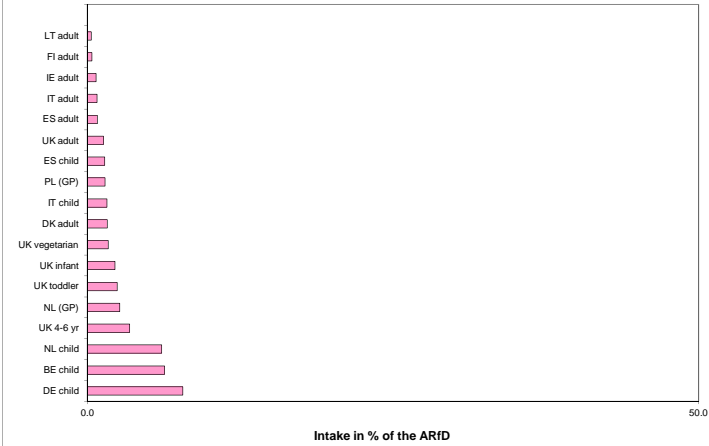
Acute exposure: Bifenthrin / Apples



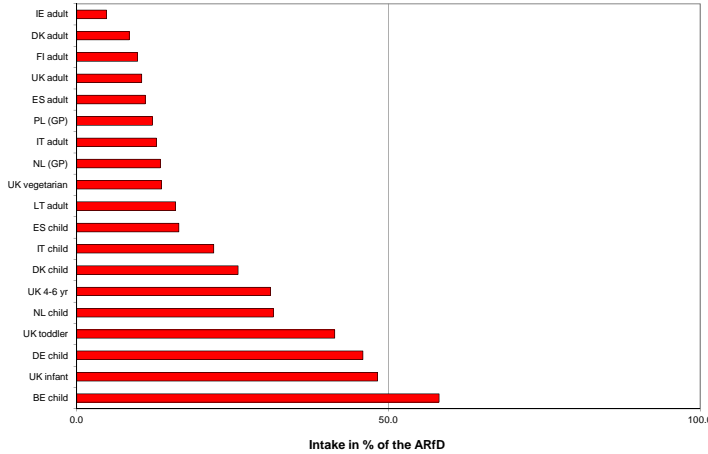
Acute exposure: Bifenthrin / Peaches



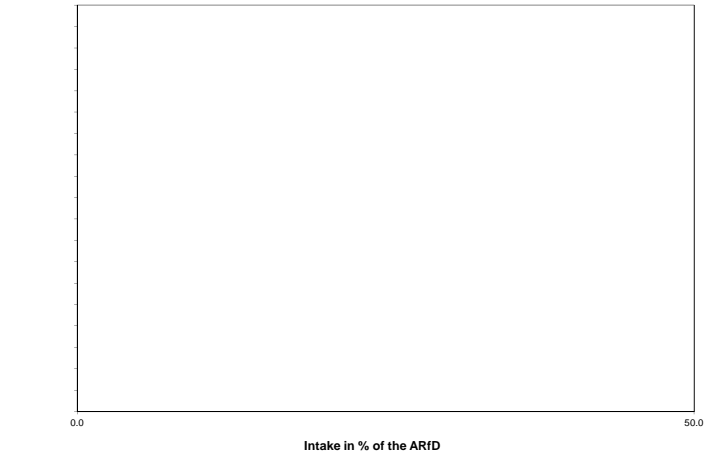
Acute exposure: Bifenthrin / Strawberries



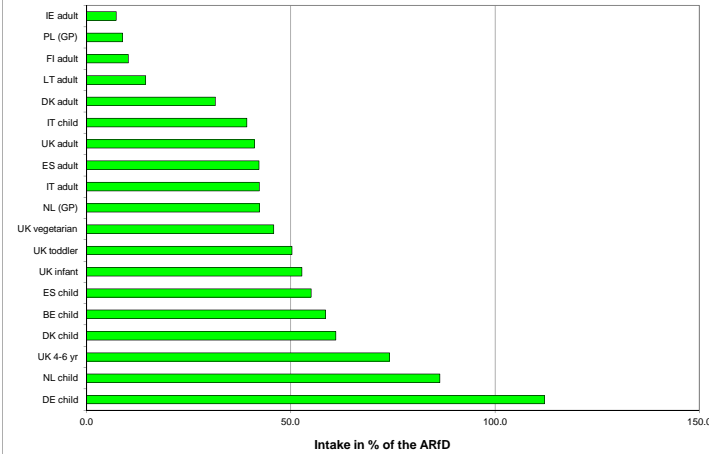
Acute exposure: Bifenthrin / Tomatoes



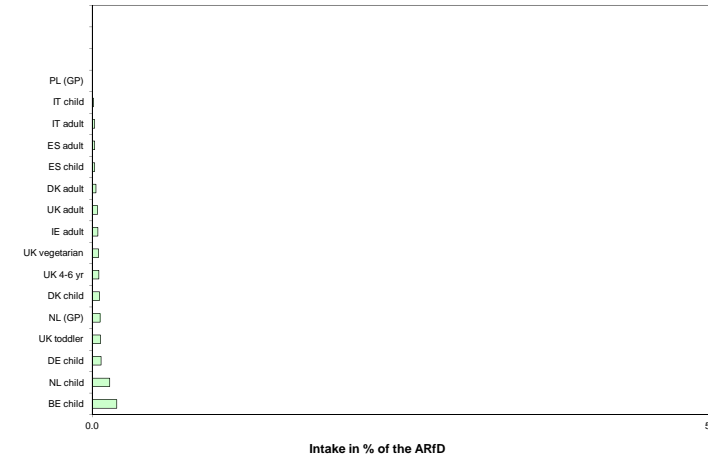
Acute exposure: Bifenthrin / Head cabbage



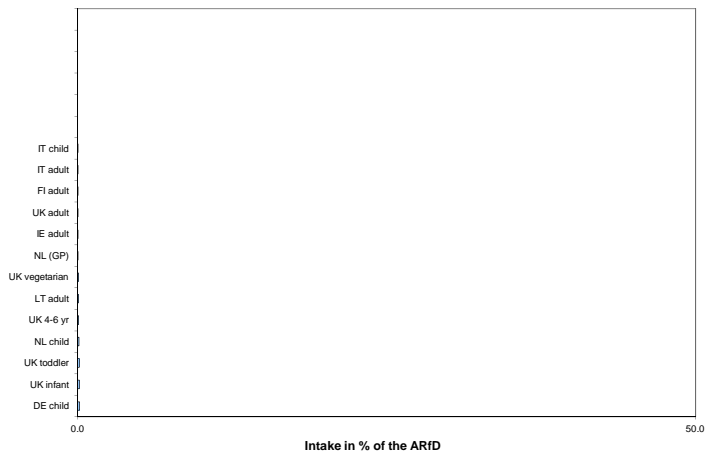
Acute exposure: Bifenthrin / Lettuce



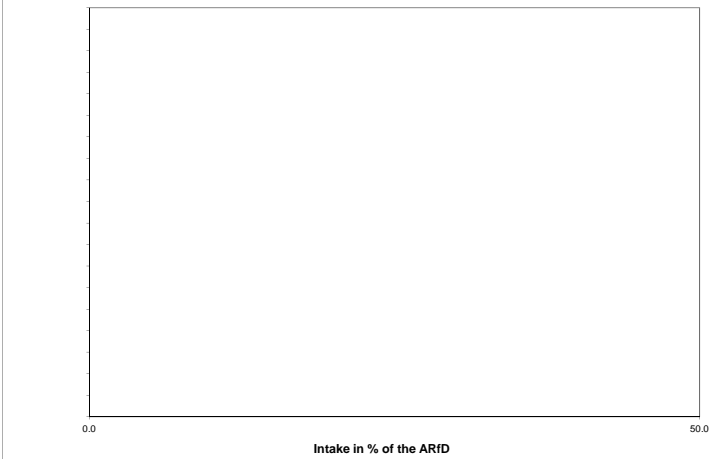
Acute exposure: Bifenthrin / Leek



Acute exposure: Bifenthrin / Oats



Acute exposure: Bifenthrin / Rye



Bitertanol			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.003	ARfD (mg/kg bw):	0.01
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2011	Year of evaluation:	2011

### Chronic risk assessment

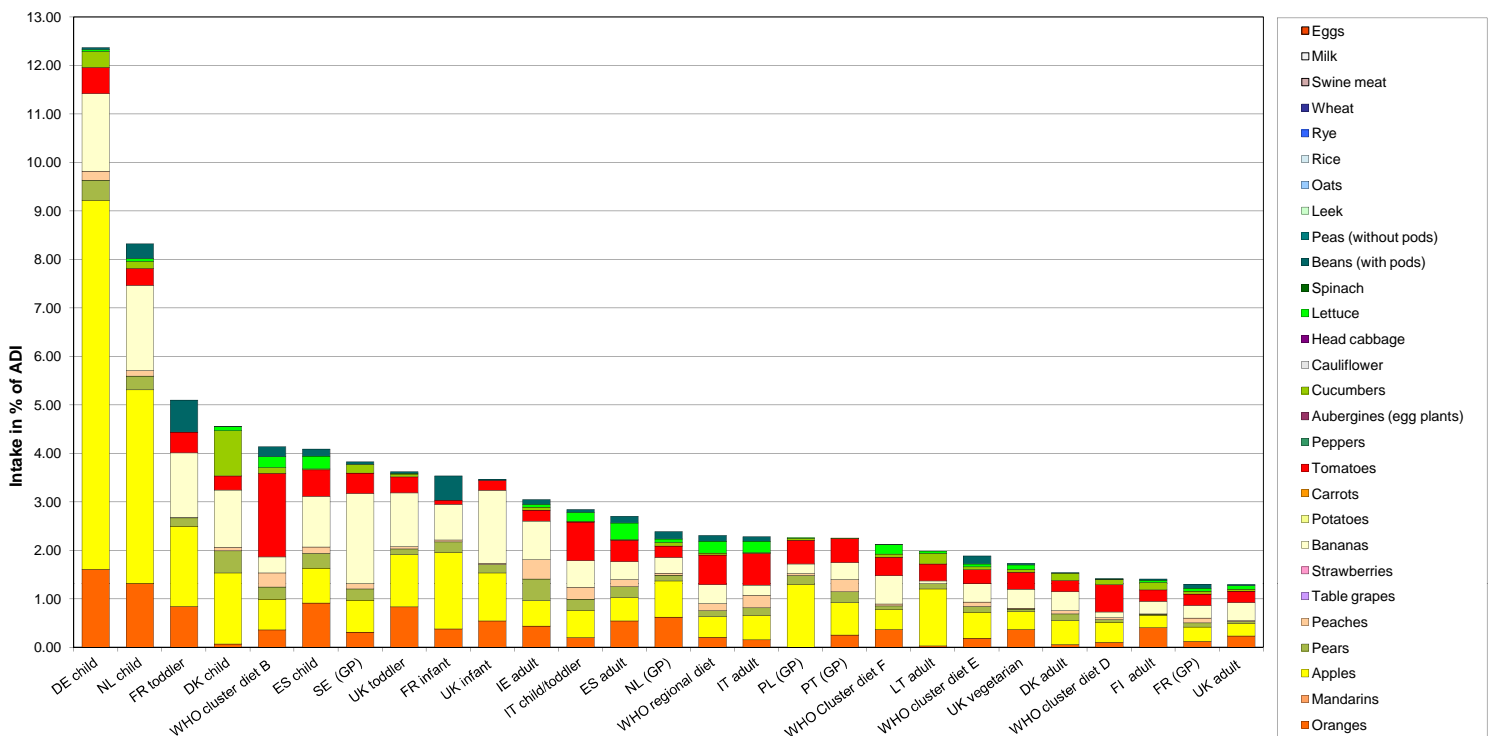
		Exposure (range) in % of ADI minimum - maximum					
		1	12				
No of diets exceeding ADI: ---							
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
12.37	DE child	7.61	Apples	1.61	Oranges	1.59	Bananas
8.32	NL child	3.99	Apples	1.75	Bananas	1.32	Oranges
5.10	FR toddler	1.65	Apples	1.33	Bananas	0.85	Oranges
4.56	DK child	1.46	Apples	1.18	Bananas	0.93	Cucumbers
4.14	WHO cluster diet B	1.72	Tomatoes	0.64	Apples	0.36	Oranges
4.09	ES child	1.04	Bananas	0.92	Oranges	0.72	Apples
3.83	SE (GP)	1.86	Bananas	0.66	Apples	0.43	Tomatoes
3.62	UK toddler	1.11	Bananas	1.08	Apples	0.84	Oranges
3.54	FR infant	1.58	Apples	0.74	Bananas	0.50	Beans (with pods)
3.47	UK infant	1.50	Bananas	0.99	Apples	0.55	Oranges
3.05	IE adult	0.80	Bananas	0.52	Apples	0.45	Pears
2.84	IT child/toddler	0.79	Tomatoes	0.56	Apples	0.55	Bananas
2.71	ES adult	0.55	Oranges	0.49	Apples	0.44	Tomatoes
2.39	NL (GP)	0.75	Apples	0.63	Oranges	0.32	Bananas
2.31	WHO regional diet	0.61	Tomatoes	0.42	Apples	0.39	Bananas
2.28	IT adult	0.65	Tomatoes	0.50	Apples	0.26	Peaches
2.26	PL (GP)	1.29	Apples	0.49	Tomatoes	0.19	Bananas
2.26	PT (GP)	0.66	Apples	0.50	Tomatoes	0.35	Bananas
2.12	WHO Cluster diet F	0.58	Bananas	0.41	Apples	0.38	Tomatoes
1.98	LT adult	1.18	Apples	0.35	Tomatoes	0.22	Cucumbers
1.89	WHO cluster diet E	0.53	Apples	0.37	Bananas	0.29	Tomatoes
1.74	UK vegetarian	0.39	Bananas	0.37	Apples	0.37	Oranges
1.54	DK adult	0.50	Apples	0.39	Bananas	0.23	Tomatoes
1.42	WHO cluster diet D	0.56	Tomatoes	0.42	Apples	0.12	Bananas
1.41	FI adult	0.41	Oranges	0.26	Bananas	0.25	Apples
1.31	FR (GP)	0.30	Apples	0.26	Bananas	0.24	Tomatoes
1.30	UK adult	0.36	Bananas	0.26	Apples	0.24	Tomatoes

### Acute risk assessment

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	2	2666	0.71		0.08		75.43	UK infant	
2010	Peaches	1	1265	1.98		0.32	1	189.86	DE child	
2010	Strawberries	0.05	2069							
2010	Tomatoes	3	2058	1.31		0.57	5	333.18	BE child	
2010	Head cabbage	0.05	1071							
2010	Lettuce	0.05	2091	0.05		0.01		3.23	DE child	
2010	Leek	0.05	837							
2010	Oats	0.05	170							
2010	Rye	0.05	400							
2010	Swine Meat									
2010	Milk									

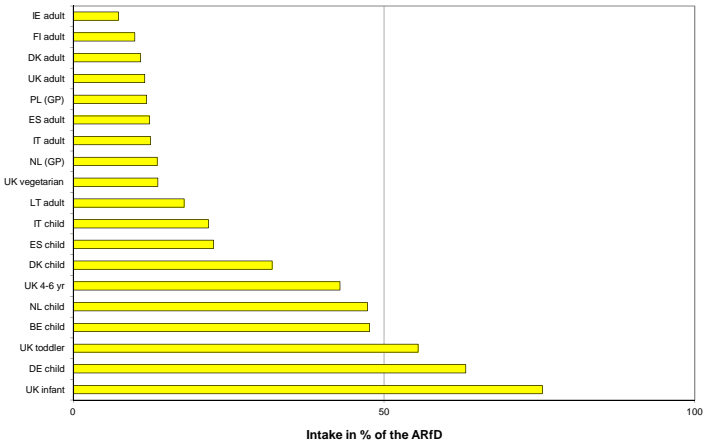
a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

### Chronic risk assessment: Bitertanol

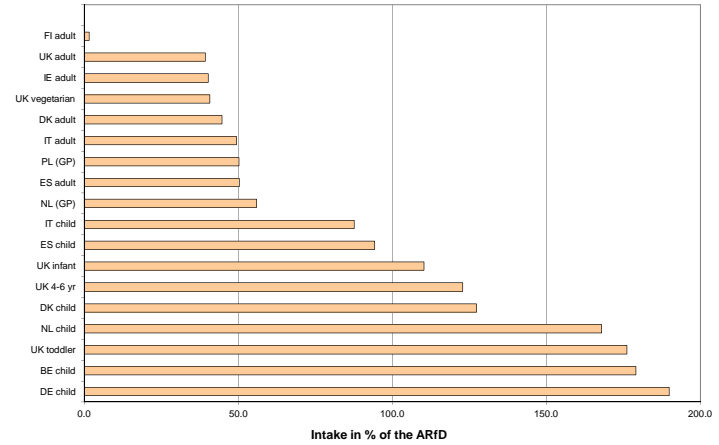


**Bitertanol**

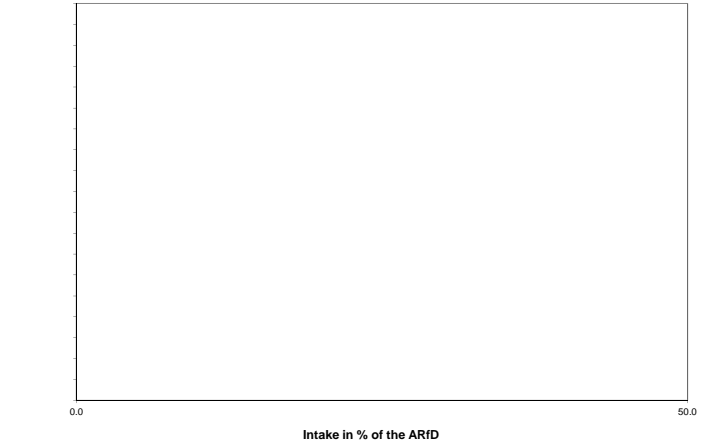
Acute exposure: Bitertanol / Apples



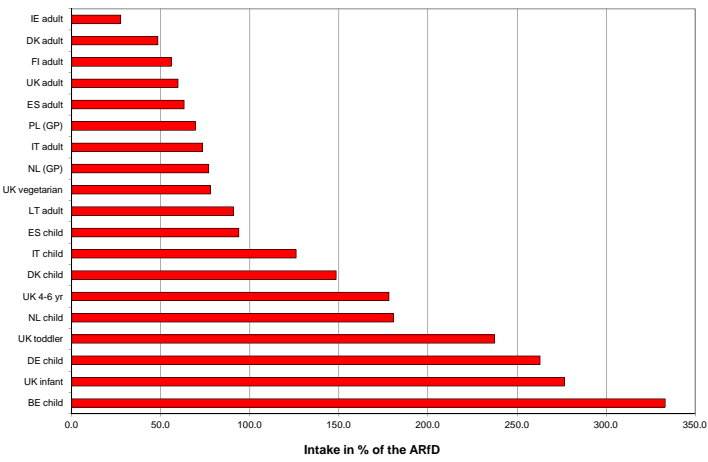
Acute exposure: Bitertanol / Peaches



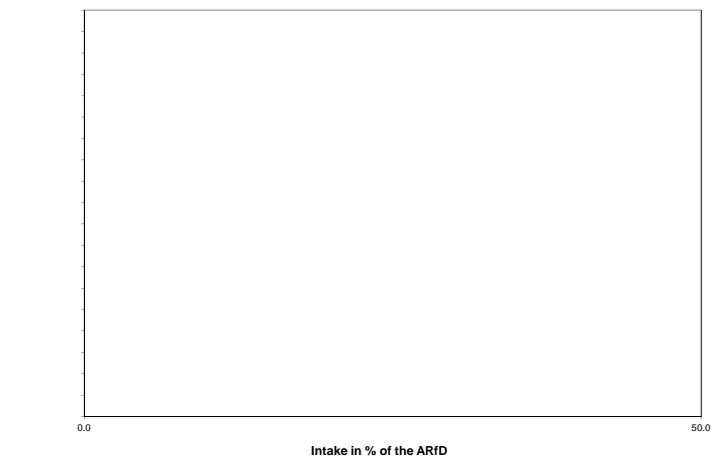
Acute exposure: Bitertanol / Strawberries



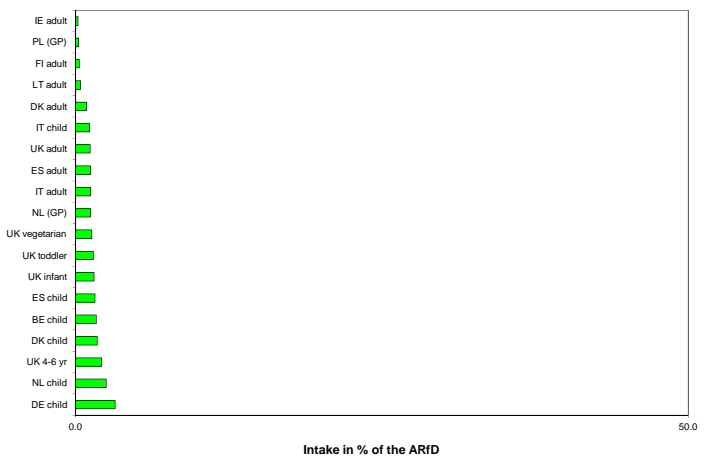
Acute exposure: Bitertanol / Tomatoes



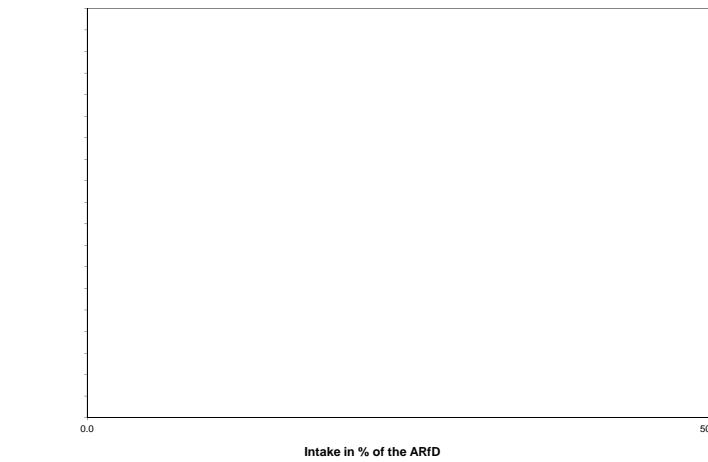
Acute exposure: Bitertanol / Head cabbage



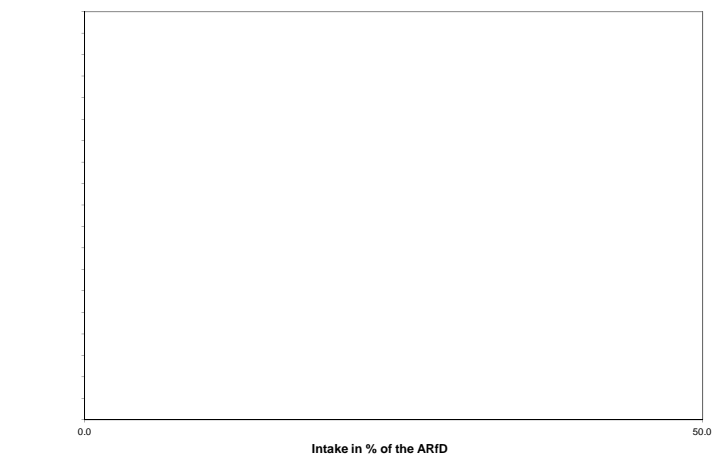
Acute exposure: Bitertanol / Lettuce



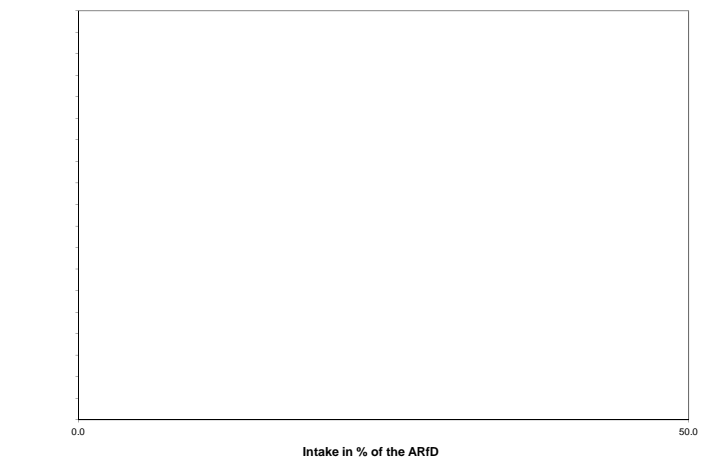
Acute exposure: Bitertanol / Leek



Acute exposure: Bitertanol / Oats



Acute exposure: Bitertanol / Rye





## Boscalid

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.04</b>	ARfD (mg/kg bw):	<b>n.n.</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2008</b>	Year of evaluation:	<b>2008</b>

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum						
		2						
		No of diets exceeding ADI:		---				
	Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
	1.51	DE child	0.61	Apples	0.19	Table grapes	0.14	Wheat
	1.20	NL child	0.32	Apples	0.19	Potatoes	0.16	Wheat
	0.92	FR toddler	0.16	Potatoes	0.13	Apples	0.12	Carrots
	0.89	WHO cluster diet B	0.29	Wheat	0.14	Potatoes	0.09	Potatoes
	0.76	DK child	0.19	Wheat	0.12	Apples	0.08	Potatoes
	0.68	FR infant	0.13	Potatoes	0.13	Carrots	0.13	Apples
	0.60	UK toddler	0.13	Wheat	0.11	Potatoes	0.09	Apples
	0.60	ES child	0.15	Wheat	0.08	Lettuce	0.06	Oranges
	0.59	SE (GP)	0.14	Potatoes	0.11	Wheat	0.06	Bananas
	0.58	PT (GP)	0.17	Potatoes	0.13	Wheat	0.05	Apples
	0.57	IT child/toddler	0.23	Wheat	0.07	Tomatoes	0.06	Lettuce
	0.54	IE adult	0.08	Wheat	0.07	Potatoes	0.06	Pears
	0.54	WHO regional diet	0.13	Potatoes	0.10	Wheat	0.07	Lettuce
	0.54	UK infant	0.11	Potatoes	0.09	Wheat	0.08	Apples
	0.53	WHO cluster diet D	0.22	Wheat	0.13	Potatoes	0.05	Tomatoes
	0.50	WHO cluster diet E	0.14	Wheat	0.12	Potatoes	0.04	Apples
	0.49	WHO Cluster diet F	0.12	Wheat	0.11	Potatoes	0.06	Lettuce
	0.45	NL (GP)	0.09	Potatoes	0.07	Wheat	0.06	Apples
	0.45	IT adult	0.14	Wheat	0.07	Lettuce	0.05	Tomatoes
	0.43	ES adult	0.10	Lettuce	0.08	Wheat	0.04	Apples
	0.38	PL (GP)	0.11	Potatoes	0.10	Apples	0.05	Table grapes
	0.34	LT adult	0.10	Potatoes	0.09	Apples	0.04	Wheat
	0.31	FR (GP)	0.11	Wheat	0.04	Potatoes	0.02	Apples
	0.31	UK vegetarian	0.07	Wheat	0.04	Potatoes	0.03	Apples
	0.28	DK adult	0.07	Wheat	0.05	Potatoes	0.04	Apples
	0.24	UK adult	0.06	Wheat	0.05	Potatoes	0.02	Lettuce
	0.21	FI adult	0.04	Potatoes	0.03	Wheat	0.03	Oranges

### Acute risk assessment

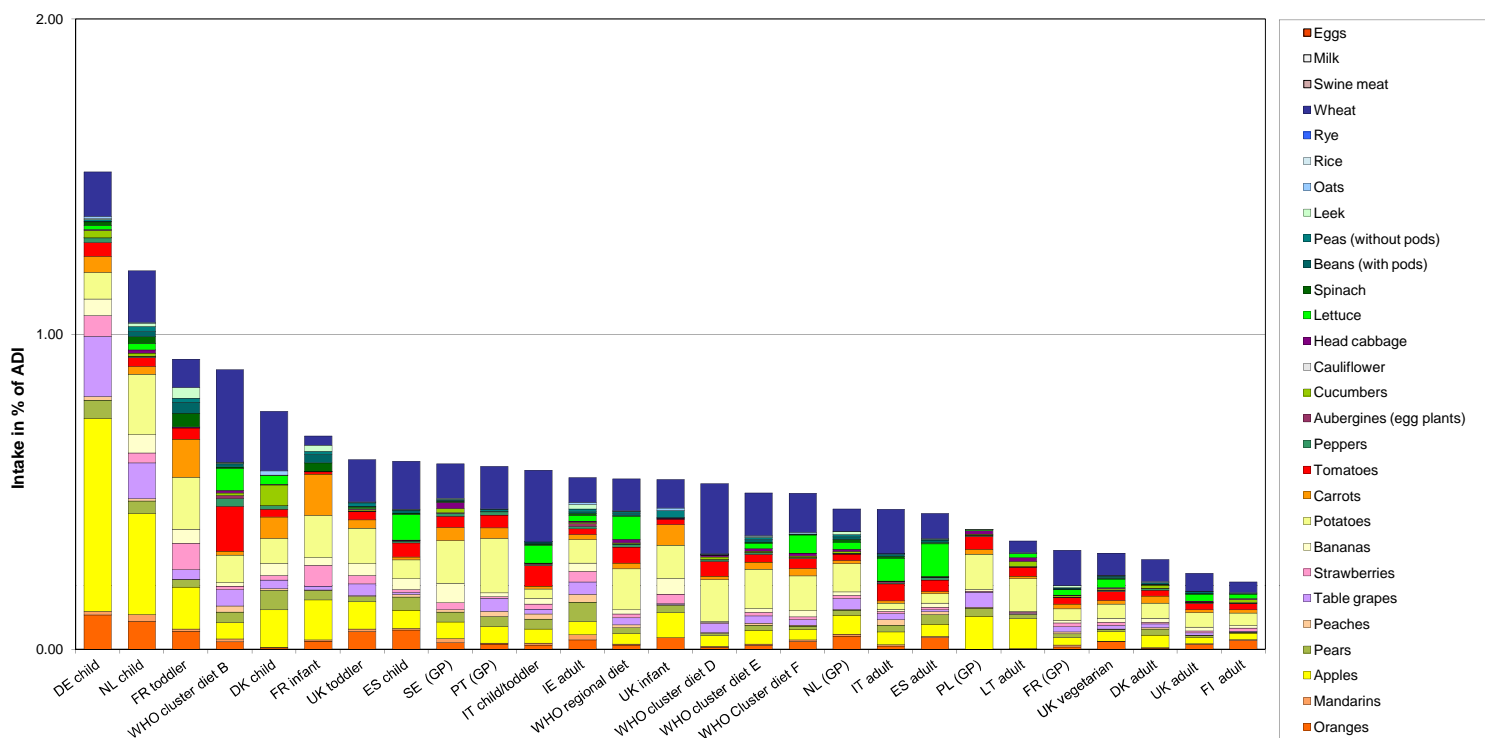
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	2	2834	13.55		0.50				
2010	Peaches	3	1340	7.16		0.99				
2010	Strawberries	10	2118	32.96		1.70				
2010	Tomatoes	1	2232	8.38		0.91				
2010	Head cabbage	2	1127	1.95		0.66				
2010	Lettuce	10	2220	18.47	0.05	13.00				
2010	Leek	5	869	17.49		0.53				
2010	Oats	3	170	0.59		0.03				
2010	Rye	0.5	386	0.26		0.02				
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Boscalid



**Boscalid**

Acute exposure: Boscalid / Apples



Intake in % of the ARfD

Acute exposure: Boscalid / Peaches



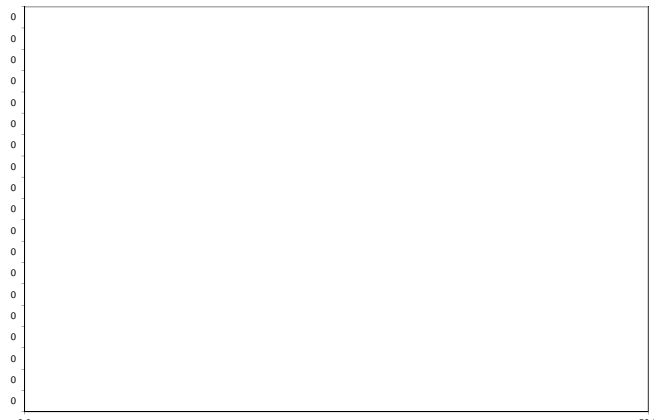
Intake in % of the ARfD

Acute exposure: Boscalid / Strawberries



Intake in % of the ARfD

Acute exposure: Boscalid / Tomatoes



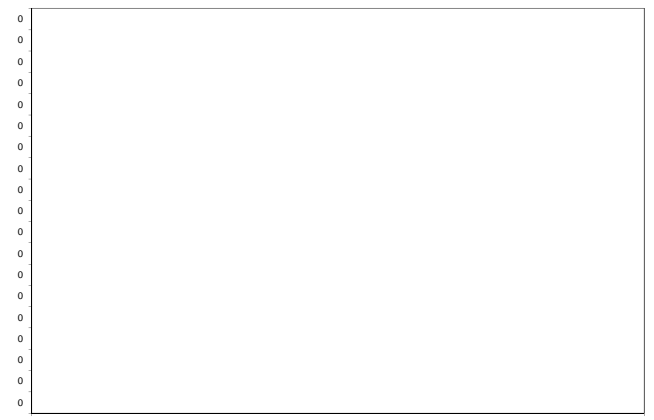
Intake in % of the ARfD

Acute exposure: Boscalid / Head cabbage



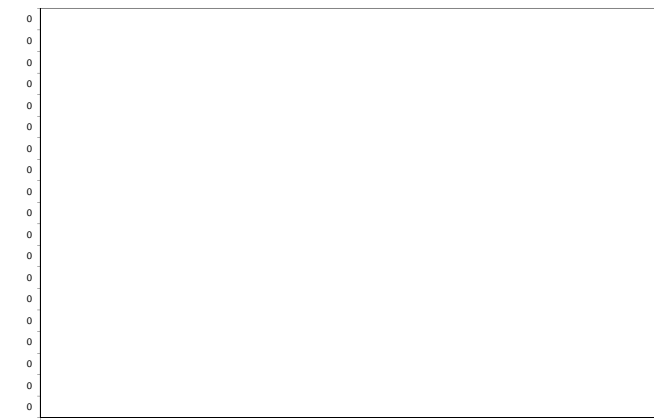
Intake in % of the ARfD

Acute exposure: Boscalid / Lettuce



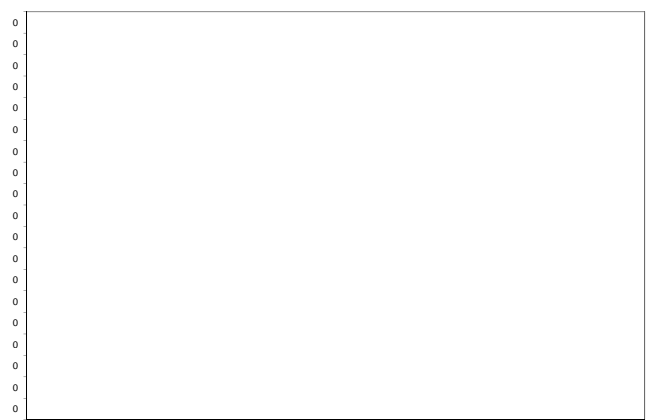
Intake in % of the ARfD

Acute exposure: Boscalid / Leek



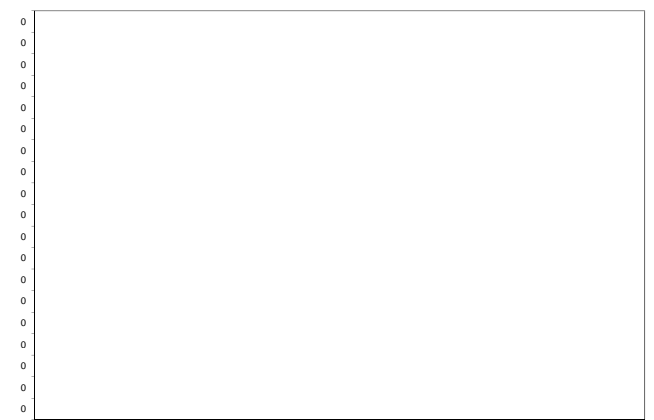
Intake in % of the ARfD

Acute exposure: Boscalid / Oats



Intake in % of the ARfD

Acute exposure: Boscalid / Rye



Intake in % of the ARfD

Bromide ion			
Status of the active substance:	Excluded obligatory on lettuce and tomatoes	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	1	ARfD (mg/kg bw):	n.n.
Source of ADI:	JMPR	Source of ARfD:	
Year of evaluation:	1988	Year of evaluation:	

Tox. reference values for methyl bromide (ADI: 0.001; ARfD: 0.003) not suitable for RA because it does not match with the residue definition; ADI for bromide ion is set by JMPR at 1 mg/kg bw/d, no ARfD available.

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum					
		1	5				
No of diets exceeding ADI:		---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
5.41	WHO cluster diet B	3.12	Wheat	1.42	Tomatoes	0.40	Rice
3.76	DK child	2.01	Wheat	0.93	Rye	0.29	Cucumbers
3.51	IT child/toddler	2.43	Wheat	0.66	Tomatoes	0.21	Lettuce
3.46	WHO cluster diet D	2.38	Wheat	0.47	Tomatoes	0.42	Rice
2.82	ES child	1.62	Wheat	0.45	Tomatoes	0.37	Rice
2.77	DE child	1.50	Wheat	0.44	Tomatoes	0.25	Strawberries
2.75	NL child	1.73	Wheat	0.29	Tomatoes	0.27	Rice
2.50	IT adult	1.51	Wheat	0.54	Tomatoes	0.28	Lettuce
2.49	PT (GP)	1.43	Wheat	0.59	Rice	0.41	Tomatoes
2.33	WHO Cluster diet F	1.32	Wheat	0.31	Tomatoes	0.22	Lettuce
2.32	UK toddler	1.43	Wheat	0.44	Rice	0.27	Tomatoes
2.26	SE (GP)	1.17	Wheat	0.35	Tomatoes	0.30	Rice
2.22	WHO regional diet	1.09	Wheat	0.51	Tomatoes	0.28	Lettuce
2.21	FR toddler	0.96	Wheat	0.36	Tomatoes	0.32	Strawberries
2.18	WHO cluster diet E	1.44	Wheat	0.24	Tomatoes	0.16	Rice
1.85	ES adult	0.86	Wheat	0.39	Lettuce	0.36	Tomatoes
1.75	UK infant	0.96	Wheat	0.48	Rice	0.17	Tomatoes
1.69	FR (GP)	1.20	Wheat	0.20	Tomatoes	0.09	Rice
1.56	IE adult	0.84	Wheat	0.18	Tomatoes	0.13	Rice
1.54	UK vegetarian	0.75	Wheat	0.29	Rice	0.29	Tomatoes
1.39	NL (GP)	0.76	Wheat	0.20	Tomatoes	0.12	Rice
1.33	LT adult	0.38	Wheat	0.29	Tomatoes	0.23	Rye
1.24	UK adult	0.61	Wheat	0.28	Rice	0.20	Tomatoes
1.24	DK adult	0.74	Wheat	0.19	Tomatoes	0.14	Rye
0.95	FI adult	0.36	Wheat	0.20	Tomatoes	0.14	Rye
0.86	FR infant	0.31	Wheat	0.25	Strawberries	0.16	Leek
0.58	PL (GP)	0.41	Tomatoes	0.12	Head cabbage	0.02	Leek

### Acute risk assessment

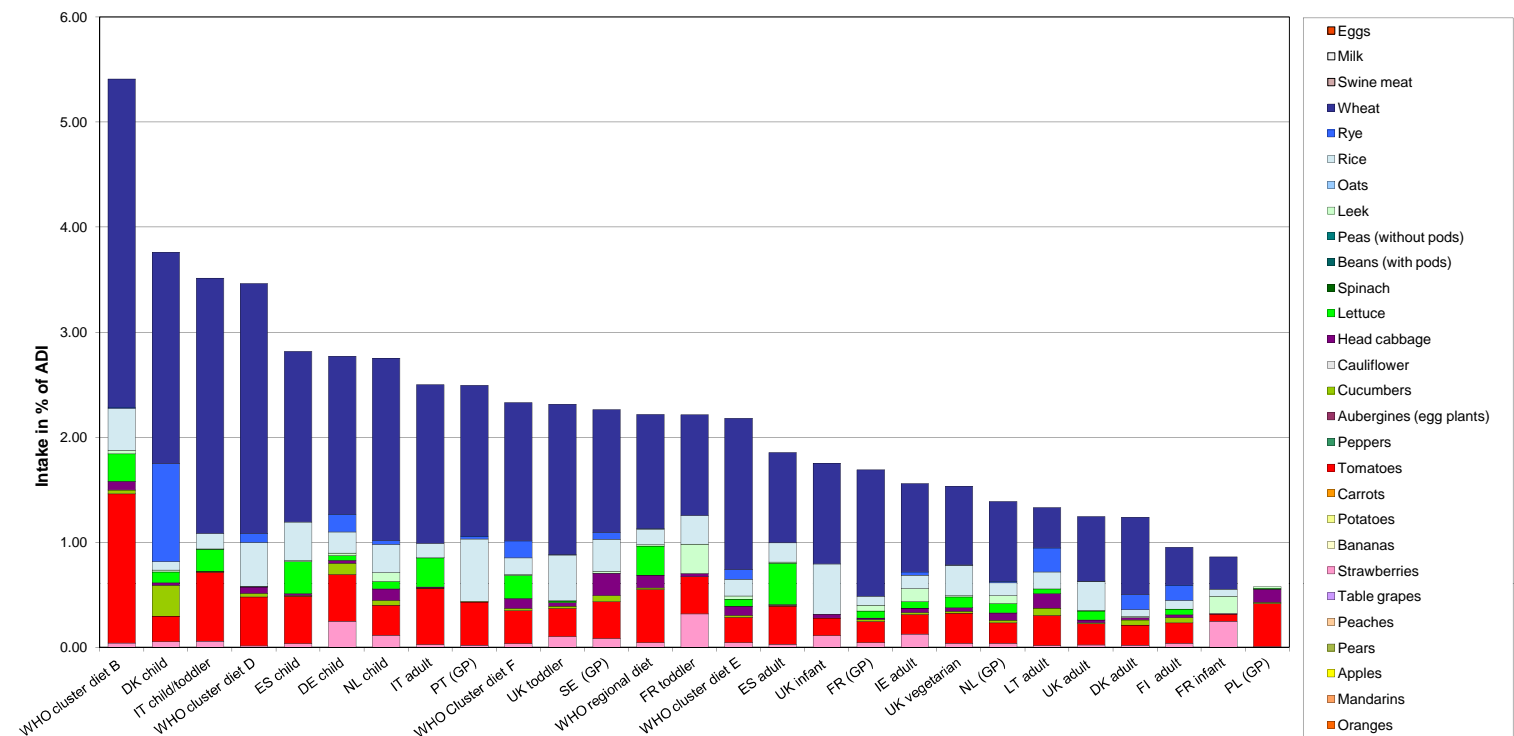
Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	20	52							
2010	Peaches	20	35							
2010	Strawberries	30	47	4.26		9.00				
2010	Tomatoes	50	510	30.98		46.80				
2010	Head cabbage	30	47	2.13		7.00				
2010	Lettuce	50	726	28.79	0.96	79.00				
2010	Leek	30	36	13.89		11.00				
2010	Oats	50	81							
2010	Rye	50	98	24.49		8.50				
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

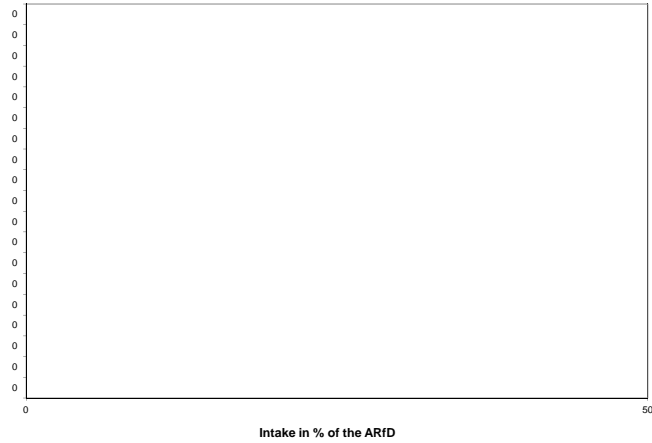
c) TRL: toxicological threshold level

### Chronic risk assessment: Bromide ion

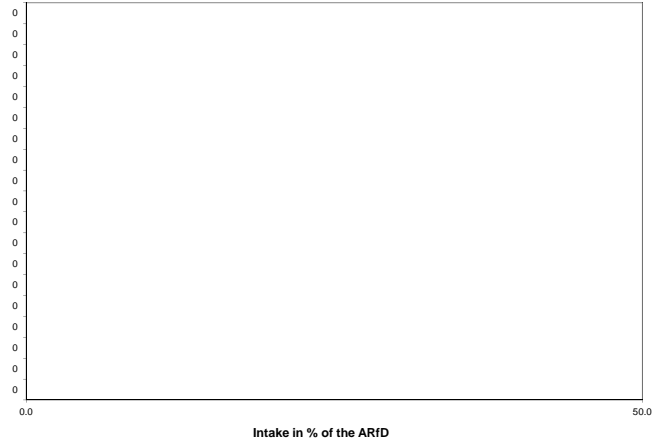


**Bromide ion**

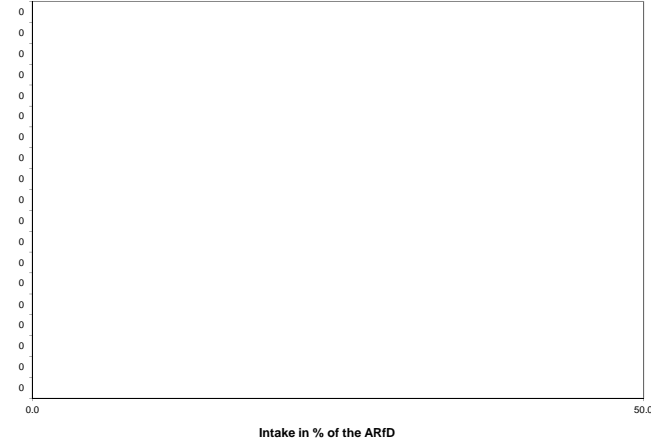
Acute exposure: Bromide ion / Apples



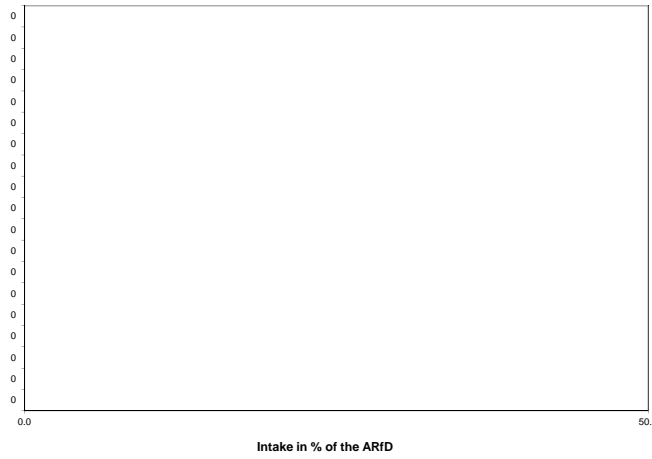
Acute exposure: Bromide ion / Peaches



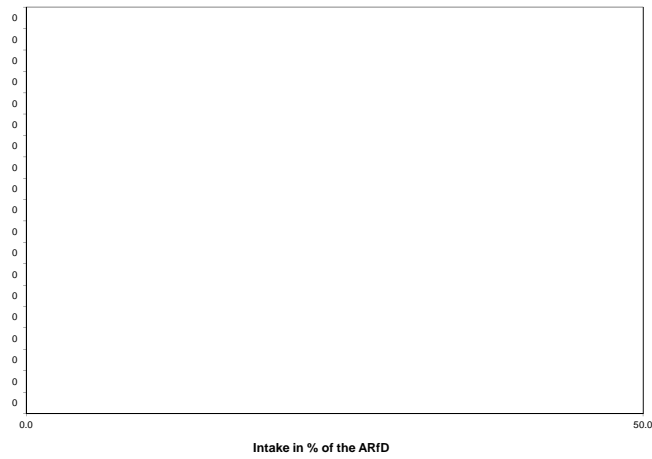
Acute exposure: Bromide ion / Strawberries



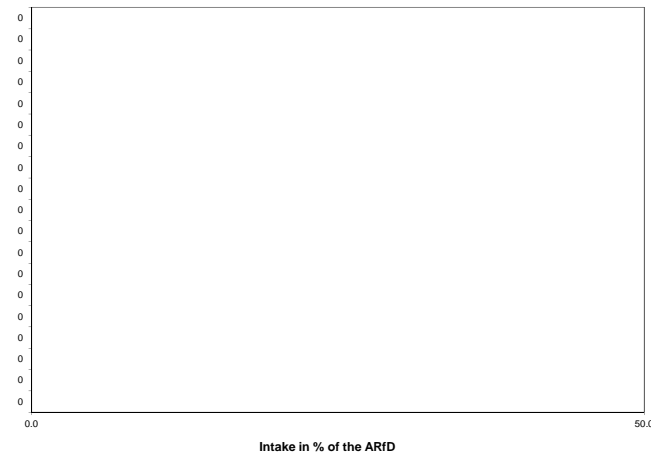
Acute exposure: Bromide ion / Tomatoes



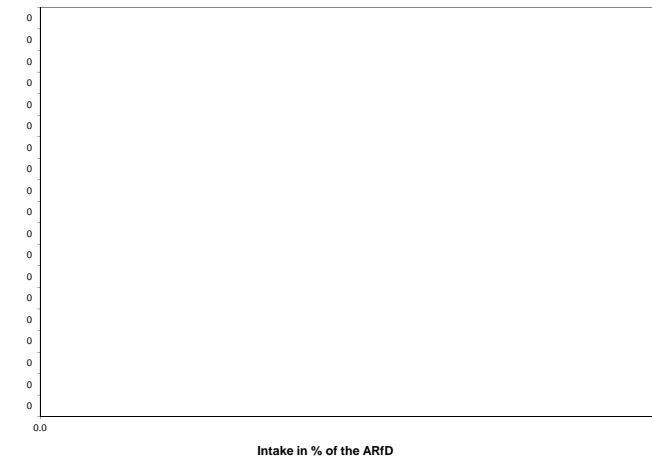
Acute exposure: Bromide ion / Head cabbage



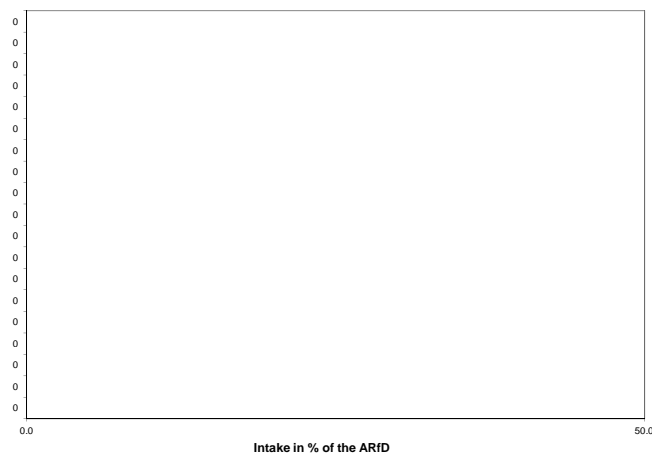
Acute exposure: Bromide ion / Lettuce



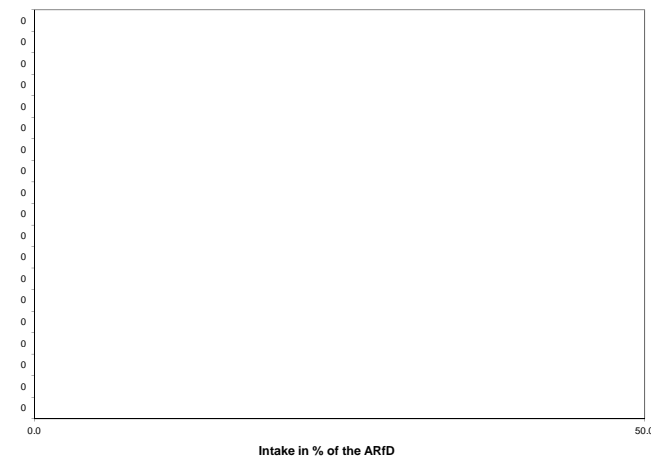
Acute exposure: Bromide ion / Leek



Acute exposure: Bromide ion / Oats



Acute exposure: Bromide ion / Rye



## Bromopropylate

Status of the active substance:	<b>Excluded</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.03</b>	ARfD (mg/kg bw):	<b>0.03</b>
Source of ADI:	<b>JMPR</b>	Source of ARfD:	
Year of evaluation:	<b>1993</b>	Year of evaluation:	

Active substance was not assessed regarding the setting of an ARfD. ADI is used as a surrogate.

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum		No of diets exceeding ADI: ---			
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.29	DK child	0.20	Rye	0.07	Cucumbers	0.01	Peppers
0.25	DE child	0.12	Oranges	0.04	Table grapes	0.04	Rye
0.19	NL child	0.10	Oranges	0.02	Spinach	0.02	Table grapes
0.19	FR toddler	0.06	Oranges	0.05	Spinach	0.04	Leek
0.11	FR infant	0.03	Spinach	0.03	Oranges	0.03	Beans (with pods)
0.11	WHO cluster diet B	0.03	Oranges	0.02	Peppers	0.01	Aubergines (egg plants)
0.10	IE adult	0.03	Oranges	0.02	Leek	0.01	Aubergines (egg plants)
0.09	NL (GP)	0.05	Oranges	0.01	Leek	0.01	Spinach
0.09	ES child	0.07	Oranges	0.01	Beans (with pods)	0.01	Spinach
0.08	UK toddler	0.06	Oranges	0.01	Table grapes	0.00	Cucumbers
0.08	FI adult	0.03	Rye	0.03	Oranges	0.01	Cucumbers
0.07	WHO Cluster diet F	0.03	Rye	0.03	Oranges	0.01	Cucumbers
0.07	SE (GP)	0.02	Oranges	0.01	Cucumbers	0.01	Rye
0.07	LT adult	0.05	Rye	0.02	Cucumbers	0.00	Oranges
0.06	ES adult	0.04	Oranges	0.01	Beans (with pods)	0.01	Peppers
0.06	WHO cluster diet E	0.02	Rye	0.01	Oranges	0.01	Beans (with pods)
0.06	DK adult	0.03	Rye	0.01	Cucumbers	0.00	Peppers
0.05	WHO cluster diet D	0.02	Rye	0.01	Cucumbers	0.01	Oranges
0.05	UK vegetarian	0.03	Oranges	0.00	Cucumbers	0.00	Peppers
0.04	WHO regional diet	0.02	Oranges	0.01	Peppers	0.01	Beans (with pods)
0.04	PT (GP)	0.02	Oranges	0.01	Peppers	0.01	Table grapes
0.04	UK infant	0.04	Oranges	0.00	Beans (with pods)	0.00	Spinach
0.04	IT adult	0.01	Oranges	0.01	Spinach	0.01	Aubergines (egg plants)
0.03	IT child/toddler	0.01	Oranges	0.00	Aubergines (egg)	0.00	Spinach
0.03	FR (GP)	0.01	Oranges	0.01	Leek	0.00	Cucumbers
0.03	UK adult	0.02	Oranges	0.00	Cucumbers	0.00	Peppers
0.02	PL (GP)	0.01	Table grapes	0.00	Peppers	0.00	Cucumbers

### Acute risk assessment

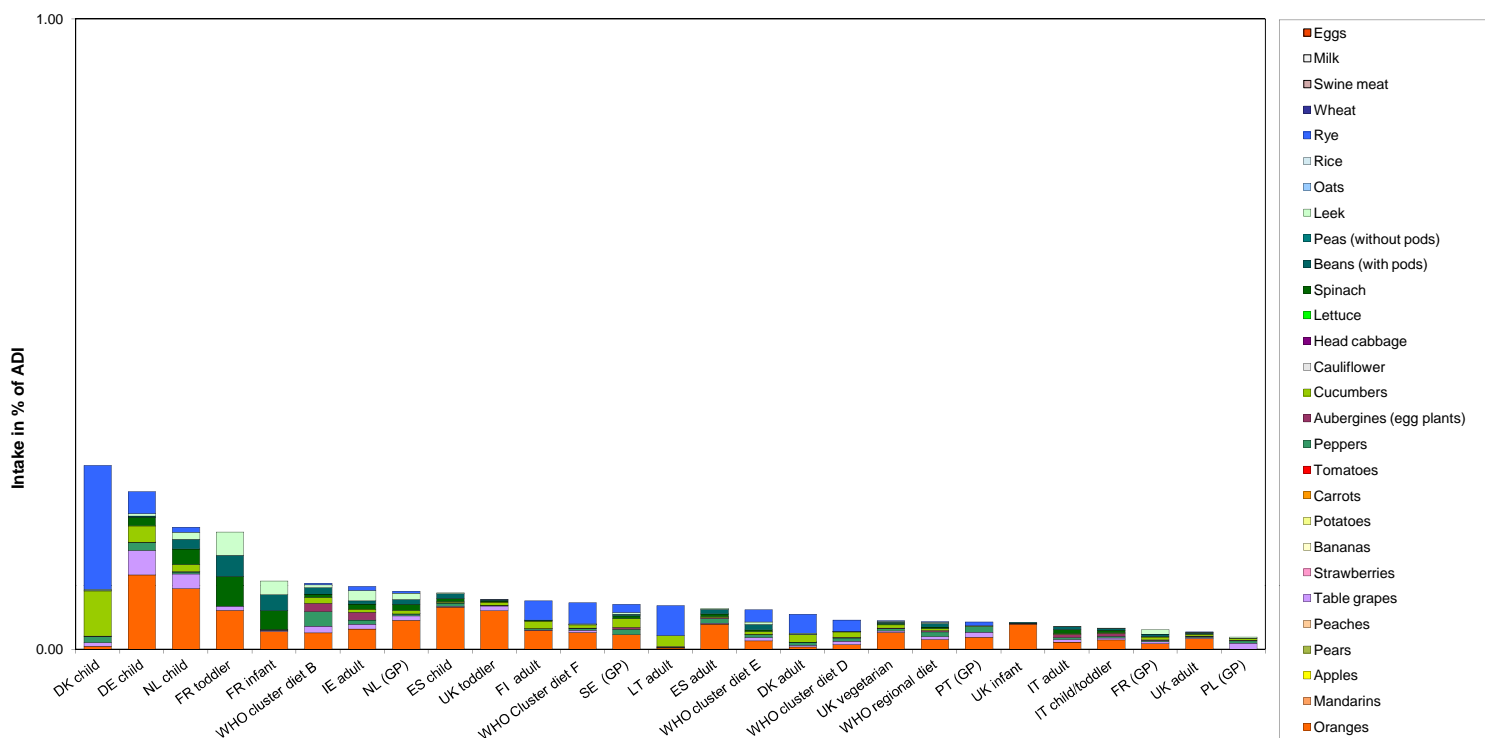
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.01	3178							
2010	Peaches	0.05	1511							
2010	Strawberries	0.05	2338							
2010	Tomatoes	0.01	2559		0.04	0.02		3.10	BE child	
2010	Head cabbage	0.05	1268							
2010	Lettuce	0.05	2404							
2010	Leek	0.05	1000		0.30	0.47		92.35	BE child	
2010	Oats	0.05	186	0.54		0.02		0.27	DE child	
2010	Rye	0.05	454	0.44		0.01		0.19	UK infant	
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

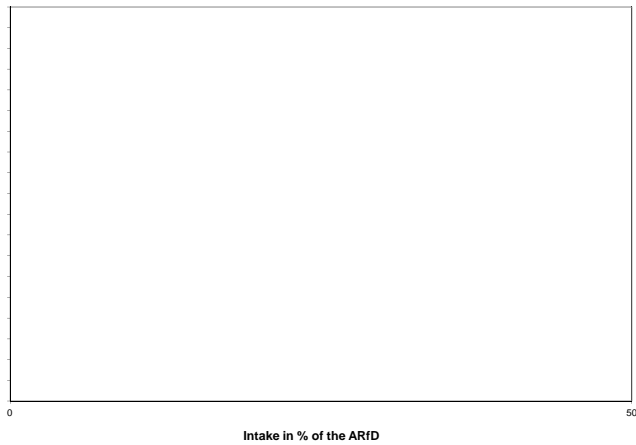
<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Bromopropylate

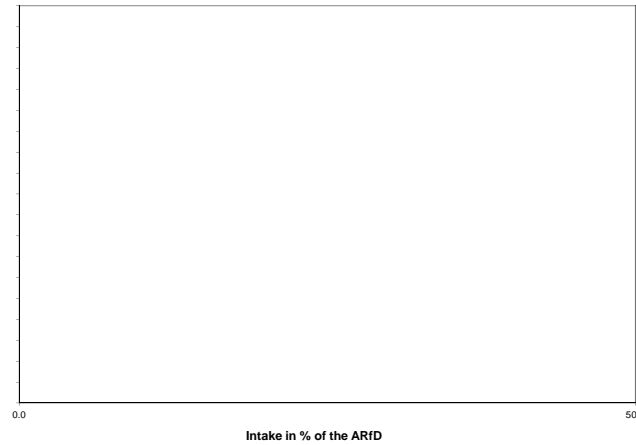


**Bromopropylate**

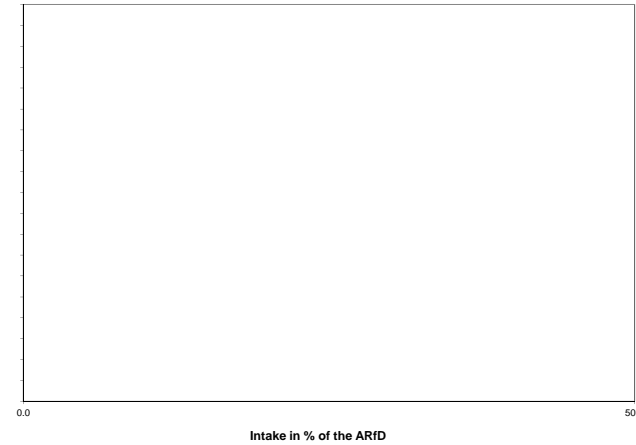
Acute exposure: Bromopropylate / Apples



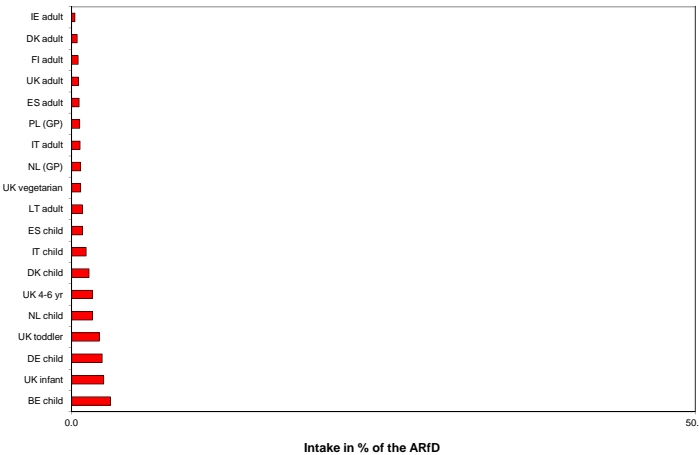
Acute exposure: Bromopropylate / Peaches



Acute exposure: Bromopropylate / Strawberries



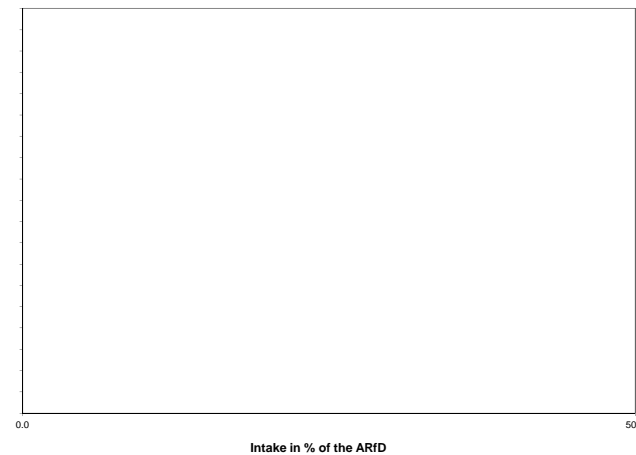
Acute exposure: Bromopropylate / Tomatoes



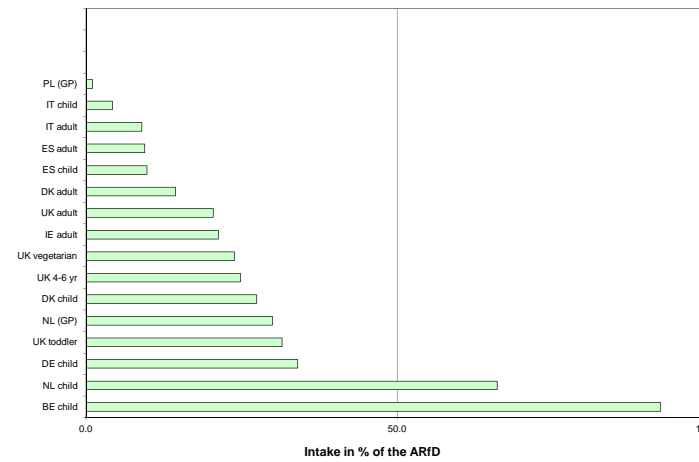
Acute exposure: Bromopropylate / Head cabbage



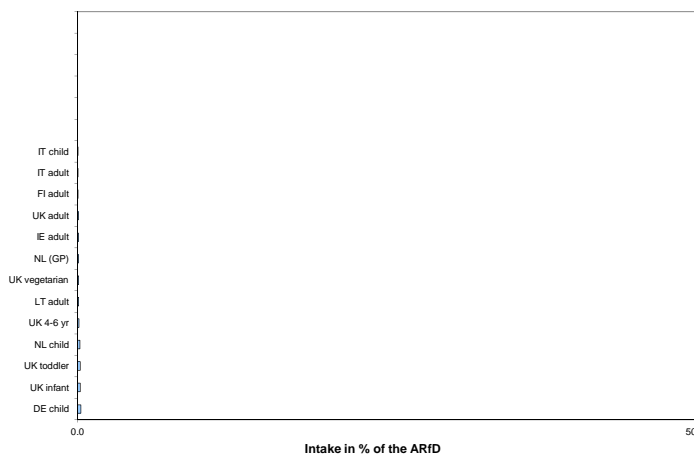
Acute exposure: Bromopropylate / Lettuce



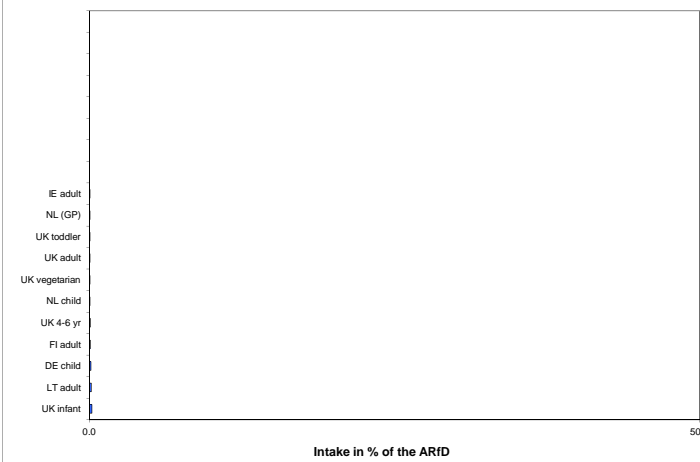
Acute exposure: Bromopropylate / Leek



Acute exposure: Bromopropylate / Oats



Acute exposure: Bromopropylate / Rye



## Bromuconazole

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:	<b>Yes</b>	Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.01</b>	ARfD (mg/kg bw):	<b>0.1</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2010</b>	Year of evaluation:	<b>2010</b>

### Chronic risk assessment

Exposure (range) in % of ADI minimum - maximum		No of diets exceeding ADI:		---			
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.18	DE child	0.18	Table grapes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.11	NL child	0.11	Table grapes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.05	WHO cluster diet B	0.05	Table grapes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.04	PL (GP)	0.04	Table grapes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.04	PT (GP)	0.04	Table grapes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.04	IE adult	0.04	Table grapes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.03	UK toddler	0.03	Table grapes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.03	NL (GP)	0.03	Table grapes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.03	FR toddler	0.03	Table grapes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.03	WHO cluster diet D	0.03	Table grapes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.03	DK child	0.03	Table grapes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.02	WHO cluster diet E	0.02	Table grapes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.02	WHO regional diet	0.02	Table grapes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.02	IT adult	0.02	Table grapes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.02	WHO Cluster diet F	0.02	Table grapes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.02	FR (GP)	0.02	Table grapes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.01	IT child/toddler	0.01	Table grapes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.01	FR infant	0.01	Table grapes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.01	DK adult	0.01	Table grapes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.01	UK vegetarian	0.01	Table grapes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.01	UK adult	0.01	Table grapes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.01	ES adult	0.01	Table grapes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.00	ES child	0.00	Table grapes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.00	UK infant	0.00	Table grapes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.00	FI adult	0.00	Table grapes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.00	LT adult	0.00	Table grapes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
	SE (GP)		FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)

### Acute risk assessment

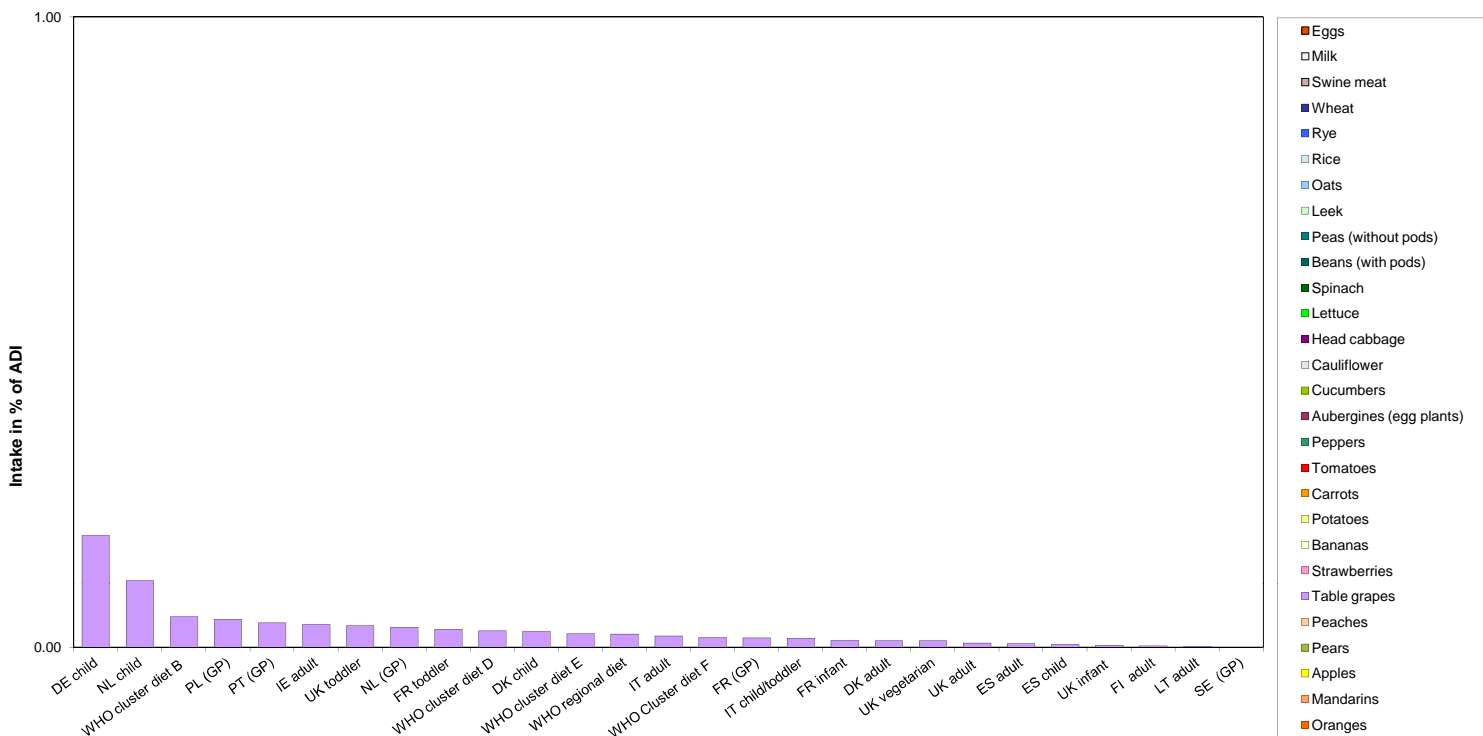
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	2165							
2010	Peaches	0.1	1093							
2010	Strawberries	0.05	1803							
2010	Tomatoes	0.05	1724							
2010	Head cabbage	0.05	927							
2010	Lettuce	0.05	1881							
2010	Leek	0.05	720							
2010	Oats	0.2	143							
2010	Rye	0.2	320							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Bromuconazole



**Bromuconazole**

Acute exposure: Bromuconazole / Apples



Intake in % of the ARfD

Acute exposure: Bromuconazole / Peaches



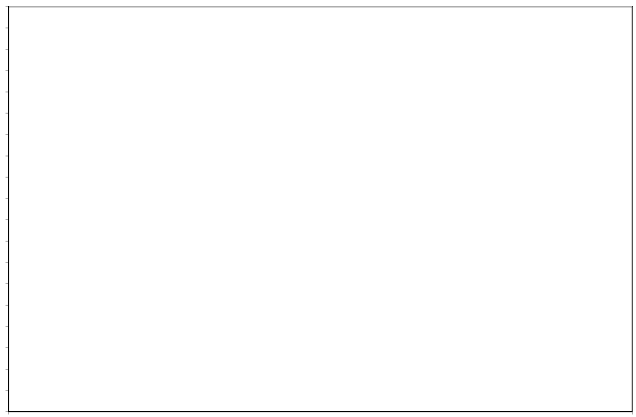
Intake in % of the ARfD

Acute exposure: Bromuconazole / Strawberries



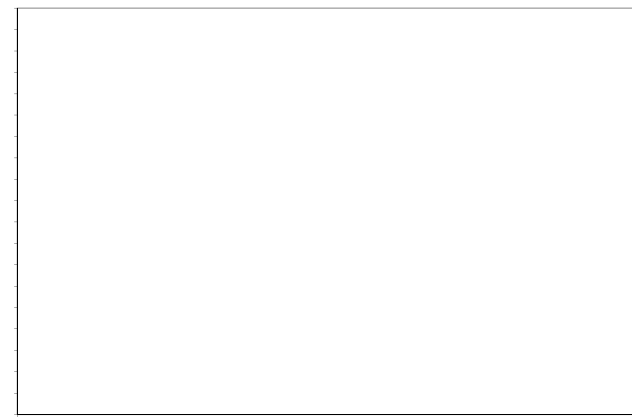
Intake in % of the ARfD

Acute exposure: Bromuconazole / Tomatoes



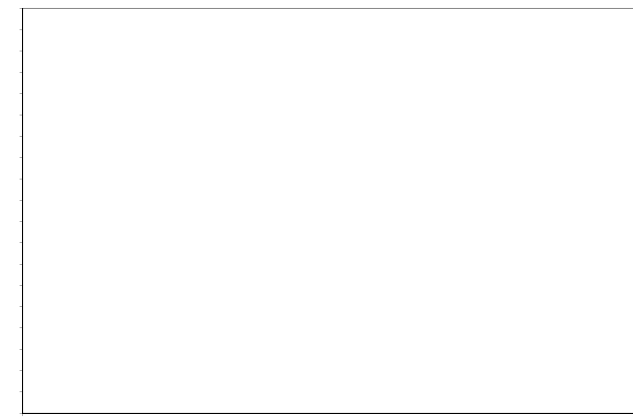
Intake in % of the ARfD

Acute exposure: Bromuconazole / Head cabbage



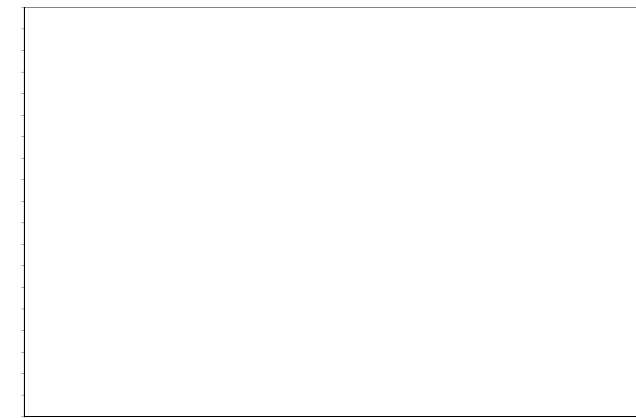
Intake in % of the ARfD

Acute exposure: Bromuconazole / Lettuce



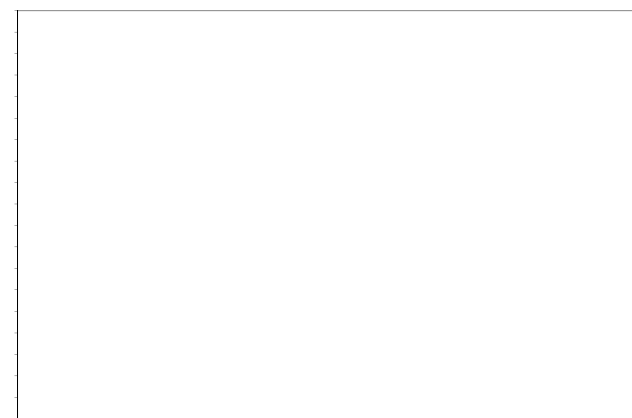
Intake in % of the ARfD

Acute exposure: Bromuconazole / Leek



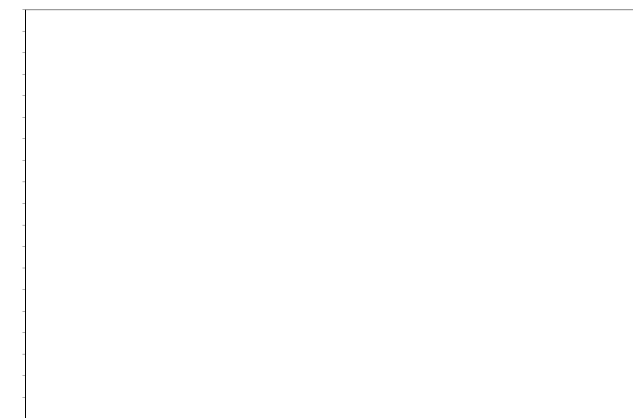
Intake in % of the ARfD

Acute exposure: Bromuconazole / Oats



Intake in % of the ARfD

Acute exposure: Bromuconazole / Rye



Intake in % of the ARfD



Bupirimate			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.05	ARfD (mg/kg bw):	n.n.
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2011	Year of evaluation:	2011

**Chronic risk assessment**

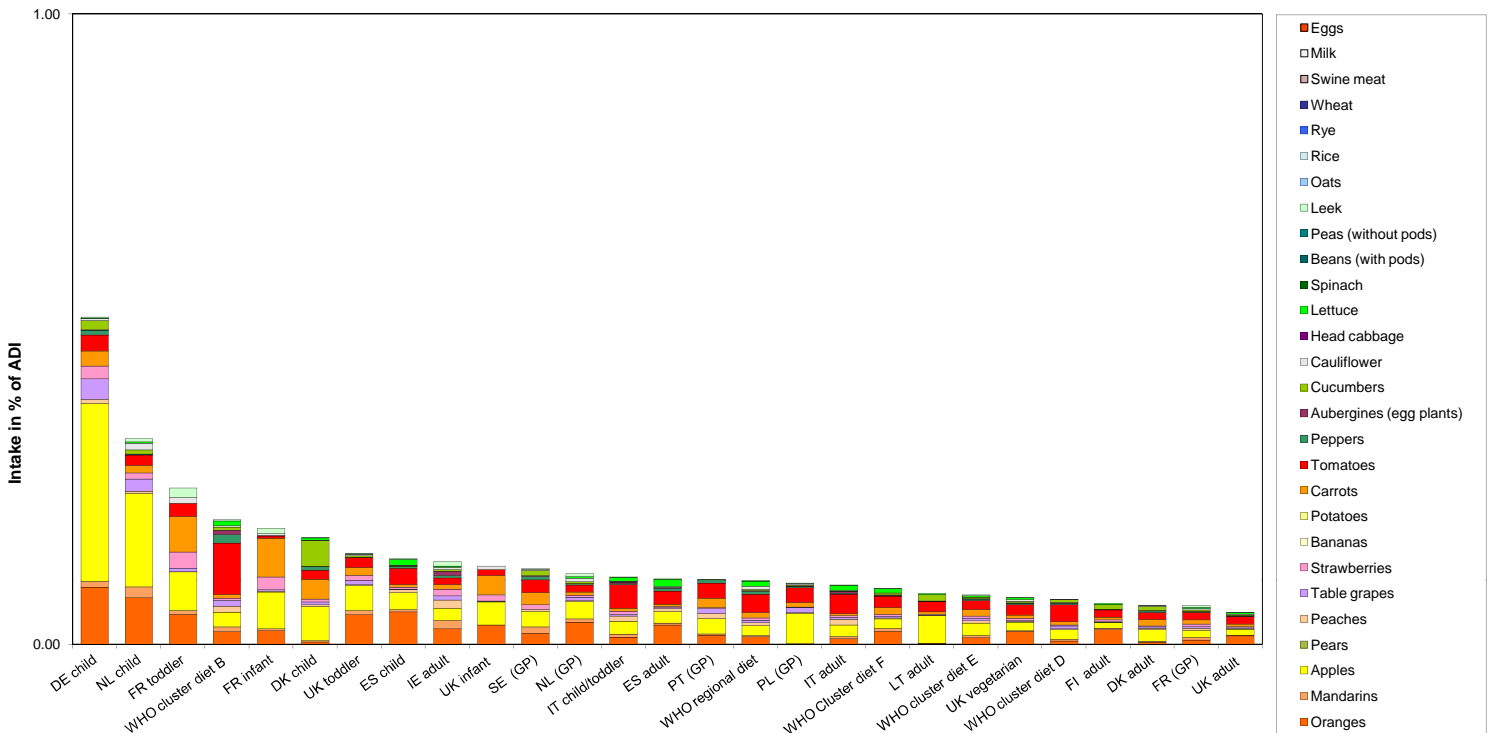
		Exposure (range) in % of ADI minimum - maximum					
		1					
		No of diets exceeding ADI: ---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.52	DE child	0.28	Apples	0.09	Oranges	0.03	Table grapes
0.33	NL child	0.15	Apples	0.07	Oranges	0.02	Table grapes
0.25	FR toddler	0.06	Apples	0.06	Carrots	0.05	Oranges
0.20	WHO cluster diet B	0.08	Tomatoes	0.02	Apples	0.02	Oranges
0.18	FR infant	0.06	Carrots	0.06	Apples	0.02	Oranges
0.17	DK child	0.05	Apples	0.04	Cucumbers	0.03	Carrots
0.14	UK toddler	0.05	Oranges	0.04	Apples	0.02	Tomatoes
0.14	ES child	0.05	Oranges	0.03	Apples	0.03	Tomatoes
0.13	IE adult	0.02	Oranges	0.02	Apples	0.01	Peaches
0.12	UK infant	0.04	Apples	0.03	Oranges	0.03	Carrots
0.12	SE (GP)	0.02	Apples	0.02	Tomatoes	0.02	Carrots
0.11	NL (GP)	0.04	Oranges	0.03	Apples	0.01	Tomatoes
0.11	IT child/toddler	0.04	Tomatoes	0.02	Apples	0.01	Oranges
0.10	ES adult	0.03	Oranges	0.02	Tomatoes	0.02	Apples
0.10	PT (GP)	0.02	Apples	0.02	Tomatoes	0.02	Carrots
0.10	WHO regional diet	0.03	Tomatoes	0.02	Apples	0.01	Oranges
0.10	PL (GP)	0.05	Apples	0.02	Tomatoes	0.01	Table grapes
0.09	IT adult	0.03	Tomatoes	0.02	Apples	0.01	Oranges
0.09	WHO Cluster diet F	0.02	Oranges	0.02	Tomatoes	0.02	Apples
0.08	LT adult	0.04	Apples	0.02	Tomatoes	0.01	Cucumbers
0.08	WHO cluster diet E	0.02	Apples	0.01	Tomatoes	0.01	Oranges
0.07	UK vegetarian	0.02	Oranges	0.02	Tomatoes	0.01	Apples
0.07	WHO cluster diet D	0.03	Tomatoes	0.02	Apples	0.01	Oranges
0.06	FI adult	0.02	Oranges	0.01	Tomatoes	0.01	Apples
0.06	DK adult	0.02	Apples	0.01	Tomatoes	0.01	Carrots
0.06	FR (GP)	0.01	Tomatoes	0.01	Apples	0.01	Carrots
0.05	UK adult	0.01	Oranges	0.01	Tomatoes	0.01	Apples

**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.2	2714	0.85		0.20				
2010	Peaches	0.2	1377	0.65		0.05				
2010	Strawberries	1	2152	6.74	0.05	1.80				
2010	Tomatoes	2	2287	1.18		0.22				
2010	Head cabbage	0.05	1125							
2010	Lettuce	0.05	2321	0.04		0.01				
2010	Leek	0.05	892	0.11		0.02				
2010	Oats	0.05	184							
2010	Rye	0.05	388							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Bupirimate**



**Bupirimate**

Acute exposure: Bupirimate / Apples



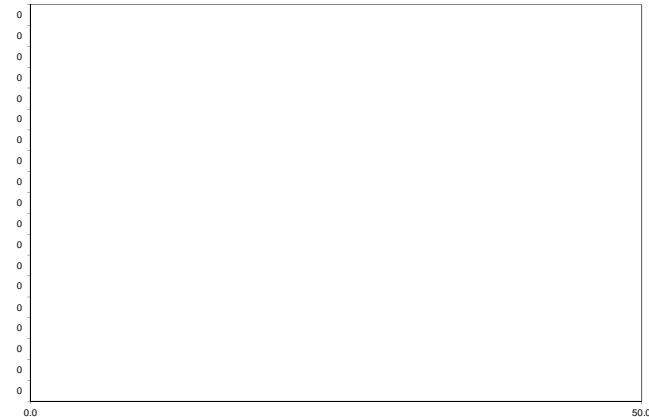
Intake in % of the ARfD

Acute exposure: Bupirimate / Peaches



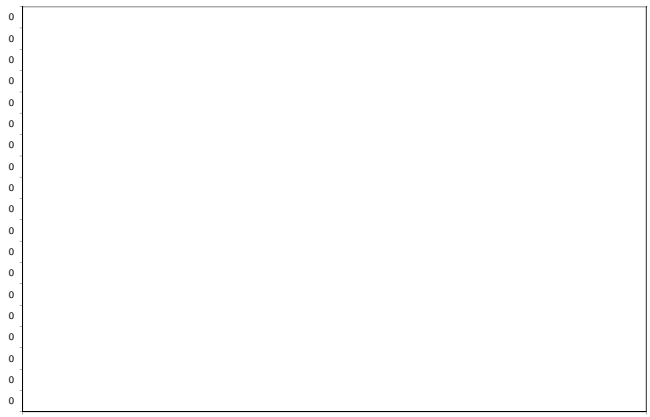
Intake in % of the ARfD

Acute exposure: Bupirimate / Strawberries



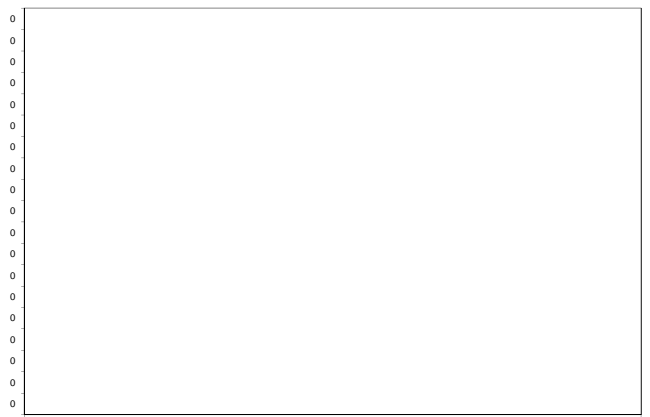
Intake in % of the ARfD

Acute exposure: Bupirimate / Tomatoes



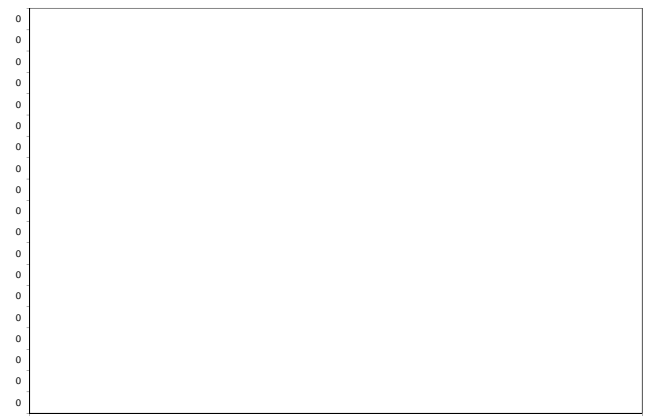
Intake in % of the ARfD

Acute exposure: Bupirimate / Head cabbage



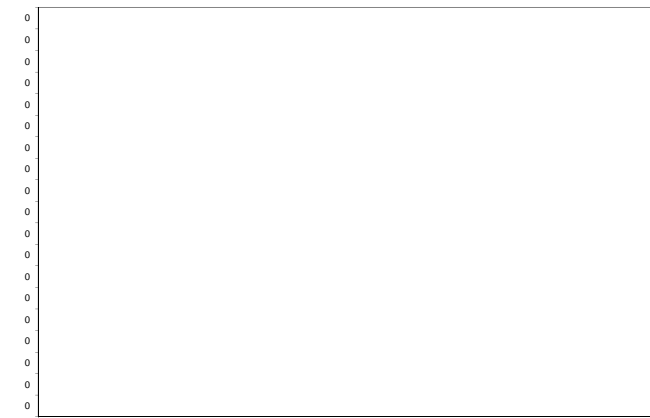
Intake in % of the ARfD

Acute exposure: Bupirimate / Lettuce



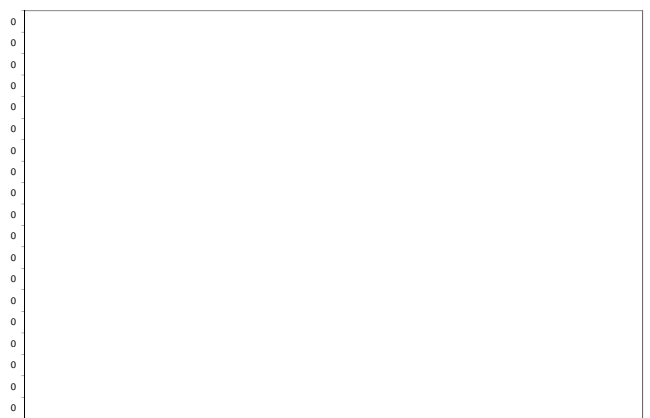
Intake in % of the ARfD

Acute exposure: Bupirimate / Leek



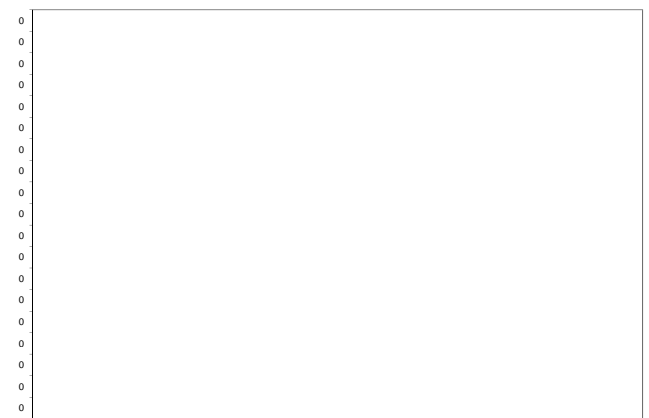
Intake in % of the ARfD

Acute exposure: Bupirimate / Oats



Intake in % of the ARfD

Acute exposure: Bupirimate / Rye



Intake in % of the ARfD

Buprofezin			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.01	ARfD (mg/kg bw):	0.5
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2010	Year of evaluation:	2010

**Chronic risk assessment**

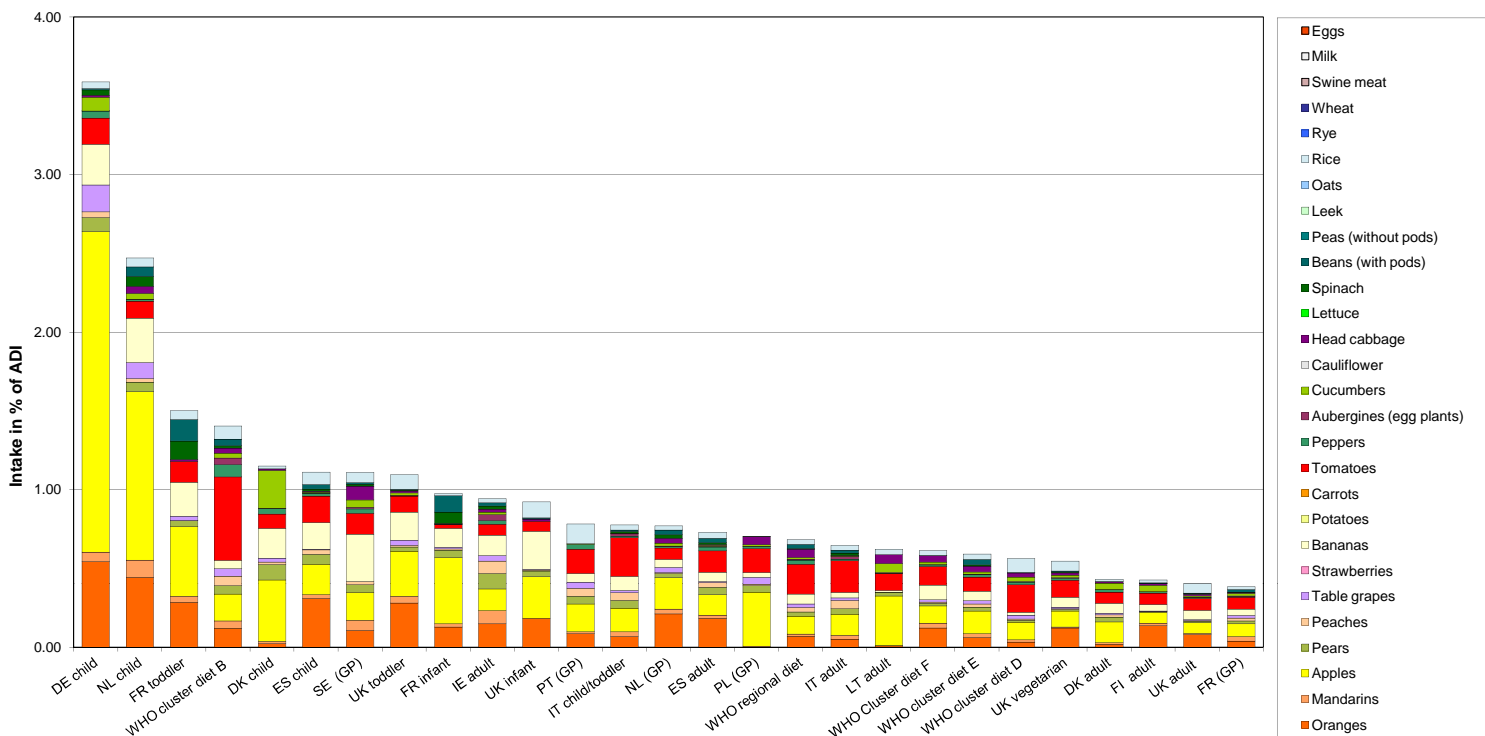
		Exposure (range) in % of ADI minimum - maximum					
		4					
No of diets exceeding ADI:		---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
3.59	DE child	2.03	Apples	0.54	Oranges	0.26	Bananas
2.47	NL child	1.07	Apples	0.45	Oranges	0.28	Bananas
1.50	FR toddler	0.44	Apples	0.29	Oranges	0.21	Bananas
1.41	WHO cluster diet B	0.53	Tomatoes	0.17	Apples	0.12	Oranges
1.15	DK child	0.39	Apples	0.24	Cucumbers	0.19	Bananas
1.11	ES child	0.31	Oranges	0.19	Apples	0.17	Tomatoes
1.11	SE (GP)	0.30	Bananas	0.18	Apples	0.13	Tomatoes
1.10	UK toddler	0.29	Apples	0.28	Oranges	0.18	Bananas
0.98	FR infant	0.42	Apples	0.13	Oranges	0.12	Bananas
0.95	IE adult	0.15	Oranges	0.14	Apples	0.13	Bananas
0.92	UK infant	0.26	Apples	0.24	Bananas	0.19	Oranges
0.78	PT (GP)	0.18	Apples	0.15	Tomatoes	0.13	Rice
0.78	IT child/toddler	0.25	Tomatoes	0.15	Apples	0.09	Bananas
0.77	NL (GP)	0.21	Oranges	0.20	Apples	0.07	Tomatoes
0.73	ES adult	0.18	Oranges	0.13	Tomatoes	0.13	Apples
0.70	PL (GP)	0.34	Apples	0.15	Tomatoes	0.05	Head cabbage
0.68	WHO regional diet	0.19	Tomatoes	0.11	Apples	0.07	Oranges
0.65	IT adult	0.20	Tomatoes	0.13	Apples	0.05	Oranges
0.62	LT adult	0.31	Apples	0.11	Tomatoes	0.06	Cucumbers
0.62	WHO Cluster diet F	0.12	Oranges	0.12	Tomatoes	0.11	Apples
0.59	WHO cluster diet E	0.14	Apples	0.09	Tomatoes	0.06	Oranges
0.56	WHO cluster diet D	0.17	Tomatoes	0.11	Apples	0.09	Rice
0.55	UK vegetarian	0.12	Oranges	0.11	Tomatoes	0.10	Apples
0.43	DK adult	0.13	Apples	0.07	Tomatoes	0.06	Bananas
0.43	FI adult	0.14	Oranges	0.07	Tomatoes	0.07	Apples
0.40	UK adult	0.08	Oranges	0.07	Tomatoes	0.07	Apples
0.39	FR (GP)	0.08	Apples	0.07	Tomatoes	0.04	Oranges

**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.5	2961	0.03		0.01		0.20	UK infant	
2010	Peaches	0.7	1461	0.21		0.06		0.71	DE child	
2010	Strawberries	0.05	2238							
2010	Tomatoes	1	2446	1.23		0.48		5.58	BE child	
2010	Head cabbage	0.05	1167	0.26		0.04		0.42	NL child	
2010	Lettuce	0.5	2349	0.04		0.03		0.15	DE child	
2010	Leek	0.05	907							
2010	Oats	0.05	183							
2010	Rye	0.05	416							
2010	Swine Meat									
2010	Milk									

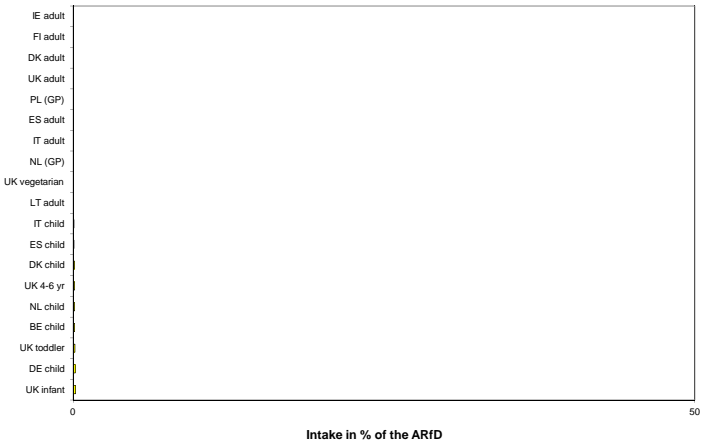
a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Buprofezin**

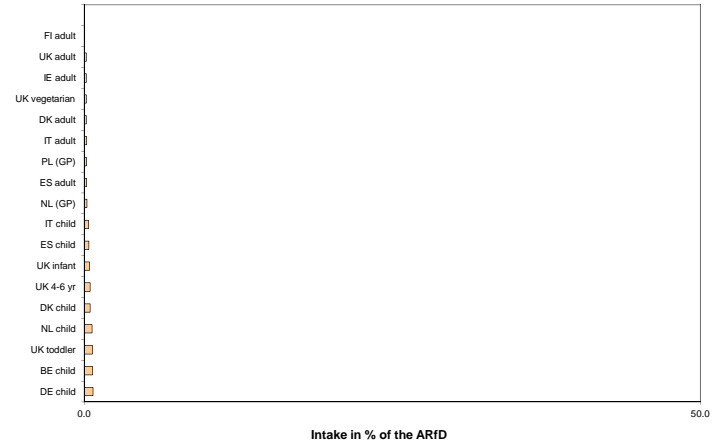


**Buprofezin**

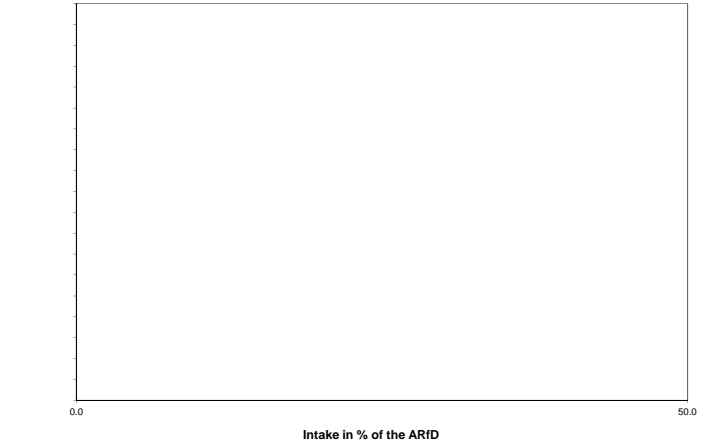
Acute exposure: Buprofezin / Apples



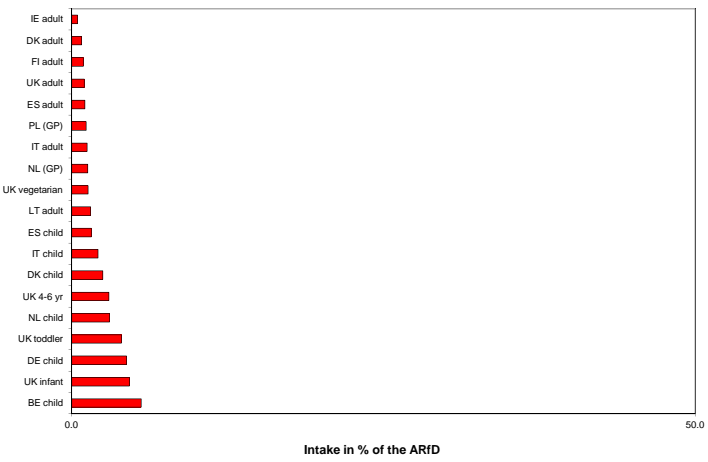
Acute exposure: Buprofezin / Peaches



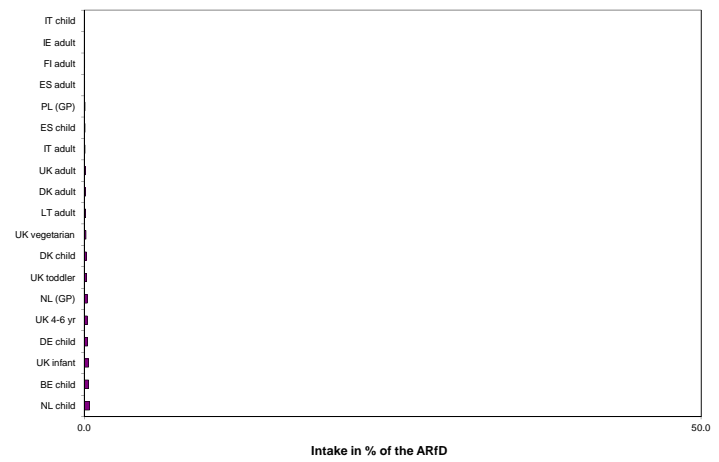
Acute exposure: Buprofezin / Strawberries



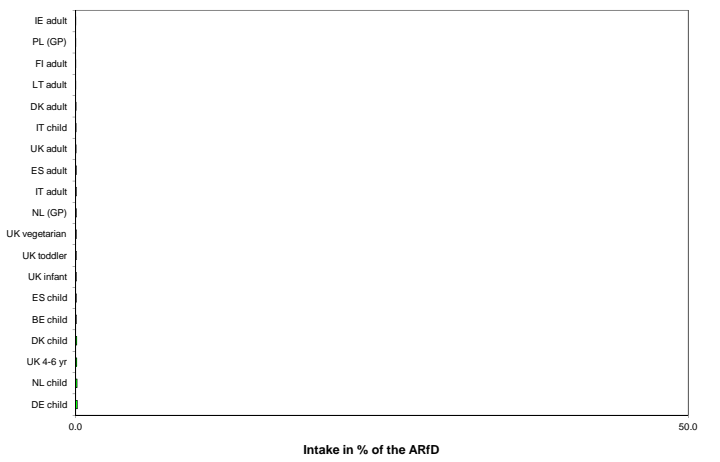
Acute exposure: Buprofezin / Tomatoes



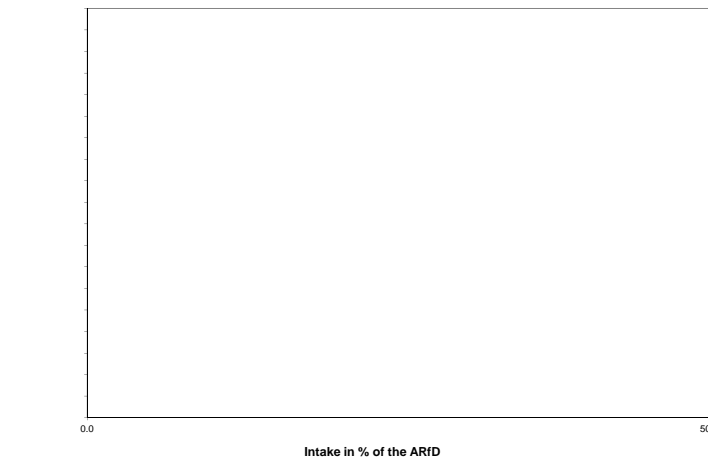
Acute exposure: Buprofezin / Head cabbage



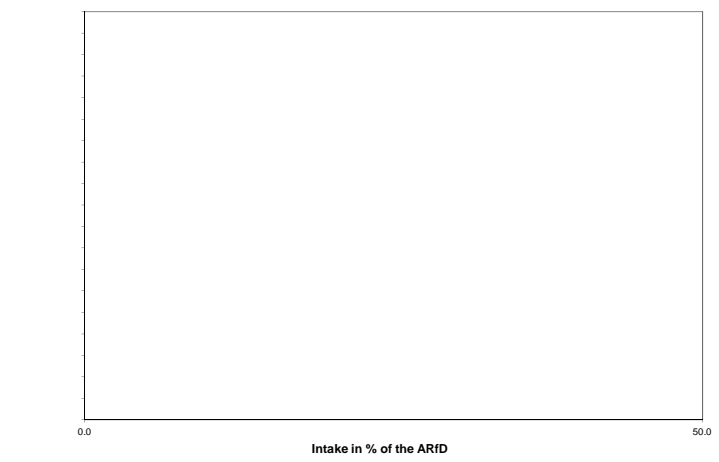
Acute exposure: Buprofezin / Lettuce



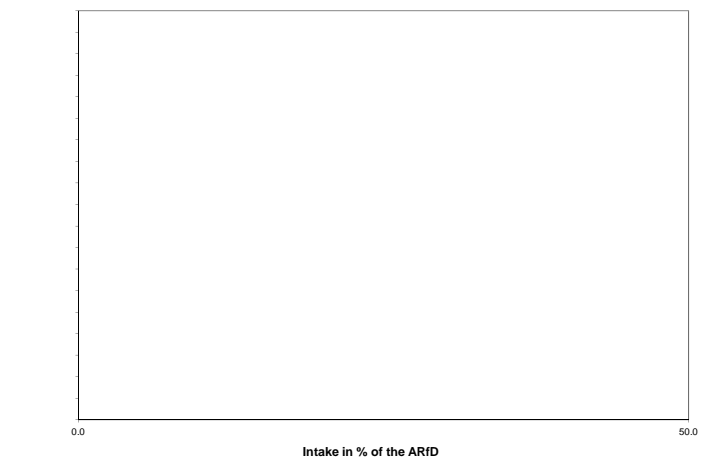
Acute exposure: Buprofezin / Leek



Acute exposure: Buprofezin / Oats



Acute exposure: Buprofezin / Rye



## Cadusafos (aka ebufos)

Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:	Yes	Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.0004	ARfD (mg/kg bw):	0.003
Source of ADI:	EFSA	Source of ARfD:	EFSA
Year of evaluation:	2009	Year of evaluation:	2009

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum					
		2					
		No of diets exceeding ADI: ---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
1.60	WHO cluster diet B	1.60	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.94	DE child	0.94	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.72	DK child	0.72	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.62	PT (GP)	0.62	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.61	SE (GP)	0.61	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.56	WHO regional diet	0.56	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.50	ES adult	0.50	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.44	IE adult	0.44	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.37	ES child	0.37	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.34	DK adult	0.34	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.34	WHO cluster diet D	0.34	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.33	WHO cluster diet E	0.33	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.26	UK vegetarian	0.26	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.25	PL (GP)	0.25	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.22	IT adult	0.22	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.22	NL child	0.22	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.21	WHO Cluster diet F	0.21	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.21	NL (GP)	0.21	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.20	IT child/toddler	0.20	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.16	FI adult	0.16	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.14	UK adult	0.14	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.12	FR (GP)	0.12	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.07	UK toddler	0.07	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.07	LT adult	0.07	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.04	FR infant	0.04	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	FR toddler		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	FR toddler		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)

### Acute risk assessment

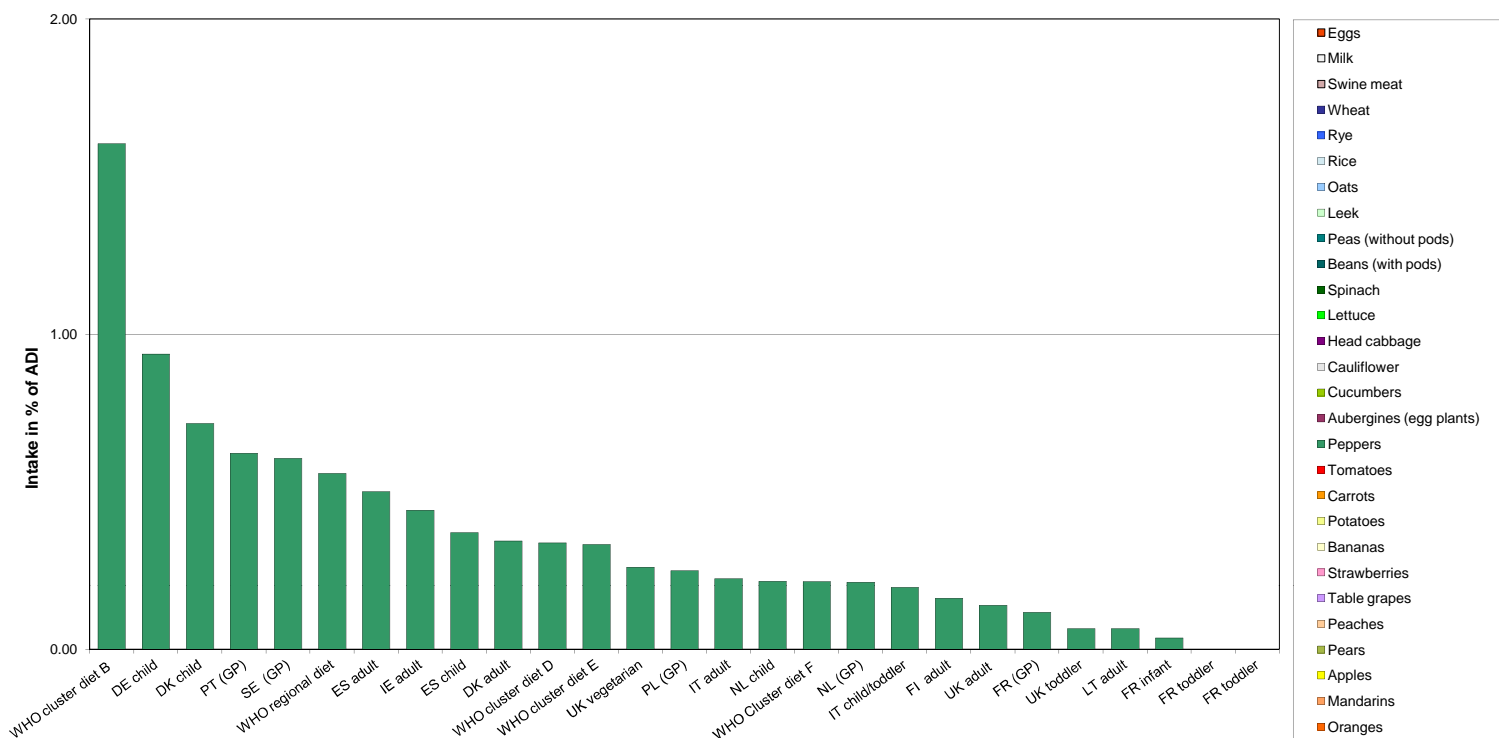
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.01	2381							
2010	Peaches	0.01	1128							
2010	Strawberries	0.01	1845							
2010	Tomatoes	0.01	1845							
2010	Head cabbage	0.01	935							
2010	Lettuce	0.01	1919							
2010	Leek	0.01	744							
2010	Oats	0.01	141							
2010	Rye	0.01	326							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

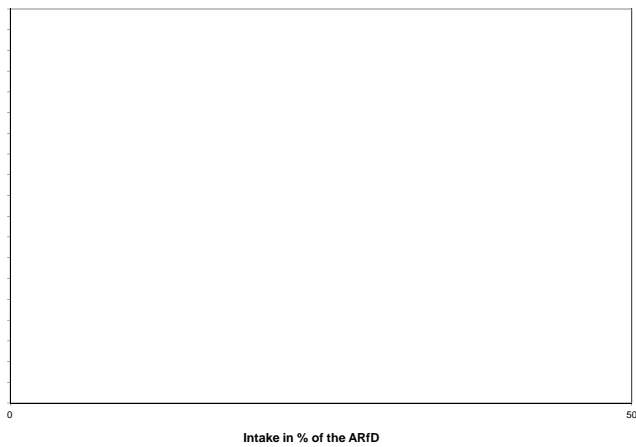
<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Cadusafos (aka ebufos)

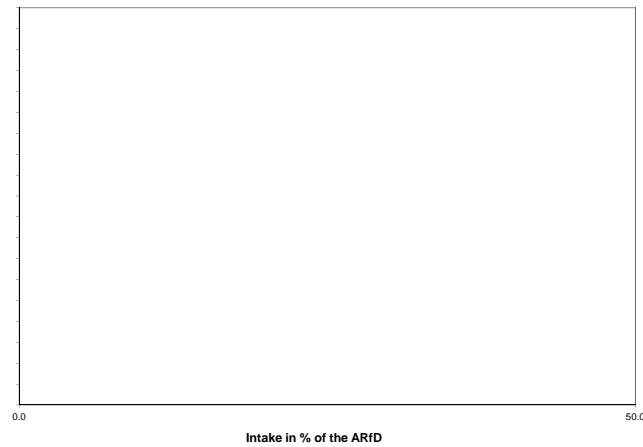


**Cadusafos (aka ebufos)**

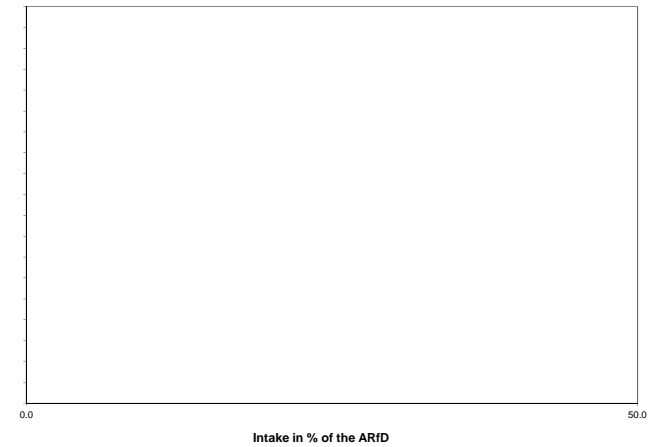
Acute exposure: Cadusafos (aka ebufos) / Apples



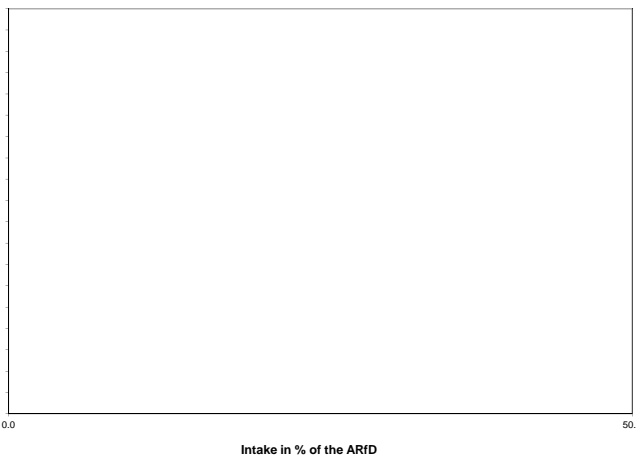
Acute exposure: Cadusafos (aka ebufos) / Peaches



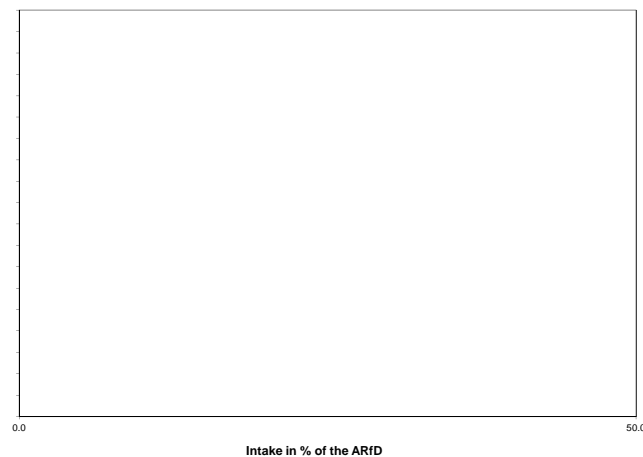
Acute exposure: Cadusafos (aka ebufos) / Strawberries



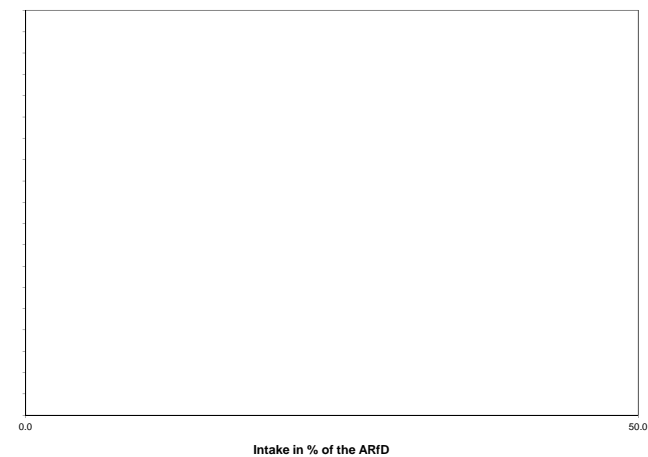
Acute exposure: Cadusafos (aka ebufos) / Tomatoes



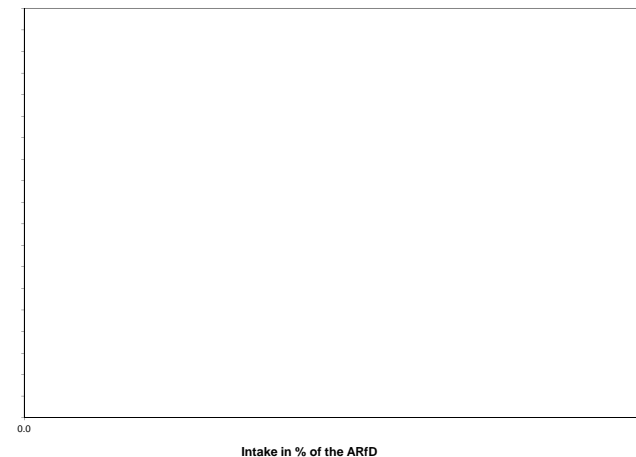
Acute exposure: Cadusafos (aka ebufos) / Head cabbage



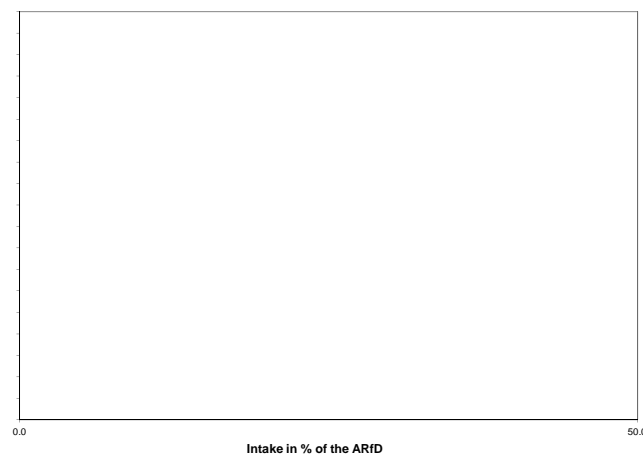
Acute exposure: Cadusafos (aka ebufos) / Lettuce



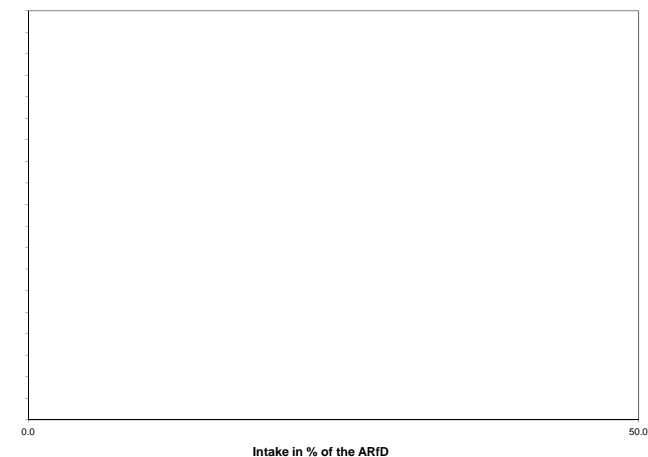
Acute exposure: Cadusafos (aka ebufos) / Leek



Acute exposure: Cadusafos (aka ebufos) / Oats



Acute exposure: Cadusafos (aka ebufos) / Rye



<b>Camphechlor</b>			
Status of the active substance:	<b>Excluded</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:	<b>Yes</b>	Analysed on animal (A) or plant (P) products:	<b>A</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):		ARfD (mg/kg bw):	
Source of ADI:	<b>JMPR</b>	Source of ARfD:	
Year of evaluation:	<b>1973</b>	Year of evaluation:	

No ADI was assigned by JMPR. Active substance was not assessed regarding the setting of an ARfD.

**Chronic risk assessment**

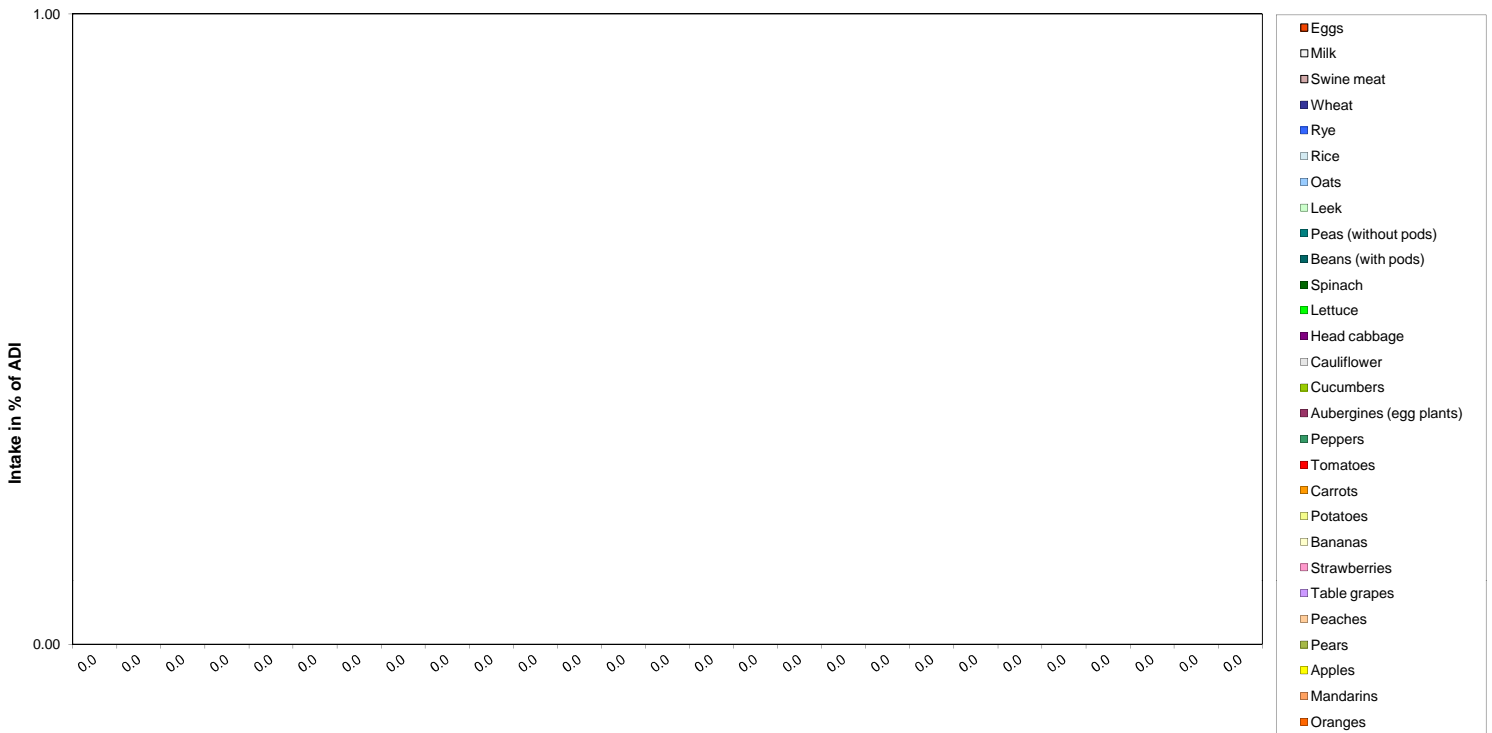
Highest calculated exposure in % of ADI		MS Diet		Highest contributor to MS diet (in % of ADI)		Commodity / group of commodities		2nd contributor to MS diet (in % of ADI)		Commodity / group of commodities		3rd contributor to MS diet (in % of ADI)		Commodity / group of commodities	
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**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples									
2010	Peaches									
2010	Strawberries									
2010	Tomatoes									
2010	Head cabbage									
2010	Lettuce									
2010	Leek									
2010	Oats									
2010	Rye									
2010	Swine Meat		110							
2010	Milk		144							

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Camphechlor**



**Campechlor**

Acute exposure: Campechlor / Apples



Intake in % of the ARfD

Acute exposure: Campechlor / Peaches



Intake in % of the ARfD

Acute exposure: Campechlor / Strawberries



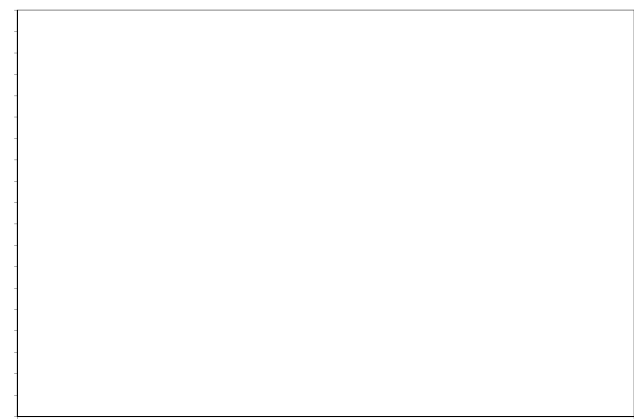
Intake in % of the ARfD

Acute exposure: Campechlor / Tomatoes



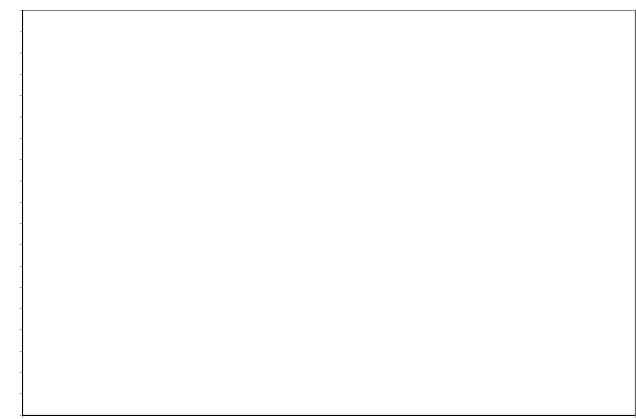
Intake in % of the ARfD

Acute exposure: Campechlor / Head cabbage



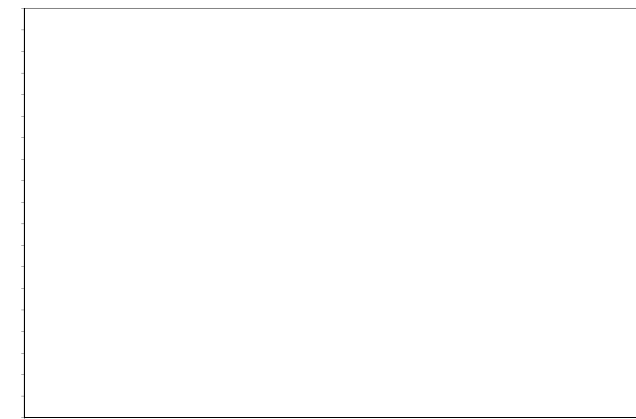
Intake in % of the ARfD

Acute exposure: Campechlor / Lettuce



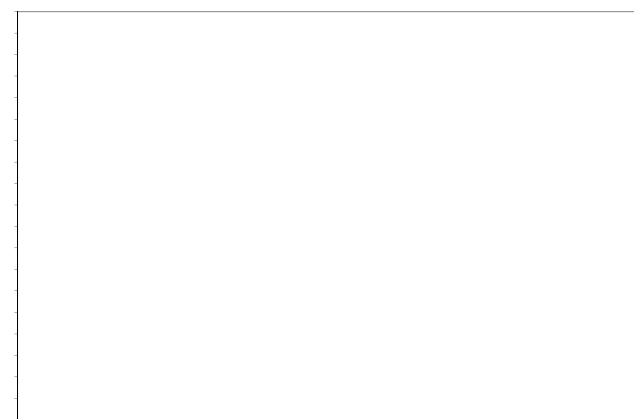
Intake in % of the ARfD

Acute exposure: Campechlor / Leek



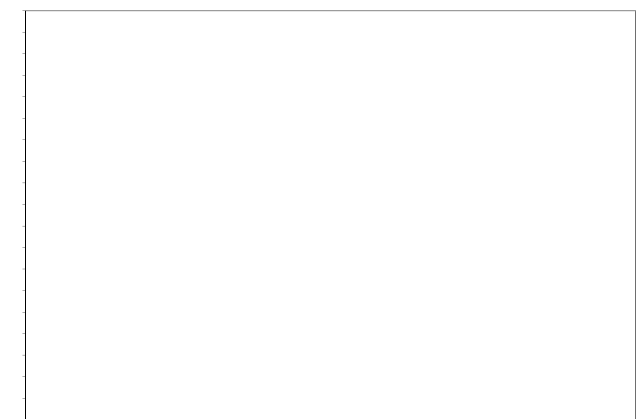
Intake in % of the ARfD

Acute exposure: Campechlor / Oats



Intake in % of the ARfD

Acute exposure: Campechlor / Rye



Intake in % of the ARfD



## Captan

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0,1</b>	ARfD (mg/kg bw):	<b>0,3</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2008</b>	Year of evaluation:	<b>2008</b>

### Chronic risk assessment

Highest calculated exposure in % of ADI		MS Diet		Highest contributor to MS diet (in % of ADI)		Commodity / group of commodities		2nd contributor to MS diet (in % of ADI)		Commodity / group of commodities		3rd contributor to MS diet (in % of ADI)		Commodity / group of commodities																																																																																																																																																																																																									
0,87	DE child	0,72	Apples	0,05	Oranges	0,03	Pears	0,48	NL child	0,38	Apples	0,04	Oranges	0,02	Pears	0,29	FR toddler	0,16	Apples	0,04	Carrots	0,03	Leek	0,26	FR infant	0,15	Apples	0,04	Carrots	0,02	Strawberries	0,24	DK child	0,14	Apples	0,04	Pears	0,02	Carrots	0,16	UK toddler	0,10	Apples	0,02	Oranges	0,01	Pears	0,15	UK infant	0,09	Apples	0,02	Carrots	0,02	Oranges	0,15	PL (GP)	0,12	Apples	0,02	Pears	0,01	Carrots	0,14	IE adult	0,05	Apples	0,04	Pears	0,01	Oranges	0,13	ES child	0,07	Apples	0,03	Oranges	0,02	Pears	0,13	LT adult	0,11	Apples	0,01	Pears	0,00	Cucumbers	0,13	WHO cluster diet B	0,06	Apples	0,02	Pears	0,01	Peppers	0,12	SE (GP)	0,06	Apples	0,02	Pears	0,01	Carrots	0,12	NL (GP)	0,07	Apples	0,02	Oranges	0,01	Pears	0,11	PT (GP)	0,06	Apples	0,02	Pears	0,01	Carrots	0,09	IT child/toddler	0,05	Apples	0,02	Pears	0,01	Oranges	0,09	ES adult	0,05	Apples	0,02	Pears	0,02	Oranges	0,09	WHO cluster diet E	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	IT adult	0,05	Apples	0,01	Pears	0,01	Peaches	0,08	DK adult	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	WHO regional diet	0,04	Apples	0,01	Pears	0,01	Carrots	0,07	WHO Cluster diet F	0,04	Apples	0,01	Oranges	0,01	Carrots	0,06	UK vegetarian	0,04	Apples	0,01	Oranges	0,00	Pears	0,06	WHO cluster diet D	0,04	Apples	0,00	Pears	0,00	Carrots	0,06	FR (GP)	0,03	Apples	0,01	Pears	0,01	Leek	0,05	FI adult	0,02	Apples	0,01	Oranges	0,00	Cucumbers	0,04	UK adult	0,02	Apples	0,01	Oranges	0,00	Pears
0,48	NL child	0,38	Apples	0,04	Oranges	0,02	Pears	0,29	FR toddler	0,16	Apples	0,04	Carrots	0,03	Leek	0,26	FR infant	0,15	Apples	0,04	Carrots	0,02	Strawberries	0,24	DK child	0,14	Apples	0,04	Pears	0,02	Carrots	0,16	UK toddler	0,10	Apples	0,02	Oranges	0,01	Pears	0,15	UK infant	0,09	Apples	0,02	Carrots	0,02	Oranges	0,15	PL (GP)	0,12	Apples	0,02	Pears	0,01	Carrots	0,14	IE adult	0,05	Apples	0,04	Pears	0,01	Oranges	0,13	ES child	0,07	Apples	0,03	Oranges	0,02	Pears	0,13	LT adult	0,11	Apples	0,01	Pears	0,00	Cucumbers	0,13	WHO cluster diet B	0,06	Apples	0,02	Pears	0,01	Peppers	0,12	SE (GP)	0,06	Apples	0,02	Pears	0,01	Carrots	0,12	NL (GP)	0,07	Apples	0,02	Oranges	0,01	Pears	0,11	PT (GP)	0,06	Apples	0,02	Pears	0,01	Carrots	0,09	IT child/toddler	0,05	Apples	0,02	Pears	0,01	Oranges	0,09	ES adult	0,05	Apples	0,02	Pears	0,02	Oranges	0,09	WHO cluster diet E	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	IT adult	0,05	Apples	0,01	Pears	0,01	Peaches	0,08	DK adult	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	WHO regional diet	0,04	Apples	0,01	Pears	0,01	Carrots	0,07	WHO Cluster diet F	0,04	Apples	0,01	Oranges	0,01	Carrots	0,06	UK vegetarian	0,04	Apples	0,01	Oranges	0,00	Pears	0,06	WHO cluster diet D	0,04	Apples	0,00	Pears	0,00	Carrots	0,06	FR (GP)	0,03	Apples	0,01	Pears	0,01	Leek	0,05	FI adult	0,02	Apples	0,01	Oranges	0,00	Cucumbers	0,04	UK adult	0,02	Apples	0,01	Oranges	0,00	Pears								
0,29	FR toddler	0,16	Apples	0,04	Carrots	0,03	Leek	0,26	FR infant	0,15	Apples	0,04	Carrots	0,02	Strawberries	0,24	DK child	0,14	Apples	0,04	Pears	0,02	Carrots	0,16	UK toddler	0,10	Apples	0,02	Oranges	0,01	Pears	0,15	UK infant	0,09	Apples	0,02	Carrots	0,02	Oranges	0,15	PL (GP)	0,12	Apples	0,02	Pears	0,01	Carrots	0,14	IE adult	0,05	Apples	0,04	Pears	0,01	Oranges	0,13	ES child	0,07	Apples	0,03	Oranges	0,02	Pears	0,13	LT adult	0,11	Apples	0,01	Pears	0,00	Cucumbers	0,13	WHO cluster diet B	0,06	Apples	0,02	Pears	0,01	Peppers	0,12	SE (GP)	0,06	Apples	0,02	Pears	0,01	Carrots	0,12	NL (GP)	0,07	Apples	0,02	Oranges	0,01	Pears	0,11	PT (GP)	0,06	Apples	0,02	Pears	0,01	Carrots	0,09	IT child/toddler	0,05	Apples	0,02	Pears	0,01	Oranges	0,09	ES adult	0,05	Apples	0,02	Pears	0,02	Oranges	0,09	WHO cluster diet E	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	IT adult	0,05	Apples	0,01	Pears	0,01	Peaches	0,08	DK adult	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	WHO regional diet	0,04	Apples	0,01	Pears	0,01	Carrots	0,07	WHO Cluster diet F	0,04	Apples	0,01	Oranges	0,01	Carrots	0,06	UK vegetarian	0,04	Apples	0,01	Oranges	0,00	Pears	0,06	WHO cluster diet D	0,04	Apples	0,00	Pears	0,00	Carrots	0,06	FR (GP)	0,03	Apples	0,01	Pears	0,01	Leek	0,05	FI adult	0,02	Apples	0,01	Oranges	0,00	Cucumbers	0,04	UK adult	0,02	Apples	0,01	Oranges	0,00	Pears																
0,26	FR infant	0,15	Apples	0,04	Carrots	0,02	Strawberries	0,24	DK child	0,14	Apples	0,04	Pears	0,02	Carrots	0,16	UK toddler	0,10	Apples	0,02	Oranges	0,01	Pears	0,15	UK infant	0,09	Apples	0,02	Carrots	0,02	Oranges	0,15	PL (GP)	0,12	Apples	0,02	Pears	0,01	Carrots	0,14	IE adult	0,05	Apples	0,04	Pears	0,01	Oranges	0,13	ES child	0,07	Apples	0,03	Oranges	0,02	Pears	0,13	LT adult	0,11	Apples	0,01	Pears	0,00	Cucumbers	0,13	WHO cluster diet B	0,06	Apples	0,02	Pears	0,01	Peppers	0,12	SE (GP)	0,06	Apples	0,02	Pears	0,01	Carrots	0,12	NL (GP)	0,07	Apples	0,02	Oranges	0,01	Pears	0,11	PT (GP)	0,06	Apples	0,02	Pears	0,01	Carrots	0,09	IT child/toddler	0,05	Apples	0,02	Pears	0,01	Oranges	0,09	ES adult	0,05	Apples	0,02	Pears	0,02	Oranges	0,09	WHO cluster diet E	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	IT adult	0,05	Apples	0,01	Pears	0,01	Peaches	0,08	DK adult	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	WHO regional diet	0,04	Apples	0,01	Pears	0,01	Carrots	0,07	WHO Cluster diet F	0,04	Apples	0,01	Oranges	0,01	Carrots	0,06	UK vegetarian	0,04	Apples	0,01	Oranges	0,00	Pears	0,06	WHO cluster diet D	0,04	Apples	0,00	Pears	0,00	Carrots	0,06	FR (GP)	0,03	Apples	0,01	Pears	0,01	Leek	0,05	FI adult	0,02	Apples	0,01	Oranges	0,00	Cucumbers	0,04	UK adult	0,02	Apples	0,01	Oranges	0,00	Pears																								
0,24	DK child	0,14	Apples	0,04	Pears	0,02	Carrots	0,16	UK toddler	0,10	Apples	0,02	Oranges	0,01	Pears	0,15	UK infant	0,09	Apples	0,02	Carrots	0,02	Oranges	0,15	PL (GP)	0,12	Apples	0,02	Pears	0,01	Carrots	0,14	IE adult	0,05	Apples	0,04	Pears	0,01	Oranges	0,13	ES child	0,07	Apples	0,03	Oranges	0,02	Pears	0,13	LT adult	0,11	Apples	0,01	Pears	0,00	Cucumbers	0,13	WHO cluster diet B	0,06	Apples	0,02	Pears	0,01	Peppers	0,12	SE (GP)	0,06	Apples	0,02	Pears	0,01	Carrots	0,12	NL (GP)	0,07	Apples	0,02	Oranges	0,01	Pears	0,11	PT (GP)	0,06	Apples	0,02	Pears	0,01	Carrots	0,09	IT child/toddler	0,05	Apples	0,02	Pears	0,01	Oranges	0,09	ES adult	0,05	Apples	0,02	Pears	0,02	Oranges	0,09	WHO cluster diet E	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	IT adult	0,05	Apples	0,01	Pears	0,01	Peaches	0,08	DK adult	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	WHO regional diet	0,04	Apples	0,01	Pears	0,01	Carrots	0,07	WHO Cluster diet F	0,04	Apples	0,01	Oranges	0,01	Carrots	0,06	UK vegetarian	0,04	Apples	0,01	Oranges	0,00	Pears	0,06	WHO cluster diet D	0,04	Apples	0,00	Pears	0,00	Carrots	0,06	FR (GP)	0,03	Apples	0,01	Pears	0,01	Leek	0,05	FI adult	0,02	Apples	0,01	Oranges	0,00	Cucumbers	0,04	UK adult	0,02	Apples	0,01	Oranges	0,00	Pears																																
0,16	UK toddler	0,10	Apples	0,02	Oranges	0,01	Pears	0,15	UK infant	0,09	Apples	0,02	Carrots	0,02	Oranges	0,15	PL (GP)	0,12	Apples	0,02	Pears	0,01	Carrots	0,14	IE adult	0,05	Apples	0,04	Pears	0,01	Oranges	0,13	ES child	0,07	Apples	0,03	Oranges	0,02	Pears	0,13	LT adult	0,11	Apples	0,01	Pears	0,00	Cucumbers	0,13	WHO cluster diet B	0,06	Apples	0,02	Pears	0,01	Peppers	0,12	SE (GP)	0,06	Apples	0,02	Pears	0,01	Carrots	0,12	NL (GP)	0,07	Apples	0,02	Oranges	0,01	Pears	0,11	PT (GP)	0,06	Apples	0,02	Pears	0,01	Carrots	0,09	IT child/toddler	0,05	Apples	0,02	Pears	0,01	Oranges	0,09	ES adult	0,05	Apples	0,02	Pears	0,02	Oranges	0,09	WHO cluster diet E	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	IT adult	0,05	Apples	0,01	Pears	0,01	Peaches	0,08	DK adult	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	WHO regional diet	0,04	Apples	0,01	Pears	0,01	Carrots	0,07	WHO Cluster diet F	0,04	Apples	0,01	Oranges	0,01	Carrots	0,06	UK vegetarian	0,04	Apples	0,01	Oranges	0,00	Pears	0,06	WHO cluster diet D	0,04	Apples	0,00	Pears	0,00	Carrots	0,06	FR (GP)	0,03	Apples	0,01	Pears	0,01	Leek	0,05	FI adult	0,02	Apples	0,01	Oranges	0,00	Cucumbers	0,04	UK adult	0,02	Apples	0,01	Oranges	0,00	Pears																																								
0,15	UK infant	0,09	Apples	0,02	Carrots	0,02	Oranges	0,15	PL (GP)	0,12	Apples	0,02	Pears	0,01	Carrots	0,14	IE adult	0,05	Apples	0,04	Pears	0,01	Oranges	0,13	ES child	0,07	Apples	0,03	Oranges	0,02	Pears	0,13	LT adult	0,11	Apples	0,01	Pears	0,00	Cucumbers	0,13	WHO cluster diet B	0,06	Apples	0,02	Pears	0,01	Peppers	0,12	SE (GP)	0,06	Apples	0,02	Pears	0,01	Carrots	0,12	NL (GP)	0,07	Apples	0,02	Oranges	0,01	Pears	0,11	PT (GP)	0,06	Apples	0,02	Pears	0,01	Carrots	0,09	IT child/toddler	0,05	Apples	0,02	Pears	0,01	Oranges	0,09	ES adult	0,05	Apples	0,02	Pears	0,02	Oranges	0,09	WHO cluster diet E	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	IT adult	0,05	Apples	0,01	Pears	0,01	Peaches	0,08	DK adult	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	WHO regional diet	0,04	Apples	0,01	Pears	0,01	Carrots	0,07	WHO Cluster diet F	0,04	Apples	0,01	Oranges	0,01	Carrots	0,06	UK vegetarian	0,04	Apples	0,01	Oranges	0,00	Pears	0,06	WHO cluster diet D	0,04	Apples	0,00	Pears	0,00	Carrots	0,06	FR (GP)	0,03	Apples	0,01	Pears	0,01	Leek	0,05	FI adult	0,02	Apples	0,01	Oranges	0,00	Cucumbers	0,04	UK adult	0,02	Apples	0,01	Oranges	0,00	Pears																																																
0,15	PL (GP)	0,12	Apples	0,02	Pears	0,01	Carrots	0,14	IE adult	0,05	Apples	0,04	Pears	0,01	Oranges	0,13	ES child	0,07	Apples	0,03	Oranges	0,02	Pears	0,13	LT adult	0,11	Apples	0,01	Pears	0,00	Cucumbers	0,13	WHO cluster diet B	0,06	Apples	0,02	Pears	0,01	Peppers	0,12	SE (GP)	0,06	Apples	0,02	Pears	0,01	Carrots	0,12	NL (GP)	0,07	Apples	0,02	Oranges	0,01	Pears	0,11	PT (GP)	0,06	Apples	0,02	Pears	0,01	Carrots	0,09	IT child/toddler	0,05	Apples	0,02	Pears	0,01	Oranges	0,09	ES adult	0,05	Apples	0,02	Pears	0,02	Oranges	0,09	WHO cluster diet E	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	IT adult	0,05	Apples	0,01	Pears	0,01	Peaches	0,08	DK adult	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	WHO regional diet	0,04	Apples	0,01	Pears	0,01	Carrots	0,07	WHO Cluster diet F	0,04	Apples	0,01	Oranges	0,01	Carrots	0,06	UK vegetarian	0,04	Apples	0,01	Oranges	0,00	Pears	0,06	WHO cluster diet D	0,04	Apples	0,00	Pears	0,00	Carrots	0,06	FR (GP)	0,03	Apples	0,01	Pears	0,01	Leek	0,05	FI adult	0,02	Apples	0,01	Oranges	0,00	Cucumbers	0,04	UK adult	0,02	Apples	0,01	Oranges	0,00	Pears																																																								
0,14	IE adult	0,05	Apples	0,04	Pears	0,01	Oranges	0,13	ES child	0,07	Apples	0,03	Oranges	0,02	Pears	0,13	LT adult	0,11	Apples	0,01	Pears	0,00	Cucumbers	0,13	WHO cluster diet B	0,06	Apples	0,02	Pears	0,01	Peppers	0,12	SE (GP)	0,06	Apples	0,02	Pears	0,01	Carrots	0,12	NL (GP)	0,07	Apples	0,02	Oranges	0,01	Pears	0,11	PT (GP)	0,06	Apples	0,02	Pears	0,01	Carrots	0,09	IT child/toddler	0,05	Apples	0,02	Pears	0,01	Oranges	0,09	ES adult	0,05	Apples	0,02	Pears	0,02	Oranges	0,09	WHO cluster diet E	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	IT adult	0,05	Apples	0,01	Pears	0,01	Peaches	0,08	DK adult	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	WHO regional diet	0,04	Apples	0,01	Pears	0,01	Carrots	0,07	WHO Cluster diet F	0,04	Apples	0,01	Oranges	0,01	Carrots	0,06	UK vegetarian	0,04	Apples	0,01	Oranges	0,00	Pears	0,06	WHO cluster diet D	0,04	Apples	0,00	Pears	0,00	Carrots	0,06	FR (GP)	0,03	Apples	0,01	Pears	0,01	Leek	0,05	FI adult	0,02	Apples	0,01	Oranges	0,00	Cucumbers	0,04	UK adult	0,02	Apples	0,01	Oranges	0,00	Pears																																																																
0,13	ES child	0,07	Apples	0,03	Oranges	0,02	Pears	0,13	LT adult	0,11	Apples	0,01	Pears	0,00	Cucumbers	0,13	WHO cluster diet B	0,06	Apples	0,02	Pears	0,01	Peppers	0,12	SE (GP)	0,06	Apples	0,02	Pears	0,01	Carrots	0,12	NL (GP)	0,07	Apples	0,02	Oranges	0,01	Pears	0,11	PT (GP)	0,06	Apples	0,02	Pears	0,01	Carrots	0,09	IT child/toddler	0,05	Apples	0,02	Pears	0,01	Oranges	0,09	ES adult	0,05	Apples	0,02	Pears	0,02	Oranges	0,09	WHO cluster diet E	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	IT adult	0,05	Apples	0,01	Pears	0,01	Peaches	0,08	DK adult	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	WHO regional diet	0,04	Apples	0,01	Pears	0,01	Carrots	0,07	WHO Cluster diet F	0,04	Apples	0,01	Oranges	0,01	Carrots	0,06	UK vegetarian	0,04	Apples	0,01	Oranges	0,00	Pears	0,06	WHO cluster diet D	0,04	Apples	0,00	Pears	0,00	Carrots	0,06	FR (GP)	0,03	Apples	0,01	Pears	0,01	Leek	0,05	FI adult	0,02	Apples	0,01	Oranges	0,00	Cucumbers	0,04	UK adult	0,02	Apples	0,01	Oranges	0,00	Pears																																																																								
0,13	LT adult	0,11	Apples	0,01	Pears	0,00	Cucumbers	0,13	WHO cluster diet B	0,06	Apples	0,02	Pears	0,01	Peppers	0,12	SE (GP)	0,06	Apples	0,02	Pears	0,01	Carrots	0,12	NL (GP)	0,07	Apples	0,02	Oranges	0,01	Pears	0,11	PT (GP)	0,06	Apples	0,02	Pears	0,01	Carrots	0,09	IT child/toddler	0,05	Apples	0,02	Pears	0,01	Oranges	0,09	ES adult	0,05	Apples	0,02	Pears	0,02	Oranges	0,09	WHO cluster diet E	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	IT adult	0,05	Apples	0,01	Pears	0,01	Peaches	0,08	DK adult	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	WHO regional diet	0,04	Apples	0,01	Pears	0,01	Carrots	0,07	WHO Cluster diet F	0,04	Apples	0,01	Oranges	0,01	Carrots	0,06	UK vegetarian	0,04	Apples	0,01	Oranges	0,00	Pears	0,06	WHO cluster diet D	0,04	Apples	0,00	Pears	0,00	Carrots	0,06	FR (GP)	0,03	Apples	0,01	Pears	0,01	Leek	0,05	FI adult	0,02	Apples	0,01	Oranges	0,00	Cucumbers	0,04	UK adult	0,02	Apples	0,01	Oranges	0,00	Pears																																																																																
0,13	WHO cluster diet B	0,06	Apples	0,02	Pears	0,01	Peppers	0,12	SE (GP)	0,06	Apples	0,02	Pears	0,01	Carrots	0,12	NL (GP)	0,07	Apples	0,02	Oranges	0,01	Pears	0,11	PT (GP)	0,06	Apples	0,02	Pears	0,01	Carrots	0,09	IT child/toddler	0,05	Apples	0,02	Pears	0,01	Oranges	0,09	ES adult	0,05	Apples	0,02	Pears	0,02	Oranges	0,09	WHO cluster diet E	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	IT adult	0,05	Apples	0,01	Pears	0,01	Peaches	0,08	DK adult	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	WHO regional diet	0,04	Apples	0,01	Pears	0,01	Carrots	0,07	WHO Cluster diet F	0,04	Apples	0,01	Oranges	0,01	Carrots	0,06	UK vegetarian	0,04	Apples	0,01	Oranges	0,00	Pears	0,06	WHO cluster diet D	0,04	Apples	0,00	Pears	0,00	Carrots	0,06	FR (GP)	0,03	Apples	0,01	Pears	0,01	Leek	0,05	FI adult	0,02	Apples	0,01	Oranges	0,00	Cucumbers	0,04	UK adult	0,02	Apples	0,01	Oranges	0,00	Pears																																																																																								
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0,12	NL (GP)	0,07	Apples	0,02	Oranges	0,01	Pears	0,11	PT (GP)	0,06	Apples	0,02	Pears	0,01	Carrots	0,09	IT child/toddler	0,05	Apples	0,02	Pears	0,01	Oranges	0,09	ES adult	0,05	Apples	0,02	Pears	0,02	Oranges	0,09	WHO cluster diet E	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	IT adult	0,05	Apples	0,01	Pears	0,01	Peaches	0,08	DK adult	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	WHO regional diet	0,04	Apples	0,01	Pears	0,01	Carrots	0,07	WHO Cluster diet F	0,04	Apples	0,01	Oranges	0,01	Carrots	0,06	UK vegetarian	0,04	Apples	0,01	Oranges	0,00	Pears	0,06	WHO cluster diet D	0,04	Apples	0,00	Pears	0,00	Carrots	0,06	FR (GP)	0,03	Apples	0,01	Pears	0,01	Leek	0,05	FI adult	0,02	Apples	0,01	Oranges	0,00	Cucumbers	0,04	UK adult	0,02	Apples	0,01	Oranges	0,00	Pears																																																																																																								
0,11	PT (GP)	0,06	Apples	0,02	Pears	0,01	Carrots	0,09	IT child/toddler	0,05	Apples	0,02	Pears	0,01	Oranges	0,09	ES adult	0,05	Apples	0,02	Pears	0,02	Oranges	0,09	WHO cluster diet E	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	IT adult	0,05	Apples	0,01	Pears	0,01	Peaches	0,08	DK adult	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	WHO regional diet	0,04	Apples	0,01	Pears	0,01	Carrots	0,07	WHO Cluster diet F	0,04	Apples	0,01	Oranges	0,01	Carrots	0,06	UK vegetarian	0,04	Apples	0,01	Oranges	0,00	Pears	0,06	WHO cluster diet D	0,04	Apples	0,00	Pears	0,00	Carrots	0,06	FR (GP)	0,03	Apples	0,01	Pears	0,01	Leek	0,05	FI adult	0,02	Apples	0,01	Oranges	0,00	Cucumbers	0,04	UK adult	0,02	Apples	0,01	Oranges	0,00	Pears																																																																																																																
0,09	IT child/toddler	0,05	Apples	0,02	Pears	0,01	Oranges	0,09	ES adult	0,05	Apples	0,02	Pears	0,02	Oranges	0,09	WHO cluster diet E	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	IT adult	0,05	Apples	0,01	Pears	0,01	Peaches	0,08	DK adult	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	WHO regional diet	0,04	Apples	0,01	Pears	0,01	Carrots	0,07	WHO Cluster diet F	0,04	Apples	0,01	Oranges	0,01	Carrots	0,06	UK vegetarian	0,04	Apples	0,01	Oranges	0,00	Pears	0,06	WHO cluster diet D	0,04	Apples	0,00	Pears	0,00	Carrots	0,06	FR (GP)	0,03	Apples	0,01	Pears	0,01	Leek	0,05	FI adult	0,02	Apples	0,01	Oranges	0,00	Cucumbers	0,04	UK adult	0,02	Apples	0,01	Oranges	0,00	Pears																																																																																																																								
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0,09	WHO cluster diet E	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	IT adult	0,05	Apples	0,01	Pears	0,01	Peaches	0,08	DK adult	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	WHO regional diet	0,04	Apples	0,01	Pears	0,01	Carrots	0,07	WHO Cluster diet F	0,04	Apples	0,01	Oranges	0,01	Carrots	0,06	UK vegetarian	0,04	Apples	0,01	Oranges	0,00	Pears	0,06	WHO cluster diet D	0,04	Apples	0,00	Pears	0,00	Carrots	0,06	FR (GP)	0,03	Apples	0,01	Pears	0,01	Leek	0,05	FI adult	0,02	Apples	0,01	Oranges	0,00	Cucumbers	0,04	UK adult	0,02	Apples	0,01	Oranges	0,00	Pears																																																																																																																																								
0,08	IT adult	0,05	Apples	0,01	Pears	0,01	Peaches	0,08	DK adult	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	WHO regional diet	0,04	Apples	0,01	Pears	0,01	Carrots	0,07	WHO Cluster diet F	0,04	Apples	0,01	Oranges	0,01	Carrots	0,06	UK vegetarian	0,04	Apples	0,01	Oranges	0,00	Pears	0,06	WHO cluster diet D	0,04	Apples	0,00	Pears	0,00	Carrots	0,06	FR (GP)	0,03	Apples	0,01	Pears	0,01	Leek	0,05	FI adult	0,02	Apples	0,01	Oranges	0,00	Cucumbers	0,04	UK adult	0,02	Apples	0,01	Oranges	0,00	Pears																																																																																																																																																
0,08	DK adult	0,05	Apples	0,01	Pears	0,01	Carrots	0,08	WHO regional diet	0,04	Apples	0,01	Pears	0,01	Carrots	0,07	WHO Cluster diet F	0,04	Apples	0,01	Oranges	0,01	Carrots	0,06	UK vegetarian	0,04	Apples	0,01	Oranges	0,00	Pears	0,06	WHO cluster diet D	0,04	Apples	0,00	Pears	0,00	Carrots	0,06	FR (GP)	0,03	Apples	0,01	Pears	0,01	Leek	0,05	FI adult	0,02	Apples	0,01	Oranges	0,00	Cucumbers	0,04	UK adult	0,02	Apples	0,01	Oranges	0,00	Pears																																																																																																																																																								
0,08	WHO regional diet	0,04	Apples	0,01	Pears	0,01	Carrots	0,07	WHO Cluster diet F	0,04	Apples	0,01	Oranges	0,01	Carrots	0,06	UK vegetarian	0,04	Apples	0,01	Oranges	0,00	Pears	0,06	WHO cluster diet D	0,04	Apples	0,00	Pears	0,00	Carrots	0,06	FR (GP)	0,03	Apples	0,01	Pears	0,01	Leek	0,05	FI adult	0,02	Apples	0,01	Oranges	0,00	Cucumbers	0,04	UK adult	0,02	Apples	0,01	Oranges	0,00	Pears																																																																																																																																																																
0,07	WHO Cluster diet F	0,04	Apples	0,01	Oranges	0,01	Carrots	0,06	UK vegetarian	0,04	Apples	0,01	Oranges	0,00	Pears	0,06	WHO cluster diet D	0,04	Apples	0,00	Pears	0,00	Carrots	0,06	FR (GP)	0,03	Apples	0,01	Pears	0,01	Leek	0,05	FI adult	0,02	Apples	0,01	Oranges	0,00	Cucumbers	0,04	UK adult	0,02	Apples	0,01	Oranges	0,00	Pears																																																																																																																																																																								
0,06	UK vegetarian	0,04	Apples	0,01	Oranges	0,00	Pears	0,06	WHO cluster diet D	0,04	Apples	0,00	Pears	0,00	Carrots	0,06	FR (GP)	0,03	Apples	0,01	Pears	0,01	Leek	0,05	FI adult	0,02	Apples	0,01	Oranges	0,00	Cucumbers	0,04	UK adult	0,02	Apples	0,01	Oranges	0,00	Pears																																																																																																																																																																																
0,06	WHO cluster diet D	0,04	Apples	0,00	Pears	0,00	Carrots	0,06	FR (GP)	0,03	Apples	0,01	Pears	0,01	Leek	0,05	FI adult	0,02	Apples	0,01	Oranges	0,00	Cucumbers	0,04	UK adult	0,02	Apples	0,01	Oranges	0,00	Pears																																																																																																																																																																																								
0,06	FR (GP)	0,03	Apples	0,01	Pears	0,01	Leek	0,05	FI adult	0,02	Apples	0,01	Oranges	0,00	Cucumbers	0,04	UK adult	0,02	Apples	0,01	Oranges	0,00	Pears																																																																																																																																																																																																
0,05	FI adult	0,02	Apples	0,01	Oranges	0,00	Cucumbers	0,04	UK adult	0,02	Apples	0,01	Oranges	0,00	Pears																																																																																																																																																																																																								
0,04	UK adult	0,02	Apples	0,01	Oranges	0,00	Pears																																																																																																																																																																																																																

### Acute risk assessment

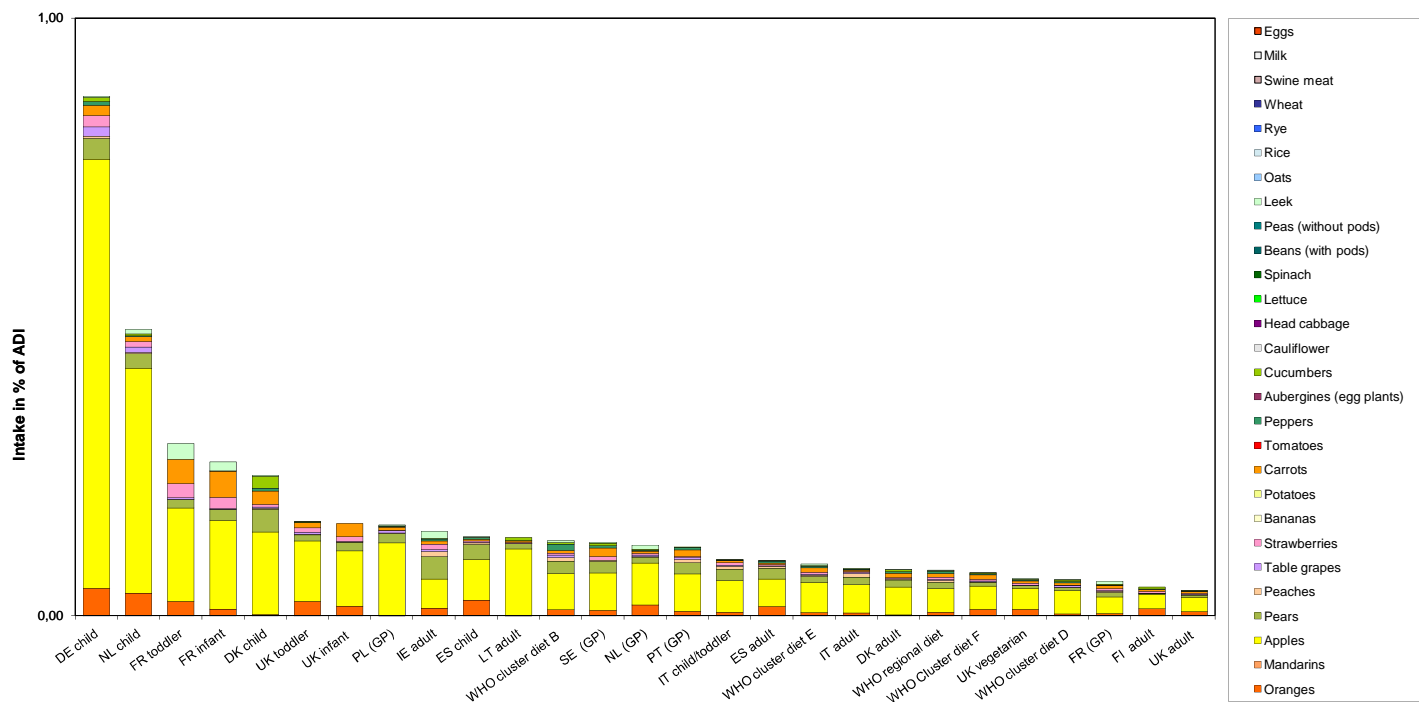
Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL a)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	3	1506	24,24		2,72		88,82	UK infant	
2010	Peaches	0,02	1339	0,15	0,45	3,20		63,29	DE child	
2010	Strawberries	3	1437	1,53	0,07	3,70		19,23	DE child	
2010	Tomatoes	2	1049							
2010	Head cabbage	0,02	1070							
2010	Lettuce	0,02	2190	0,05		0,02		0,18	DE child	
2010	Leek	2	851	0,59		0,44		8,65	BE child	
2010	Oats	0,02	172							
2010	Rye	0,02	373							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

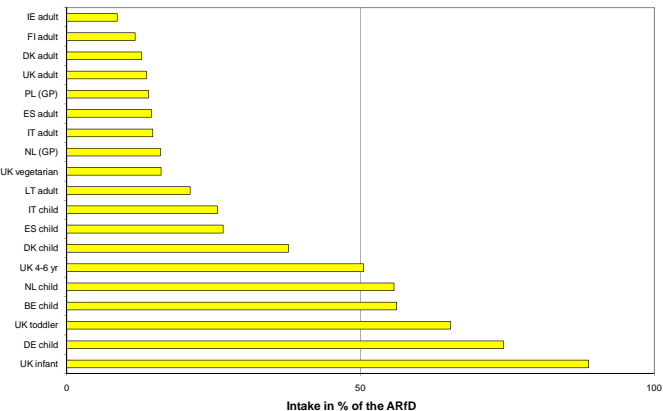
c) TRL: toxicological threshold level

### Chronic risk assessment: Captan

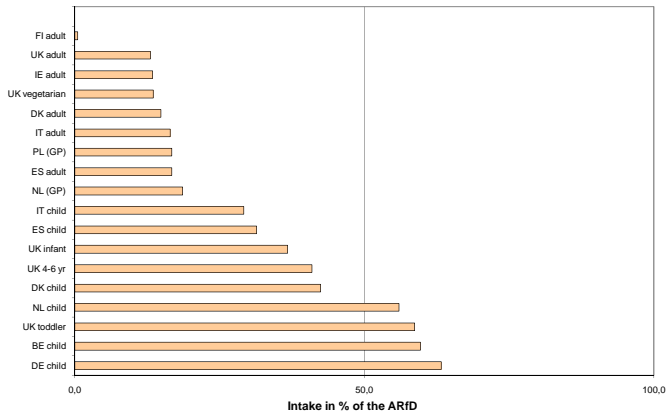


**Captan**

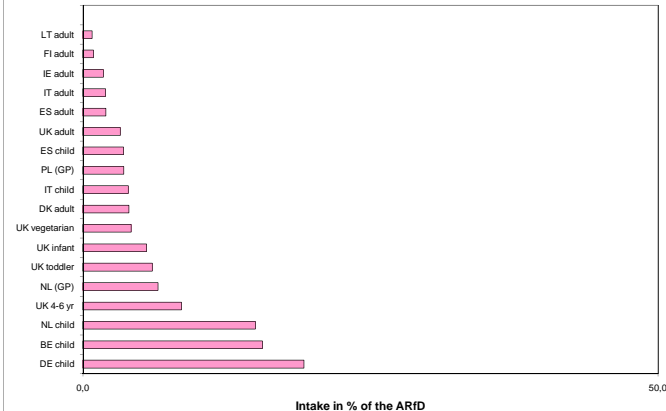
Acute exposure: Captan / Apples



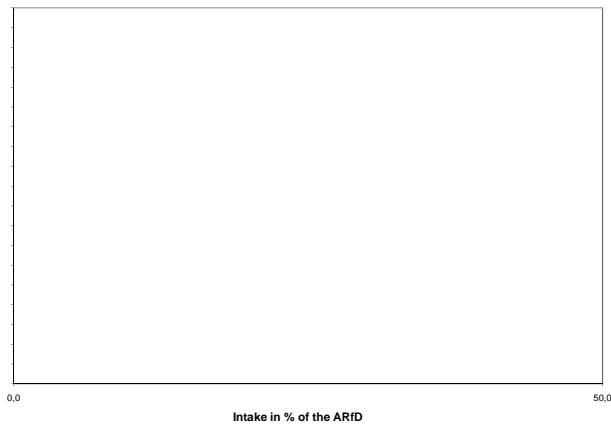
Acute exposure: Captan / Peaches



Acute exposure: Captan / Strawberries



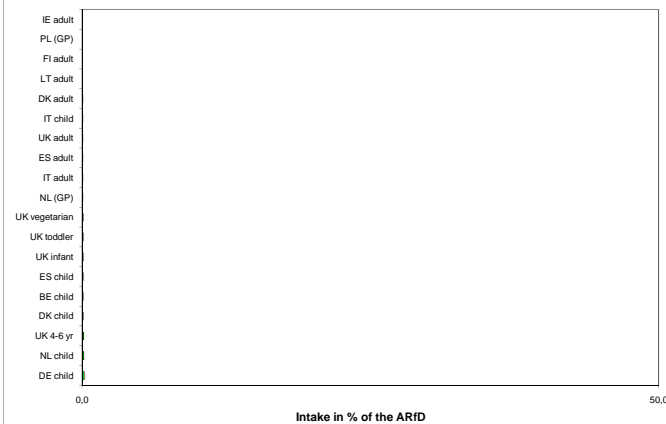
Acute exposure: Captan / Tomatoes



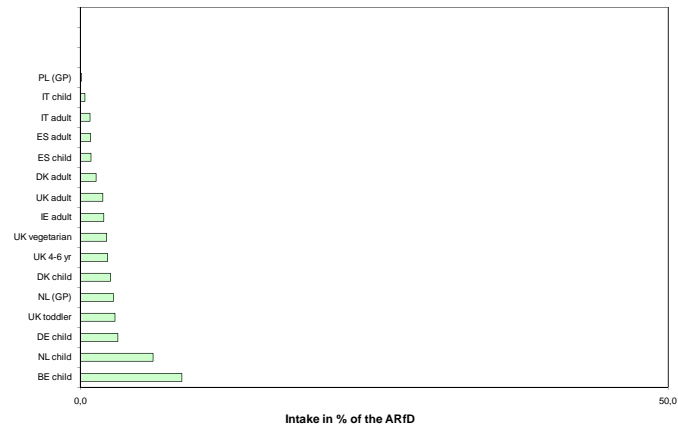
Acute exposure: Captan / Head cabbage



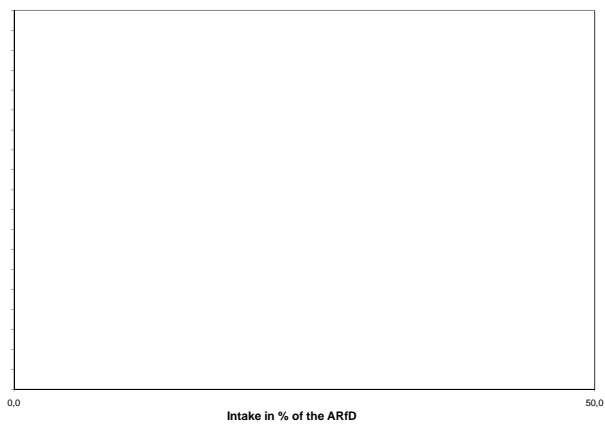
Acute exposure: Captan / Lettuce



Acute exposure: Captan / Leek



Acute exposure: Captan / Oats



Acute exposure: Captan / Rye



Carbaryl			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.0075	ARfD (mg/kg bw):	0.01
Source of ADI:	EFSA	Source of ARfD:	EFSA
Year of evaluation:	2006	Year of evaluation:	2006

### Chronic risk assessment

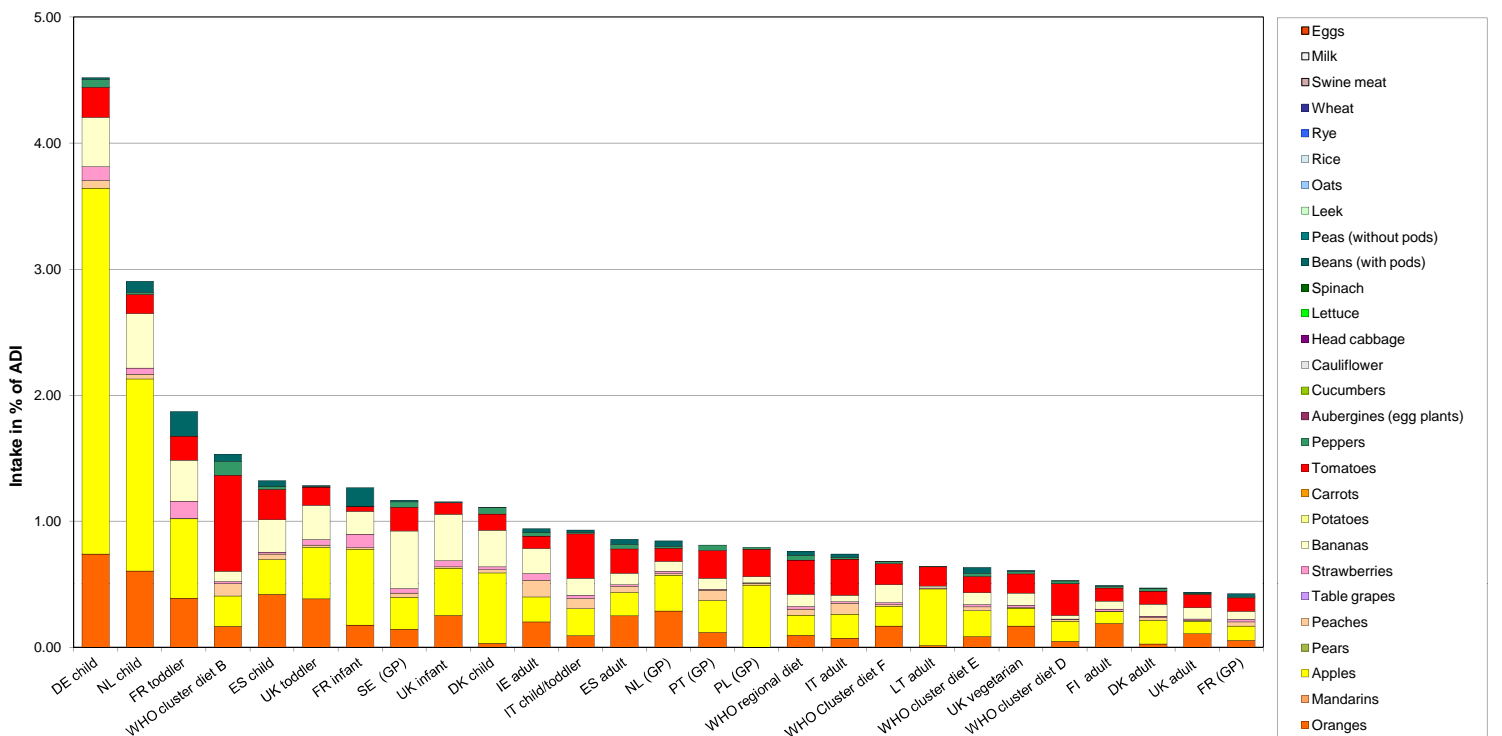
Highest calculated exposure in % of ADI		MS Diet		Exposure (range) in % of ADI minimum - maximum		No of diets exceeding ADI:					
				5		---					
Highest contributor to MS diet (in % of ADI)		Commodity / group of commodities		2nd contributor to MS diet (in % of ADI)		Commodity / group of commodities		3rd contributor to MS diet (in % of ADI)		Commodity / group of commodities	
4.52	DE child	2.90	Apples	0.74	Oranges	0.39	Bananas				
2.90	NL child	1.52	Apples	0.61	Oranges	0.43	Bananas				
1.87	FR toddler	0.63	Apples	0.39	Oranges	0.33	Bananas				
1.53	WHO cluster diet B	0.76	Tomatoes	0.24	Apples	0.17	Oranges				
1.32	ES child	0.42	Oranges	0.27	Apples	0.26	Bananas				
1.28	UK toddler	0.41	Apples	0.39	Oranges	0.27	Bananas				
1.27	FR infant	0.60	Apples	0.18	Bananas	0.18	Oranges				
1.17	SE (GP)	0.46	Bananas	0.25	Apples	0.19	Tomatoes				
1.15	UK infant	0.38	Apples	0.37	Bananas	0.25	Oranges				
1.11	DK child	0.56	Apples	0.29	Bananas	0.13	Tomatoes				
0.94	IE adult	0.20	Oranges	0.20	Apples	0.20	Bananas				
0.93	IT child/toddler	0.35	Tomatoes	0.21	Apples	0.14	Bananas				
0.86	ES adult	0.25	Oranges	0.19	Tomatoes	0.18	Apples				
0.85	NL (GP)	0.29	Oranges	0.28	Apples	0.11	Tomatoes				
0.81	PT (GP)	0.25	Apples	0.22	Tomatoes	0.12	Oranges				
0.80	PL (GP)	0.49	Apples	0.22	Tomatoes	0.05	Bananas				
0.76	WHO regional diet	0.27	Tomatoes	0.16	Apples	0.10	Oranges				
0.74	IT adult	0.29	Tomatoes	0.19	Apples	0.09	Peaches				
0.68	WHO Cluster diet F	0.17	Oranges	0.17	Tomatoes	0.16	Apples				
0.64	LT adult	0.45	Apples	0.15	Tomatoes	0.01	Bananas				
0.63	WHO cluster diet E	0.20	Apples	0.13	Tomatoes	0.09	Bananas				
0.61	UK vegetarian	0.17	Oranges	0.15	Tomatoes	0.14	Apples				
0.53	WHO cluster diet D	0.25	Tomatoes	0.16	Apples	0.05	Oranges				
0.49	FI adult	0.19	Oranges	0.11	Tomatoes	0.10	Apples				
0.47	DK adult	0.19	Apples	0.10	Tomatoes	0.10	Bananas				
0.44	UK adult	0.11	Oranges	0.11	Tomatoes	0.10	Apples				
0.43	FR (GP)	0.11	Apples	0.11	Tomatoes	0.06	Bananas				

### Acute risk assessment

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	2973	0.27		0.02		20.57	UK infant	
2010	Peaches	0.05	1424	0.07		0.03		18.99	DE child	
2010	Strawberries	0.05	2199	0.09		0.02		2.34	DE child	
2010	Tomatoes	0.5	2336	0.04		0.02		9.30	BE child	
2010	Head cabbage	0.05	1150							
2010	Lettuce	0.05	2223							
2010	Leek	0.05	890							
2010	Oats	0.5	268							
2010	Rye	0.5	443							
2010	Swine Meat									
2010	Milk									

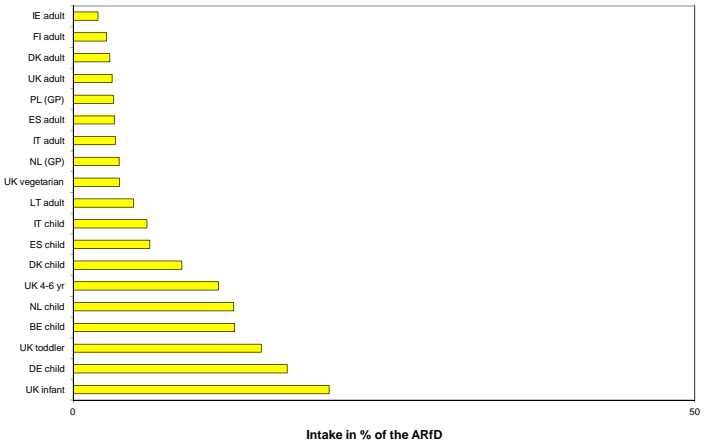
a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

### Chronic risk assessment: Carbaryl

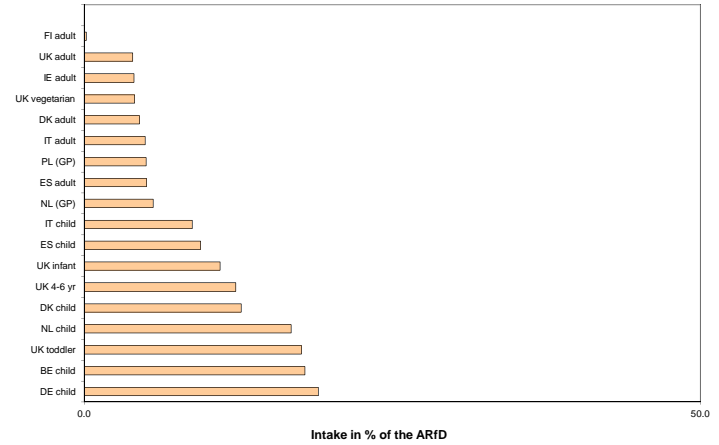


**Carbaryl**

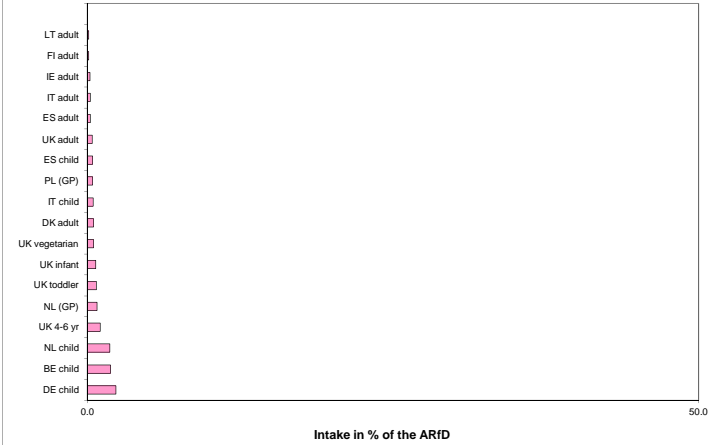
Acute exposure: Carbaryl/ Apples



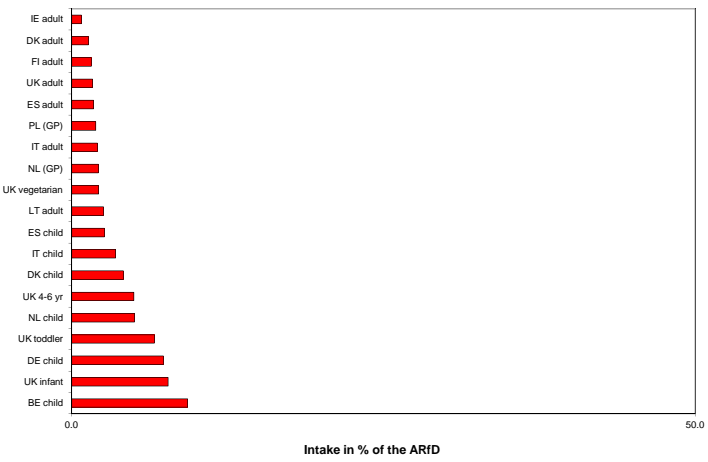
Acute exposure: Carbaryl/ Peaches



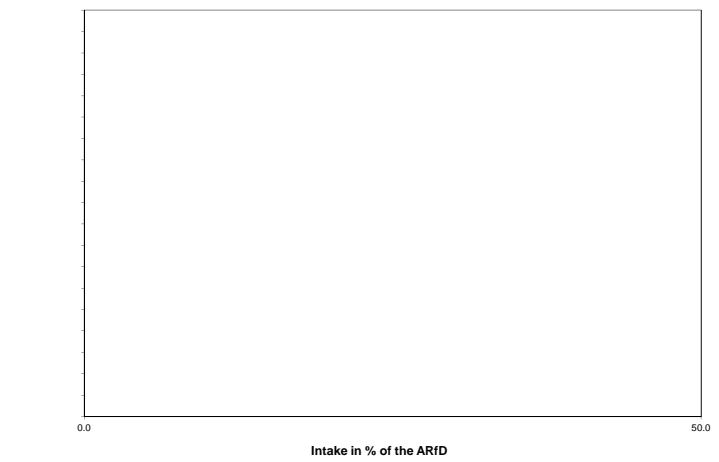
Acute exposure: Carbaryl/ Strawberries



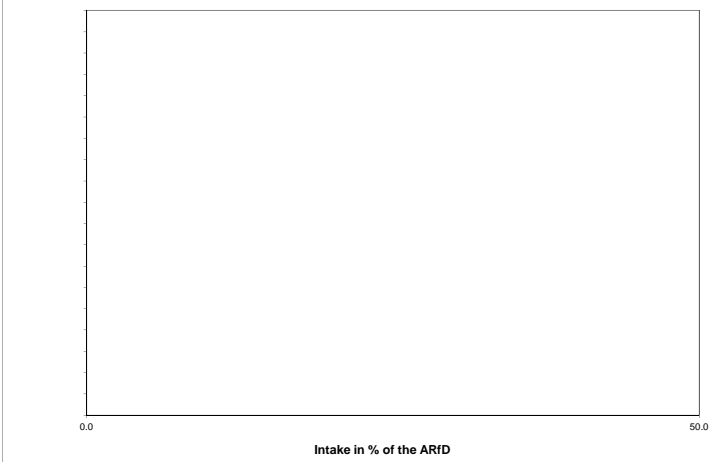
Acute exposure: Carbaryl/ Tomatoes



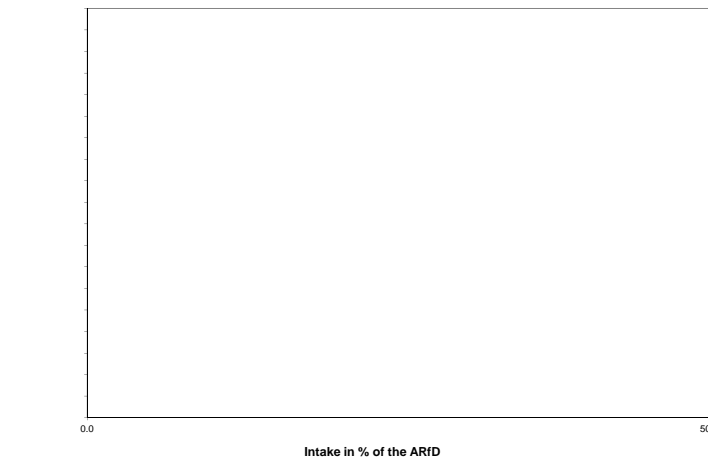
Acute exposure: Carbaryl/ Head cabbage



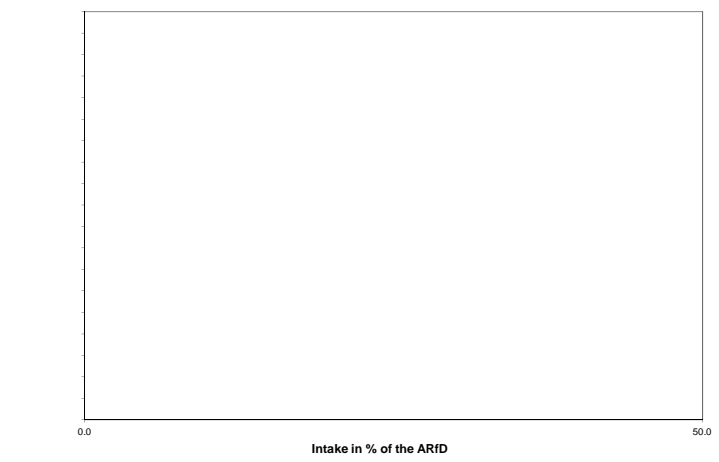
Acute exposure: Carbaryl/ Lettuce



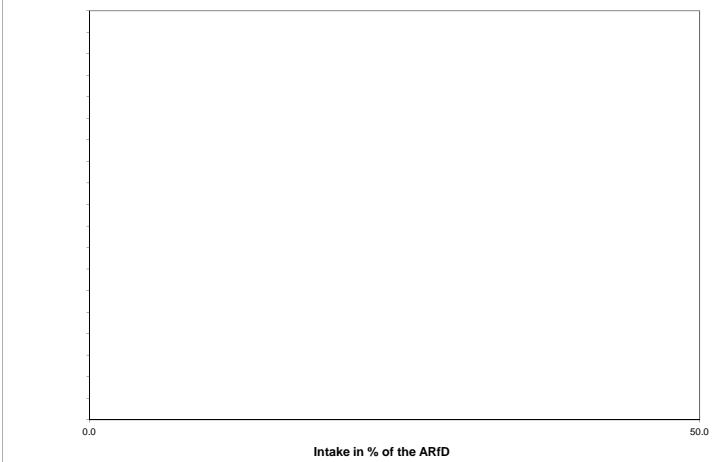
Acute exposure: Carbaryl/ Leek



Acute exposure: Carbaryl / Oats



Acute exposure: Carbaryl / Rye



## Carbendazim and benomyl

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.02</b>	ARfD (mg/kg bw):	<b>0.02</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2010</b>	Year of evaluation:	<b>2010</b>

For the risk assessment the toxicological reference values of carbendazim are used. (ADI and ARfD for benomyl: 0.03 mg/kg bw/d (DE, 1998))

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum					
		2					
		No of diets exceeding ADI:		---			
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
2.13	DE child	0.90	Apples	0.39	Wheat	0.26	Oranges
1.82	NL child	0.47	Apples	0.45	Wheat	0.34	Potatoes
1.54	WHO cluster diet B	0.81	Wheat	0.19	Tomatoes	0.15	Potatoes
1.50	DK child	0.52	Wheat	0.38	Rye	0.17	Apples
1.18	FR toddler	0.29	Potatoes	0.25	Wheat	0.19	Apples
1.10	WHO cluster diet D	0.62	Wheat	0.23	Potatoes	0.06	Tomatoes
1.01	UK toddler	0.37	Wheat	0.20	Potatoes	0.13	Oranges
1.01	PT (GP)	0.37	Wheat	0.31	Potatoes	0.08	Apples
1.00	IT child/toddler	0.63	Wheat	0.09	Tomatoes	0.07	Apples
0.96	ES child	0.42	Wheat	0.15	Wheat	0.11	Potatoes
0.92	SE (GP)	0.30	Wheat	0.24	Potatoes	0.08	Apples
0.89	WHO cluster diet E	0.37	Wheat	0.22	Potatoes	0.06	Apples
0.86	WHO Cluster diet F	0.34	Wheat	0.20	Potatoes	0.07	Rye
0.82	WHO regional diet	0.28	Wheat	0.23	Potatoes	0.07	Tomatoes
0.81	UK infant	0.25	Wheat	0.19	Potatoes	0.12	Apples
0.79	IE adult	0.22	Wheat	0.13	Potatoes	0.07	Oranges
0.76	FR infant	0.24	Potatoes	0.19	Apples	0.08	Wheat
0.71	NL (GP)	0.20	Wheat	0.16	Potatoes	0.10	Oranges
0.71	IT adult	0.39	Wheat	0.07	Tomatoes	0.06	Apples
0.64	LT adult	0.18	Potatoes	0.14	Apples	0.10	Wheat
0.60	ES adult	0.22	Wheat	0.09	Oranges	0.06	Apples
0.54	FR (GP)	0.31	Wheat	0.06	Potatoes	0.04	Apples
0.51	DK adult	0.19	Wheat	0.08	Potatoes	0.06	Rye
0.50	UK vegetarian	0.19	Wheat	0.08	Potatoes	0.06	Oranges
0.48	PL (GP)	0.20	Potatoes	0.15	Apples	0.05	Tomatoes
0.40	FI adult	0.09	Wheat	0.07	Potatoes	0.07	Oranges
0.40	UK adult	0.16	Wheat	0.08	Potatoes	0.04	Oranges

### Acute risk assessment

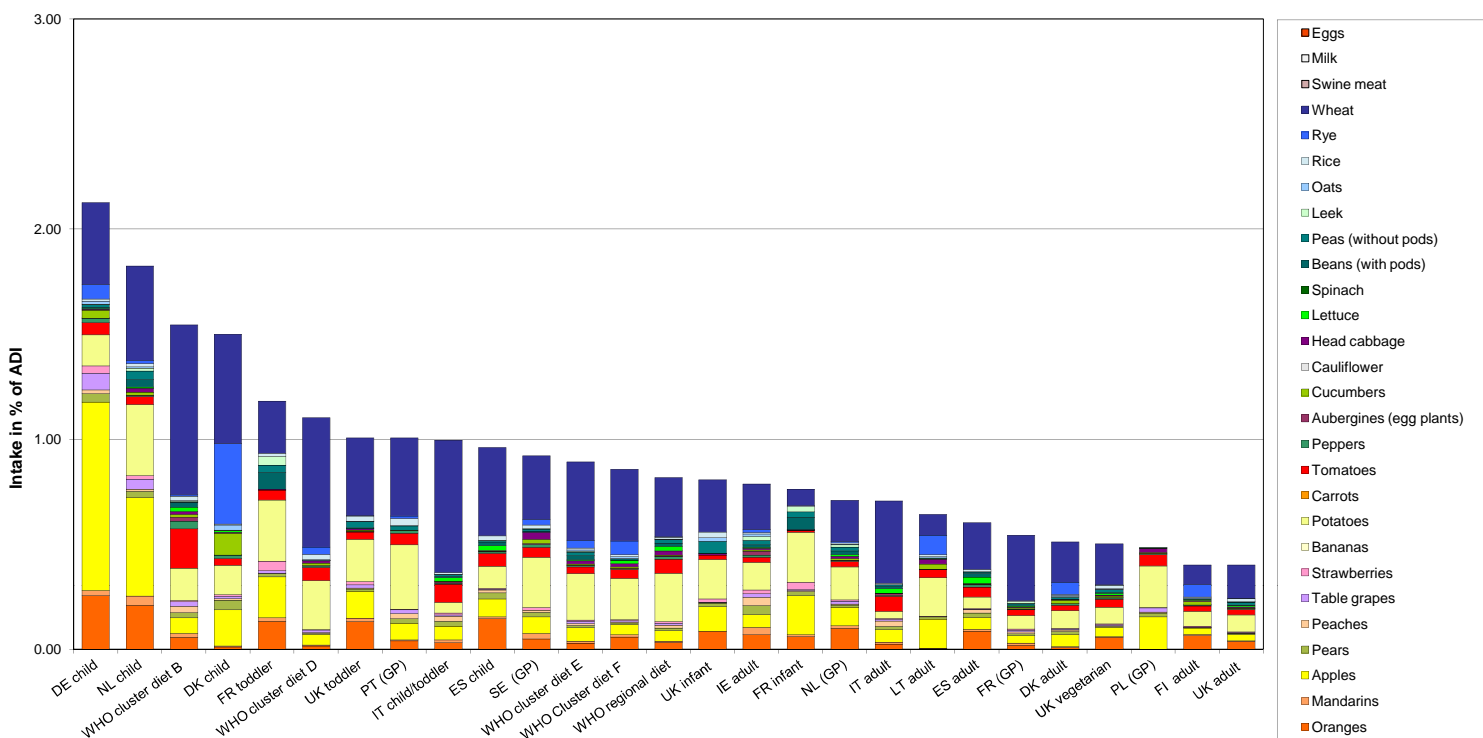
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.2	2471	9.07	0.20	0.44	4	215.52	UK infant	
2010	Peaches	0.2	1236	6.47	0.16	0.64	1	189.86	DE child	
2010	Strawberries	0.1	1806	1.55	0.17	0.29		22.37	DE child	
2010	Tomatoes	0.5	1845	2.38		0.20		58.15	BE child	
2010	Head cabbage	0.1	979	0.10		0.01		2.89	NL child	
2010	Lettuce	0.1	1894	0.11	0.16	0.19		25.56	DE child	
2010	Leek	0.1	822	0.12		0.01		2.95	BE child	
2010	Oats	2	228	0.44		0.08		1.55	DE child	
2010	Rye	0.1	355	0.28		0.08		2.59	UK infant	
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

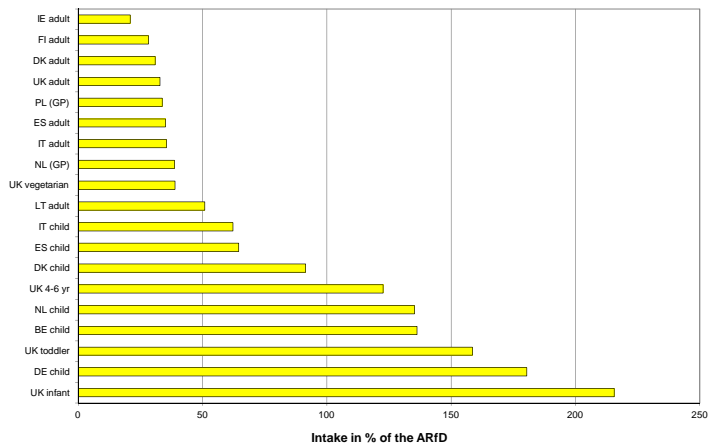
<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Carbendazim and benomyl

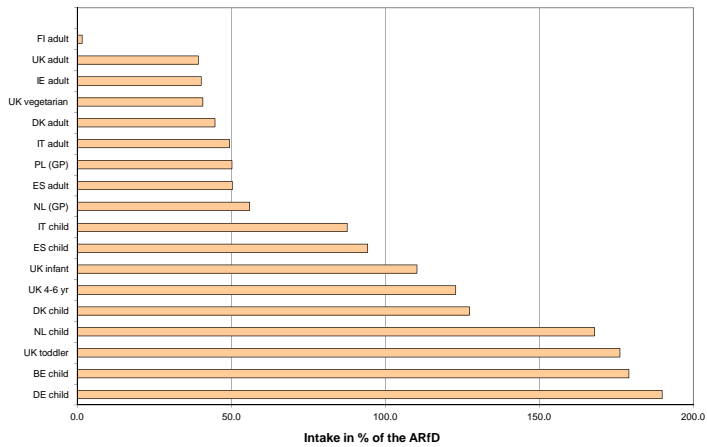


**Carbendazim and benomyl**

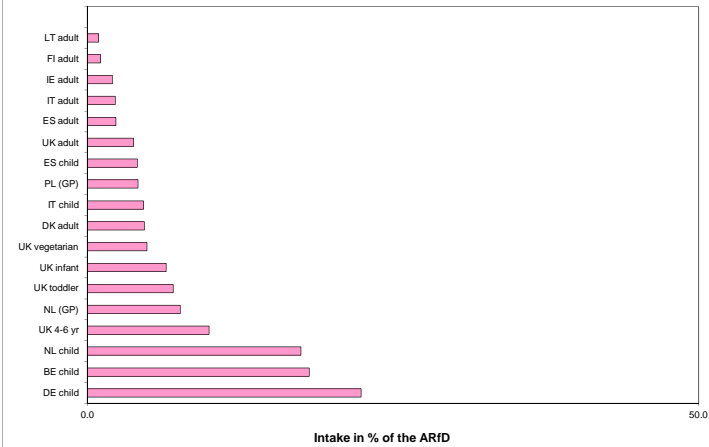
Acute exposure: Carbendazim and benomyl / Apples



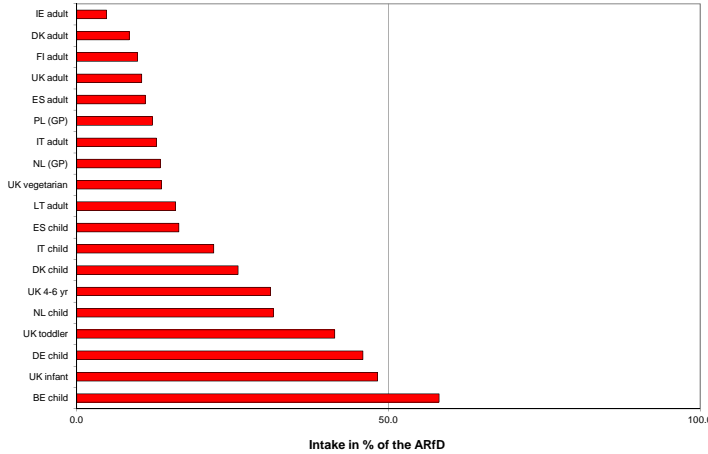
Acute exposure: Carbendazim and benomyl / Peaches



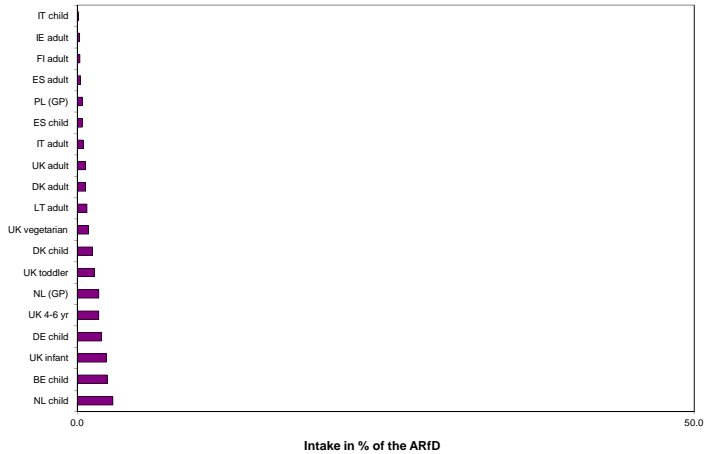
Acute exposure: Carbendazim and benomyl / Strawberries



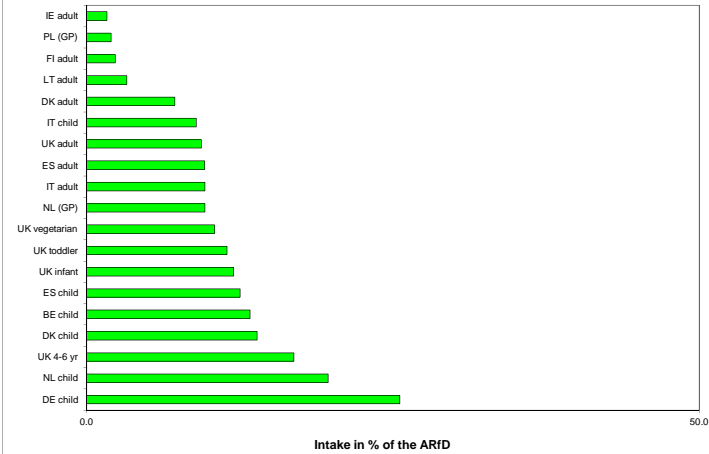
Acute exposure: Carbendazim and benomyl / Tomatoes



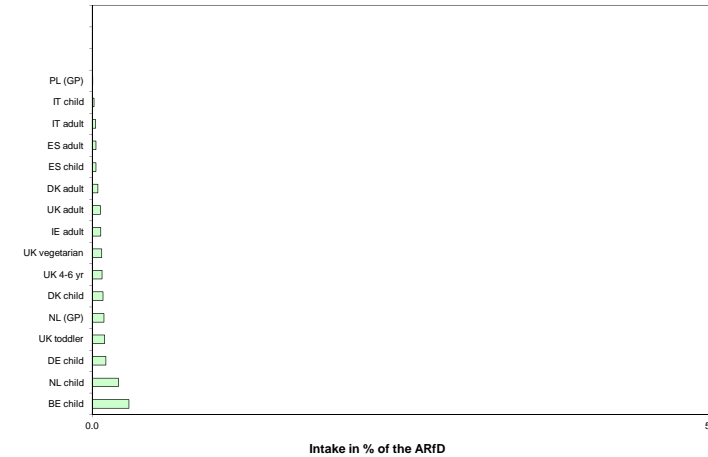
Acute exposure: Carbendazim and benomyl / Head cabbage



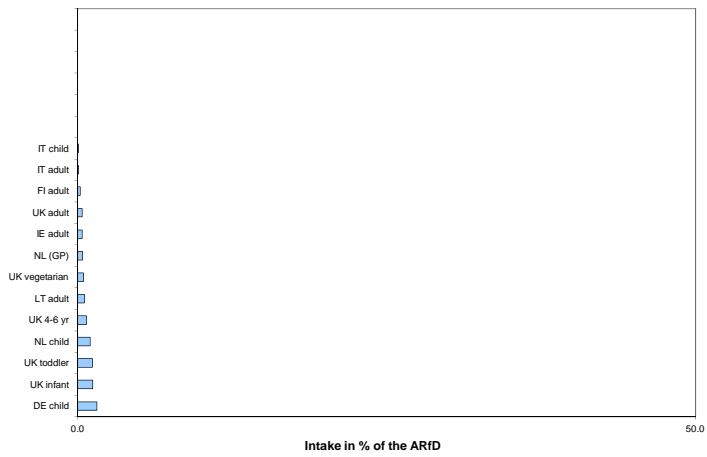
Acute exposure: Carbendazim and benomyl / Lettuce



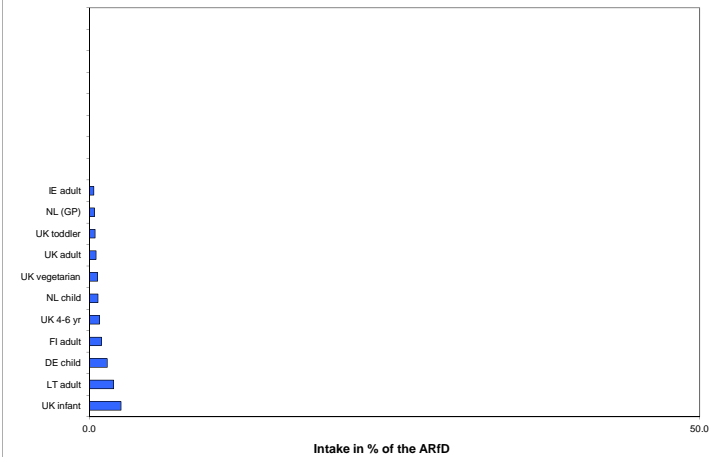
Acute exposure: Carbendazim and benomyl / Leek



Acute exposure: Carbendazim and benomyl / Oats



Acute exposure: Carbendazim and benomyl / Rye



## Carbofuran

Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.00015	ARfD (mg/kg bw):	0.00015
Source of ADI:	EFSA	Source of ARfD:	EFSA
Year of evaluation:	2009	Year of evaluation:	2009

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
1 31

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI		MS Diet		Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
30.75	DE child			26.05	Oranges	2.00	Peppers	1.74	Spinach
29.10	NL child			21.32	Oranges	3.37	Beans (with pods)	3.18	Spinach
27.10	FR toddler			13.68	Oranges	7.38	Beans (with pods)	6.04	Spinach
21.02	ES child			14.83	Oranges	3.03	Lettuce	1.60	Beans (with pods)
16.90	WHO cluster diet B			5.84	Oranges	3.43	Peppers	2.60	Lettuce
16.26	ES adult			8.84	Oranges	3.89	Lettuce	1.56	Beans (with pods)
15.78	FR infant			6.22	Oranges	5.62	Beans (with pods)	3.78	Spinach
14.46	NL (GP)			10.17	Oranges	1.68	Beans (with pods)	1.21	Spinach
14.44	UK toddler			13.54	Oranges	0.32	Beans (with pods)	0.23	Spinach
12.88	IE adult			7.14	Oranges	1.99	Aubergines (egg)	1.12	Beans (with pods)
9.29	UK infant			8.89	Oranges	0.31	Beans (with pods)	0.10	Spinach
9.22	WHO regional diet			3.40	Oranges	2.74	Lettuce	1.34	Beans (with pods)
8.66	WHO Cluster diet F			5.95	Oranges	2.18	Lettuce	0.46	Peppers
8.43	UK vegetarian			5.93	Oranges	1.02	Lettuce	0.56	Peppers
8.41	IT adult			2.74	Lettuce	2.55	Oranges	1.01	Beans (with pods)
8.01	SE (GP)			5.11	Oranges	1.30	Peppers	0.57	Spinach
7.92	FI adult			6.63	Oranges	0.57	Lettuce	0.35	Peppers
7.66	IT child/toddler			3.29	Oranges	2.11	Lettuce	0.70	Aubergines (egg plants)
6.76	WHO cluster diet E			3.04	Oranges	1.87	Beans (with pods)	0.71	Peppers
5.52	PT (GP)			4.18	Oranges	1.33	Peppers		FRUIT (FRESH OR FROZEN)
5.49	UK adult			3.84	Oranges	0.85	Lettuce	0.31	Beans (with pods)
4.09	FR (GP)			1.97	Oranges	0.95	Beans (with pods)	0.67	Lettuce
3.77	DK child			1.53	Peppers	1.15	Oranges	1.02	Lettuce
2.73	WHO cluster diet D			1.64	Oranges	0.72	Peppers	0.20	Aubergines (egg plants)
1.82	DK adult			0.92	Oranges	0.73	Peppers	0.11	Beans (with pods)
1.27	LT adult			0.50	Oranges	0.46	Lettuce	0.18	Aubergines (egg plants)
0.89	PL (GP)			0.53	Peppers	0.12	Oranges	0.11	Aubergines (egg plants)

## Acute risk assessment

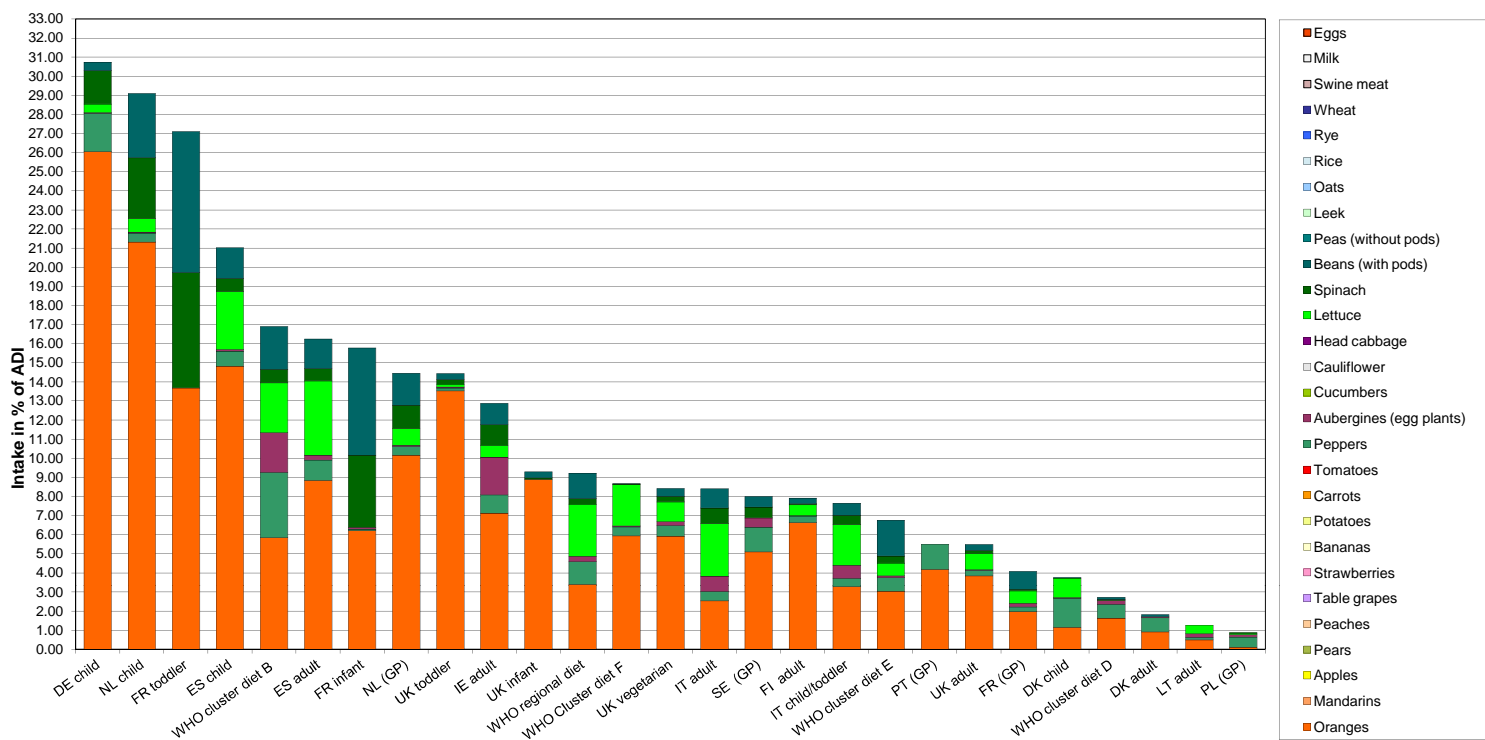
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.02	2473							
2010	Peaches	0.02	1231							
2010	Strawberries	0.02	1916							
2010	Tomatoes	0.02	1912							
2010	Head cabbage	0.02	987							
2010	Lettuce	0.02	1913	0.05		0.02	1	322.85	DE child	
2010	Leek	0.02	791							
2010	Oats	0.02	130							
2010	Rye	0.02	401							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

<sup>c)</sup> TRL: toxicological threshold level

## Chronic risk assessment: Carbofuran



**Carbofuran**

Acute exposure: Carbofuran / Apples



Intake in % of the ARfD

Acute exposure: Carbofuran / Peaches



Intake in % of the ARfD

Acute exposure: Carbofuran / Strawberries



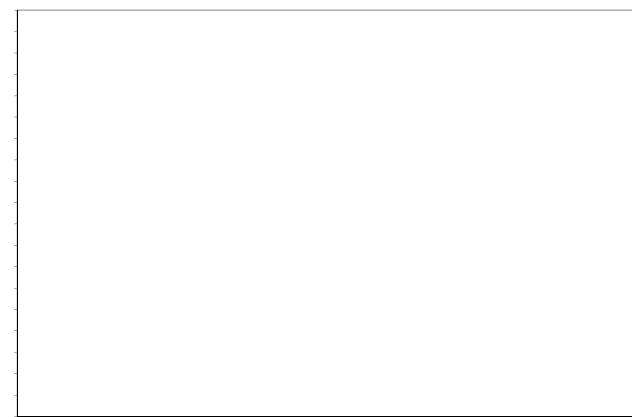
Intake in % of the ARfD

Acute exposure: Carbofuran / Tomatoes



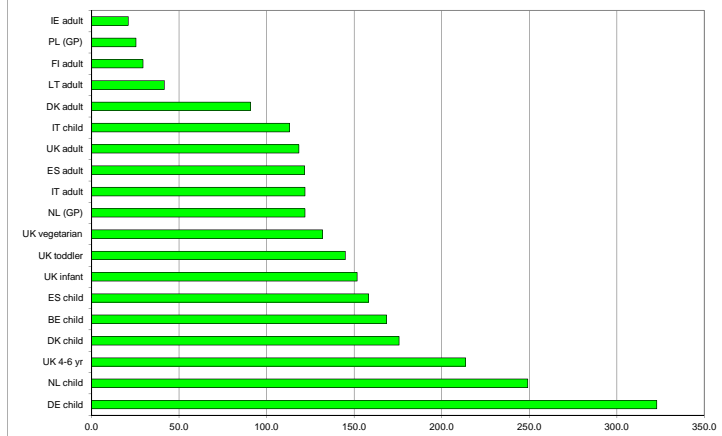
Intake in % of the ARfD

Acute exposure: Carbofuran / Head cabbage



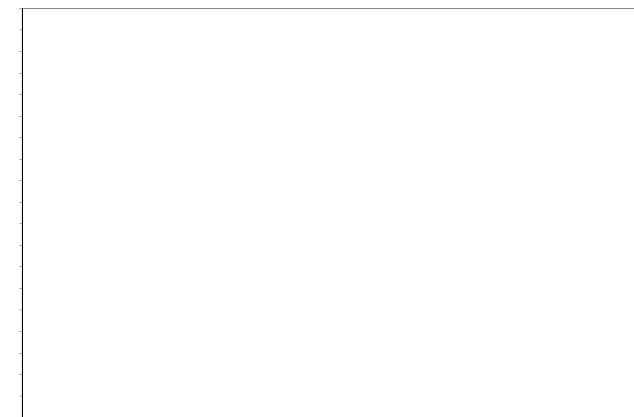
Intake in % of the ARfD

Acute exposure: Carbofuran / Lettuce



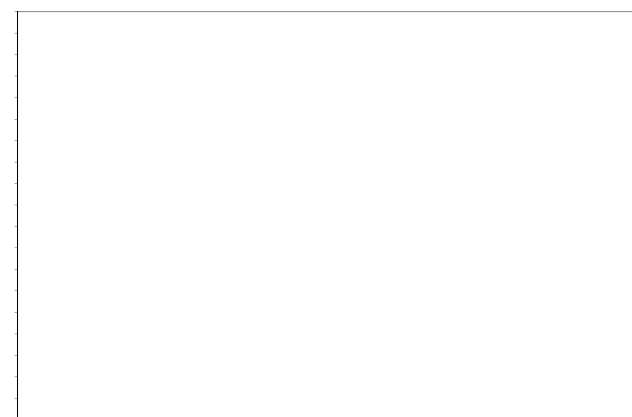
Intake in % of the ARfD

Acute exposure: Carbofuran / Leek



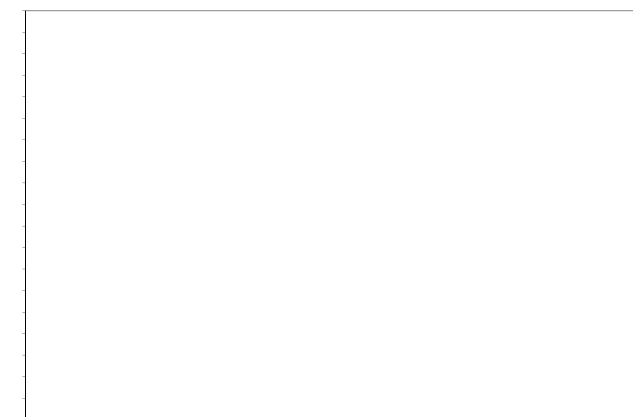
Intake in % of the ARfD

Acute exposure: Carbofuran / Oats



Intake in % of the ARfD

Acute exposure: Carbofuran / Rye



Intake in % of the ARfD



## Carbosulfan

Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:	Yes	Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.005	ARfD (mg/kg bw):	0.005
Source of ADI:	EFSA	Source of ARfD:	EFSA
Year of evaluation:	2009	Year of evaluation:	2009

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.14	IE adult	0.10	Aubergines (egg)	0.04	Peppers		FRUIT (FRESH OR FROZEN)
0.09	DE child	0.09	Peppers	0.00	Aubergines (egg)		FRUIT (FRESH OR FROZEN)
0.08	SE (GP)	0.06	Peppers	0.02	Aubergines (egg)		FRUIT (FRESH OR FROZEN)
0.07	DK child	0.07	Peppers	0.00	Aubergines (egg)		FRUIT (FRESH OR FROZEN)
0.07	WHO regional diet	0.05	Peppers	0.01	Aubergines (egg)		FRUIT (FRESH OR FROZEN)
0.06	IT adult	0.04	Aubergines (egg)	0.02	Peppers		FRUIT (FRESH OR FROZEN)
0.06	ES adult	0.05	Peppers	0.01	Aubergines (egg)		FRUIT (FRESH OR FROZEN)
0.06	PT (GP)	0.06	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.05	IT child/toddler	0.04	Aubergines (egg)	0.02	Peppers		FRUIT (FRESH OR FROZEN)
0.04	WHO cluster diet D	0.03	Peppers	0.01	Aubergines (egg)		FRUIT (FRESH OR FROZEN)
0.04	ES child	0.03	Peppers	0.00	Aubergines (egg)		FRUIT (FRESH OR FROZEN)
0.04	WHO cluster diet E	0.03	Peppers	0.00	Aubergines (egg)		FRUIT (FRESH OR FROZEN)
0.03	UK vegetarian	0.02	Peppers	0.01	Aubergines (egg)		FRUIT (FRESH OR FROZEN)
0.03	DK adult	0.03	Peppers	0.00	Aubergines (egg)		FRUIT (FRESH OR FROZEN)
0.03	PL (GP)	0.02	Peppers	0.01	Aubergines (egg)		FRUIT (FRESH OR FROZEN)
0.02	NL (GP)	0.02	Peppers	0.00	Aubergines (egg)		FRUIT (FRESH OR FROZEN)
0.02	NL child	0.02	Peppers	0.00	Aubergines (egg)		FRUIT (FRESH OR FROZEN)
0.02	WHO Cluster diet F	0.02	Peppers	0.00	Aubergines (egg)		FRUIT (FRESH OR FROZEN)
0.02	FR (GP)	0.01	Peppers	0.01	Aubergines (egg)		FRUIT (FRESH OR FROZEN)
0.02	FI adult	0.01	Peppers	0.00	Aubergines (egg)		FRUIT (FRESH OR FROZEN)
0.02	LT adult	0.01	Aubergines (egg)	0.01	Peppers		FRUIT (FRESH OR FROZEN)
0.01	UK adult	0.01	Peppers	0.00	Aubergines (egg)		FRUIT (FRESH OR FROZEN)
0.01	UK toddler	0.01	Peppers	0.00	Aubergines (egg)		FRUIT (FRESH OR FROZEN)
0.01	FR infant	0.00	Aubergines (egg)	0.00	Peppers		FRUIT (FRESH OR FROZEN)
	FR toddler		FRUIT (FRESH)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	FR toddler		FRUIT (FRESH)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)

## Acute risk assessment

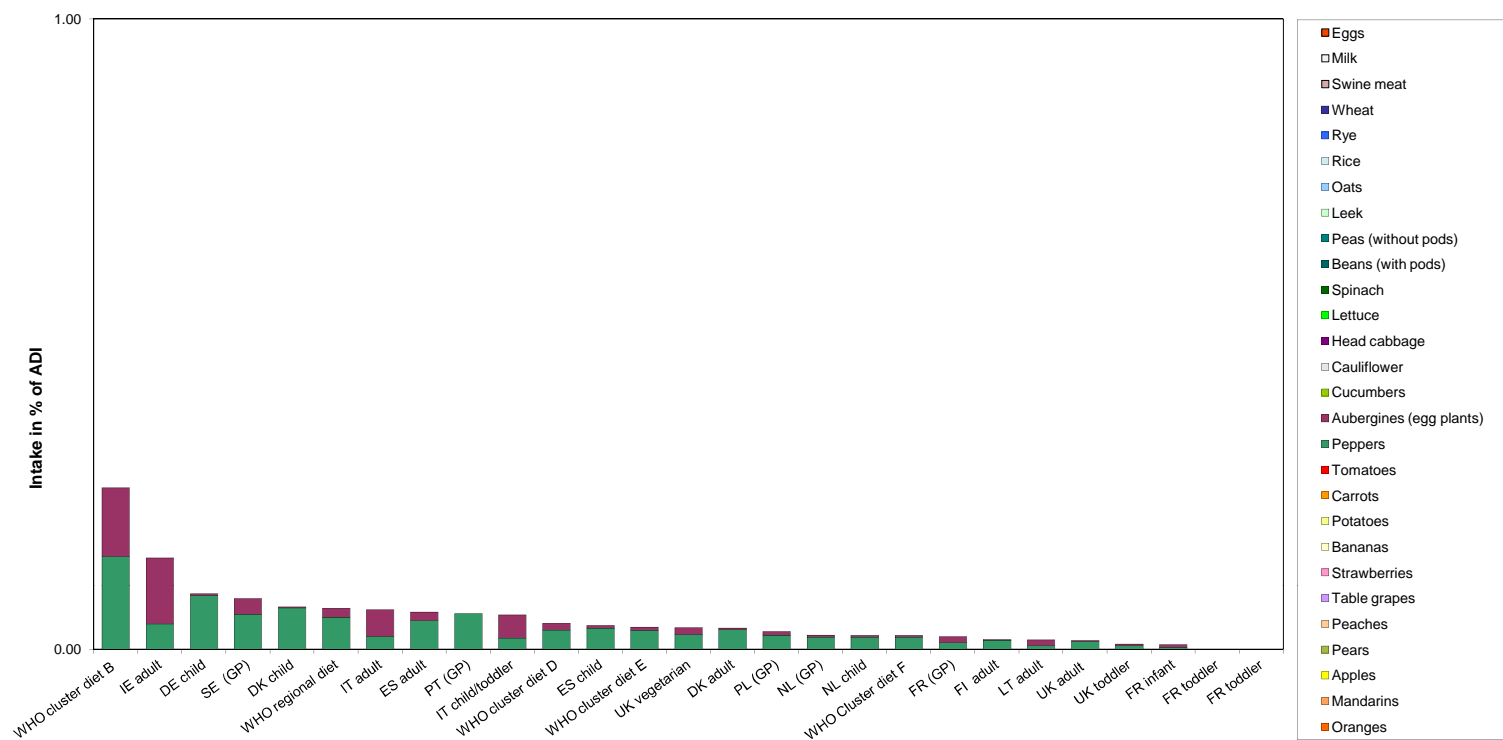
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	1846							
2010	Peaches	0.05	723							
2010	Strawberries	0.05	1373							
2010	Tomatoes	0.05	1316							
2010	Head cabbage	0.05	835							
2010	Lettuce	0.05	1348							
2010	Leek	0.05	601							
2010	Oats	0.05	83							
2010	Rye	0.05	249							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

c) TRL: toxicological threshold level

## Chronic risk assessment: Carbosulfan



**Carbosulfan**

Acute exposure: Carbosulfan / Apples



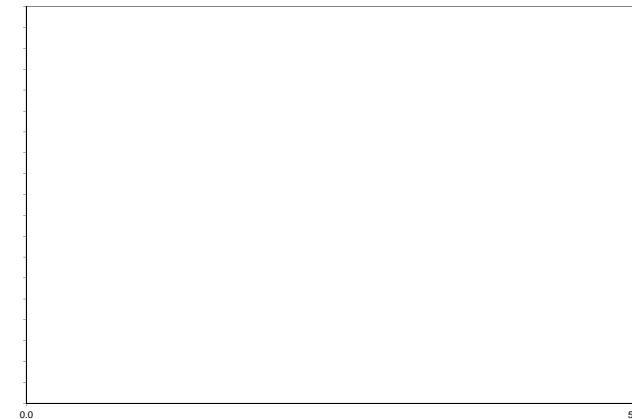
Intake in % of the ARfD

Acute exposure: Carbosulfan / Peaches



Intake in % of the ARfD

Acute exposure: Carbosulfan / Strawberries



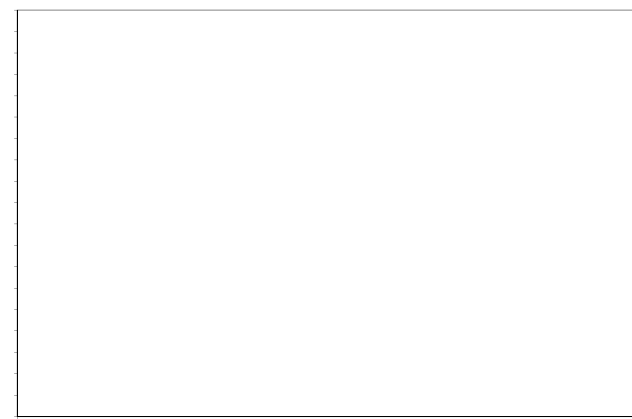
Intake in % of the ARfD

Acute exposure: Carbosulfan / Tomatoes



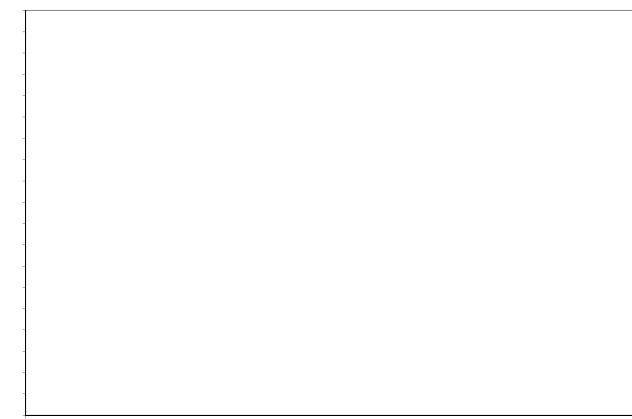
Intake in % of the ARfD

Acute exposure: Carbosulfan / Head cabbage



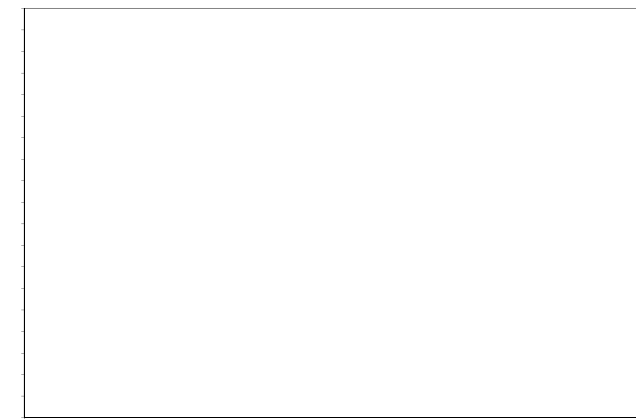
Intake in % of the ARfD

Acute exposure: Carbosulfan / Lettuce



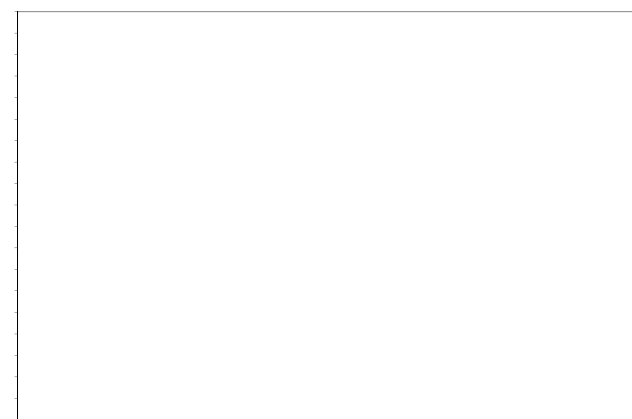
Intake in % of the ARfD

Acute exposure: Carbosulfan / Leek



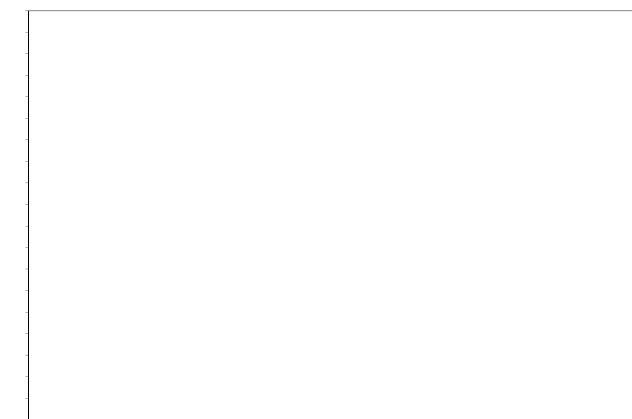
Intake in % of the ARfD

Acute exposure: Carbosulfan / Oats



Intake in % of the ARfD

Acute exposure: Carbosulfan / Rye



Intake in % of the ARfD

Chlordane			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	A
Toxicological end points			
ADI (mg/kg bw/day):	0.0005	ARfD (mg/kg bw):	0.0005
Source of ADI:	JMPR	Source of ARfD:	
Year of evaluation:	1994	Year of evaluation:	

Active substance was not assessed regarding the setting of an ARfD. The ADI is used as a surrogate.

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum		No of diets exceeding ADI:			
		1		---			
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.71	UK infant	0.71	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.59	DE child	0.59	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.53	FR toddler	0.53	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.47	UK toddler	0.47	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.46	SE (GP)	0.46	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.45	DK child	0.45	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.38	ES child	0.38	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.33	WHO cluster diet E	0.33	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.33	WHO regional diet	0.33	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.31	NL child	0.31	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.26	WHO cluster diet B	0.26	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.24	ES adult	0.24	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.24	WHO Cluster diet F	0.24	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.23	FR infant	0.23	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.21	WHO cluster diet D	0.21	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.19	DK adult	0.19	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.18	UK vegetarian	0.18	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.17	LT adult	0.17	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.16	UK adult	0.16	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.16	FR (GP)	0.16	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.15	NL (GP)	0.15	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.14	IE adult	0.14	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.12	FI adult	0.12	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	IT adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	IT adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	IT adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	IT adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)

### Acute risk assessment

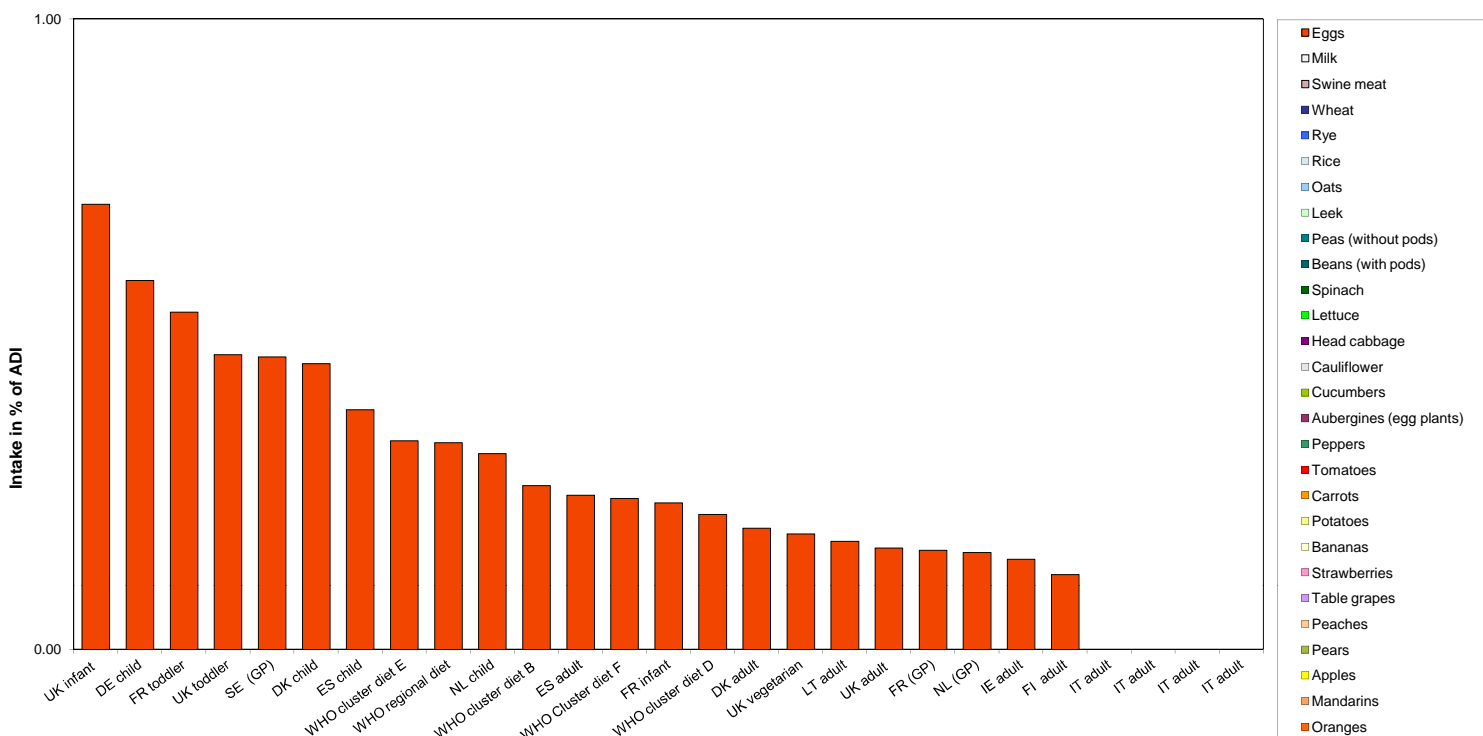
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples									
2010	Peaches									
2010	Strawberries									
2010	Tomatoes									
2010	Head cabbage									
2010	Lettuce									
2010	Leek									
2010	Oats									
2010	Rye									
2010	Swine Meat		411							
2010	Milk		443							

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Chlordane



**Chlordane**

Acute exposure: Chlordane / Apples



Intake in % of the ARfD

Acute exposure: Chlordane / Peaches



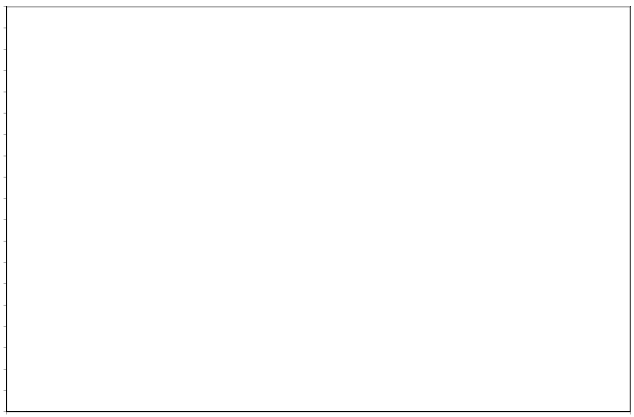
Intake in % of the ARfD

Acute exposure: Chlordane / Strawberries



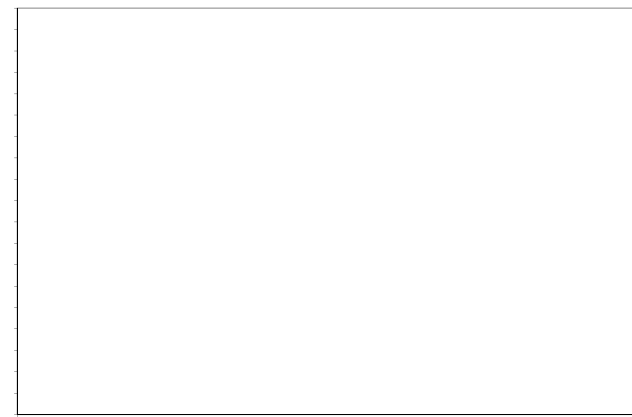
Intake in % of the ARfD

Acute exposure: Chlordane / Tomatoes



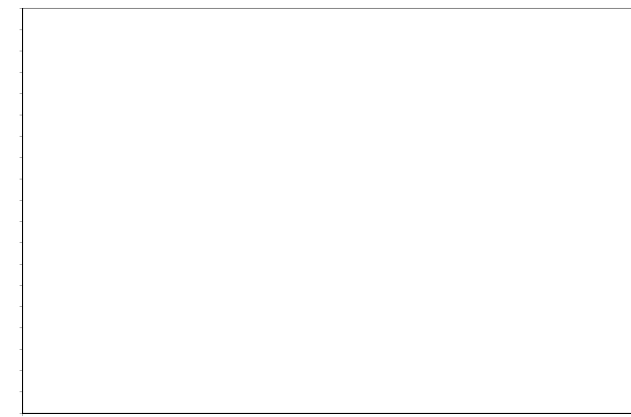
Intake in % of the ARfD

Acute exposure: Chlordane / Head cabbage



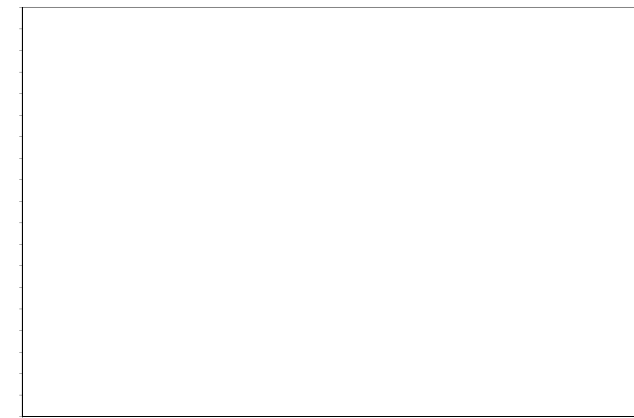
Intake in % of the ARfD

Acute exposure: Chlordane / Lettuce



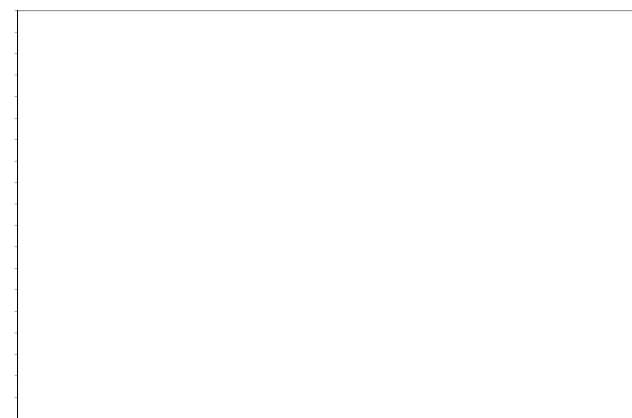
Intake in % of the ARfD

Acute exposure: Chlordane / Leek



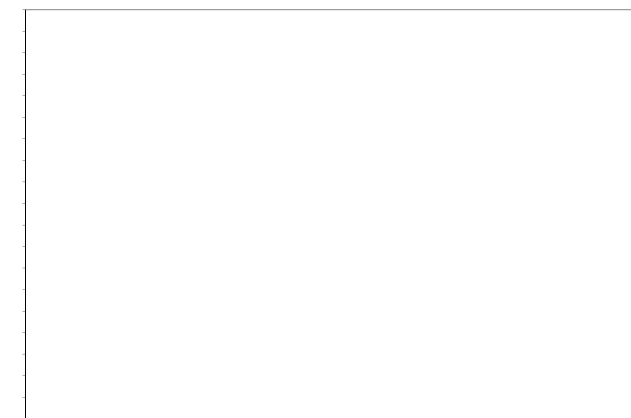
Intake in % of the ARfD

Acute exposure: Chlordane / Oats



Intake in % of the ARfD

Acute exposure: Chlordane / Rye



Intake in % of the ARfD

## Chlorfenapyr

Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.015	ARfD (mg/kg bw):	0.015
Source of ADI:	ECCO	Source of ARfD:	ECCO
Year of evaluation:	1999	Year of evaluation:	1999

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
2

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
1.68	DE child	1.22	Apples	0.32	Oranges	0.04	Cucumbers
1.04	NL child	0.64	Apples	0.26	Oranges	0.06	Mandarins
0.58	FR toddler	0.27	Apples	0.17	Oranges	0.08	Beans (with pods)
0.44	FR infant	0.25	Apples	0.08	Oranges	0.06	Beans (with pods)
0.40	DK child	0.23	Apples	0.12	Cucumbers	0.02	Peppers
0.39	UK toddler	0.17	Apples	0.17	Oranges	0.02	Mandarins
0.35	ES child	0.18	Oranges	0.12	Apples	0.02	Beans (with pods)
0.30	NL (GP)	0.12	Oranges	0.12	Apples	0.02	Beans (with pods)
0.29	UK infant	0.16	Apples	0.11	Oranges	0.02	Strawberries
0.29	WHO cluster diet B	0.10	Apples	0.07	Oranges	0.04	Peppers
0.27	IE adult	0.09	Oranges	0.08	Apples	0.05	Mandarins
0.26	SE (GP)	0.11	Apples	0.06	Oranges	0.04	Mandarins
0.23	ES adult	0.11	Oranges	0.08	Apples	0.02	Beans (with pods)
0.23	LT adult	0.19	Apples	0.03	Cucumbers	0.01	Oranges
0.22	PL (GP)	0.21	Apples	0.01	Peppers	0.00	Cucumbers
0.18	PT (GP)	0.11	Apples	0.05	Oranges	0.02	Peppers
0.18	WHO cluster diet E	0.09	Apples	0.04	Oranges	0.02	Beans (with pods)
0.17	WHO Cluster diet F	0.07	Oranges	0.07	Apples	0.02	Mandarins
0.17	IT child/toddler	0.09	Apples	0.04	Oranges	0.02	Mandarins
0.16	FI adult	0.08	Oranges	0.04	Apples	0.02	Cucumbers
0.16	UK vegetarian	0.07	Oranges	0.06	Apples	0.01	Cucumbers
0.16	WHO regional diet	0.07	Apples	0.04	Oranges	0.01	Beans (with pods)
0.15	IT adult	0.08	Apples	0.03	Cucumbers	0.01	Mandarins
0.13	DK adult	0.08	Apples	0.02	Cucumbers	0.01	Oranges
0.12	WHO cluster diet D	0.07	Apples	0.02	Oranges	0.01	Cucumbers
0.12	FR (GP)	0.05	Apples	0.02	Oranges	0.02	Mandarins
0.11	UK adult	0.05	Oranges	0.04	Apples	0.00	Mandarins

## Acute risk assessment

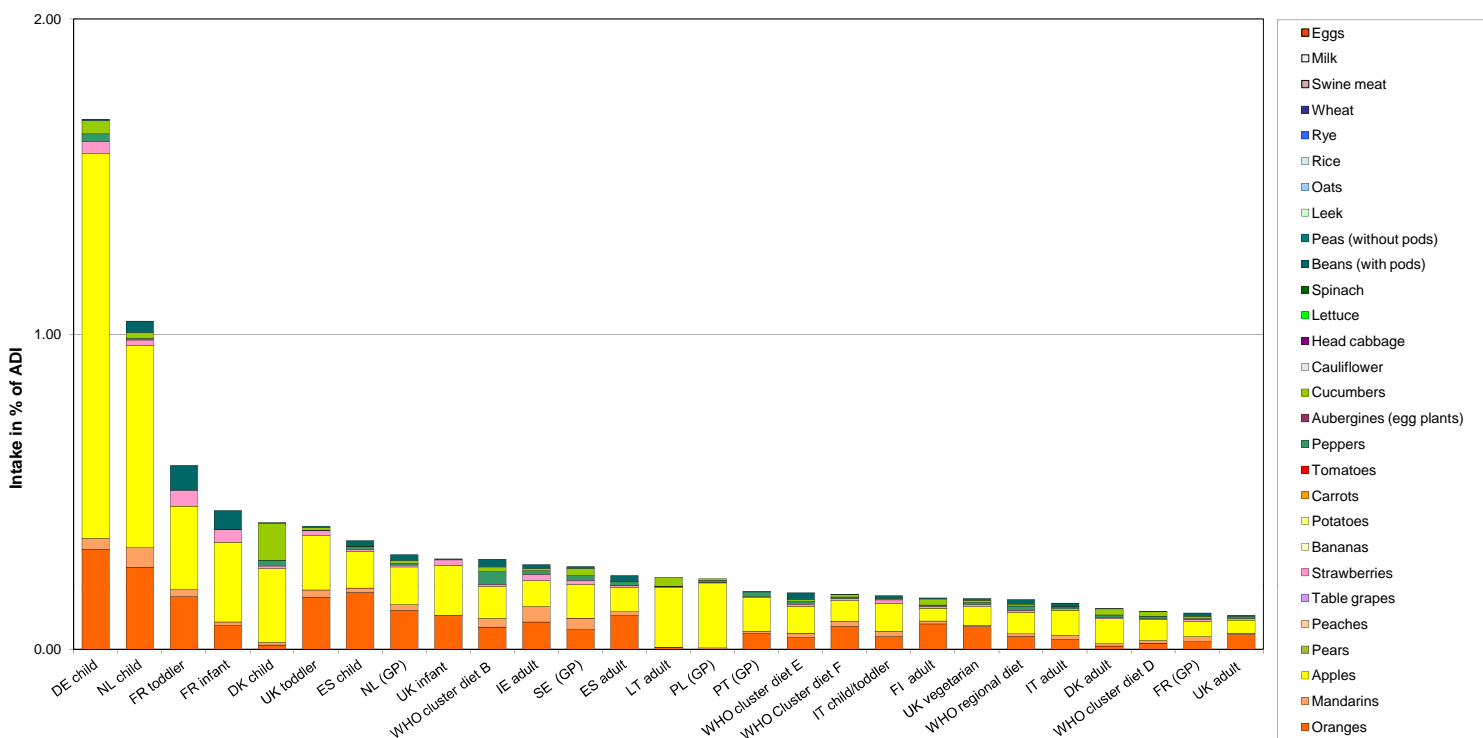
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	2007	0.05		0.03		20.90	UK infant	
2010	Peaches	0.05	1007							
2010	Strawberries	0.05	1614	0.06	0.06	0.17		17.67	DE child	
2010	Tomatoes	0.05	1470	0.27		0.03		13.18	BE child	
2010	Head cabbage	0.05	907							
2010	Lettuce	0.05	1414							
2010	Leek	0.05	738							
2010	Oats	0.05	103							
2010	Rye	0.05	309							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

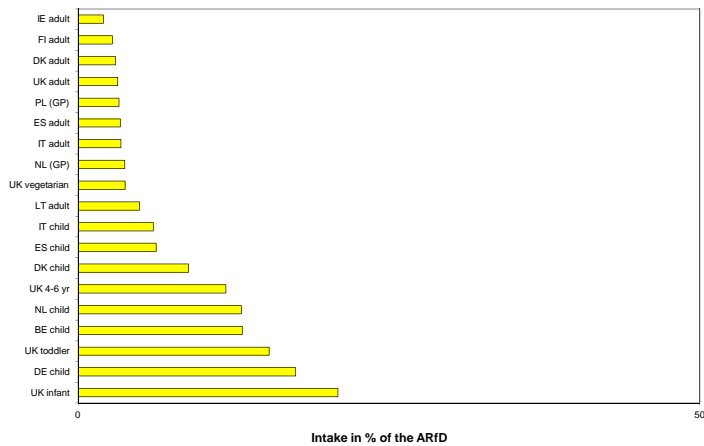
<sup>c)</sup> TRL: toxicological threshold level

## Chronic risk assessment: Chlorfenapyr

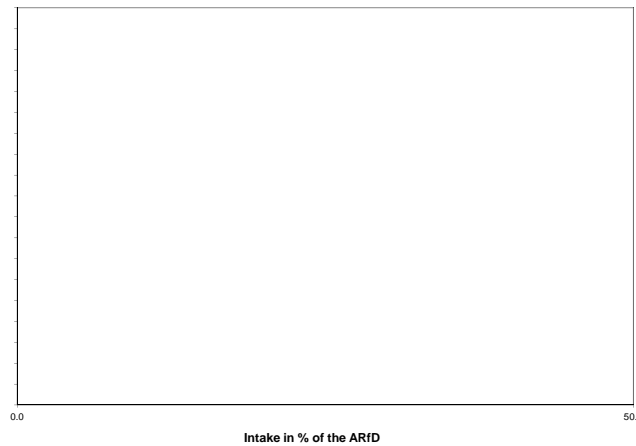


**Chlorfenapyr**

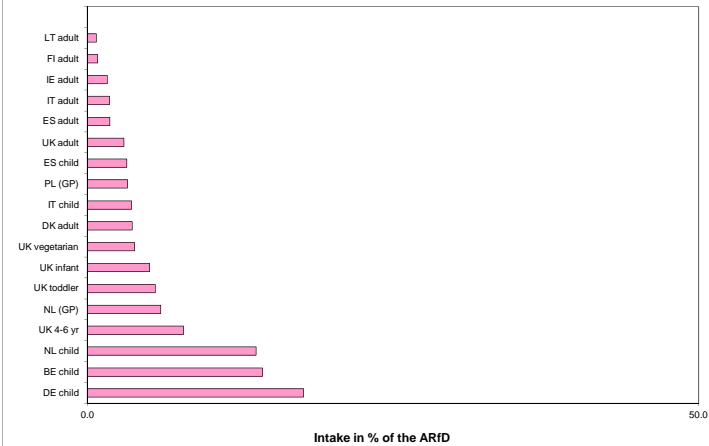
Acute exposure: Chlorfenapyr / Apples



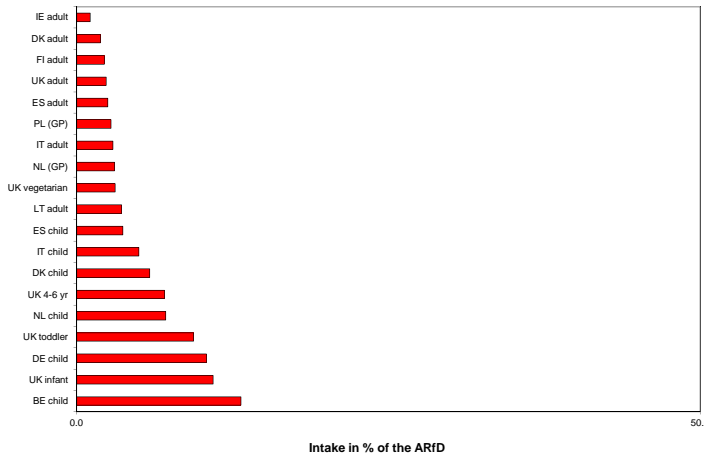
Acute exposure: Chlorfenapyr / Peaches



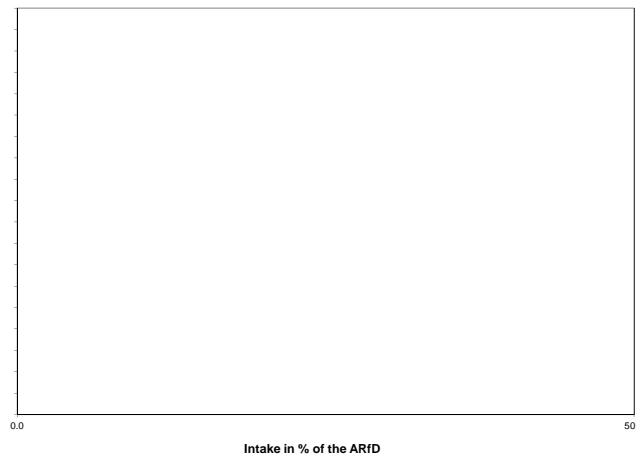
Acute exposure: Chlorfenapyr / Strawberries



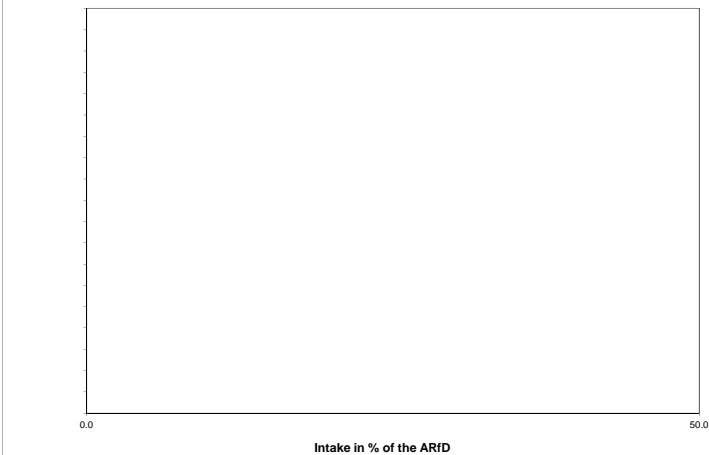
Acute exposure: Chlorfenapyr / Tomatoes



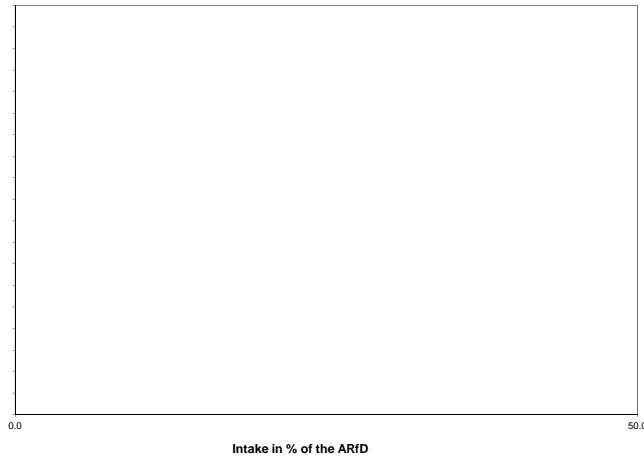
Acute exposure: Chlorfenapyr / Head cabbage



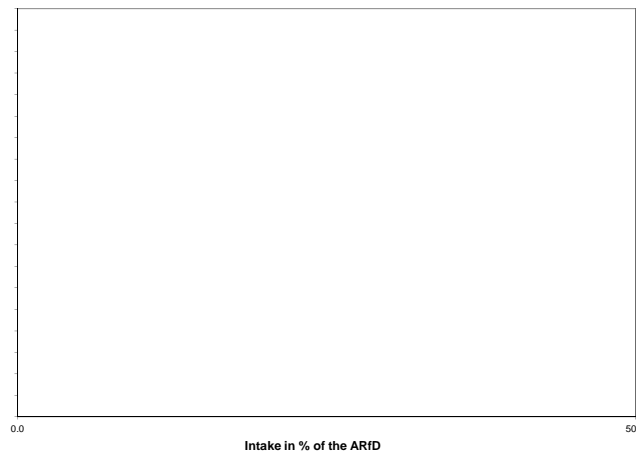
Acute exposure: Chlorfenapyr / Lettuce



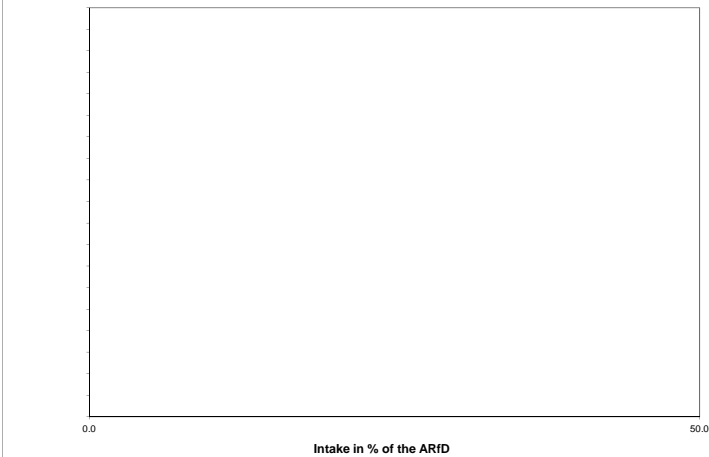
Acute exposure: Chlorfenapyr / Leek



Acute exposure: Chlorfenapyr / Oats



Acute exposure: Chlorfenapyr / Rye



## Chlorfenvinphos

Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.0005	ARfD (mg/kg bw):	0.0005
Source of ADI:	JMPR	Source of ARfD:	
Year of evaluation:	1994	Year of evaluation:	

Active substance was not assessed regarding the setting of an ARfD. ADI is used as a surrogate.

## Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum					
		1 34					
		No of diets exceeding ADI:		---			
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
34.02	DE child	28.62	Apples	2.80	Table grapes	2.61	Carrots
17.96	NL child	15.02	Apples	1.67	Table grapes	1.27	Carrots
12.87	FR toddler	6.22	Apples	6.19	Carrots	0.46	Table grapes
12.82	FR infant	6.71	Carrots	5.93	Apples	0.18	Table grapes
9.39	DK child	5.51	Apples	3.48	Carrots	0.40	Table grapes
7.11	UK infant	3.71	Apples	3.35	Carrots	0.05	Table grapes
6.32	PL (GP)	4.84	Apples	0.77	Carrots	0.71	Table grapes
5.91	UK toddler	4.04	Apples	1.32	Carrots	0.54	Table grapes
4.89	LT adult	4.43	Apples	0.44	Carrots	0.03	Table grapes
4.79	PT (GP)	2.49	Apples	1.69	Carrots	0.61	Table grapes
4.64	SE (GP)	2.49	Apples	2.15	Carrots		FRUIT (FRESH OR FROZEN)
3.85	NL (GP)	2.80	Apples	0.55	Carrots	0.50	Table grapes
3.80	WHO cluster diet B	2.39	Apples	0.77	Table grapes	0.64	Carrots
3.49	WHO cluster diet E	2.01	Apples	1.14	Carrots	0.34	Table grapes
3.33	IE adult	1.95	Apples	0.81	Carrots	0.57	Table grapes
3.24	ES child	2.71	Apples	0.45	Carrots	0.08	Table grapes
3.16	DK adult	1.86	Apples	1.13	Carrots	0.17	Table grapes
3.01	WHO Cluster diet F	1.56	Apples	1.20	Carrots	0.25	Table grapes
2.85	WHO regional diet	1.58	Apples	0.93	Carrots	0.34	Table grapes
2.80	IT child/toddler	2.10	Apples	0.46	Carrots	0.23	Table grapes
2.58	WHO cluster diet D	1.58	Apples	0.59	Carrots	0.42	Table grapes
2.53	IT adult	1.88	Apples	0.36	Carrots	0.29	Table grapes
2.28	ES adult	1.82	Apples	0.36	Carrots	0.10	Table grapes
2.15	UK vegetarian	1.40	Apples	0.57	Carrots	0.17	Table grapes
2.13	FR (GP)	1.13	Apples	0.76	Carrots	0.24	Table grapes
1.54	UK adult	0.97	Apples	0.46	Carrots	0.11	Table grapes
1.48	FI adult	0.96	Apples	0.48	Carrots	0.04	Table grapes

## Acute risk assessment

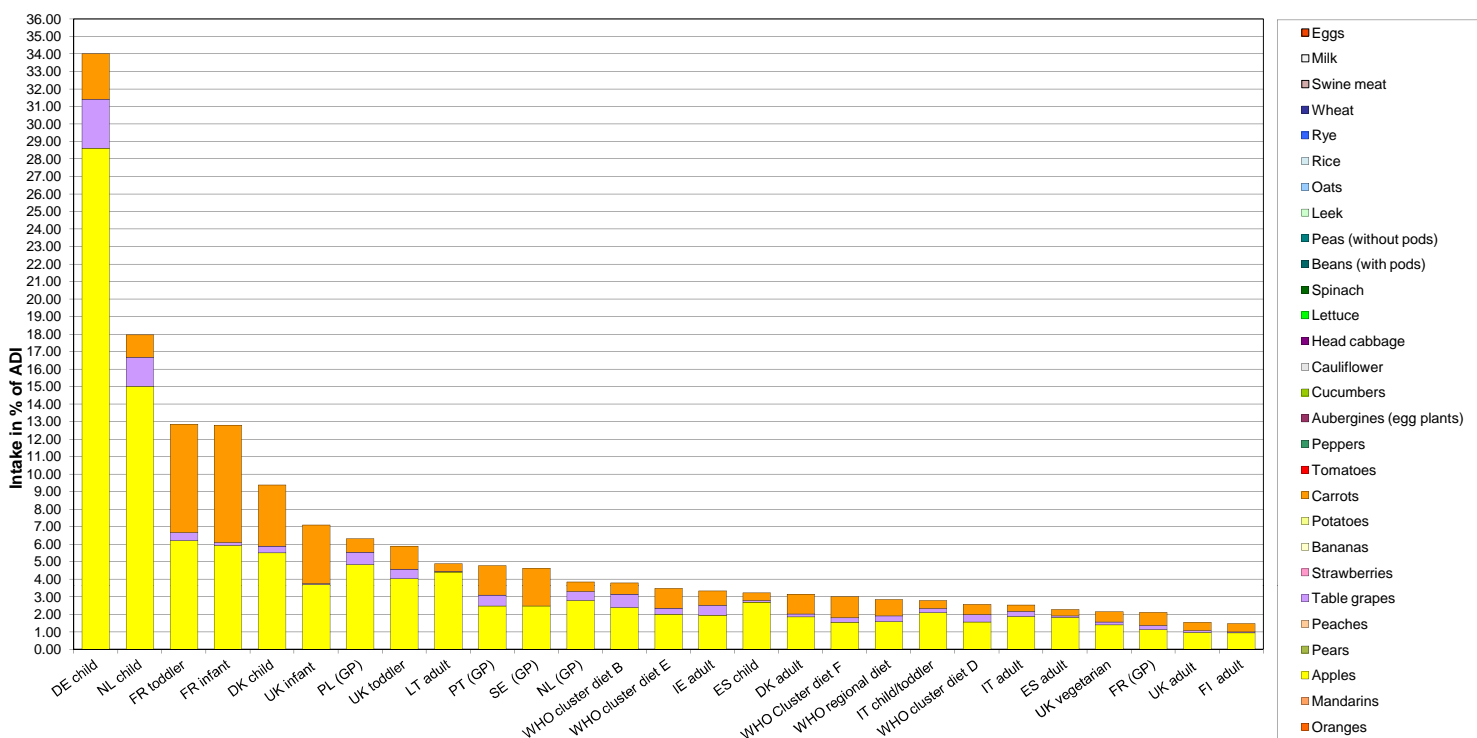
Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.02	3001	0.03		0.01	1	195.93	UK infant	
2010	Peaches	0.02	1395							
2010	Strawberries	0.02	2223							
2010	Tomatoes	0.02	2421							
2010	Head cabbage	0.5	1160							
2010	Lettuce	0.02	2333	0.04		0.00		10.76	DE child	
2010	Leek	0.1	925							
2010	Oats	0.02	184							
2010	Rye	0.02	402							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

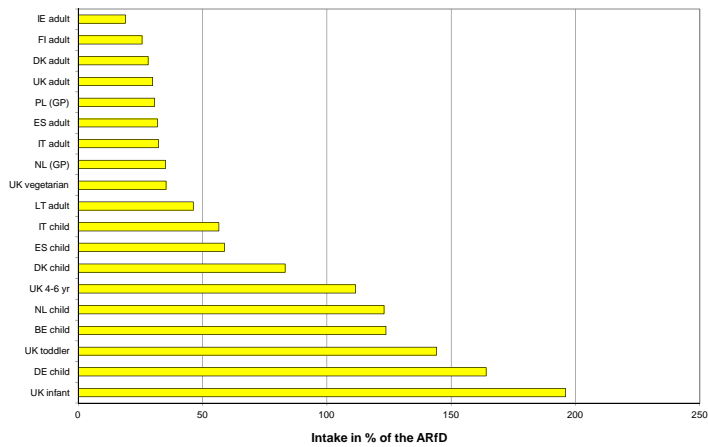
c) TRL: toxicological threshold level

## Chronic risk assessment: Chlorfenvinphos

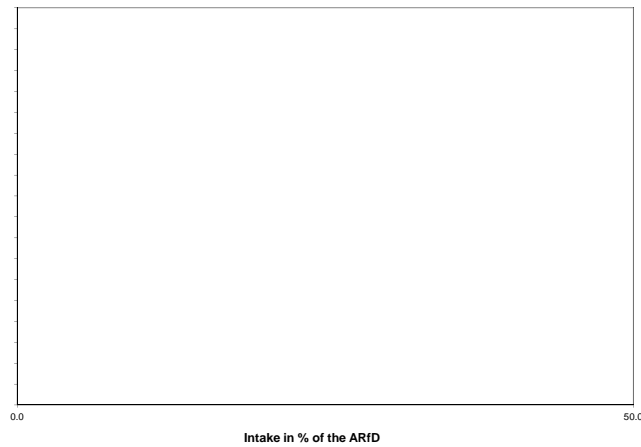


**Chlorfenvinphos**

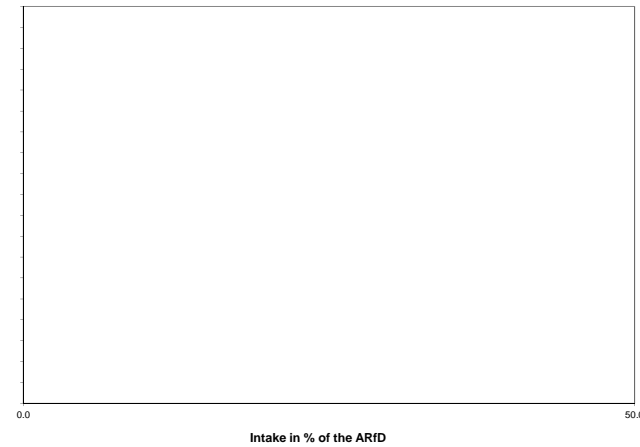
Acute exposure: Chlorfenvinphos / Apples



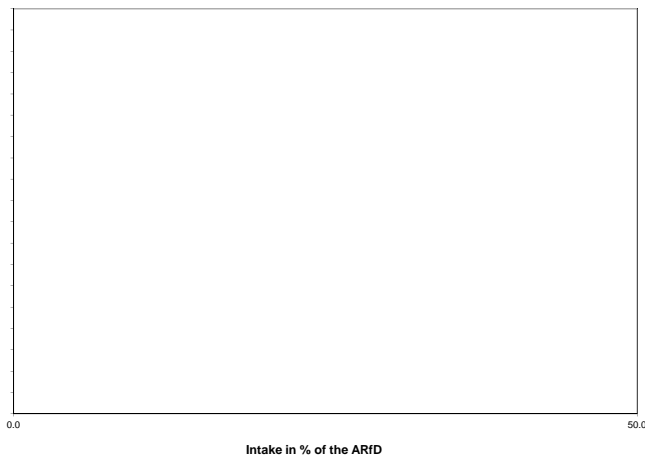
Acute exposure: Chlorfenvinphos / Peaches



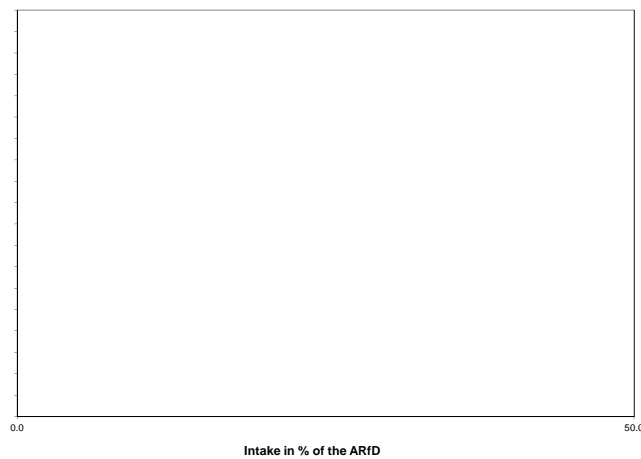
Acute exposure: Chlorfenvinphos / Strawberries



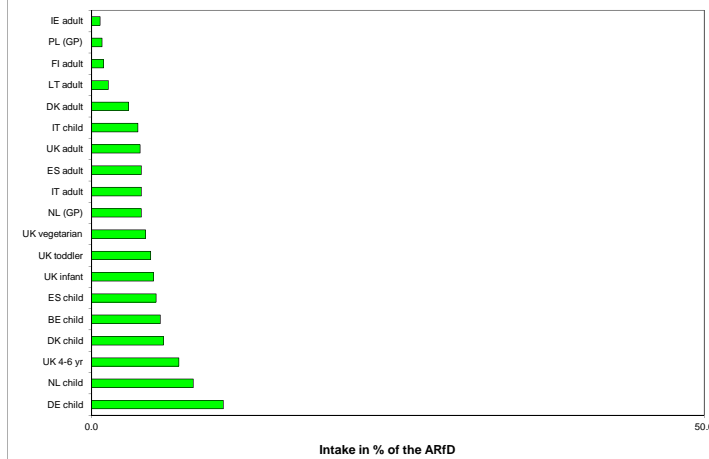
Acute exposure: Chlorfenvinphos / Tomatoes



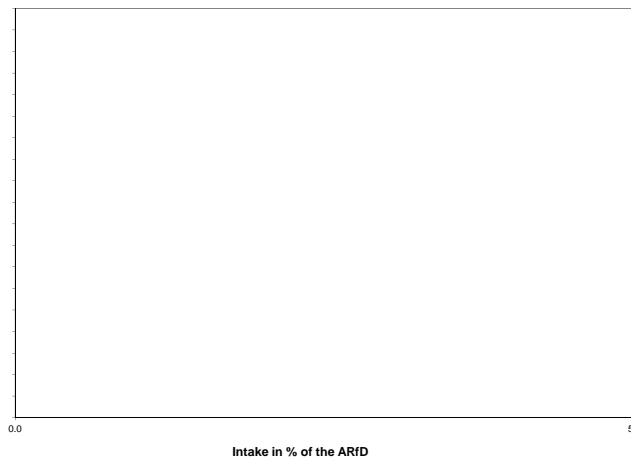
Acute exposure: Chlorfenvinphos / Head cabbage



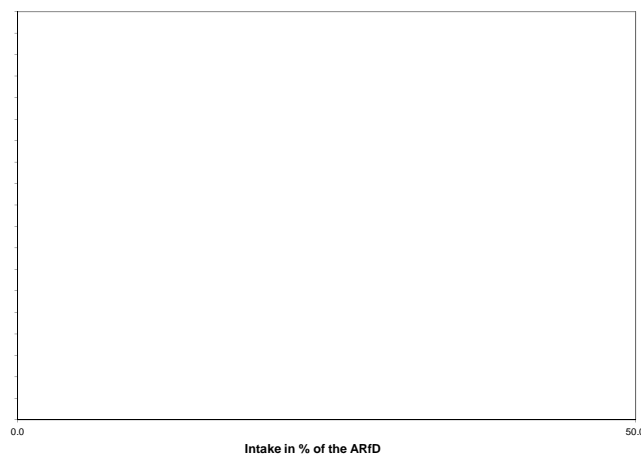
Acute exposure: Chlorfenvinphos / Lettuce



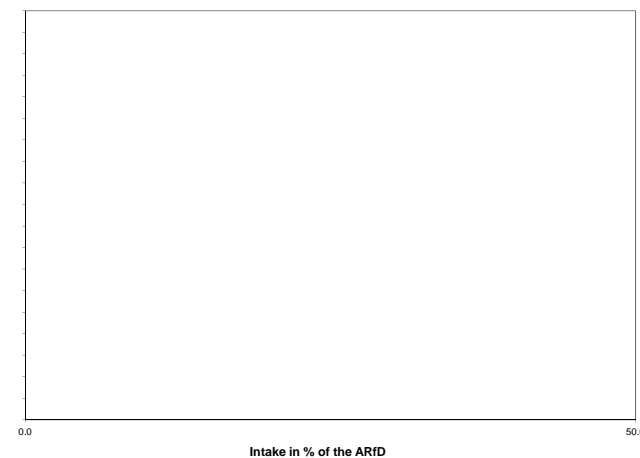
Acute exposure: Chlorfenvinphos / Leek



Acute exposure: Chlorfenvinphos / Oats



Acute exposure: Chlorfenvinphos / Rye





Chlormequat			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:	obligatory on rye, oats in 2010	Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.031	ARfD (mg/kg bw):	0.07
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2009	Year of evaluation:	2009

ADI and ARfD were derived for chlormequat chloride (ADI: 0.04; ARfD: 0.09, values were recalculated to chlormequat to match with the residue definition. (0.031 ADI , 0.07 ARfD)

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum					
		5					
No of diets exceeding ADI:		---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
5.27	DK child	2.20	Oats	1.81	Rye	1.19	Wheat
2.42	DE child	1.14	Oats	0.89	Wheat	0.32	Rye
2.00	UK infant	1.41	Oats	0.57	Wheat	0.03	Pears
1.97	WHO cluster diet D	1.40	Wheat	0.39	Oats	0.17	Rye
1.96	WHO cluster diet B	1.84	Wheat	0.05	Oats	0.04	Pears
1.93	WHO Cluster diet F	0.82	Oats	0.78	Wheat	0.31	Rye
1.74	NL child	1.02	Wheat	0.59	Oats	0.07	Rye
1.64	IE adult	1.01	Oats	0.50	Wheat	0.08	Pears
1.57	WHO cluster diet E	0.85	Wheat	0.53	Oats	0.18	Rye
1.48	IT child/toddler	1.43	Wheat	0.04	Pears	0.00	Oats
1.37	DK adult	0.64	Oats	0.43	Wheat	0.28	Rye
1.19	LT adult	0.50	Oats	0.44	Rye	0.23	Wheat
1.13	UK toddler	0.84	Wheat	0.27	Oats	0.02	Pears
1.11	PT (GP)	0.85	Wheat	0.17	Oats	0.06	Rye
1.01	ES child	0.96	Wheat	0.05	Pears		FRUIT (FRESH OR FROZEN)
0.97	FI adult	0.47	Oats	0.28	Rye	0.21	Wheat
0.92	IT adult	0.89	Wheat	0.03	Pears	0.00	Oats
0.86	WHO regional diet	0.64	Wheat	0.19	Oats	0.02	Pears
0.85	SE (GP)	0.69	Wheat	0.12	Rye	0.04	Pears
0.73	UK vegetarian	0.44	Wheat	0.27	Oats	0.01	Pears
0.72	FR (GP)	0.71	Wheat	0.01	Pears		FRUIT (FRESH OR FROZEN)
0.67	NL (GP)	0.45	Wheat	0.18	Oats	0.03	Rye
0.60	FR toddler	0.57	Wheat	0.03	Pears		FRUIT (FRESH OR FROZEN)
0.54	ES adult	0.51	Wheat	0.04	Pears		FRUIT (FRESH OR FROZEN)
0.47	UK adult	0.36	Wheat	0.10	Oats	0.01	Pears
0.22	FR infant	0.18	Wheat	0.04	Pears		FRUIT (FRESH OR FROZEN)
0.03	PL (GP)	0.03	Pears		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)

### Acute risk assessment

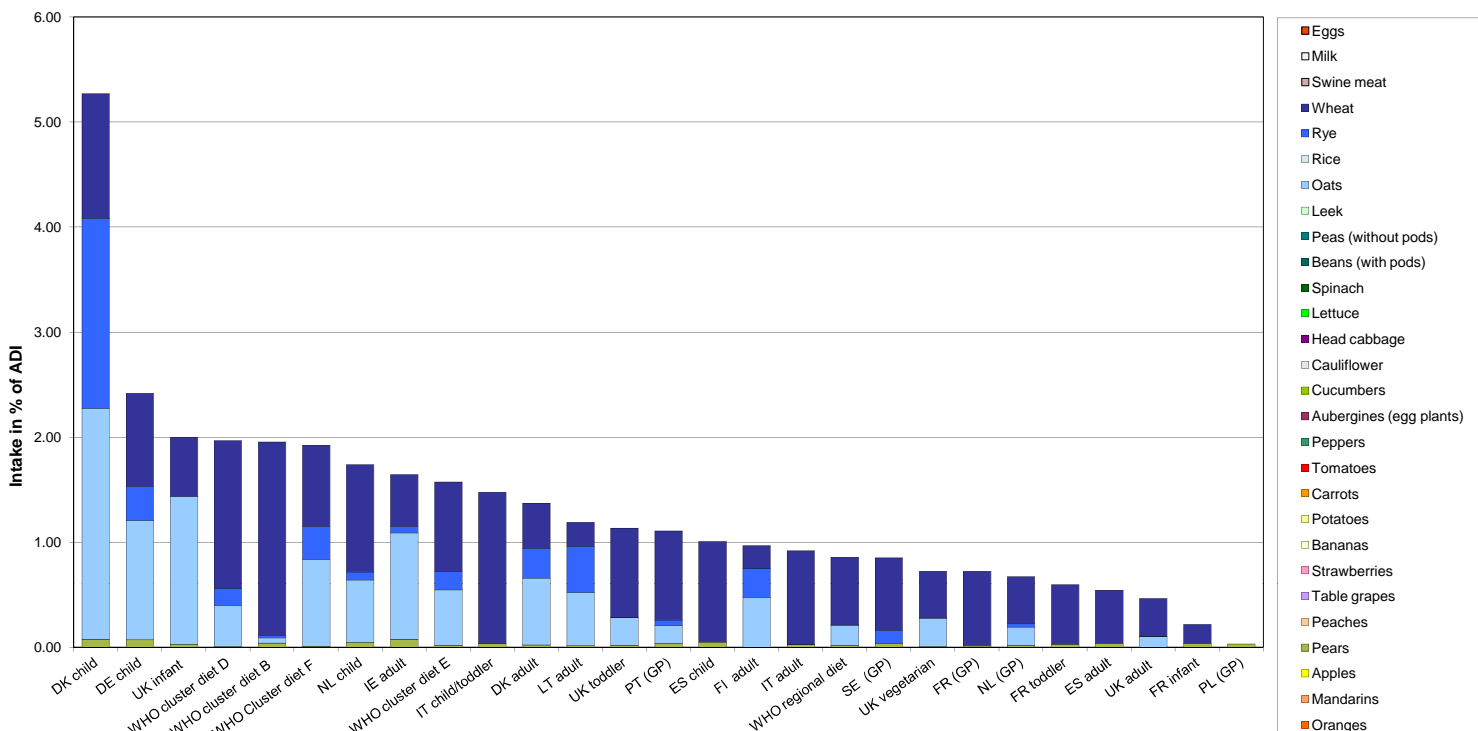
Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples									
2010	Peaches									
2010	Strawberries									
2010	Tomatoes									
2010	Head cabbage									
2010	Lettuce									
2010	Leek									
2010	Oats	5	167	54.49	7.78	15.00		85.32	DE child	
2010	Rye	2	287	34.15	0.35	2.41		21.74	UK infant	
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

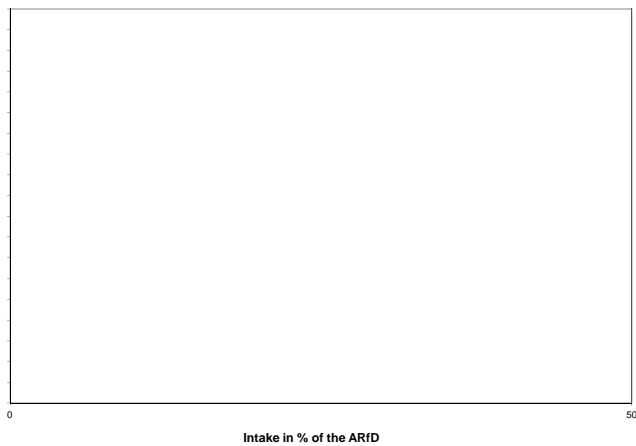
c) TRL: toxicological threshold level

### Chronic risk assessment: Chlormequat

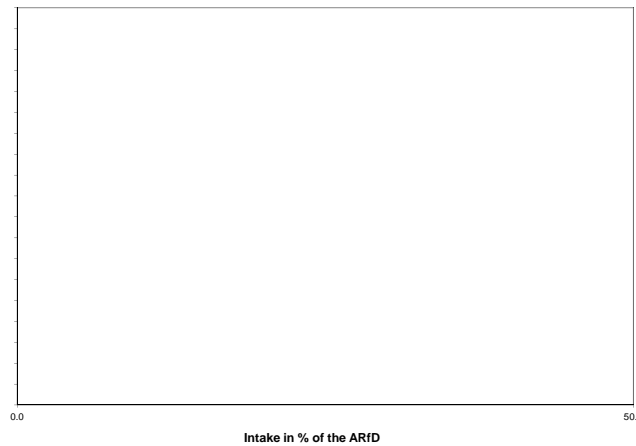


**Chlormequat**

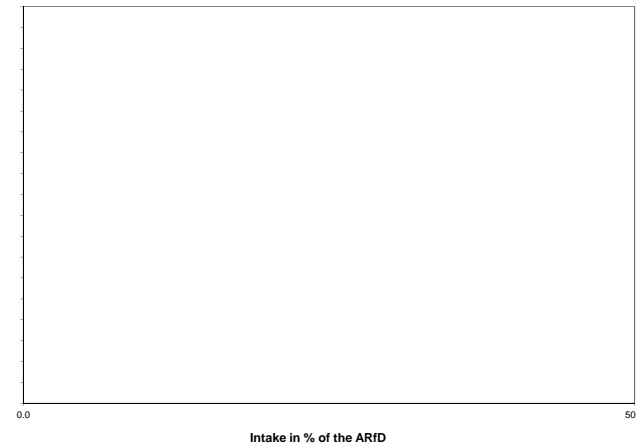
Acute exposure: Chlormequat / Apples



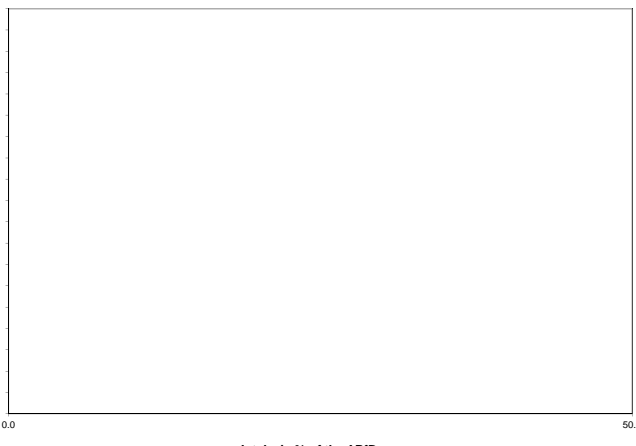
Acute exposure: Chlormequat / Peaches



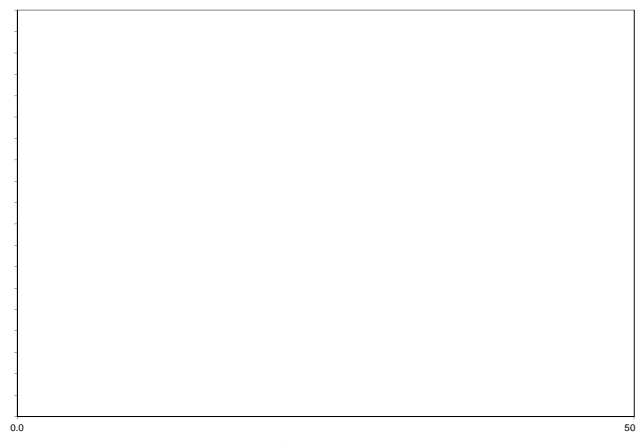
Acute exposure: Chlormequat / Strawberries



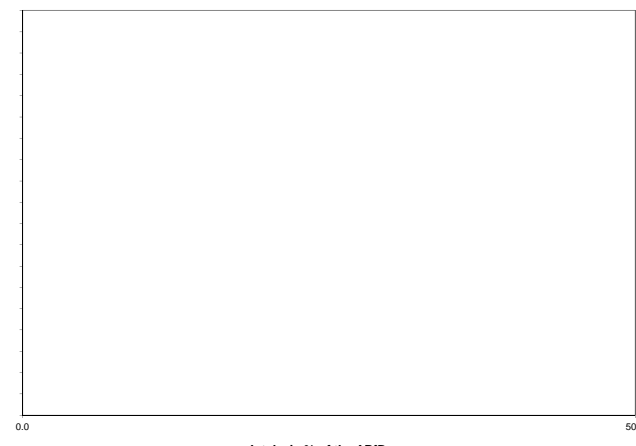
Acute exposure: Chlormequat / Tomatoes



Acute exposure: Chlormequat / Head cabbage



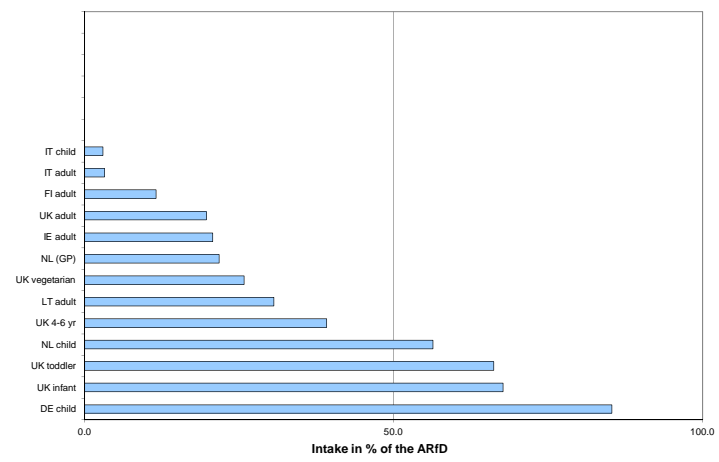
Acute exposure: Chlormequat / Lettuce



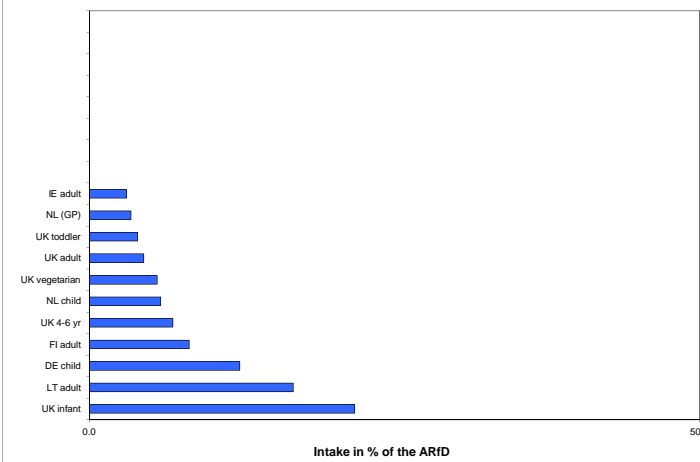
Acute exposure: Chlormequat / Leek



Acute exposure: Chlormequat / Oats



Acute exposure: Chlormequat / Rye



Chlorobenzilate			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:	Yes	Analysed on animal (A) or plant (P) products:	A
Toxicological end points			
ADI (mg/kg bw/day):	0.02	ARfD (mg/kg bw):	0.02
Source of ADI:	JMPR	Source of ARfD:	
Year of evaluation:	1980	Year of evaluation:	

Active substance was not assessed regarding the setting of an ARfD. The ADI is used as a surrogate.

**Chronic risk assessment**

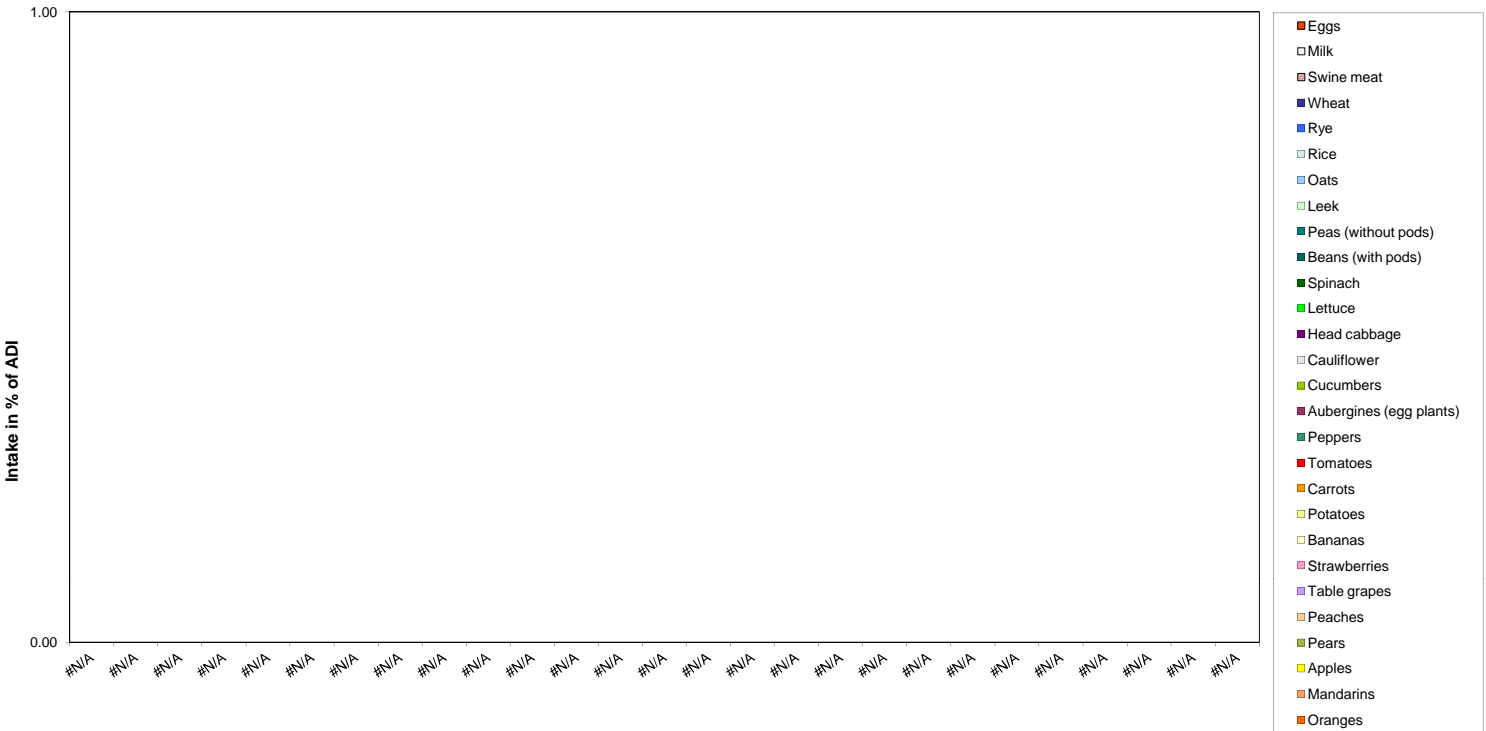
Exposure (range) in % of ADI minimum - maximum			#N/A #N/A		#N/A #N/A		No of diets exceeding ADI:		---	
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
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#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			

**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples									
2010	Peaches									
2010	Strawberries									
2010	Tomatoes									
2010	Head cabbage									
2010	Lettuce									
2010	Leek									
2010	Oats									
2010	Rye									
2010	Swine Meat	0.1	445							
2010	Milk	0.1	622							

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
b) MRL in place on 01/01/2010  
c) TRL: toxicological threshold level

**Chronic risk assessment: Chlorobenzilate**



**Chlorobenzilate**

Acute exposure: Chlorobenzilate / Apples



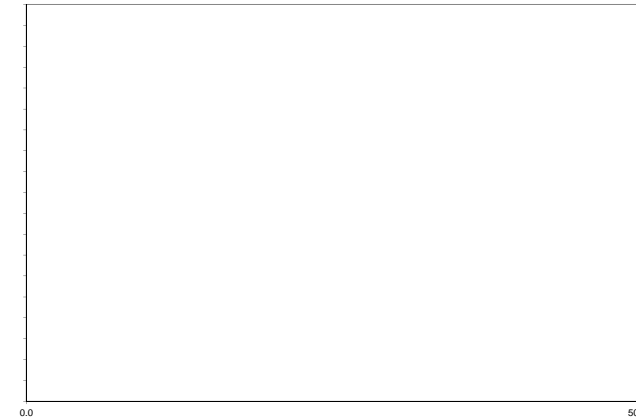
Intake in % of the ARfD

Acute exposure: Chlorobenzilate / Peaches



Intake in % of the ARfD

Acute exposure: Chlorobenzilate / Strawberries



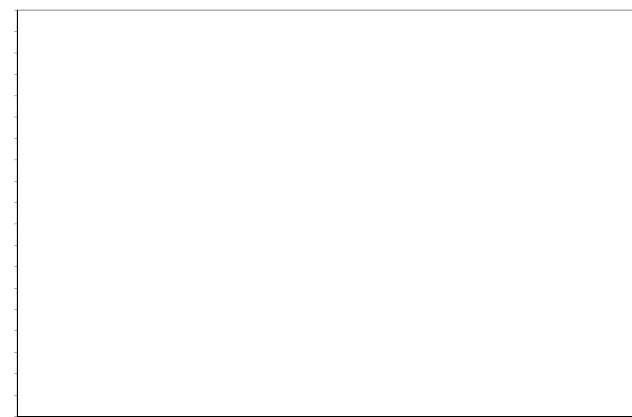
Intake in % of the ARfD

Acute exposure: Chlorobenzilate / Tomatoes



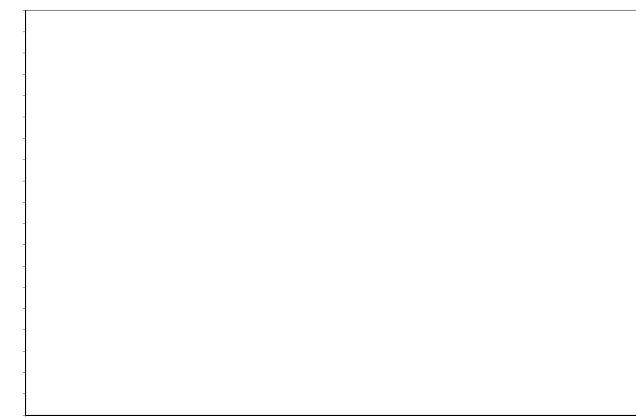
Intake in % of the ARfD

Acute exposure: Chlorobenzilate / Head cabbage



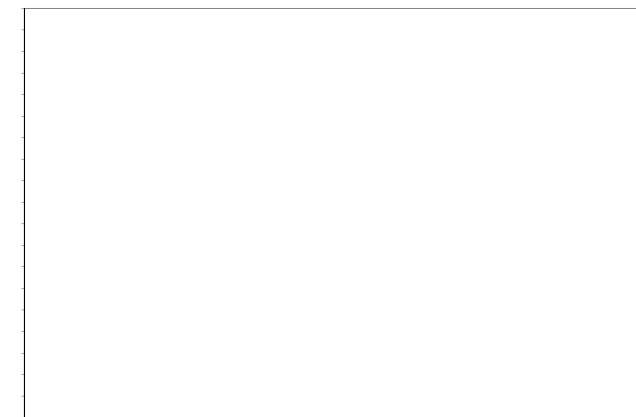
Intake in % of the ARfD

Acute exposure: Chlorobenzilate / Lettuce



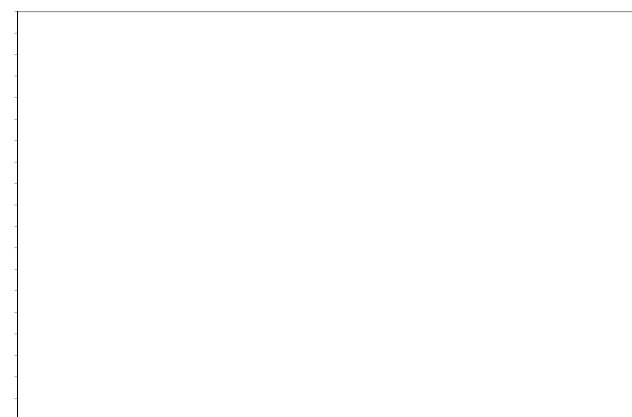
Intake in % of the ARfD

Acute exposure: Chlorobenzilate / Leek



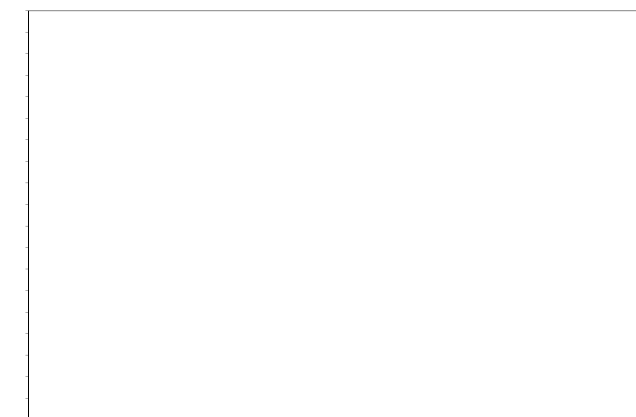
Intake in % of the ARfD

Acute exposure: Chlorobenzilate / Oats



Intake in % of the ARfD

Acute exposure: Chlorobenzilate / Rye



Intake in % of the ARfD

## Chlorothalonil

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.015	ARfD (mg/kg bw):	0.6
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2006	Year of evaluation:	2006

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
2

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
2.27	DE child	1.07	Apples	0.24	Oranges	0.18	Bananas
1.55	NL child	0.56	Apples	0.20	Oranges	0.19	Bananas
1.37	FR toddler	0.28	Carrots	0.23	Apples	0.15	Bananas
1.14	WHO cluster diet B	0.55	Tomatoes	0.09	Apples	0.05	Oranges
1.03	DK child	0.24	Cucumbers	0.21	Apples	0.16	Carrots
1.01	FR infant	0.30	Carrots	0.22	Apples	0.10	Beans (with pods)
0.83	SE (GP)	0.21	Bananas	0.14	Tomatoes	0.10	Carrots
0.74	ES child	0.17	Tomatoes	0.14	Oranges	0.11	Bananas
0.71	UK infant	0.17	Bananas	0.15	Carrots	0.14	Apples
0.71	IE adult	0.09	Bananas	0.08	Pears	0.07	Apples
0.70	UK toddler	0.15	Apples	0.12	Oranges	0.12	Bananas
0.62	IT child/toddler	0.25	Tomatoes	0.08	Apples	0.06	Bananas
0.61	WHO regional diet	0.20	Tomatoes	0.06	Apples	0.04	Bananas
0.55	PL (GP)	0.18	Apples	0.16	Tomatoes	0.04	Head cabbage
0.55	PT (GP)	0.16	Tomatoes	0.09	Apples	0.08	Carrots
0.55	ES adult	0.14	Tomatoes	0.08	Oranges	0.07	Apples
0.54	NL (GP)	0.10	Apples	0.09	Oranges	0.08	Tomatoes
0.53	IT adult	0.21	Tomatoes	0.07	Apples	0.04	Peaches
0.48	WHO Cluster diet F	0.12	Tomatoes	0.06	Bananas	0.06	Apples
0.47	WHO cluster diet E	0.09	Tomatoes	0.08	Apples	0.05	Carrots
0.45	LT adult	0.17	Apples	0.11	Tomatoes	0.06	Cucumbers
0.40	WHO cluster diet D	0.18	Tomatoes	0.06	Apples	0.03	Cucumbers
0.39	UK vegetarian	0.11	Tomatoes	0.05	Oranges	0.05	Apples
0.36	DK adult	0.07	Tomatoes	0.07	Apples	0.05	Carrots
0.33	FR (GP)	0.08	Tomatoes	0.04	Apples	0.03	Carrots
0.31	FI adult	0.08	Tomatoes	0.06	Oranges	0.04	Cucumbers
0.28	UK adult	0.08	Tomatoes	0.04	Bananas	0.04	Apples

## Acute risk assessment

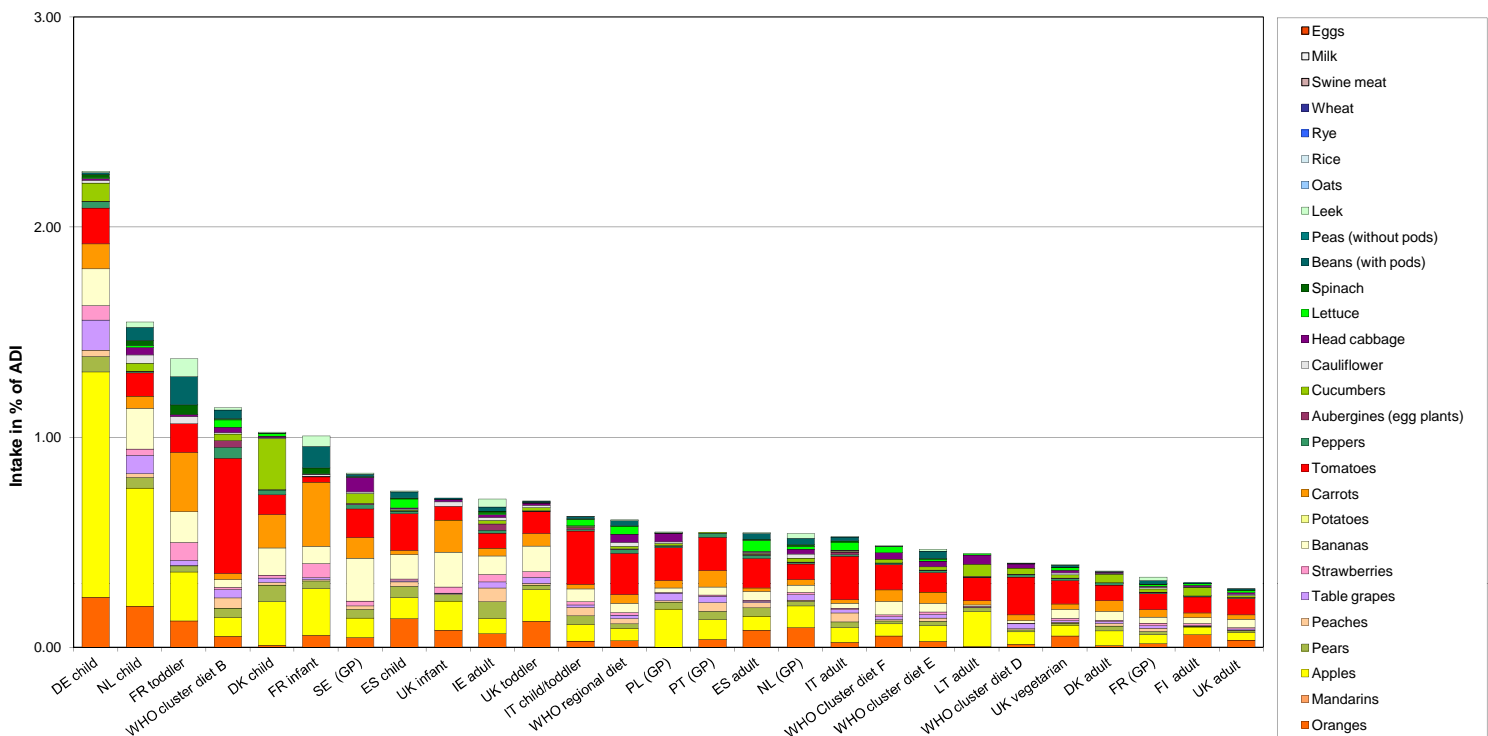
Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	1	3078	0.39		0.26		4.25	UK infant	
2010	Peaches	1	1493	2.34		0.91		8.96	DE child	
2010	Strawberries	3	2300	1.26		2.10		5.46	DE child	
2010	Tomatoes	2	2505	7.35		1.81		17.54	BE child	
2010	Head cabbage	3	1259	0.56		0.60		5.26	NL child	
2010	Lettuce	0.01	2374	0.08	0.38	3.28		14.71	DE child	
2010	Leek	10	967	1.34		0.93		9.14	BE child	
2010	Oats	0.1	263							
2010	Rye	0.1	448							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

c) TRL: toxicological threshold level

## Chronic risk assessment: Chlorothalonil



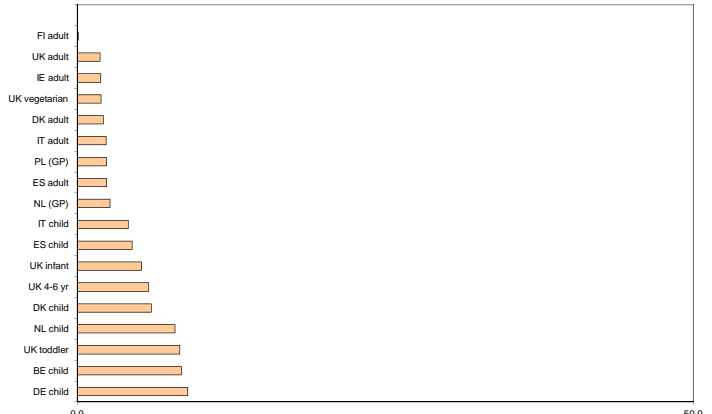
**Chlorothalonil**

Acute exposure: Chlorothalonil / Apples



Intake in % of the ARfD

Acute exposure: Chlorothalonil / Peaches



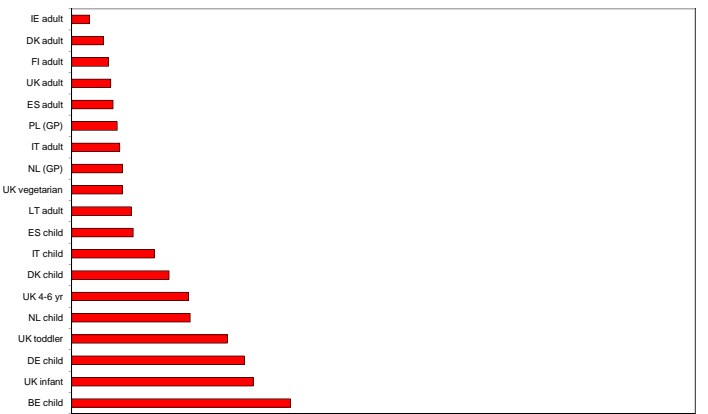
Intake in % of the ARfD

Acute exposure: Chlorothalonil / Strawberries



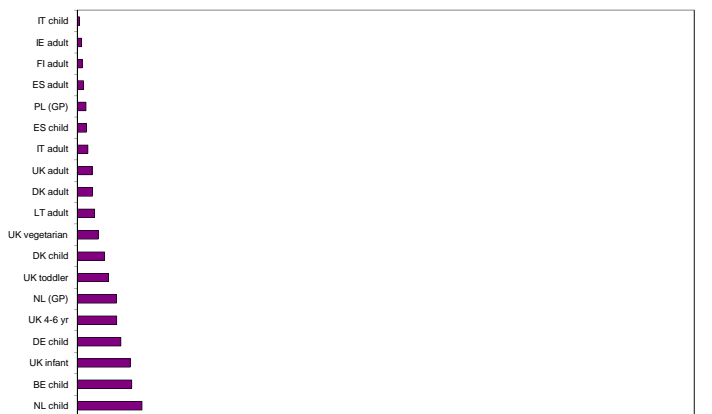
Intake in % of the ARfD

Acute exposure: Chlorothalonil / Tomatoes



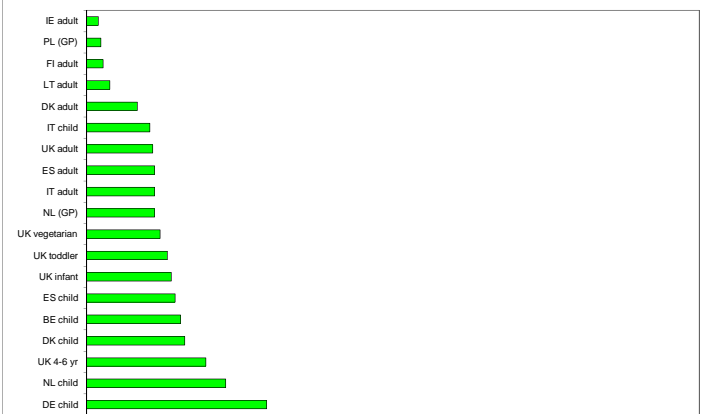
Intake in % of the ARfD

Acute exposure: Chlorothalonil / Head cabbage



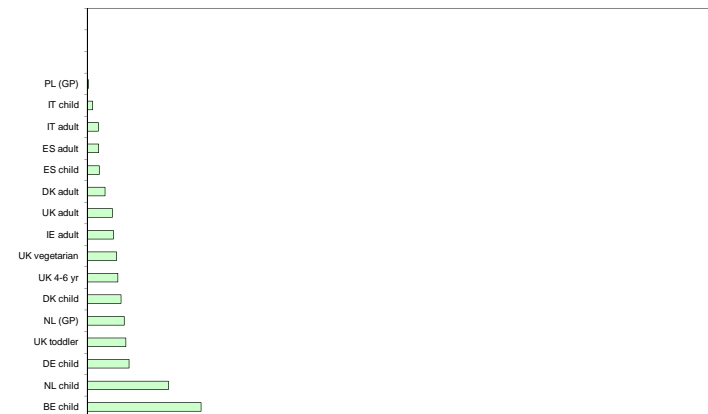
Intake in % of the ARfD

Acute exposure: Chlorothalonil / Lettuce



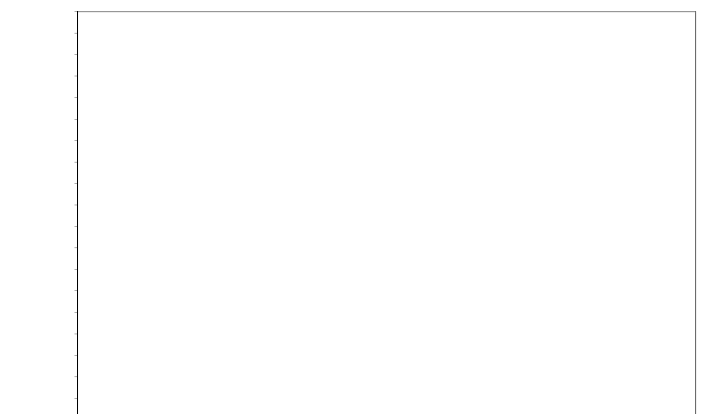
Intake in % of the ARfD

Acute exposure: Chlorothalonil / Leek



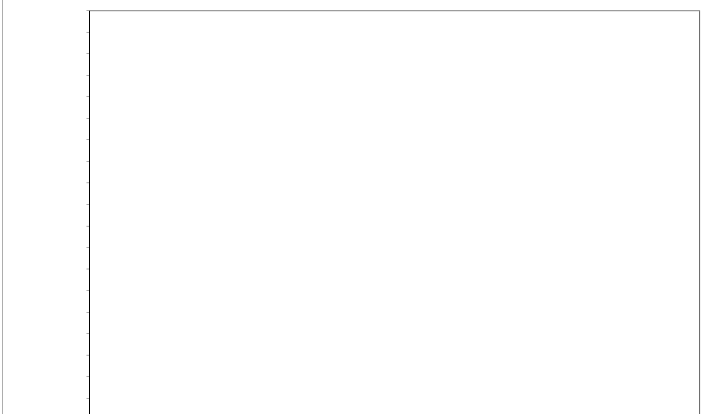
Intake in % of the ARfD

Acute exposure: Chlorothalonil / Oats



Intake in % of the ARfD

Acute exposure: Chlorothalonil / Rye



Intake in % of the ARfD

## Chlorpropham

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.05	ARfD (mg/kg bw):	0.5
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2004	Year of evaluation:	2004

### Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
1

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.60	DE child	0.42	Apples	0.08	Wheat	0.02	Pears
0.38	NL child	0.22	Apples	0.10	Wheat	0.02	Mandarins
0.26	DK child	0.11	Wheat	0.08	Apples	0.03	Carrots
0.26	WHO cluster diet B	0.17	Wheat	0.04	Apples	0.02	Peaches
0.25	FR toddler	0.09	Apples	0.06	Carrots	0.05	Wheat
0.21	IT child/toddler	0.14	Wheat	0.03	Apples	0.02	Peaches
0.20	FR infant	0.09	Apples	0.06	Carrots	0.02	Strawberries
0.18	UK toddler	0.08	Wheat	0.06	Apples	0.01	Carrots
0.17	WHO cluster diet D	0.13	Wheat	0.02	Apples	0.01	Carrots
0.17	ES child	0.09	Wheat	0.04	Apples	0.02	Pears
0.17	PT (GP)	0.08	Wheat	0.04	Apples	0.02	Peaches
0.16	SE (GP)	0.07	Wheat	0.04	Apples	0.02	Carrots
0.16	IE adult	0.05	Wheat	0.03	Apples	0.03	Pears
0.16	UK infant	0.05	Apples	0.05	Wheat	0.03	Carrots
0.15	IT adult	0.08	Wheat	0.03	Apples	0.02	Peaches
0.14	WHO cluster diet E	0.08	Wheat	0.03	Apples	0.01	Carrots
0.12	WHO Cluster diet F	0.07	Wheat	0.02	Apples	0.01	Carrots
0.12	WHO regional diet	0.06	Wheat	0.02	Apples	0.01	Peaches
0.11	FR (GP)	0.07	Wheat	0.02	Apples	0.01	Carrots
0.11	NL (GP)	0.04	Wheat	0.04	Apples	0.01	Pears
0.11	ES adult	0.05	Wheat	0.03	Apples	0.01	Pears
0.10	LT adult	0.06	Apples	0.02	Wheat	0.01	Pears
0.10	DK adult	0.04	Wheat	0.03	Apples	0.01	Carrots
0.09	PL (GP)	0.07	Apples	0.01	Pears	0.01	Carrots
0.08	UK vegetarian	0.04	Wheat	0.02	Apples	0.01	Carrots
0.06	UK adult	0.03	Wheat	0.01	Apples	0.00	Carrots
0.05	FI adult	0.02	Wheat	0.01	Apples	0.00	Carrots

### Acute risk assessment

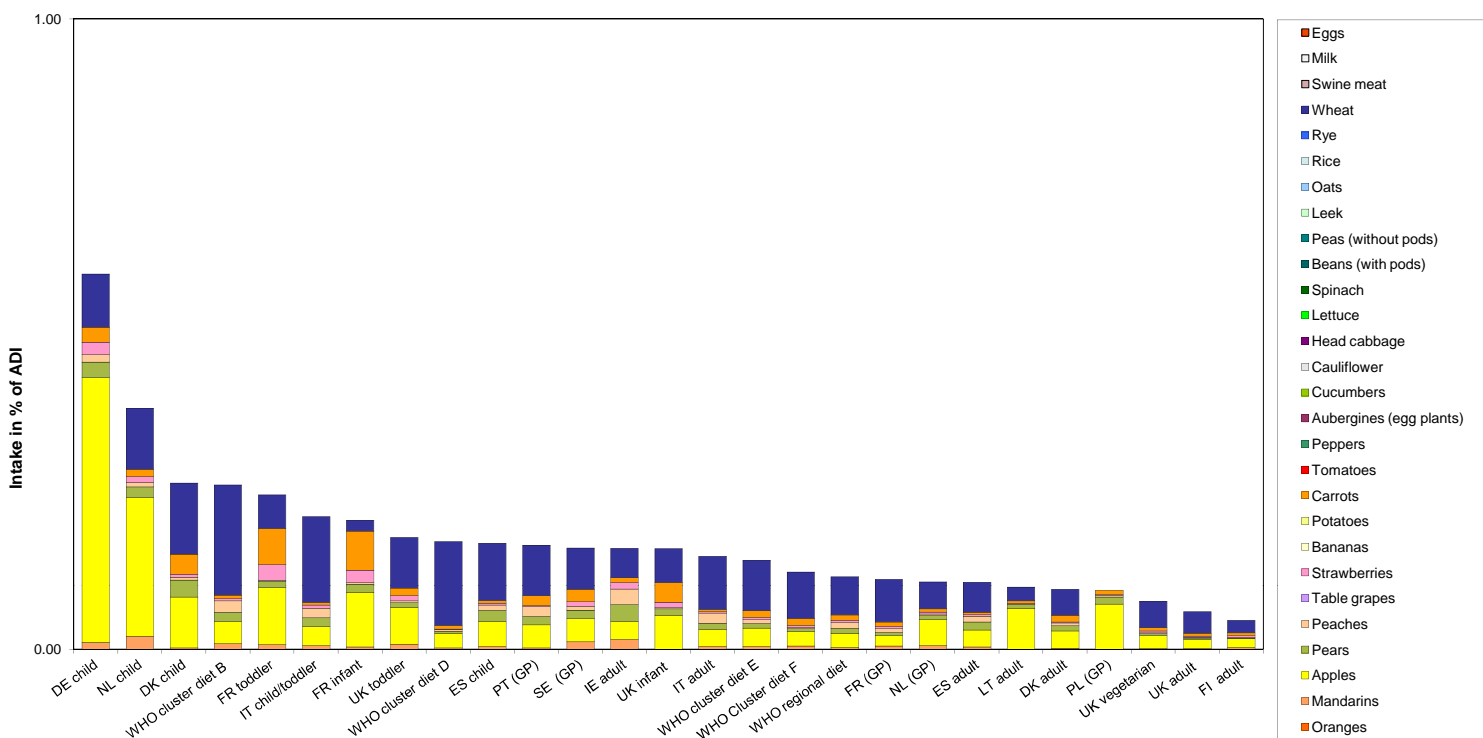
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	1908	0.16		0.02		0.41	UK infant	
2010	Peaches	0.05	1001	0.10		0.00		0.02	DE child	
2010	Strawberries	0.05	1565	0.13		0.05		0.15	DE child	
2010	Tomatoes	0.05	1468	0.07		0.01		0.12	BE child	
2010	Head cabbage	0.05	764							
2010	Lettuce	0.05	1416							
2010	Leek	0.05	642							
2010	Oats	0.02	166							
2010	Rye	0.02	326							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

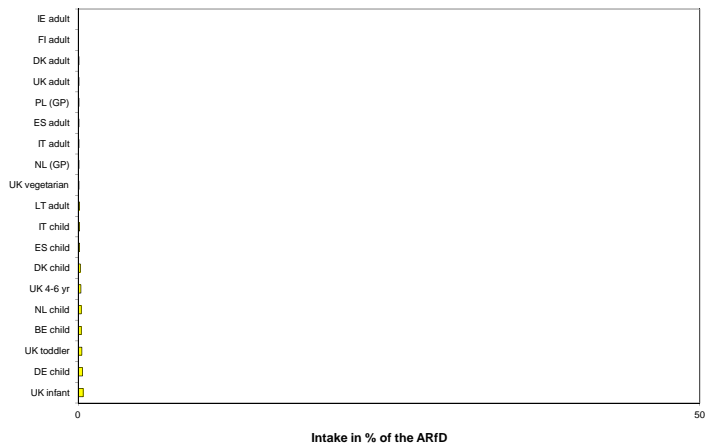
<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Chlorpropham

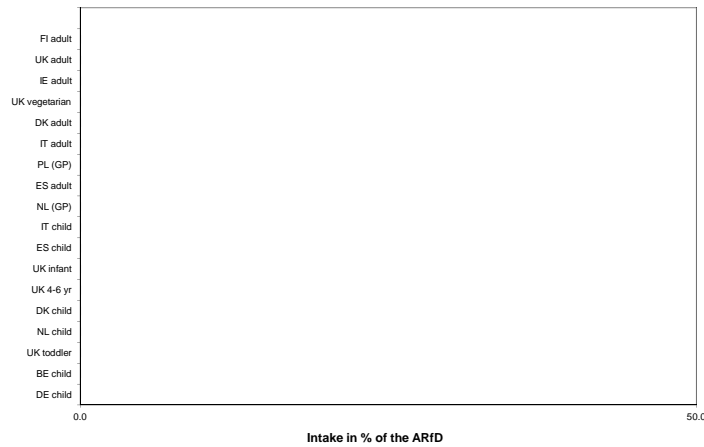


**Chlorpropham**

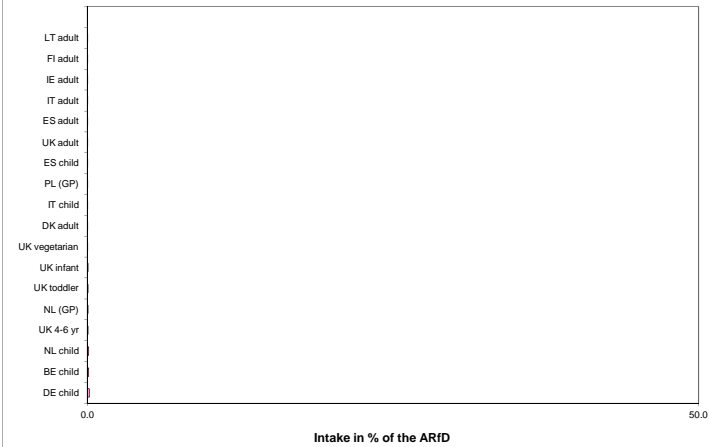
Acute exposure: Chlorpropham / Apples



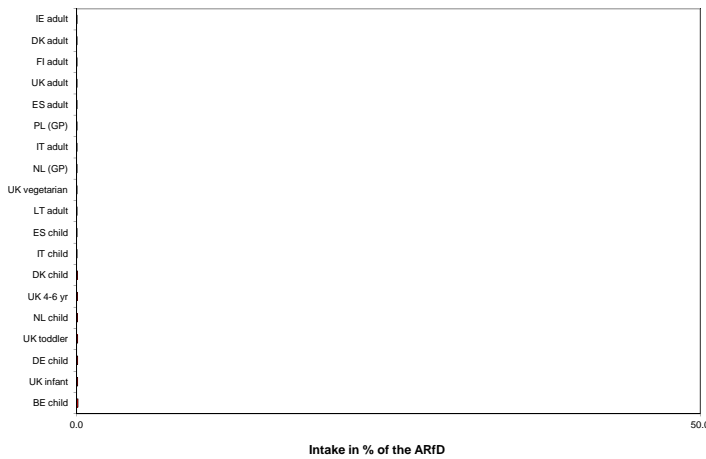
Acute exposure: Chlorpropham / Peaches



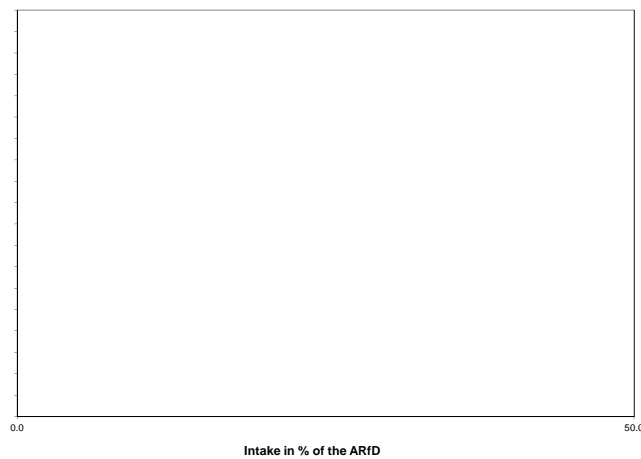
Acute exposure: Chlorpropham / Strawberries



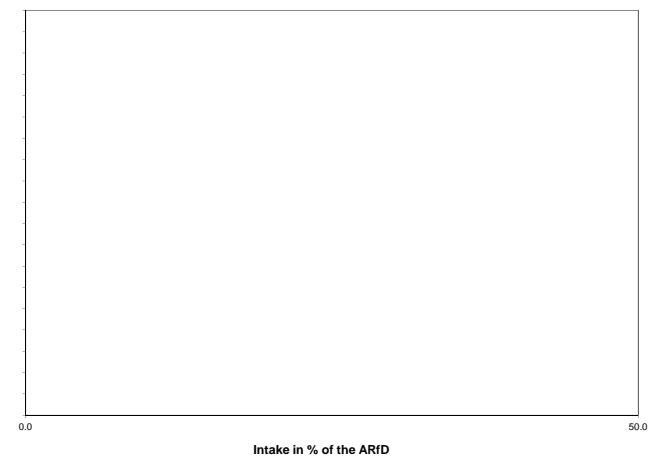
Acute exposure: Chlorpropham / Tomatoes



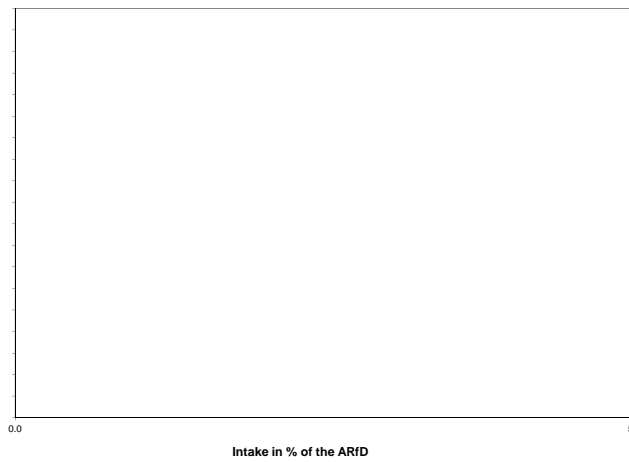
Acute exposure: Chlorpropham / Head cabbage



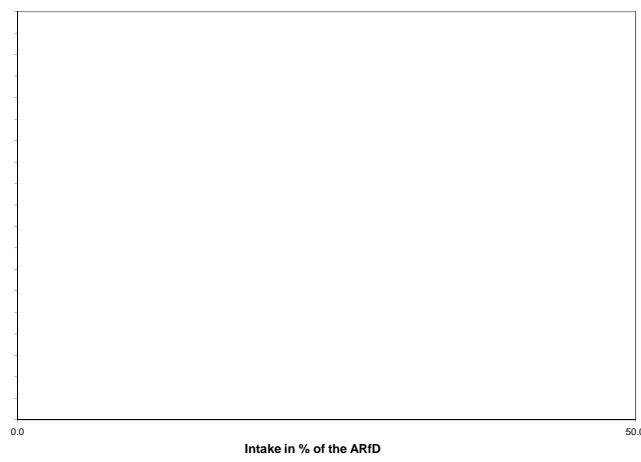
Acute exposure: Chlorpropham / Lettuce



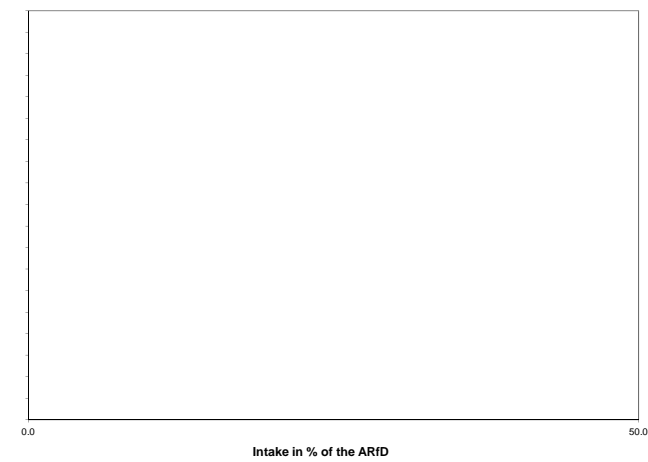
Acute exposure: Chlorpropham / Leek



Acute exposure: Chlorpropham / Oats



Acute exposure: Chlorpropham / Rye





## Chlorpyrifos

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P and A
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.01	ARfD (mg/kg bw):	0.1
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2005	Year of evaluation:	2005

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
1 7

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
6.64	DE child	2.27	Apples	1.14	Oranges	0.63	Milk
6.42	NL child	1.29	Milk	1.19	Apples	0.94	Oranges
5.30	FR toddler	1.75	Milk	0.61	Potatoes	0.60	Oranges
3.94	UK infant	1.71	Milk	0.39	Potatoes	0.39	Oranges
3.77	DK child	0.80	Wheat	0.56	Rye	0.56	Milk
3.61	UK toddler	0.91	Milk	0.60	Oranges	0.57	Wheat
3.49	FR infant	1.14	Milk	0.50	Potatoes	0.47	Apples
3.48	WHO cluster diet B	1.23	Wheat	0.47	Tomatoes	0.32	Potatoes
3.17	SE (GP)	0.55	Milk	0.50	Potatoes	0.46	Wheat
3.08	ES child	0.65	Oranges	0.64	Wheat	0.55	Milk
2.37	WHO cluster diet D	0.94	Wheat	0.49	Potatoes	0.21	Milk
2.35	IE adult	0.33	Wheat	0.32	Mandarins	0.31	Oranges
2.28	PT (GP)	0.65	Potatoes	0.57	Wheat	0.20	Apples
2.19	WHO Cluster diet F	0.52	Wheat	0.41	Potatoes	0.26	Oranges
2.18	NL (GP)	0.45	Oranges	0.33	Potatoes	0.30	Wheat
2.12	IT child/toddler	0.96	Wheat	0.22	Tomatoes	0.17	Apples
2.09	WHO regional diet	0.49	Potatoes	0.43	Wheat	0.21	Milk
2.09	WHO cluster diet E	0.57	Wheat	0.46	Potatoes	0.16	Apples
1.79	ES adult	0.39	Oranges	0.34	Wheat	0.22	Milk
1.55	LT adult	0.38	Potatoes	0.35	Apples	0.17	Milk
1.54	IT adult	0.60	Wheat	0.18	Tomatoes	0.15	Apples
1.40	UK vegetarian	0.30	Wheat	0.26	Oranges	0.17	Potatoes
1.39	DK adult	0.29	Wheat	0.24	Milk	0.18	Potatoes
1.35	FR (GP)	0.48	Wheat	0.14	Potatoes	0.12	Milk
1.31	FI adult	0.29	Oranges	0.25	Milk	0.15	Potatoes
1.26	PL (GP)	0.42	Potatoes	0.38	Apples	0.13	Tomatoes
1.13	UK adult	0.24	Wheat	0.17	Potatoes	0.17	Oranges

## Acute risk assessment

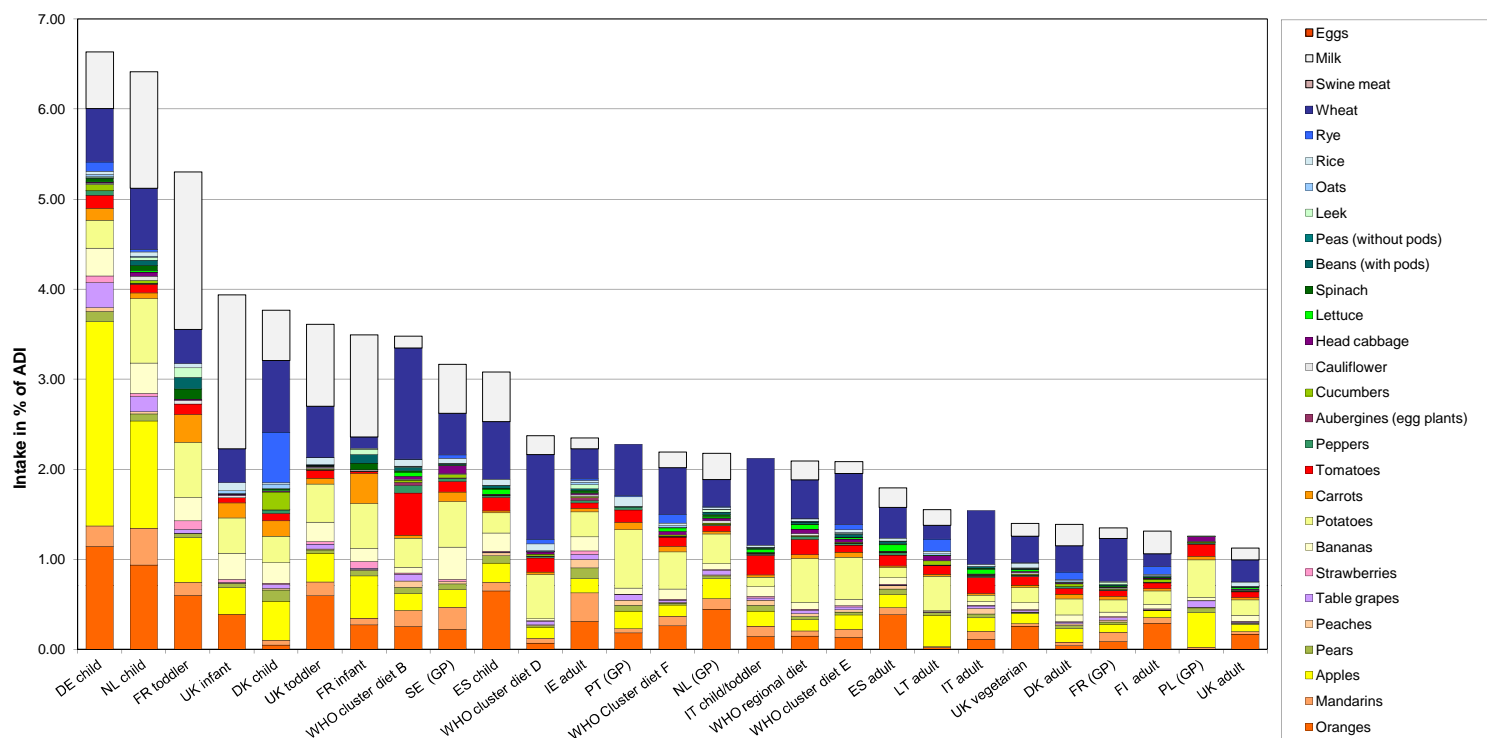
Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.5	3263	11.46		0.50		48.98	UK infant	
2010	Peaches	0.2	1554	13.71	0.13	0.68		40.35	DE child	
2010	Strawberries	0.2	2382	2.06		0.16		2.49	DE child	
2010	Tomatoes	0.5	2689	1.75		0.41		23.84	BE child	
2010	Head cabbage	1	1296	1.16		0.29		15.26	NL child	
2010	Lettuce	0.05	2459	0.89	0.33	1.04		27.98	DE child	
2010	Leek	0.5	1030	0.49		0.10		5.84	BE child	
2010	Oats	0.05	269	1.49		0.04		0.16	DE child	
2010	Rye	0.05	477	0.63		0.02		0.13	UK infant	
2010	Swine Meat		591							
2010	Milk	0.01	796	0.13		0.00		0.12	UK infant	

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

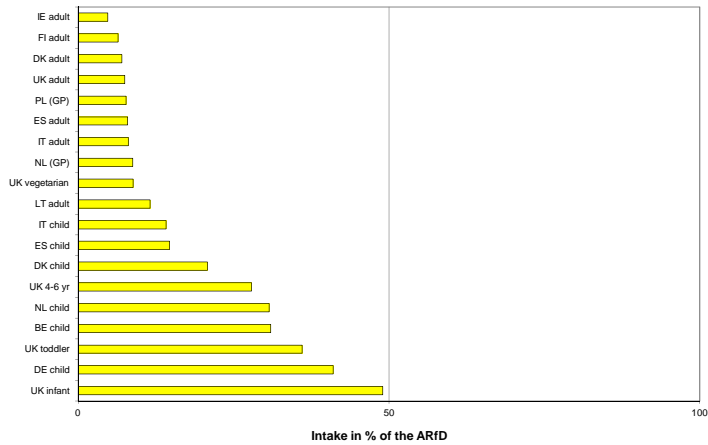
c) TRL: toxicological threshold level

## Chronic risk assessment: Chlorpyrifos

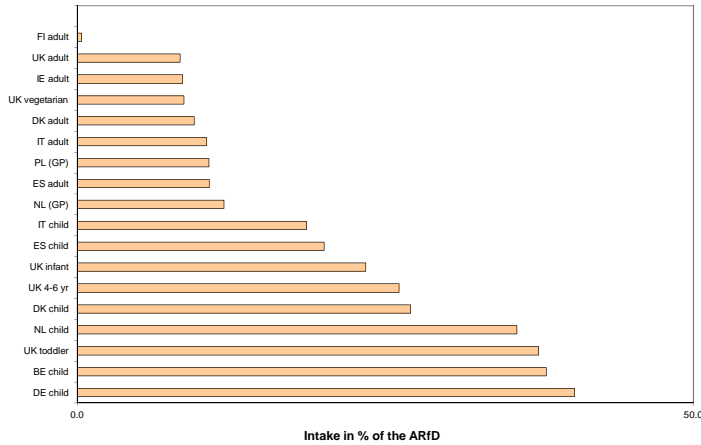


**Chlorpyrifos**

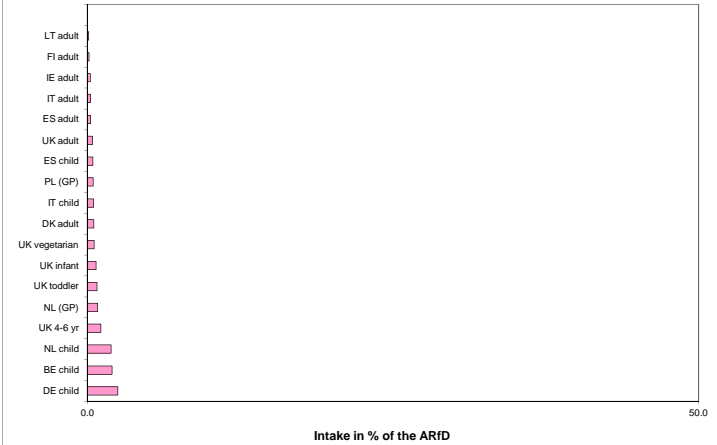
Acute exposure: Chlorpyrifos / Apples



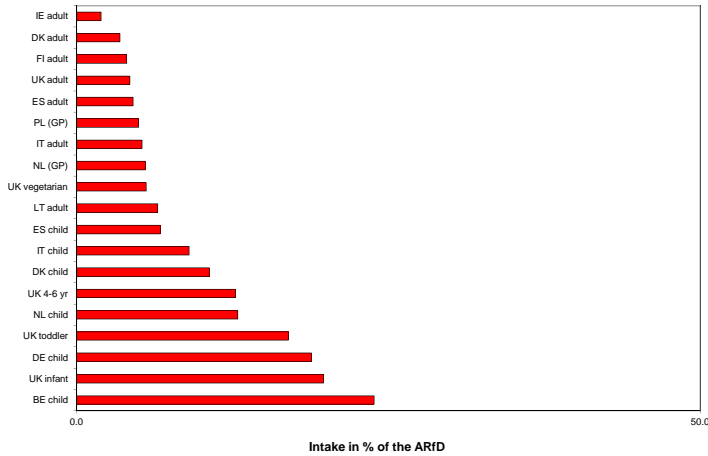
Acute exposure: Chlorpyrifos / Peaches



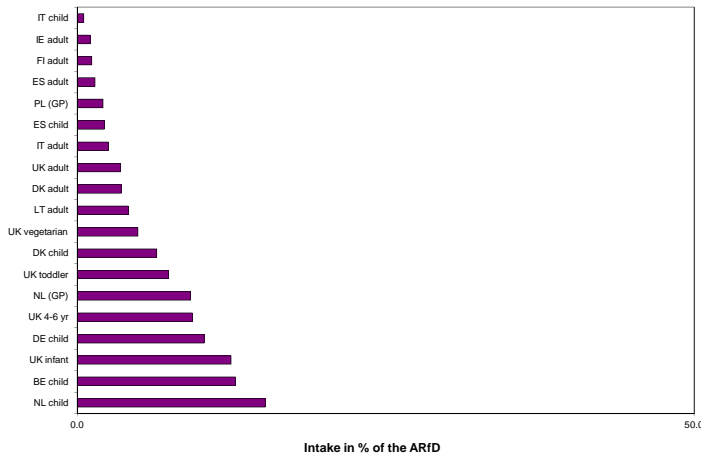
Acute exposure: Chlorpyrifos / Strawberries



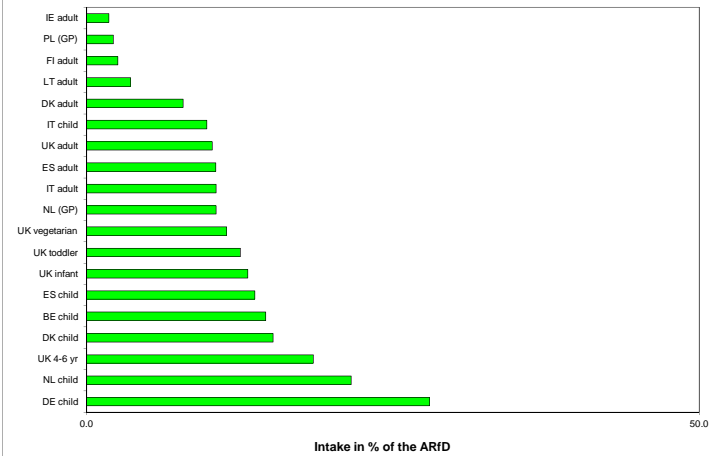
Acute exposure: Chlorpyrifos / Tomatoes



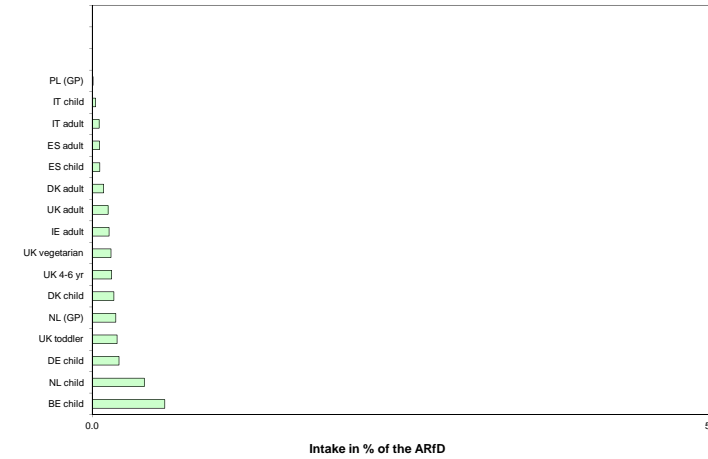
Acute exposure: Chlorpyrifos / Head cabbage



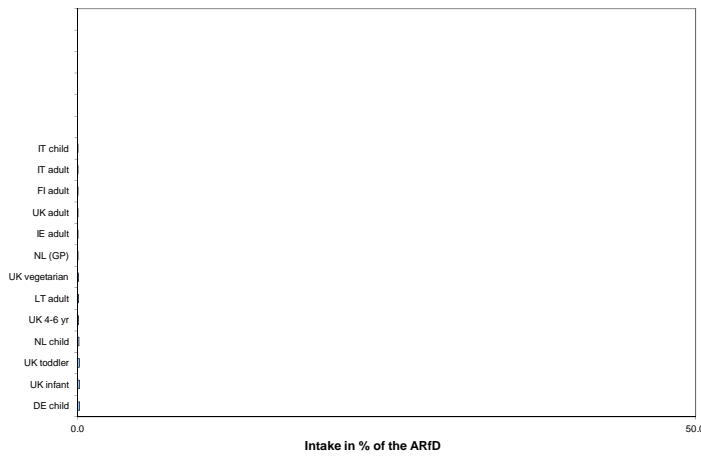
Acute exposure: Chlorpyrifos / Lettuce



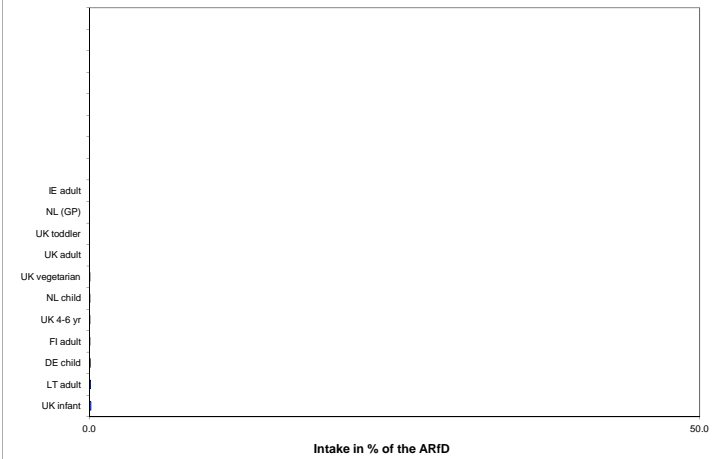
Acute exposure: Chlorpyrifos / Leek



Acute exposure: Chlorpyrifos / Oats



Acute exposure: Chlorpyrifos / Rye



## Chlorpyrifos-methyl

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P and A</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.01</b>	ARfD (mg/kg bw):	<b>0.1</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2005</b>	Year of evaluation:	<b>2005</b>

### Chronic risk assessment

Highest calculated exposure in % of ADI		MS Diet		Exposure (range) in % of ADI minimum - maximum		No of diets exceeding ADI:					
				1	4	---	---				
Highest contributor to MS diet (in % of ADI)		Commodity / group of commodities		2nd contributor to MS diet (in % of ADI)		Commodity / group of commodities		3rd contributor to MS diet (in % of ADI)		Commodity / group of commodities	
3.93	DE child	1.62	Apples	0.89	Wheat	0.47	Oranges				
3.08	WHO cluster diet B	1.85	Wheat	0.49	Tomatoes	0.14	Apples				
2.90	NL child	1.03	Wheat	0.85	Apples	0.39	Oranges				
2.74	DK child	1.20	Wheat	0.62	Rye	0.31	Apples				
2.11	IT child/toddler	1.44	Wheat	0.23	Tomatoes	0.12	Apples				
1.98	WHO cluster diet D	1.41	Wheat	0.16	Tomatoes	0.10	Rice				
1.90	FR toddler	0.57	Wheat	0.35	Apples	0.26	Carrots				
1.84	ES child	0.96	Wheat	0.27	Oranges	0.16	Tomatoes				
1.73	UK toddler	0.85	Wheat	0.25	Oranges	0.23	Apples				
1.62	PT (GP)	0.85	Wheat	0.14	Rice	0.14	Tomatoes				
1.48	IT adult	0.90	Wheat	0.18	Tomatoes	0.11	Apples				
1.45	WHO Cluster diet F	0.78	Wheat	0.11	Tomatoes	0.11	Oranges				
1.44	SE (GP)	0.70	Wheat	0.14	Apples	0.12	Tomatoes				
1.42	WHO cluster diet E	0.86	Wheat	0.11	Apples	0.08	Tomatoes				
1.41	UK infant	0.57	Wheat	0.21	Apples	0.16	Oranges				
1.37	IE adult	0.50	Wheat	0.13	Oranges	0.11	Apples				
1.23	WHO regional diet	0.64	Wheat	0.17	Tomatoes	0.09	Apples				
1.16	FR infant	0.34	Apples	0.28	Carrots	0.18	Wheat				
1.15	ES adult	0.51	Wheat	0.16	Oranges	0.12	Tomatoes				
1.08	NL (GP)	0.45	Wheat	0.18	Oranges	0.16	Apples				
1.06	FR (GP)	0.71	Wheat	0.07	Tomatoes	0.06	Apples				
0.92	UK vegetarian	0.45	Wheat	0.11	Oranges	0.10	Tomatoes				
0.91	DK adult	0.44	Wheat	0.11	Apples	0.10	Rye				
0.87	LT adult	0.25	Apples	0.23	Wheat	0.15	Rye				
0.71	UK adult	0.36	Wheat	0.07	Oranges	0.07	Tomatoes				
0.67	FI adult	0.21	Wheat	0.12	Oranges	0.10	Rye				
0.56	PL (GP)	0.27	Apples	0.14	Tomatoes	0.04	Table grapes				

### Acute risk assessment

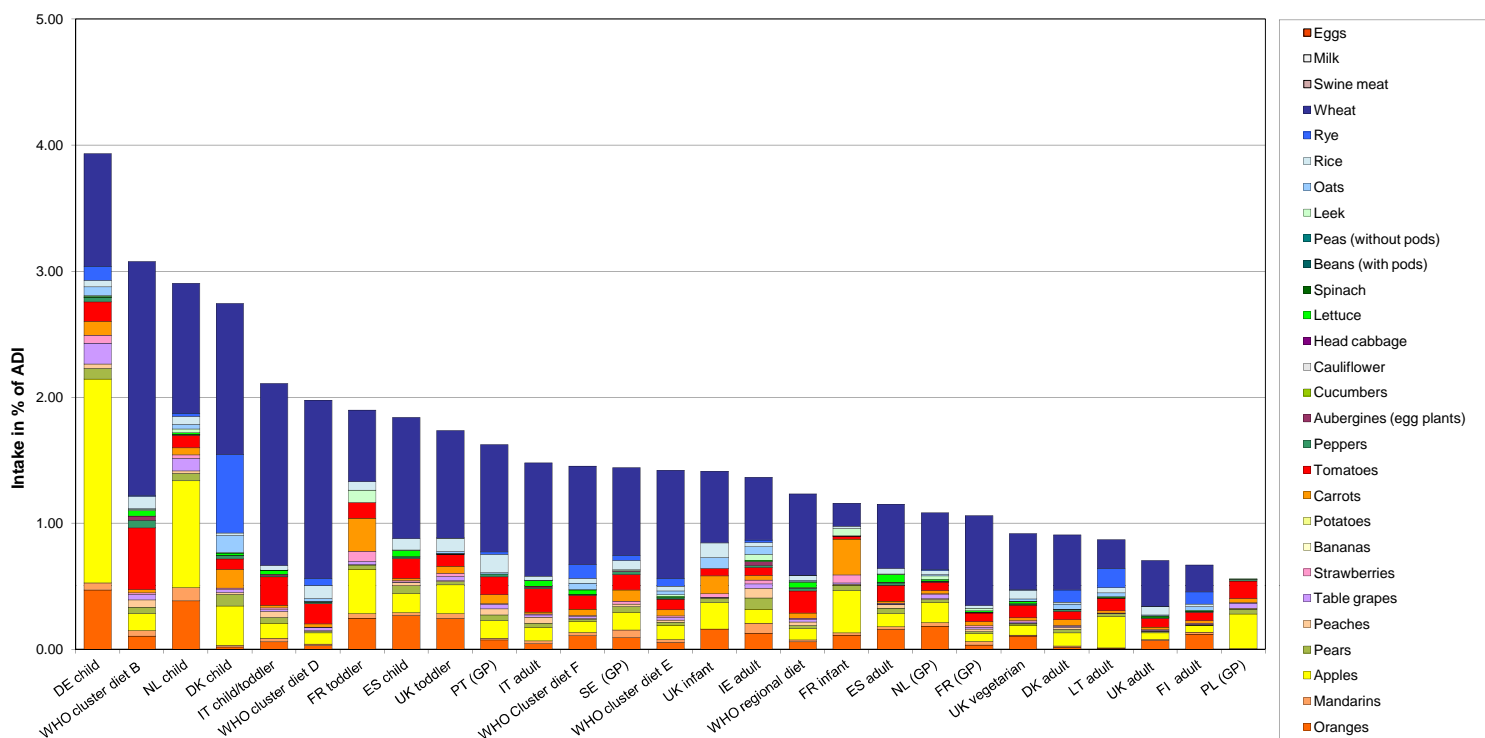
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.5	3215	1.65		0.27		26.45	UK infant	
2010	Peaches	0.5	1540	2.40		0.50		29.67	DE child	
2010	Strawberries	0.5	2357	0.47		0.14		2.15	DE child	
2010	Tomatoes	0.5	2668	1.65		0.40		23.26	BE child	
2010	Head cabbage	0.05	1282							
2010	Lettuce	0.05	2450	0.04		0.03		0.91	DE child	
2010	Leek	0.05	1016	0.10		0.01		0.59	BE child	
2010	Oats	3	269	9.29		1.13		4.50	DE child	
2010	Rye	3	482	2.49		0.07		0.45	UK infant	
2010	Swine Meat	0.05	575							
2010	Milk	0.01	717							

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

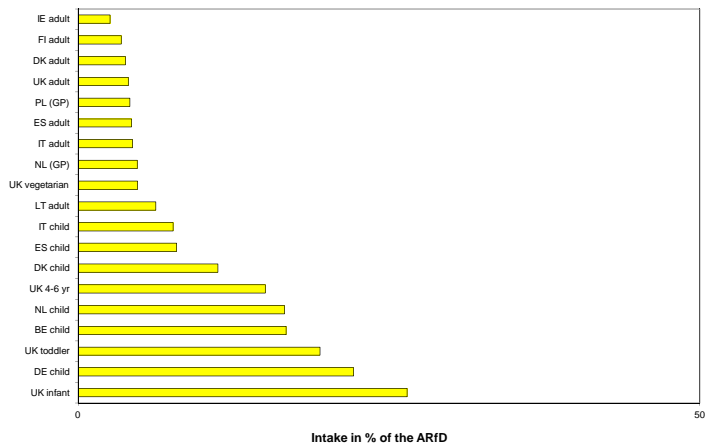
<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Chlorpyrifos-methyl

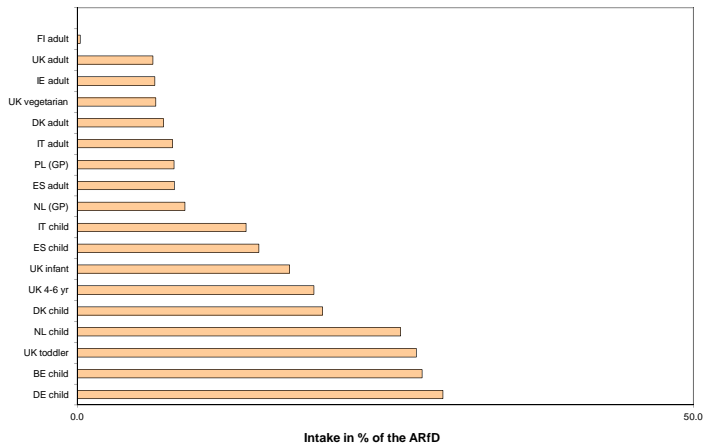


**Chlorpyrifos-methyl**

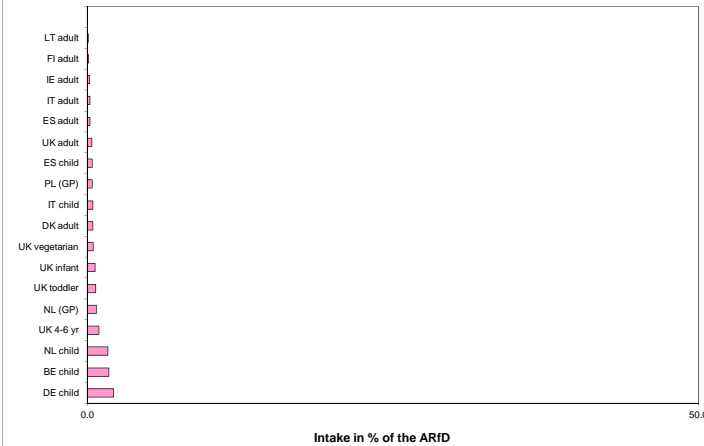
Acute exposure: Chlorpyrifos-methyl / Apples



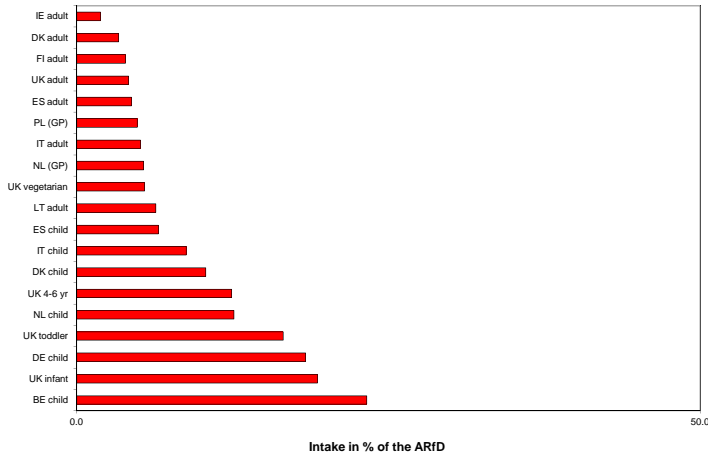
Acute exposure: Chlorpyrifos-methyl / Peaches



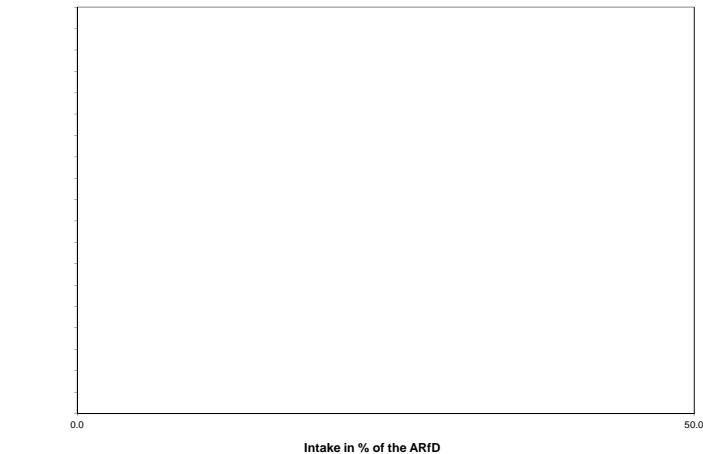
Acute exposure: Chlorpyrifos-methyl / Strawberries



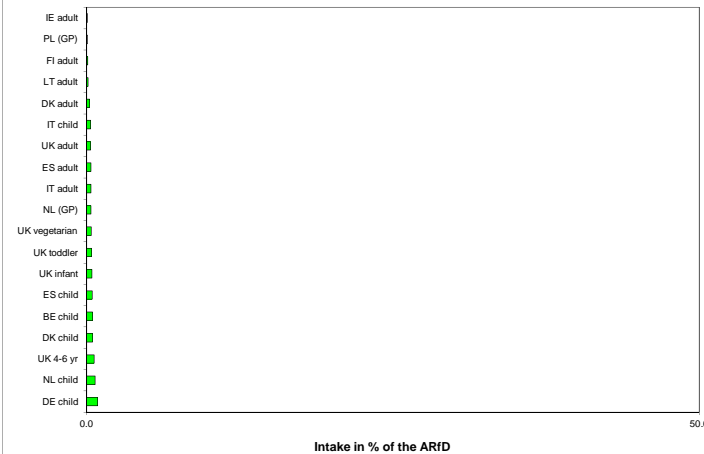
Acute exposure: Chlorpyrifos-methyl / Tomatoes



Acute exposure: Chlorpyrifos-methyl / Head cabbage



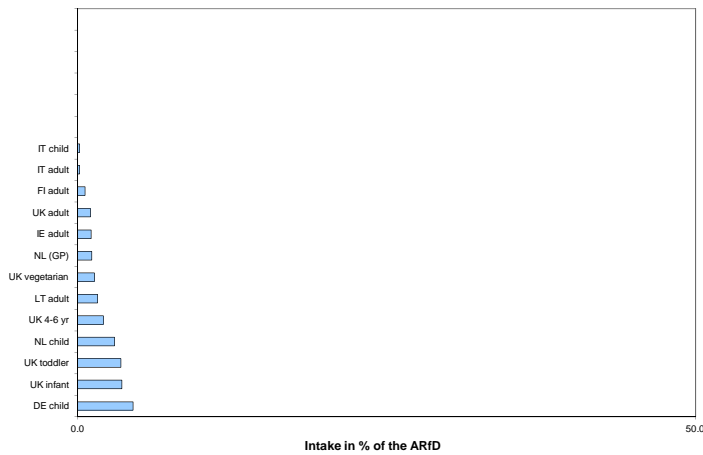
Acute exposure: Chlorpyrifos-methyl / Lettuce



Acute exposure: Chlorpyrifos-methyl / Leek



Acute exposure: Chlorpyrifos-methyl / Oats



Acute exposure: Chlorpyrifos-methyl / Rye



## Clofentezine

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.02</b>	ARfD (mg/kg bw):	<b>n.n.</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2010</b>	Year of evaluation:	<b>2010</b>

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum						
		1						
		---						
No of diets exceeding ADI:								
	Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
	1.28	DE child	0.72	Apples	0.21	Oranges	0.09	Bananas
	0.85	NL child	0.38	Apples	0.18	Oranges	0.10	Bananas
	0.54	FR toddler	0.16	Apples	0.11	Oranges	0.08	Bananas
	0.46	WHO cluster diet B	0.22	Tomatoes	0.06	Apples	0.05	Oranges
	0.38	UK toddler	0.11	Oranges	0.10	Apples	0.06	Bananas
	0.37	DK child	0.14	Apples	0.07	Cucumbers	0.07	Bananas
	0.37	ES child	0.12	Oranges	0.07	Tomatoes	0.07	Apples
	0.35	FR infant	0.15	Apples	0.05	Oranges	0.04	Strawberries
	0.34	SE (GP)	0.11	Bananas	0.06	Apples	0.05	Tomatoes
	0.30	UK infant	0.09	Apples	0.09	Bananas	0.07	Oranges
	0.30	IE adult	0.06	Oranges	0.05	Apples	0.05	Bananas
	0.27	IT child/toddler	0.10	Tomatoes	0.05	Apples	0.03	Bananas
	0.26	NL (GP)	0.08	Oranges	0.07	Apples	0.03	Tomatoes
	0.24	ES adult	0.07	Oranges	0.06	Tomatoes	0.05	Apples
	0.23	PT (GP)	0.06	Tomatoes	0.06	Apples	0.03	Oranges
	0.23	PL (GP)	0.12	Apples	0.06	Tomatoes	0.02	Table grapes
	0.22	WHO regional diet	0.08	Tomatoes	0.04	Apples	0.03	Oranges
	0.22	IT adult	0.08	Tomatoes	0.05	Apples	0.02	Oranges
	0.21	WHO Cluster diet F	0.05	Oranges	0.05	Tomatoes	0.04	Apples
	0.19	WHO cluster diet E	0.05	Apples	0.04	Tomatoes	0.03	Oranges
	0.19	LT adult	0.11	Apples	0.04	Tomatoes	0.02	Cucumbers
	0.18	UK vegetarian	0.05	Oranges	0.04	Tomatoes	0.04	Apples
	0.17	WHO cluster diet D	0.07	Tomatoes	0.04	Apples	0.01	Oranges
	0.16	FI adult	0.05	Oranges	0.03	Tomatoes	0.02	Apples
	0.14	DK adult	0.05	Apples	0.03	Tomatoes	0.02	Bananas
	0.14	FR (GP)	0.03	Tomatoes	0.03	Apples	0.02	Oranges
	0.13	UK adult	0.03	Oranges	0.03	Tomatoes	0.02	Apples

### Acute risk assessment

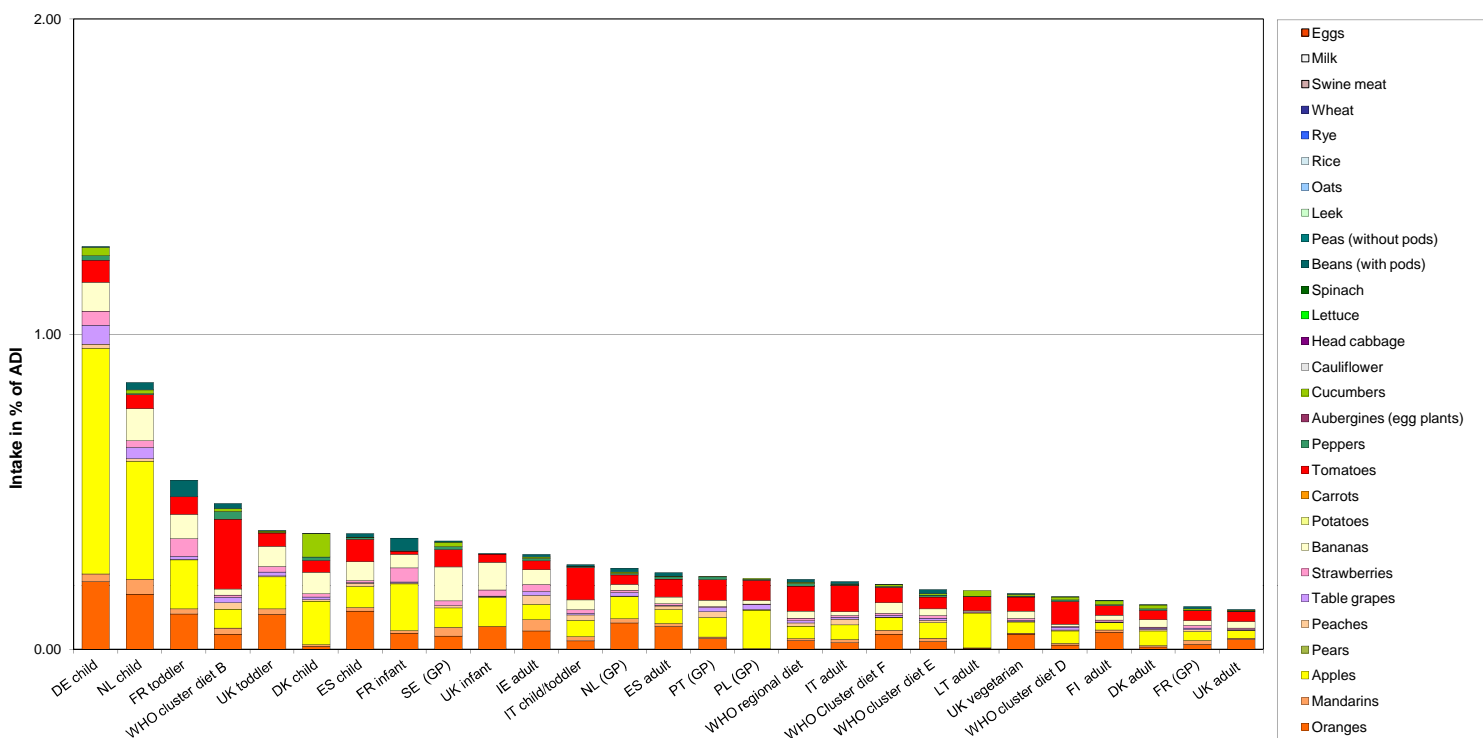
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.5	2305	0.09		0.02				
2010	Peaches	0.02	1138	0.18		0.02				
2010	Strawberries	2	1780	4.66		0.95				
2010	Tomatoes	0.3	1630	0.86		0.13				
2010	Head cabbage	0.02	944							
2010	Lettuce	0.02	1698							
2010	Leek	0.02	744							
2010	Oats		49							
2010	Rye		58							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Clofentezine



**Clofentezine**

Acute exposure: Clofentezine / Apples



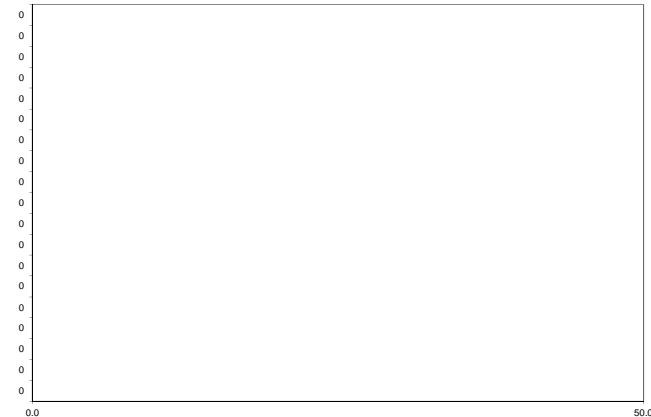
Intake in % of the ARfD

Acute exposure: Clofentezine / Peaches



Intake in % of the ARfD

Acute exposure: Clofentezine / Strawberries



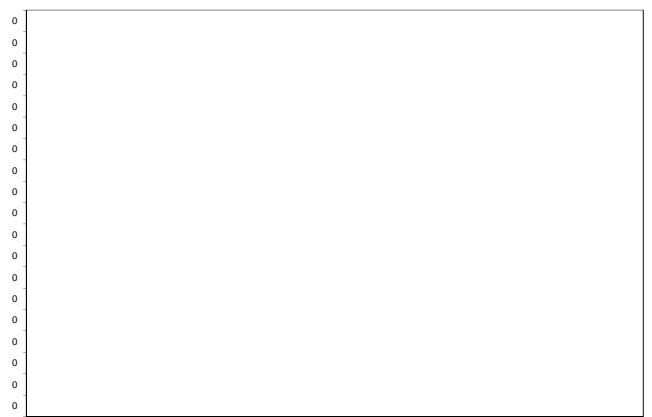
Intake in % of the ARfD

Acute exposure: Clofentezine / Tomatoes



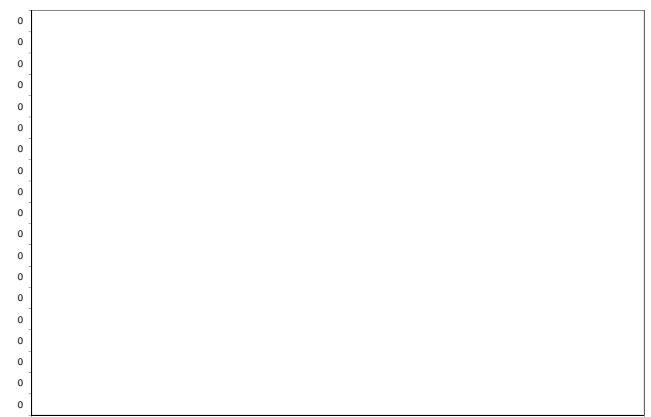
Intake in % of the ARfD

Acute exposure: Clofentezine / Head cabbage



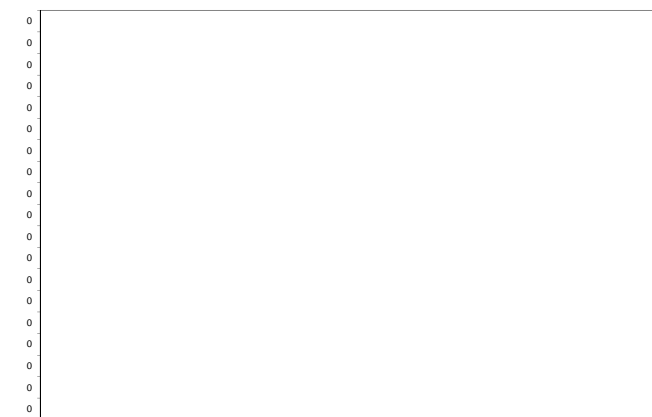
Intake in % of the ARfD

Acute exposure: Clofentezine / Lettuce



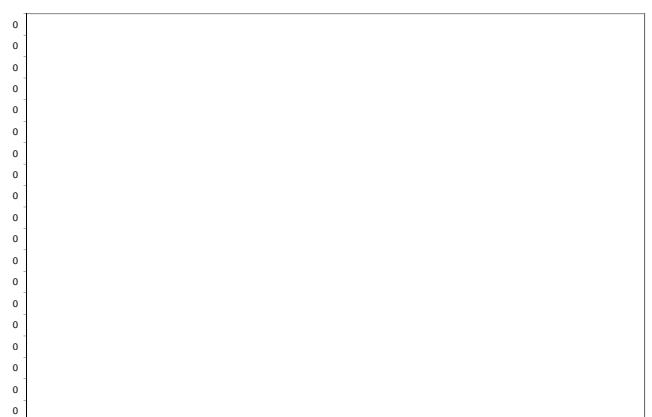
Intake in % of the ARfD

Acute exposure: Clofentezine / Leek



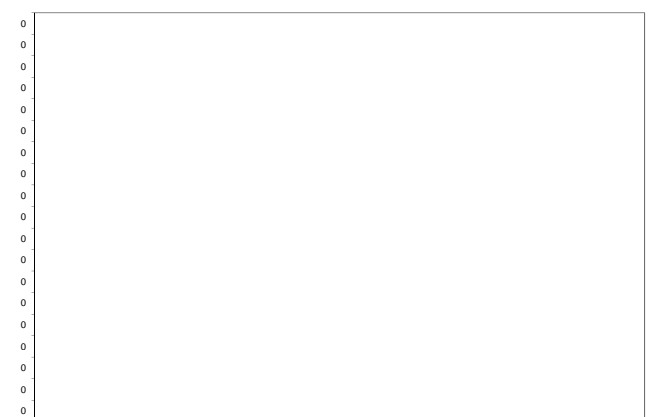
Intake in % of the ARfD

Acute exposure: Clofentezine / Oats



Intake in % of the ARfD

Acute exposure: Clofentezine / Rye



Intake in % of the ARfD

## Clothianidin

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.097	ARfD (mg/kg bw):	0.1
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2006	Year of evaluation:	2006

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.19	DE child	0.12	Apples	0.04	Oranges	0.01	Table grapes
0.12	NL child	0.06	Apples	0.03	Oranges	0.01	Table grapes
0.07	FR toddler	0.03	Apples	0.02	Oranges	0.01	Beans (with pods)
0.07	WHO cluster diet B	0.03	Tomatoes	0.01	Apples	0.01	Oranges
0.05	DK child	0.02	Apples	0.01	Cucumbers	0.01	Tomatoes
0.05	ES child	0.02	Oranges	0.01	Apples	0.01	Tomatoes
0.05	FR infant	0.02	Apples	0.01	Oranges	0.01	Beans (with pods)
0.05	UK toddler	0.02	Oranges	0.02	Apples	0.01	Tomatoes
0.04	NL (GP)	0.02	Oranges	0.01	Apples	0.00	Tomatoes
0.04	IE adult	0.01	Oranges	0.01	Apples	0.01	Peaches
0.04	ES adult	0.01	Oranges	0.01	Tomatoes	0.01	Apples
0.03	IT child/toddler	0.01	Tomatoes	0.01	Apples	0.00	Oranges
0.03	PL (GP)	0.02	Apples	0.01	Tomatoes	0.00	Table grapes
0.03	PT (GP)	0.01	Apples	0.01	Tomatoes	0.01	Oranges
0.03	UK infant	0.02	Apples	0.01	Oranges	0.00	Tomatoes
0.03	SE (GP)	0.01	Apples	0.01	Oranges	0.01	Tomatoes
0.03	IT adult	0.01	Tomatoes	0.01	Apples	0.00	Peaches
0.03	WHO regional diet	0.01	Tomatoes	0.01	Apples	0.01	Oranges
0.03	LT adult	0.02	Apples	0.01	Tomatoes	0.00	Cucumbers
0.03	WHO cluster diet E	0.01	Apples	0.01	Tomatoes	0.00	Oranges
0.03	WHO Cluster diet F	0.01	Oranges	0.01	Tomatoes	0.01	Apples
0.02	UK vegetarian	0.01	Oranges	0.01	Tomatoes	0.01	Apples
0.02	WHO cluster diet D	0.01	Tomatoes	0.01	Apples	0.00	Oranges
0.02	FI adult	0.01	Oranges	0.00	Tomatoes	0.00	Apples
0.02	DK adult	0.01	Apples	0.00	Tomatoes	0.00	Cucumbers
0.02	FR (GP)	0.00	Apples	0.00	Tomatoes	0.00	Oranges
0.02	UK adult	0.01	Oranges	0.00	Tomatoes	0.00	Apples

## Acute risk assessment

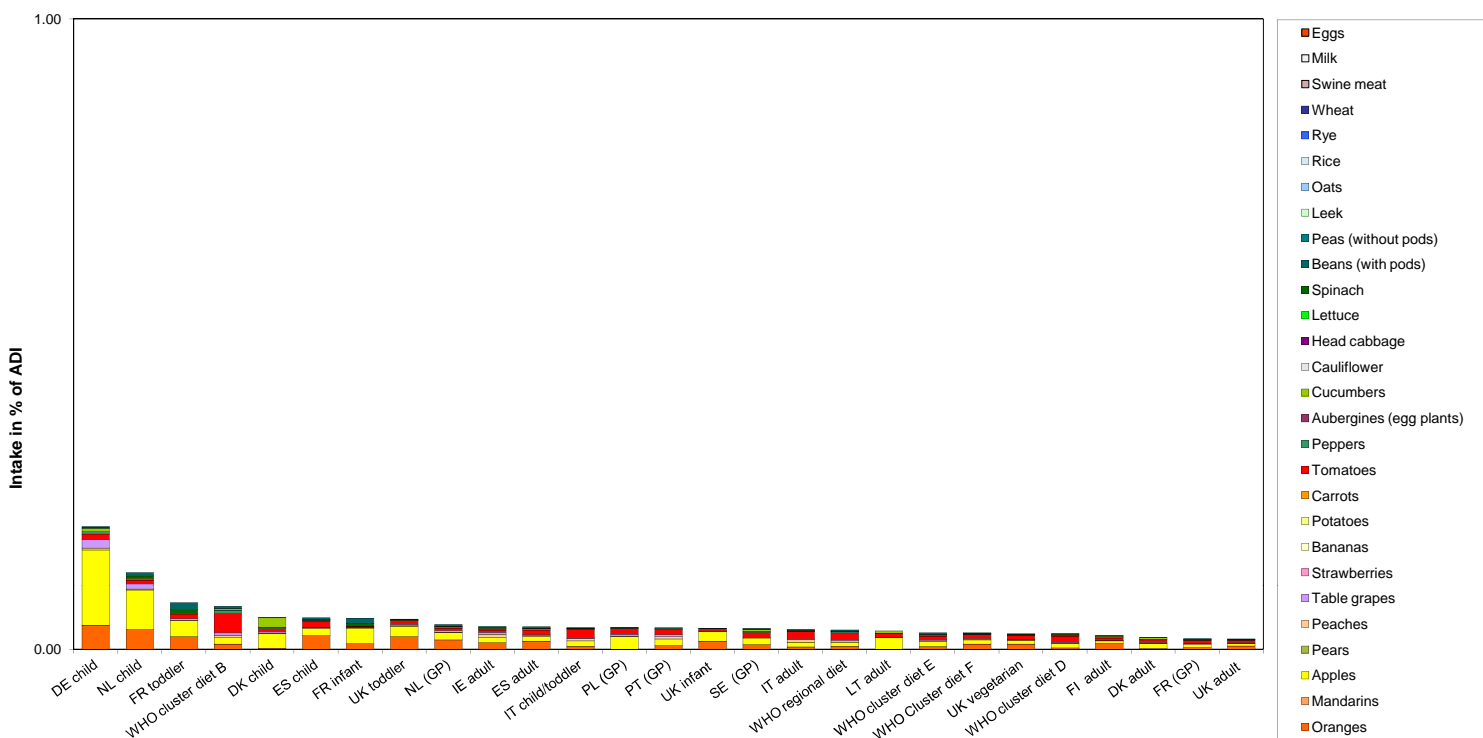
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	1339	0.07		0.01		1.18	UK infant	
2010	Peaches	0.1	674	0.30		0.01		0.71	DE child	
2010	Strawberries	0.02	791							
2010	Tomatoes	0.05	1010	0.89		0.03		1.74	BE child	
2010	Head cabbage	0.02	609							
2010	Lettuce	0.1	991	0.71		0.02		0.62	DE child	
2010	Leek	0.02	486							
2010	Oats	0.02	129							
2010	Rye	0.02	186							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

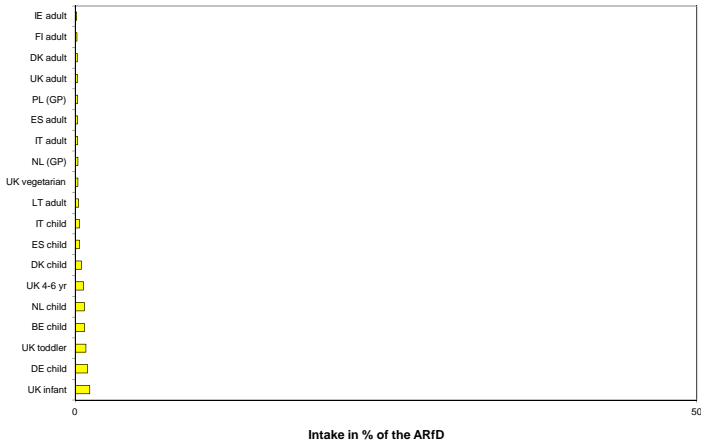
c) TRL: toxicological threshold level

## Chronic risk assessment: Clothianidin

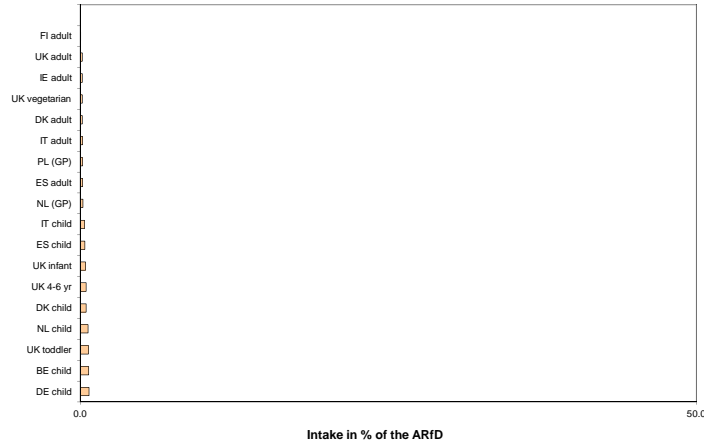


**Clothianidin**

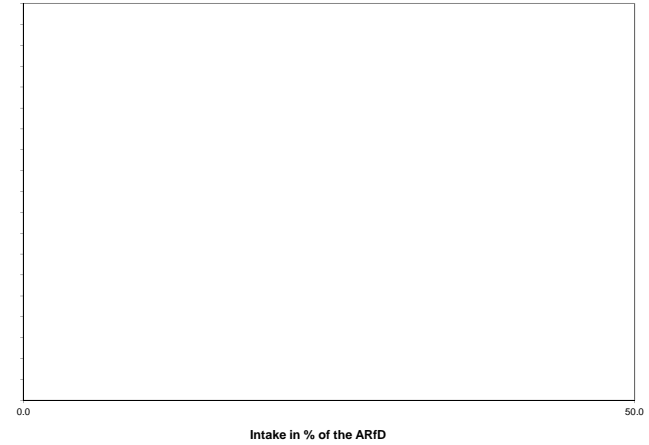
Acute exposure: Clothianidin / Apples



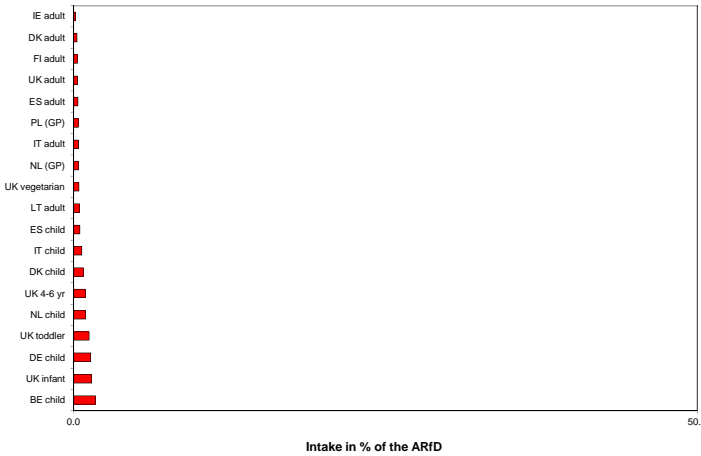
Acute exposure: Clothianidin / Peaches



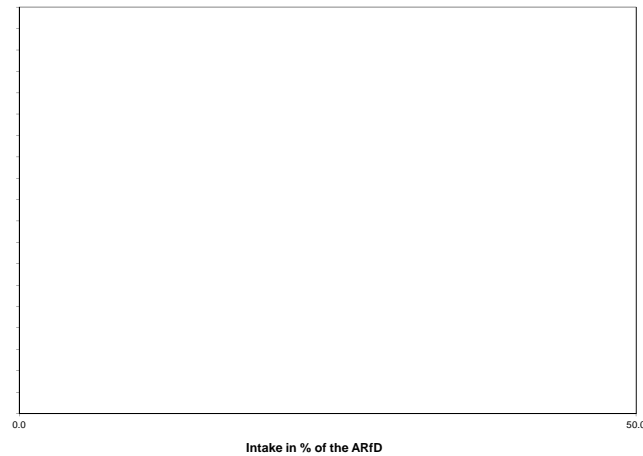
Acute exposure: Clothianidin / Strawberries



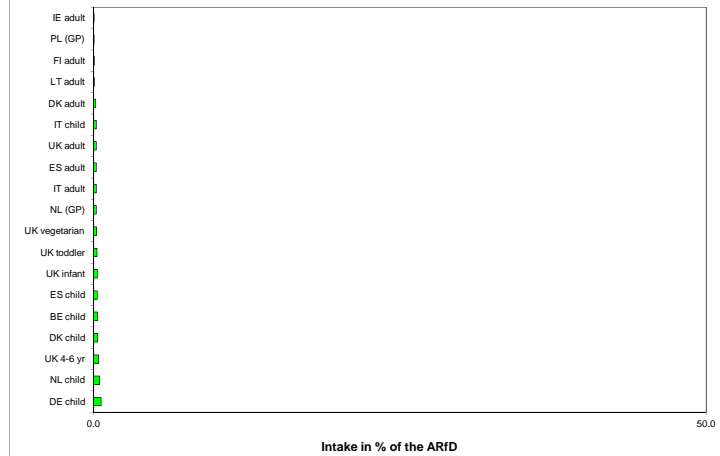
Acute exposure: Clothianidin / Tomatoes



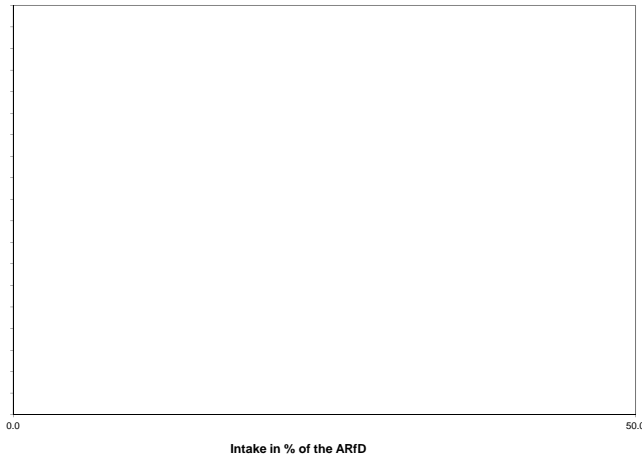
Acute exposure: Clothianidin / Head cabbage



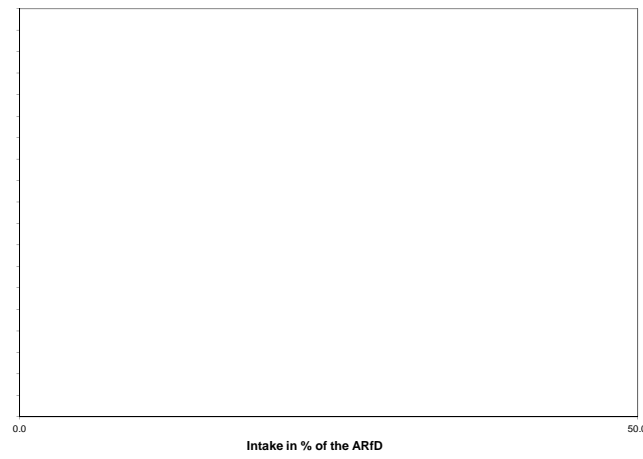
Acute exposure: Clothianidin / Lettuce



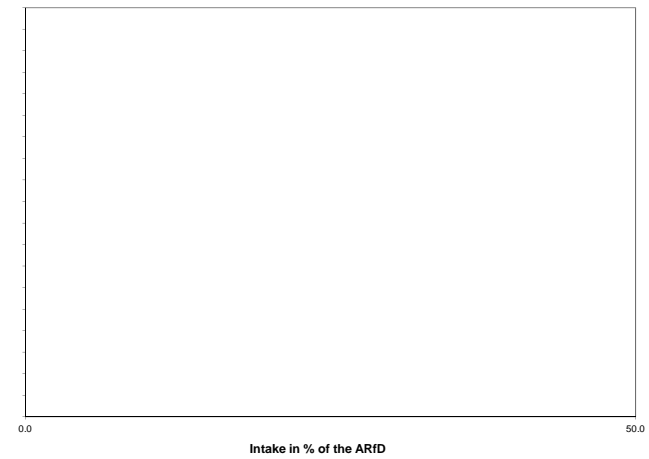
Acute exposure: Clothianidin / Leek



Acute exposure: Clothianidin / Oats



Acute exposure: Clothianidin / Rye





Cyfluthrin			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P and A
Toxicological end points			
ADI (mg/kg bw/day):	0.003	ARfD (mg/kg bw):	0.02
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2003	Year of evaluation:	2003

The risk assessment is performed with the toxicological reference values derived for cyfluthrin. For beta-cyfluthrin the same toxicological reference values were established.

### Chronic risk assessment

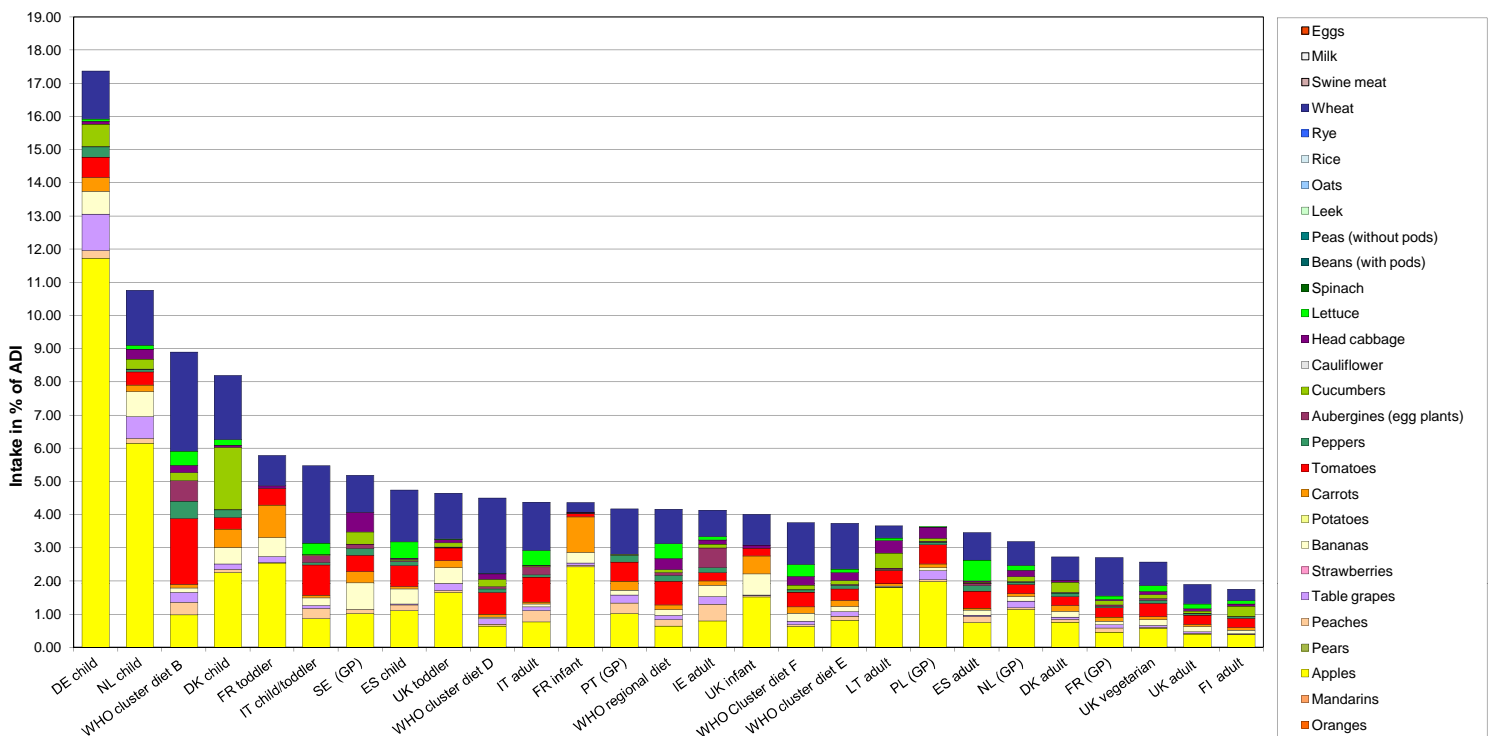
		Exposure (range) in % of ADI minimum - maximum					
		2	17				
No of diets exceeding ADI:		---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
17.37	DE child	11.73	Apples	1.44	Wheat	1.10	Table grapes
10.77	NL child	6.15	Apples	1.66	Wheat	0.75	Bananas
8.91	WHO cluster diet B	2.99	Wheat	1.99	Tomatoes	0.98	Apples
8.19	DK child	2.26	Apples	1.93	Wheat	1.88	Cucumbers
5.79	FR toddler	2.55	Apples	0.99	Carrots	0.92	Wheat
5.47	IT child/toddler	2.33	Wheat	0.92	Tomatoes	0.86	Apples
5.19	SE (GP)	1.12	Wheat	1.02	Apples	0.79	Bananas
4.74	ES child	1.56	Wheat	1.11	Apples	0.63	Tomatoes
4.64	UK toddler	1.66	Apples	1.37	Wheat	0.47	Bananas
4.50	WHO cluster diet D	2.28	Wheat	0.65	Tomatoes	0.65	Apples
4.38	IT adult	1.45	Wheat	0.77	Apples	0.75	Tomatoes
4.37	FR infant	2.43	Apples	1.07	Carrots	0.31	Bananas
4.18	PT (GP)	1.37	Wheat	1.02	Apples	0.58	Tomatoes
4.17	WHO regional diet	1.04	Wheat	0.71	Tomatoes	0.65	Apples
4.14	IE adult	0.80	Wheat	0.80	Apples	0.59	Aubergines (egg plants)
4.01	UK infant	1.52	Apples	0.92	Wheat	0.64	Bananas
3.76	WHO Cluster diet F	1.26	Wheat	0.64	Apples	0.44	Tomatoes
3.74	WHO cluster diet E	1.38	Wheat	0.82	Apples	0.34	Tomatoes
3.66	LT adult	1.81	Apples	0.45	Cucumbers	0.40	Tomatoes
3.64	PL (GP)	1.99	Apples	0.57	Tomatoes	0.34	Head cabbage
3.46	ES adult	0.82	Wheat	0.75	Apples	0.63	Lettuce
3.19	NL (GP)	1.15	Apples	0.73	Wheat	0.28	Tomatoes
2.73	DK adult	0.76	Apples	0.71	Wheat	0.31	Cucumbers
2.71	FR (GP)	1.15	Wheat	0.46	Apples	0.28	Tomatoes
2.57	UK vegetarian	0.72	Wheat	0.58	Apples	0.40	Tomatoes
1.89	UK adult	0.59	Wheat	0.40	Apples	0.28	Tomatoes
1.75	FI adult	0.39	Apples	0.35	Wheat	0.31	Cucumbers

### Acute risk assessment

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.2	2595	0.15		0.03		14.69	UK infant	
2010	Peaches	0.3	1239	0.97		0.19		56.36	DE child	
2010	Strawberries	0.02	1875							
2010	Tomatoes	0.05	2086	0.05		0.04		11.63	BE child	
2010	Head cabbage	0.3	1082	0.28		0.04		10.53	NL child	
2010	Lettuce	1	1992	0.25		0.12		15.60	DE child	
2010	Leek	0.02	848							
2010	Oats	0.02	160							
2010	Rye	0.02	337							
2010	Swine Meat	0.05	529							
2010	Milk	0.02	653							

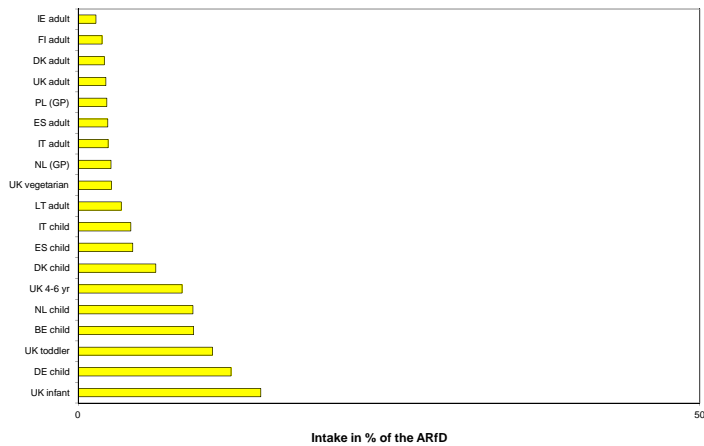
a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

### Chronic risk assessment: Cyfluthrin

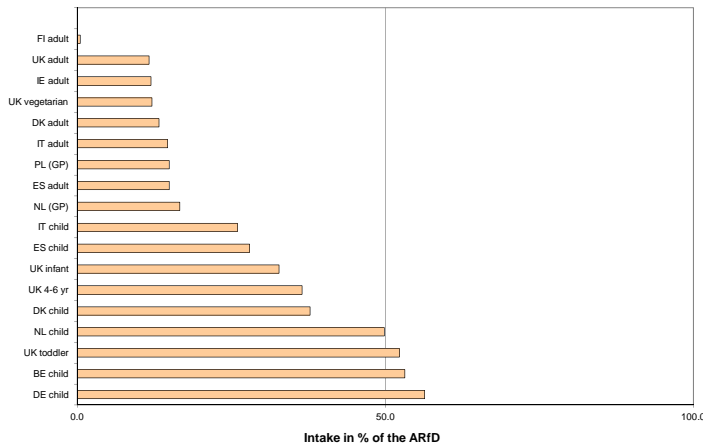


**Cyfluthrin**

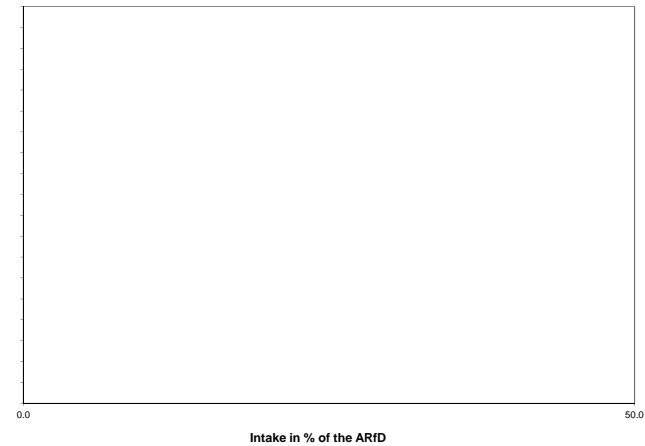
Acute exposure: Cyfluthrin / Apples



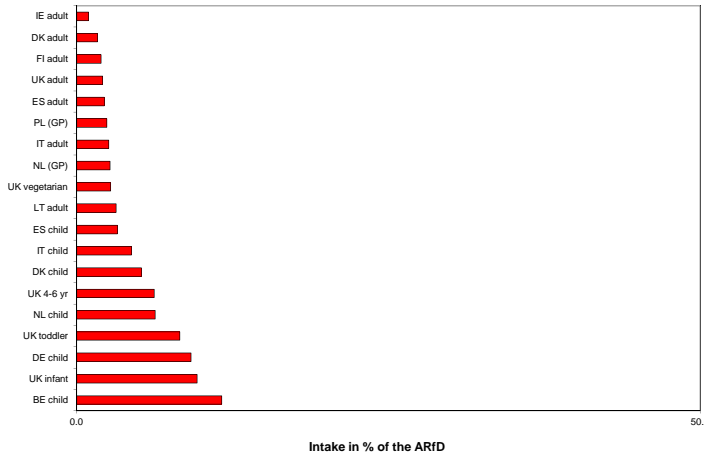
Acute exposure: Cyfluthrin / Peaches



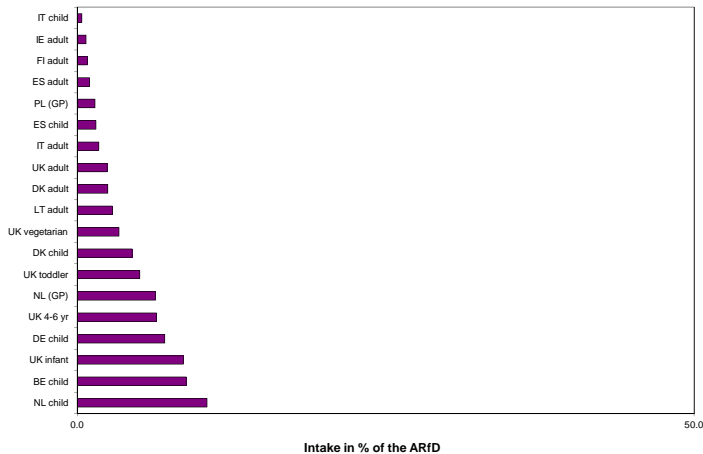
Acute exposure: Cyfluthrin / Strawberries



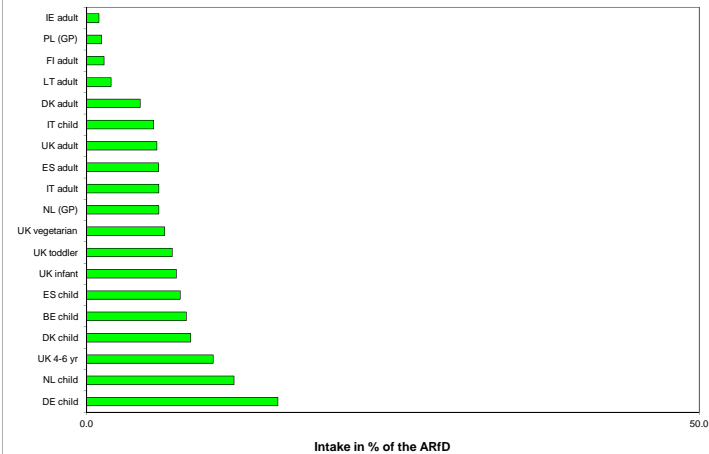
Acute exposure: Cyfluthrin / Tomatoes



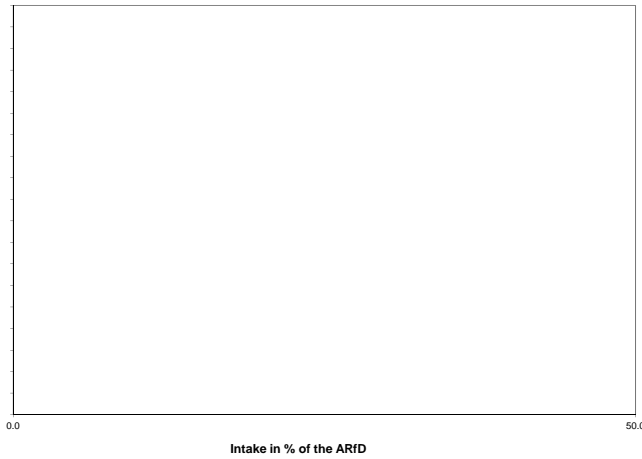
Acute exposure: Cyfluthrin / Head cabbage



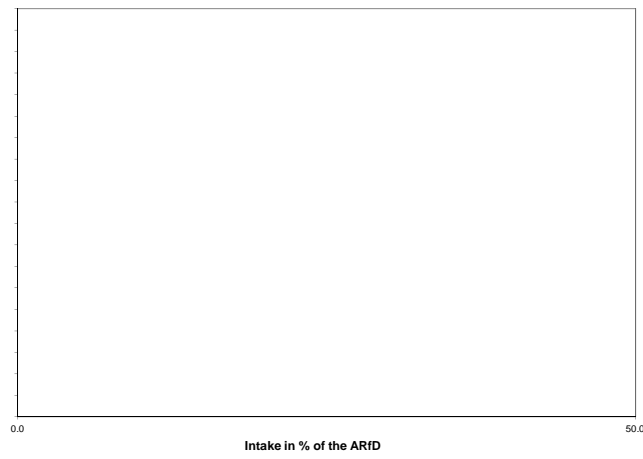
Acute exposure: Cyfluthrin / Lettuce



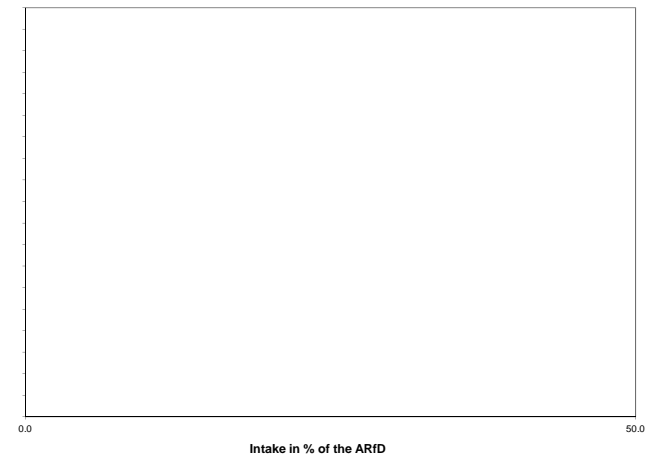
Acute exposure: Cyfluthrin / Leek



Acute exposure: Cyfluthrin / Oats



Acute exposure: Cyfluthrin / Rye



## Cypermethrin

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P and A
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.05	ARfD (mg/kg bw):	0.2
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2005	Year of evaluation:	2005

For the risk assessment the toxicological reference values of cypermethrin were selected.

Other toxicological reference values for cypermethrin isomers: alpha-cypermethrin: ADI 0,015 mg/kg bw/day, ARfD 0,04 mg/kg bw (COM 2004); zeta-cypermethrin: ADI 0.04 mg/kg bw/d (EFSA, 2008); ARfD: 0.125 mg/kg bw (EFSA, 2008). Cypermethrin: ARfD 0.2 mg/kg bw/d (COM, 2005); ADI 0.05 mg/kg bw (COM 2005).

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
2

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)		2nd contributor to MS diet (in % of ADI)		3rd contributor to MS diet (in % of ADI)	
		Commodity / group of commodities	Commodity / group of commodities	Commodity / group of commodities	Commodity / group of commodities		
1.50	DE child	0.73	Apples	0.22	Wheat	0.16	Oranges
1.18	NL child	0.38	Apples	0.25	Wheat	0.14	Oranges
1.00	WHO cluster diet B	0.45	Wheat	0.18	Tomatoes	0.06	Apples
0.76	FR toddler	0.16	Apples	0.14	Wheat	0.09	Oranges
0.68	DK child	0.29	Wheat	0.14	Apples	0.06	Cucumbers
0.67	ES child	0.23	Wheat	0.09	Oranges	0.07	Apples
0.64	IT child/toddler	0.35	Wheat	0.08	Tomatoes	0.05	Apples
0.56	UK toddler	0.21	Wheat	0.10	Apples	0.09	Oranges
0.53	WHO cluster diet D	0.34	Wheat	0.06	Tomatoes	0.04	Apples
0.53	SE (GP)	0.17	Wheat	0.07	Bananas	0.06	Apples
0.50	IE adult	0.12	Wheat	0.05	Apples	0.05	Oranges
0.47	IT adult	0.22	Wheat	0.07	Tomatoes	0.05	Apples
0.47	WHO regional diet	0.16	Wheat	0.06	Tomatoes	0.04	Swine meat
0.47	PT (GP)	0.21	Wheat	0.06	Apples	0.05	Tomatoes
0.46	FR infant	0.15	Apples	0.06	Beans (with pods)	0.04	Wheat
0.45	WHO cluster diet E	0.21	Wheat	0.05	Apples	0.03	Tomatoes
0.45	WHO Cluster diet F	0.19	Wheat	0.04	Apples	0.04	Swine meat
0.44	ES adult	0.12	Wheat	0.06	Oranges	0.05	Apples
0.43	NL (GP)	0.11	Wheat	0.07	Apples	0.06	Oranges
0.43	UK infant	0.14	Wheat	0.09	Apples	0.06	Bananas
0.34	FR (GP)	0.17	Wheat	0.03	Apples	0.02	Tomatoes
0.31	LT adult	0.11	Apples	0.06	Wheat	0.04	Tomatoes
0.30	UK vegetarian	0.11	Wheat	0.04	Oranges	0.04	Apples
0.26	PL (GP)	0.12	Apples	0.05	Tomatoes	0.02	Head cabbage
0.25	DK adult	0.11	Wheat	0.05	Apples	0.02	Tomatoes
0.22	UK adult	0.09	Wheat	0.02	Apples	0.02	Tomatoes
0.20	FI adult	0.05	Wheat	0.04	Oranges	0.02	Apples

## Acute risk assessment

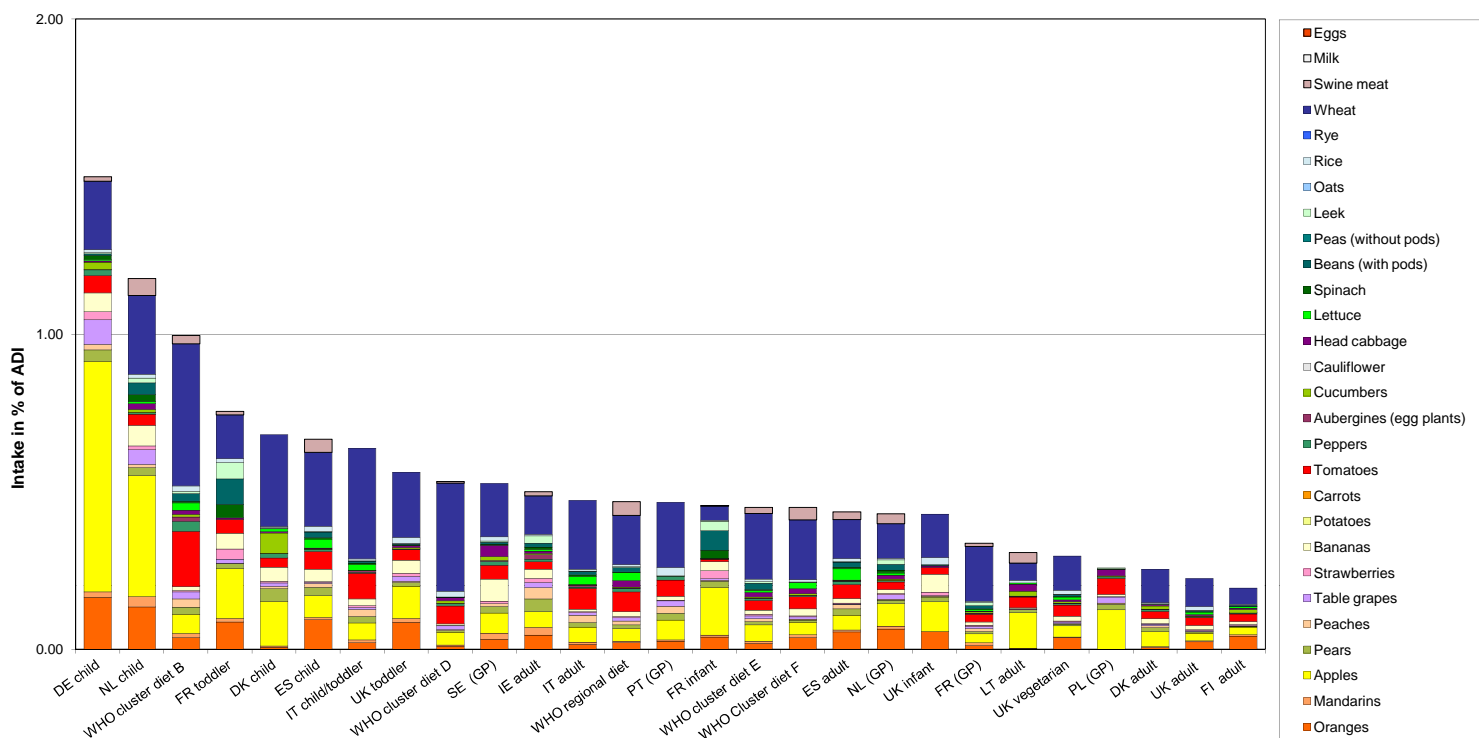
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	1	2766	1.55		0.39		19.10	UK infant	
2010	Peaches	2	1327	4.07		0.60		17.80	DE child	
2010	Strawberries	0.05	1999	0.40	0.10	0.14		1.09	DE child	
2010	Tomatoes	0.5	2298	1.22		0.46		13.37	BE child	
2010	Head cabbage	0.5	1149	0.52		0.59		15.53	NL child	
2010	Lettuce	2	2119	3.16		1.30		17.49	DE child	
2010	Leek	0.5	846	2.25	0.12	1.00		29.47	BE child	
2010	Oats	2	251							
2010	Rye	2	391							
2010	Swine Meat	0.2	593	0.17		0.03		0.13	DE child	
2010	Milk	0.05	653							

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

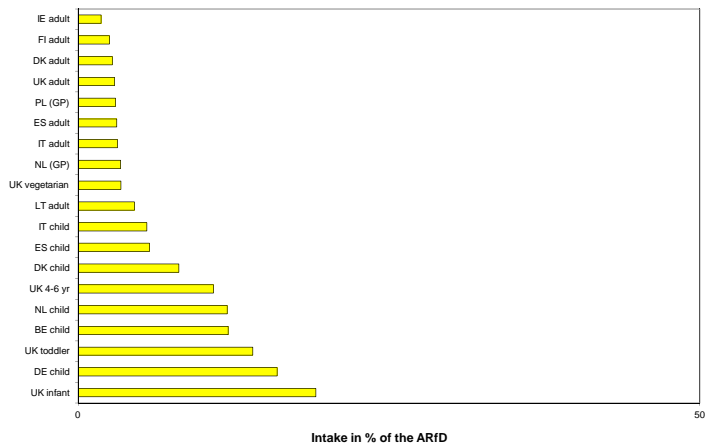
<sup>c)</sup> TRL: toxicological threshold level

## Chronic risk assessment: Cypermethrin

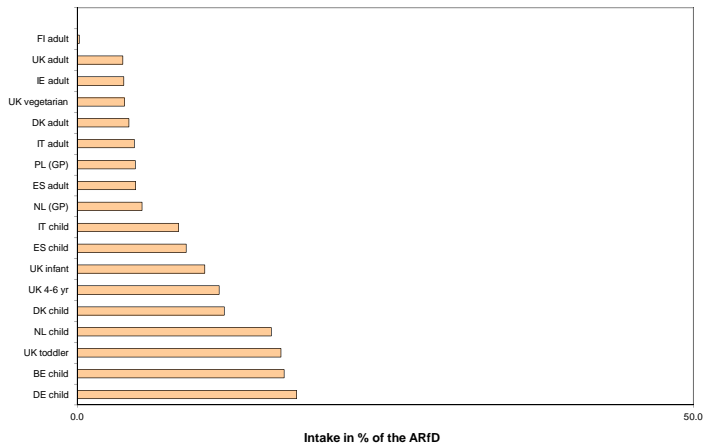


**Cypermethrin**

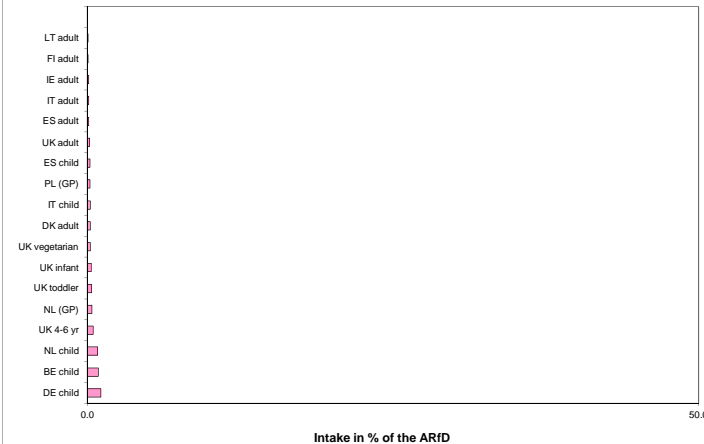
Acute exposure: Cypermethrin / Apples



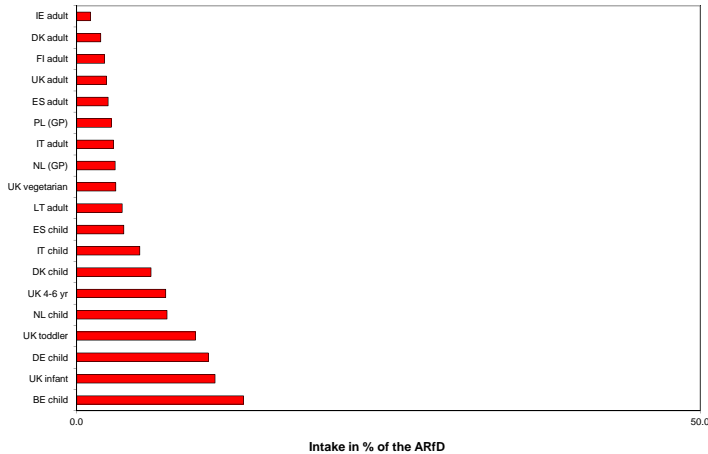
Acute exposure: Cypermethrin / Peaches



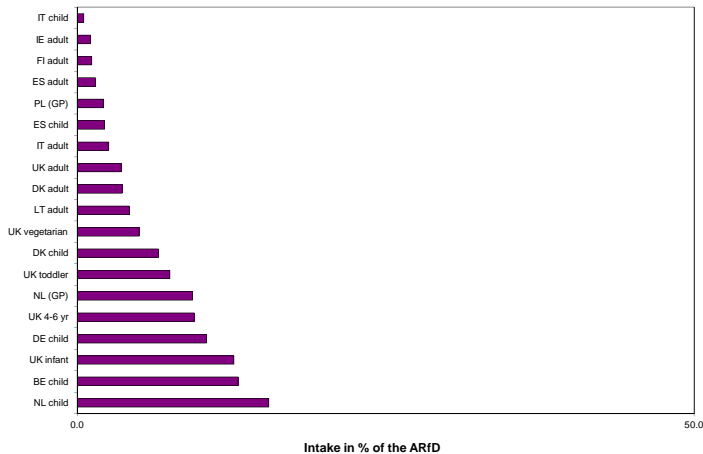
Acute exposure: Cypermethrin / Strawberries



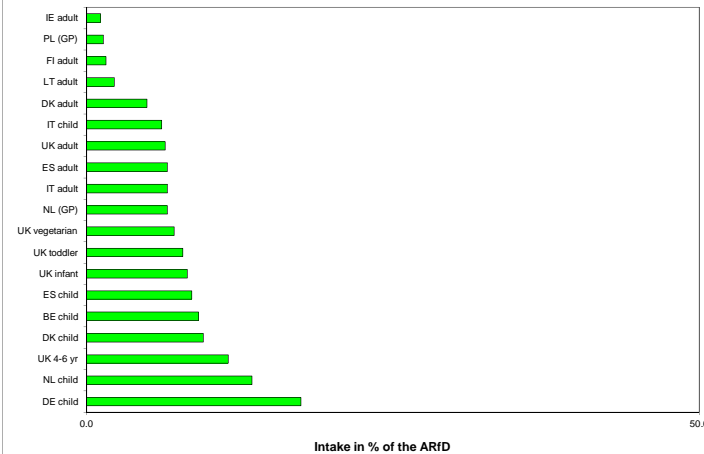
Acute exposure: Cypermethrin / Tomatoes



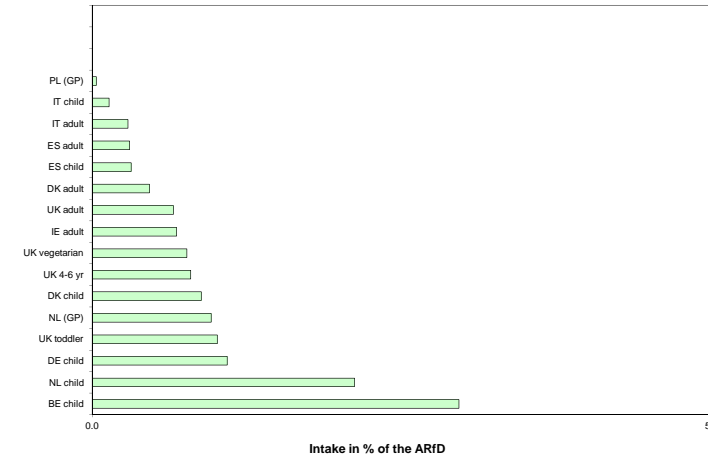
Acute exposure: Cypermethrin / Head cabbage



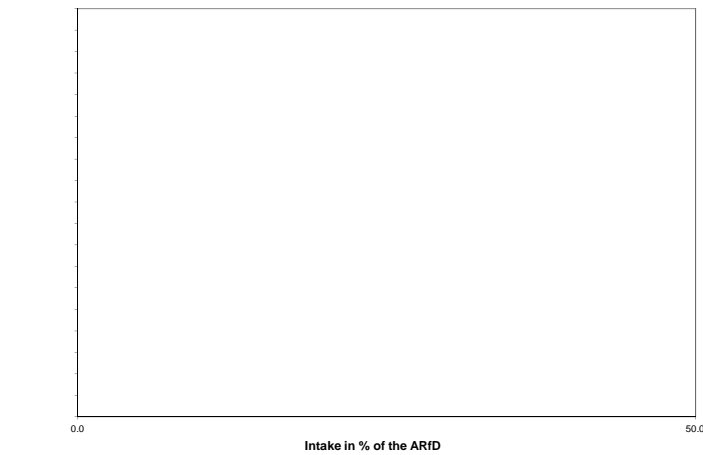
Acute exposure: Cypermethrin / Lettuce



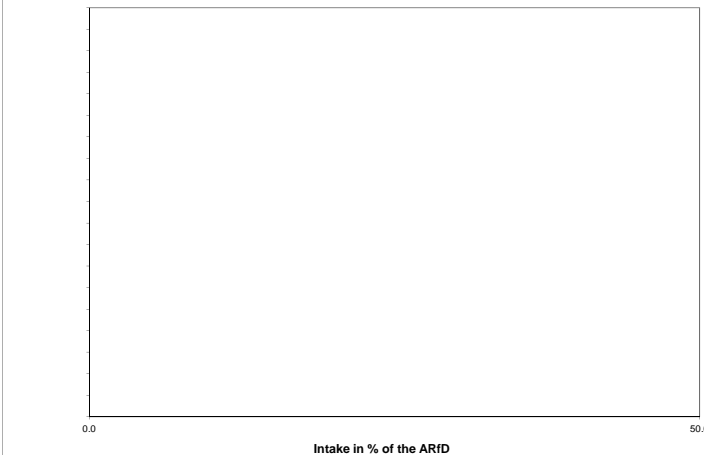
Acute exposure: Cypermethrin / Leek



Acute exposure: Cypermethrin / Oats



Acute exposure: Cypermethrin / Rye



## Cyproconazole

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:	<b>Yes</b>	Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.02</b>	ARfD (mg/kg bw):	<b>0.02</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2011</b>	Year of evaluation:	<b>2011</b>

### Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
1

**No of diets exceeding ADI:** ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)		2nd contributor to MS diet (in % of ADI)		3rd contributor to MS diet (in % of ADI)	
		Commodity / group of commodities	Commodity / group of commodities	Commodity / group of commodities	Commodity / group of commodities		
1.27	DE child	0.89	Apples	0.09	Table grapes	0.07	Carrots
0.71	NL child	0.47	Apples	0.05	Table grapes	0.04	Tomatoes
0.56	FR toddler	0.19	Apples	0.17	Carrots	0.07	Beans (with pods)
0.51	DK child	0.17	Apples	0.12	Cucumbers	0.10	Carrots
0.48	FR infant	0.19	Carrots	0.19	Apples	0.05	Beans (with pods)
0.46	WHO cluster diet B	0.22	Tomatoes	0.07	Apples	0.03	Peppers
0.30	SE (GP)	0.08	Apples	0.06	Carrots	0.05	Tomatoes
0.30	PL (GP)	0.15	Apples	0.06	Tomatoes	0.02	Head cabbage
0.29	UK infant	0.12	Apples	0.09	Carrots	0.03	Tomatoes
0.26	UK toddler	0.13	Apples	0.04	Tomatoes	0.04	Carrots
0.26	LT adult	0.14	Apples	0.04	Tomatoes	0.03	Cucumbers
0.25	PT (GP)	0.08	Apples	0.06	Tomatoes	0.05	Carrots
0.24	WHO regional diet	0.08	Tomatoes	0.05	Apples	0.03	Carrots
0.24	IE adult	0.06	Apples	0.04	Peaches	0.03	Tomatoes
0.23	IT child/toddler	0.10	Tomatoes	0.07	Apples	0.03	Peaches
0.22	ES child	0.08	Apples	0.07	Tomatoes	0.01	Beans (with pods)
0.22	WHO cluster diet E	0.06	Apples	0.04	Carrots	0.03	Carrots
0.21	IT adult	0.08	Tomatoes	0.06	Apples	0.03	Peaches
0.20	NL (GP)	0.09	Apples	0.03	Tomatoes	0.02	Table grapes
0.20	WHO cluster diet D	0.07	Tomatoes	0.05	Apples	0.02	Carrots
0.19	WHO Cluster diet F	0.05	Apples	0.05	Tomatoes	0.03	Carrots
0.18	DK adult	0.06	Apples	0.03	Carrots	0.03	Tomatoes
0.17	ES adult	0.06	Apples	0.06	Tomatoes	0.02	Peaches
0.14	UK vegetarian	0.04	Apples	0.04	Tomatoes	0.02	Carrots
0.13	FR (GP)	0.04	Apples	0.03	Tomatoes	0.02	Carrots
0.12	FI adult	0.03	Tomatoes	0.03	Apples	0.02	Cucumbers
0.10	UK adult	0.03	Tomatoes	0.03	Apples	0.01	Carrots

### Acute risk assessment

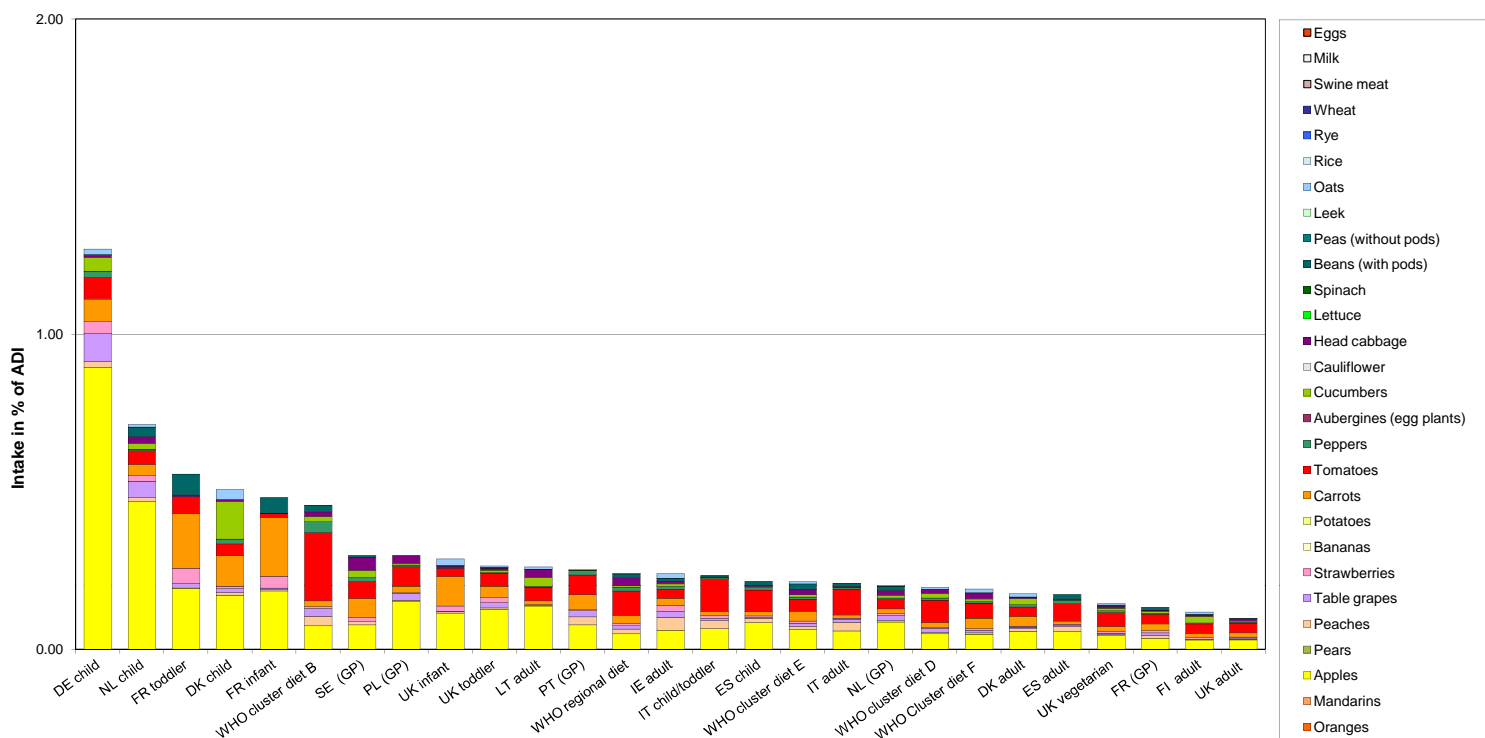
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.1	2741	0.04		0.01		6.86	UK infant	
2010	Peaches	0.1	1302	1.31		0.10		29.07	DE child	
2010	Strawberries	0.05	2051	0.39	0.05	0.06		4.83	DE child	
2010	Tomatoes	0.05	2164	0.32		0.05		14.25	BE child	
2010	Head cabbage	0.05	1055		0.09	0.11		28.95	NL child	
2010	Lettuce	0.05	2098							
2010	Leek	0.05	824							
2010	Oats	0.1	228	1.75		0.02		0.40	DE child	
2010	Rye	0.1	385							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

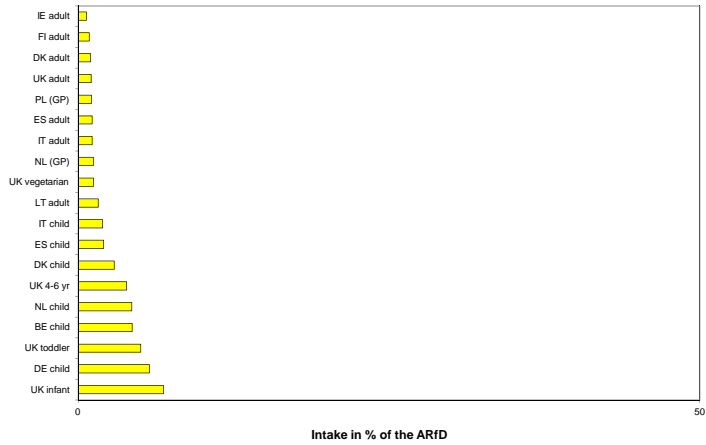
<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Cyproconazole

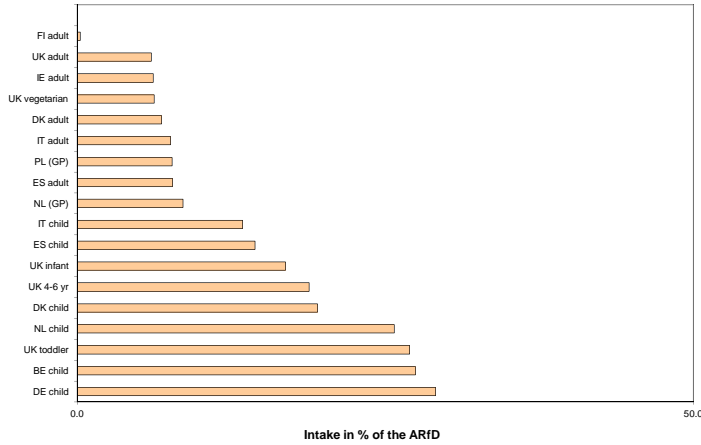


**Cyproconazole**

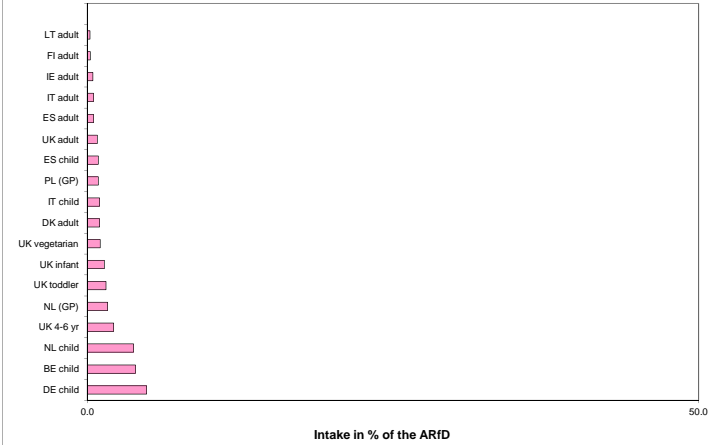
Acute exposure: Cyproconazole / Apples



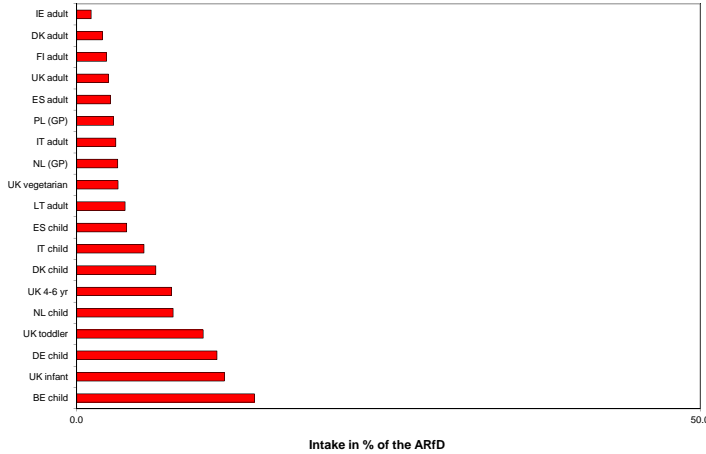
Acute exposure: Cyproconazole / Peaches



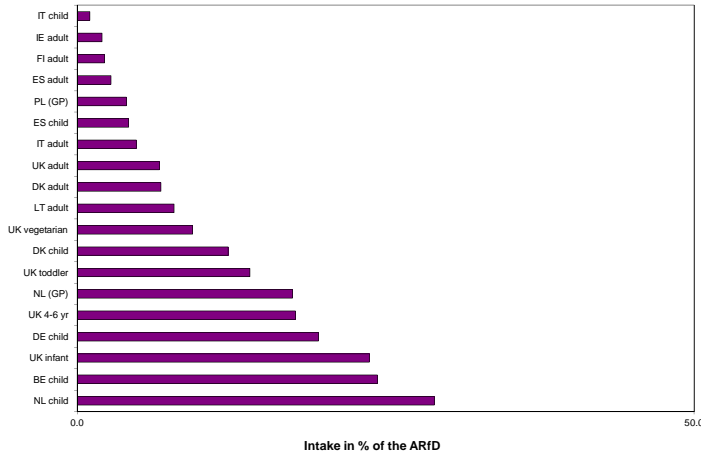
Acute exposure: Cyproconazole / Strawberries



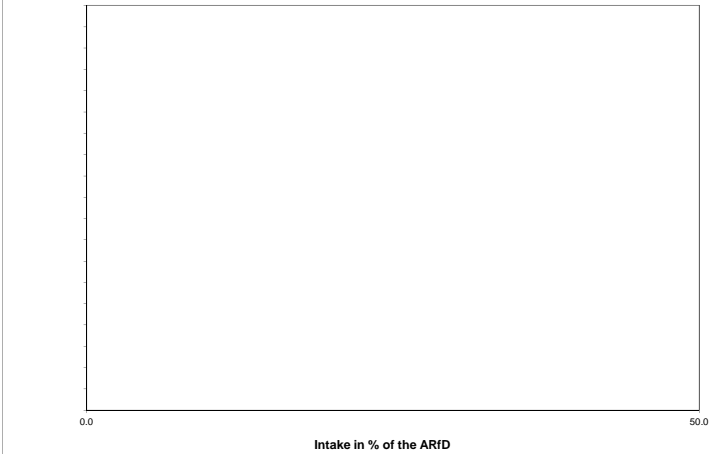
Acute exposure: Cyproconazole / Tomatoes



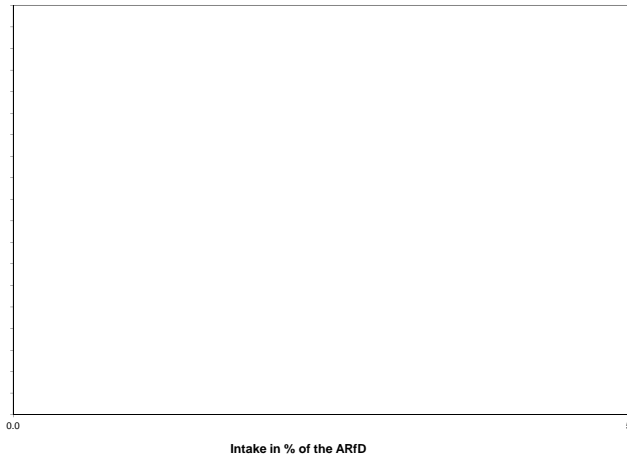
Acute exposure: Cyproconazole / Head cabbage



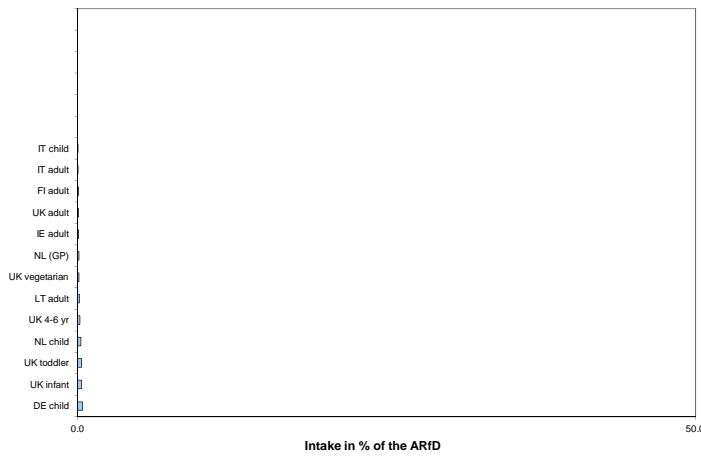
Acute exposure: Cyproconazole / Lettuce



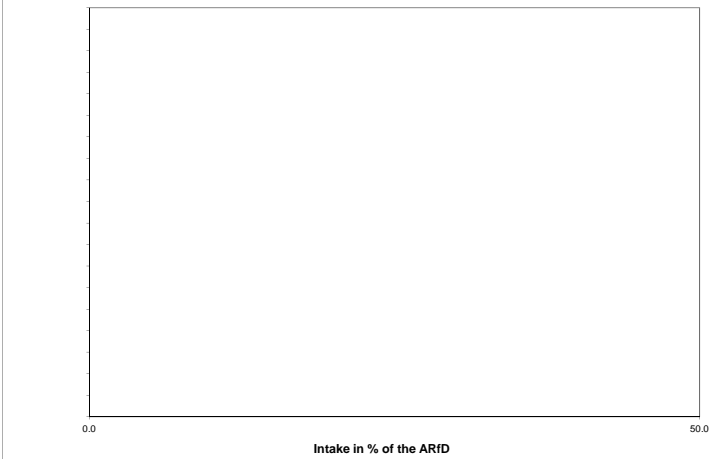
Acute exposure: Cyproconazole / Leek



Acute exposure: Cyproconazole / Oats



Acute exposure: Cyproconazole / Rye



## Cyprodinil

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.03</b>	ARfD (mg/kg bw):	<b>n.n.</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2006</b>	Year of evaluation:	<b>2006</b>

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum					
		2					
		No of diets exceeding ADI:		---			
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
1.68	DE child	0.71	Apples	0.21	Table grapes	0.19	Wheat
1.18	NL child	0.37	Apples	0.22	Wheat	0.12	Table grapes
0.99	WHO cluster diet B	0.40	Wheat	0.17	Tomatoes	0.06	Lettuce
0.83	FR toddler	0.15	Apples	0.12	Wheat	0.11	Strawberries
0.77	DK child	0.26	Wheat	0.14	Apples	0.07	Cucumbers
0.67	IT child/toddler	0.31	Wheat	0.08	Tomatoes	0.05	Apples
0.66	ES child	0.21	Wheat	0.08	Oranges	0.07	Lettuce
0.60	UK toddler	0.18	Wheat	0.10	Apples	0.08	Oranges
0.57	FR infant	0.15	Apples	0.10	Carrots	0.08	Strawberries
0.56	IE adult	0.11	Wheat	0.07	Pears	0.05	Apples
0.53	SE (GP)	0.15	Wheat	0.07	Bananas	0.06	Apples
0.52	IT adult	0.19	Wheat	0.07	Lettuce	0.06	Tomatoes
0.52	PT (GP)	0.18	Wheat	0.06	Apples	0.05	Tomatoes
0.51	WHO cluster diet D	0.31	Wheat	0.06	Tomatoes	0.04	Apples
0.49	UK infant	0.12	Wheat	0.09	Apples	0.06	Bananas
0.47	ES adult	0.11	Wheat	0.09	Lettuce	0.05	Oranges
0.47	WHO regional diet	0.14	Wheat	0.07	Lettuce	0.06	Tomatoes
0.44	WHO Cluster diet F	0.17	Wheat	0.05	Lettuce	0.04	Apples
0.44	WHO cluster diet E	0.19	Wheat	0.05	Apples	0.03	Tomatoes
0.41	NL (GP)	0.10	Wheat	0.07	Apples	0.06	Oranges
0.34	FR (GP)	0.15	Wheat	0.03	Apples	0.02	Tomatoes
0.31	UK vegetarian	0.10	Wheat	0.03	Apples	0.03	Tomatoes
0.29	PL (GP)	0.12	Apples	0.05	Table grapes	0.05	Tomatoes
0.27	DK adult	0.09	Wheat	0.05	Apples	0.02	Tomatoes
0.27	LT adult	0.11	Apples	0.05	Wheat	0.03	Tomatoes
0.24	UK adult	0.08	Wheat	0.02	Apples	0.02	Tomatoes
0.21	FI adult	0.05	Wheat	0.04	Oranges	0.02	Apples

### Acute risk assessment

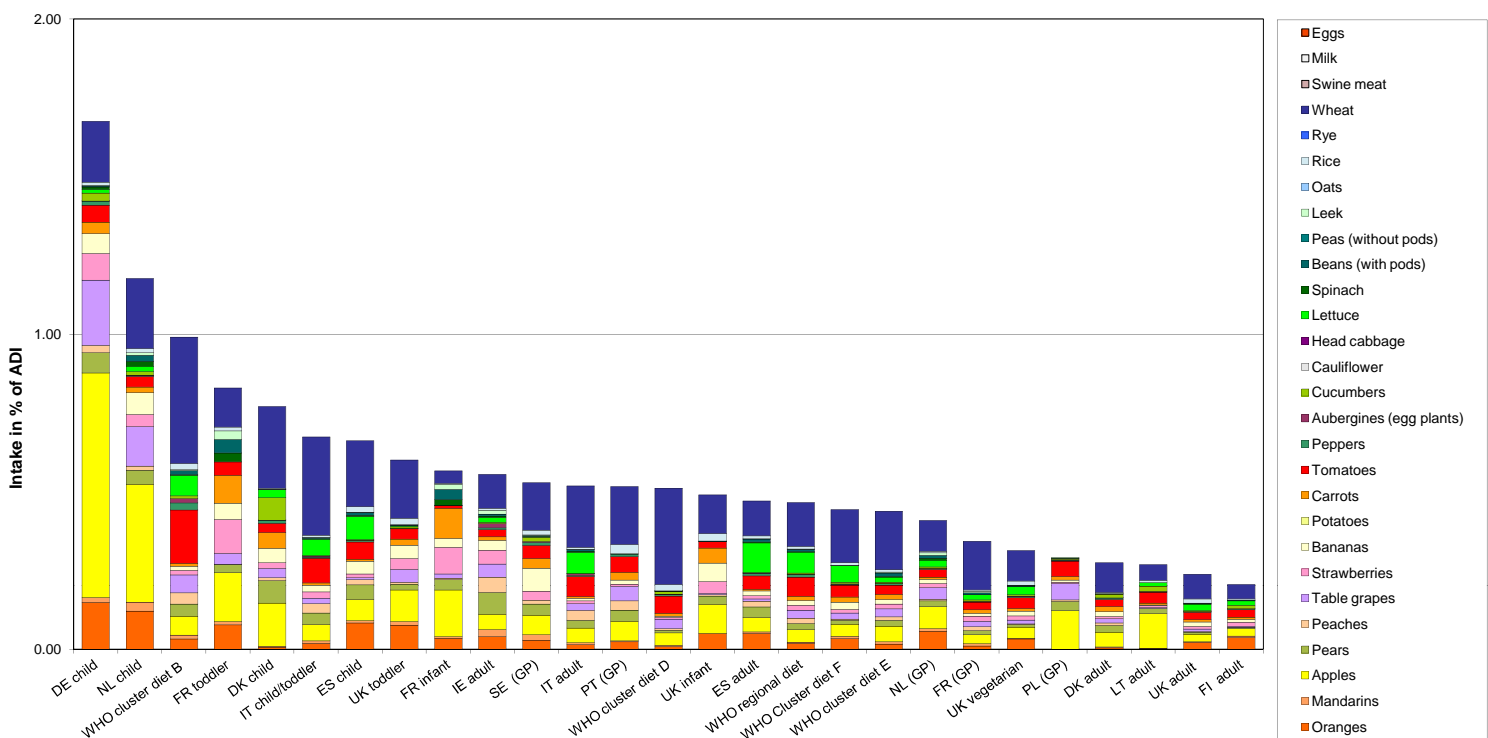
Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	1	3010	3.75		0.69				
2010	Peaches	2	1487	11.50		0.72				
2010	Strawberries	5	2296	40.46		1.90				
2010	Tomatoes	1	2456	8.43		0.82				
2010	Head cabbage	0.05	1216							
2010	Lettuce	10	2358	13.10		2.66				
2010	Leek	0.05	970	0.10	0.10	0.06				
2010	Oats	2	255	0.78		0.03				
2010	Rye	0.5	424							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

c) TRL: toxicological threshold level

### Chronic risk assessment: Cyprodinil



**Cyprodinil**

Acute exposure: Cyprodinil / Apples



Intake in % of the ARfD

Acute exposure: Cyprodinil / Peaches



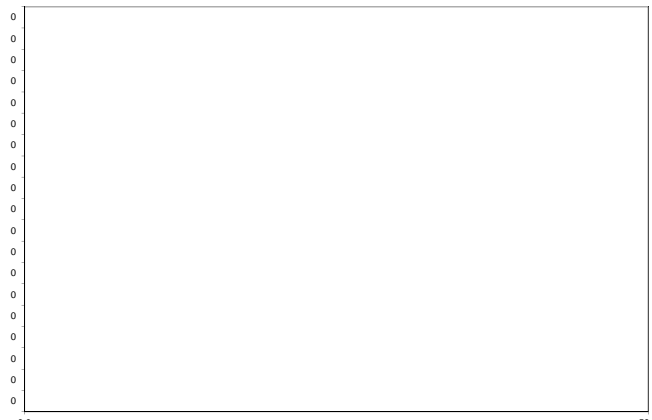
Intake in % of the ARfD

Acute exposure: Cyprodinil / Strawberries



Intake in % of the ARfD

Acute exposure: Cyprodinil / Tomatoes



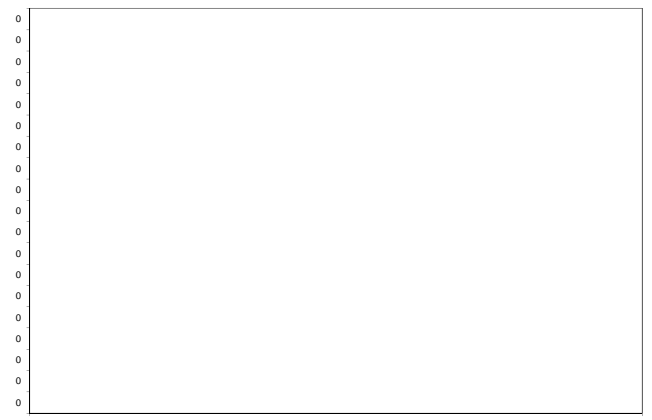
Intake in % of the ARfD

Acute exposure: Cyprodinil / Head cabbage



Intake in % of the ARfD

Acute exposure: Cyprodinil / Lettuce



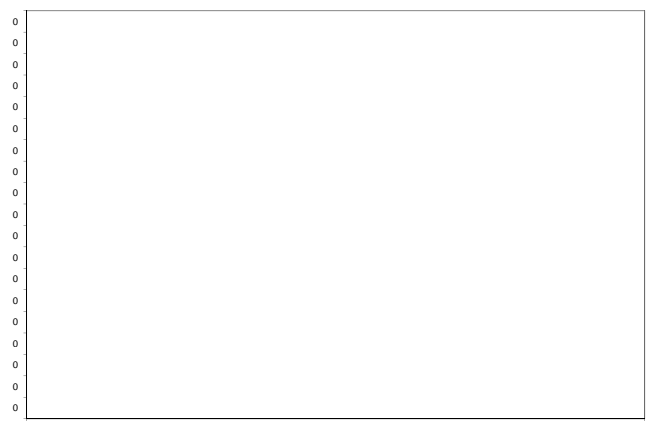
Intake in % of the ARfD

Acute exposure: Cyprodinil / Leek



Intake in % of the ARfD

Acute exposure: Cyprodinil / Oats



Intake in % of the ARfD

Acute exposure: Cyprodinil / Rye



Intake in % of the ARfD



DDT			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	A
Toxicological end points			
ADI (mg/kg bw/day):	0.01	ARfD (mg/kg bw):	n.n.
Source of ADI:	JMPR	Source of ARfD:	JMPR
Year of evaluation:	2000	Year of evaluation:	2000

### Chronic risk assessment

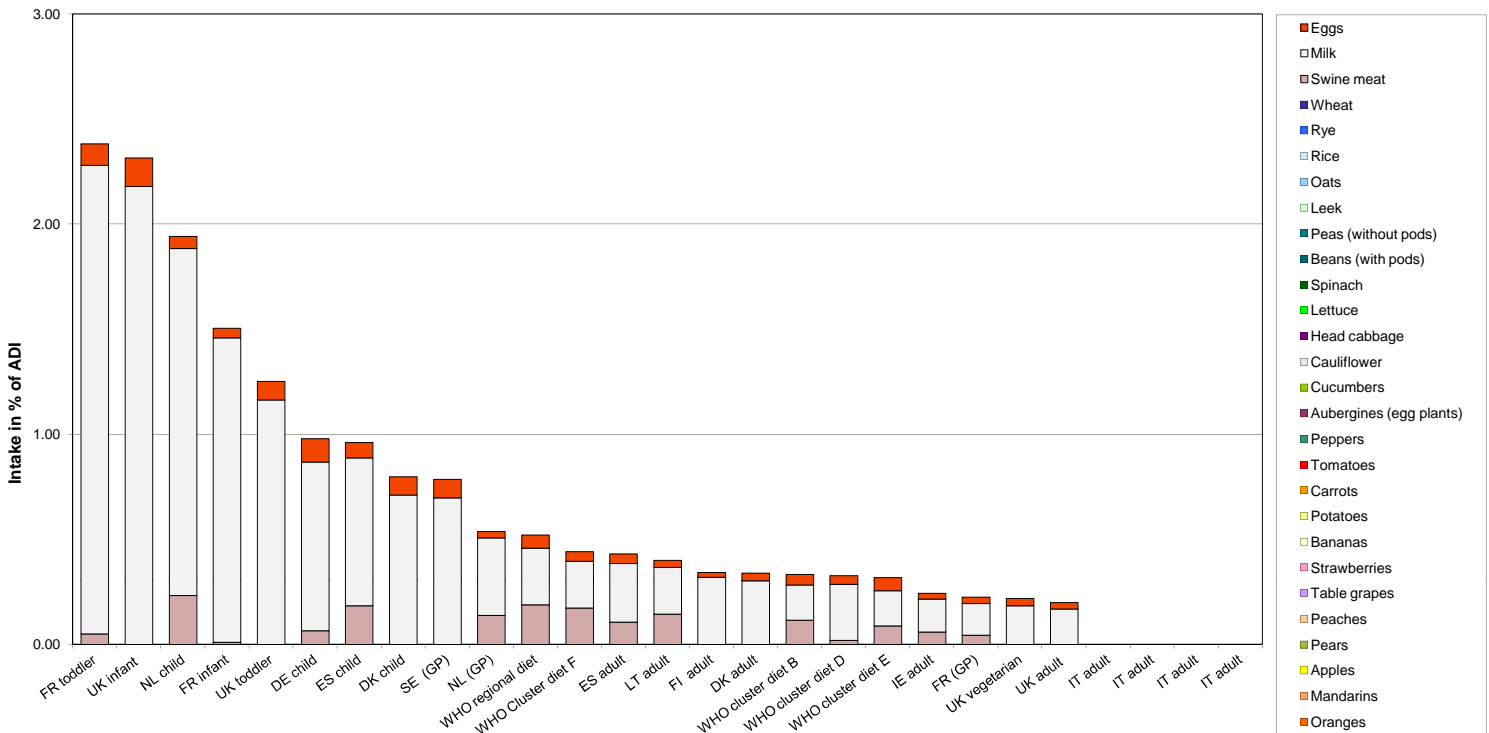
		Exposure (range) in % of ADI minimum - maximum					
		2					
		No of diets exceeding ADI: ---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
2.38	FR toddler	2.23	Milk	0.10	Eggs	0.05	Swine meat
2.31	UK infant	2.18	Milk	0.13	Eggs	0.06	FRUIT (FRESH OR FROZEN)
1.94	NL child	1.65	Milk	0.23	Swine meat	0.01	Eggs
1.50	FR infant	1.45	Milk	0.04	Eggs	0.06	Swine meat
1.25	UK toddler	1.16	Milk	0.09	Eggs	0.06	FRUIT (FRESH OR FROZEN)
0.98	DE child	0.80	Milk	0.11	Eggs	0.06	Swine meat
0.96	ES child	0.70	Milk	0.18	Swine meat	0.07	Eggs
0.80	DK child	0.71	Milk	0.09	Eggs	0.07	FRUIT (FRESH OR FROZEN)
0.79	SE (GP)	0.70	Milk	0.09	Eggs	0.07	FRUIT (FRESH OR FROZEN)
0.54	NL (GP)	0.37	Milk	0.14	Swine meat	0.03	Eggs
0.52	WHO regional diet	0.27	Milk	0.19	Swine meat	0.06	Eggs
0.44	WHO Cluster diet F	0.22	Milk	0.17	Swine meat	0.05	Eggs
0.43	ES adult	0.28	Milk	0.11	Swine meat	0.05	Eggs
0.40	LT adult	0.22	Milk	0.14	Swine meat	0.03	Eggs
0.34	FI adult	0.32	Milk	0.02	Eggs	0.03	FRUIT (FRESH OR FROZEN)
0.34	DK adult	0.30	Milk	0.04	Eggs	0.03	FRUIT (FRESH OR FROZEN)
0.33	WHO cluster diet B	0.17	Milk	0.12	Swine meat	0.05	Eggs
0.33	WHO cluster diet D	0.27	Milk	0.04	Eggs	0.02	Swine meat
0.32	WHO cluster diet E	0.17	Milk	0.09	Swine meat	0.06	Eggs
0.24	IE adult	0.16	Milk	0.06	Swine meat	0.03	Eggs
0.22	FR (GP)	0.15	Milk	0.04	Swine meat	0.03	Eggs
0.22	UK vegetarian	0.18	Milk	0.03	Eggs	0.03	FRUIT (FRESH OR FROZEN)
0.20	UK adult	0.17	Milk	0.03	Eggs	0.03	FRUIT (FRESH OR FROZEN)
	IT adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	IT adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	IT adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	IT adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)

### Acute risk assessment

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples									
2010	Peaches									
2010	Strawberries									
2010	Tomatoes									
2010	Head cabbage									
2010	Lettuce									
2010	Leek									
2010	Oats									
2010	Rye									
2010	Swine Meat	1	469	4.05		0.02				
2010	Milk	0.04	550	12.55		0.04				

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

### Chronic risk assessment: DDT



## DDT

Acute exposure: DDT / Apples



Intake in % of the ARfD

Acute exposure: DDT / Peaches



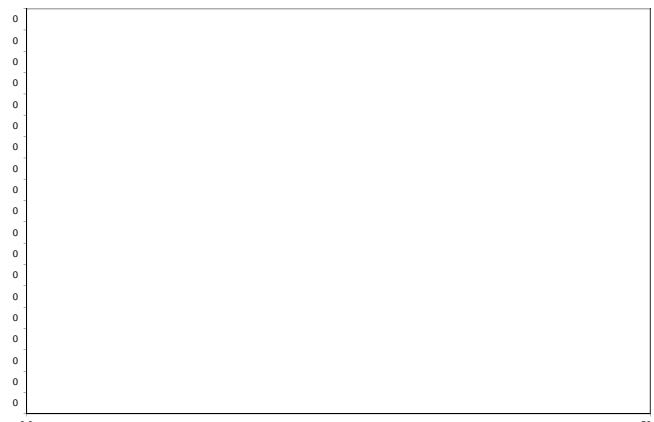
Intake in % of the ARfD

Acute exposure: DDT / Strawberries



Intake in % of the ARfD

Acute exposure: DDT / Tomatoes



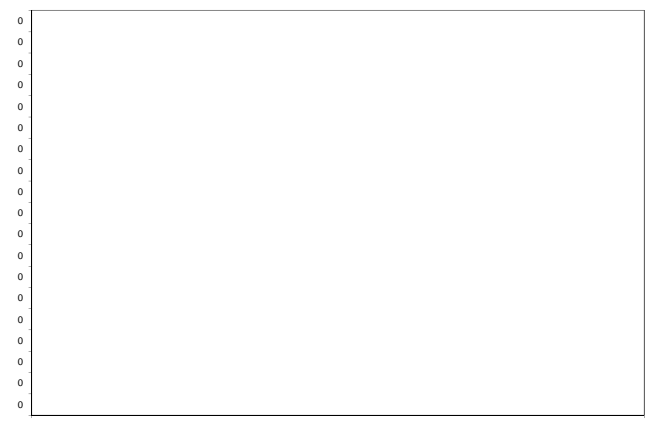
Intake in % of the ARfD

Acute exposure: DDT / Head cabbage



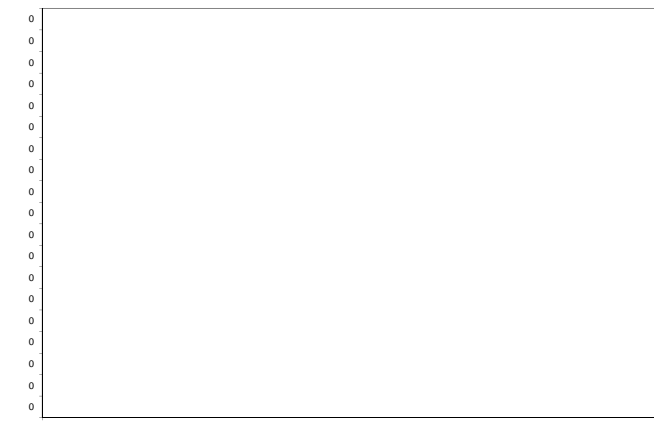
Intake in % of the ARfD

Acute exposure: DDT / Lettuce



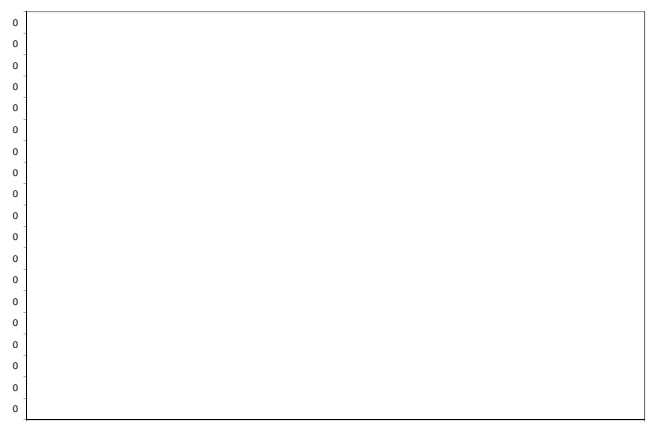
Intake in % of the ARfD

Acute exposure: DDT / Leek



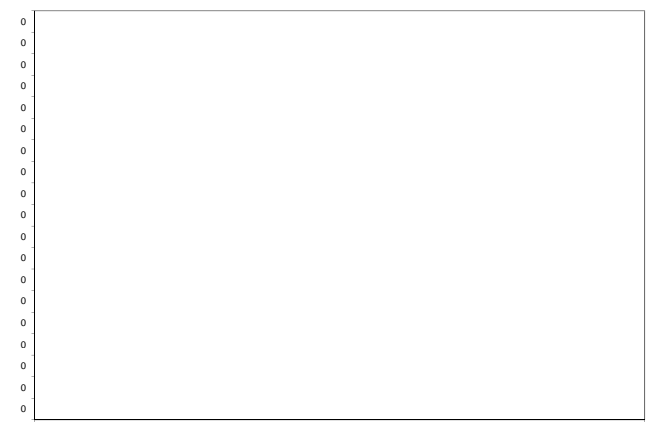
Intake in % of the ARfD

Acute exposure: DDT / Oats



Intake in % of the ARfD

Acute exposure: DDT / Rye



Intake in % of the ARfD

Deltamethrin			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P and A
Toxicological end points			
ADI (mg/kg bw/day):	0.01	ARfD (mg/kg bw):	0.01
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2003	Year of evaluation:	2003

**Chronic risk assessment**

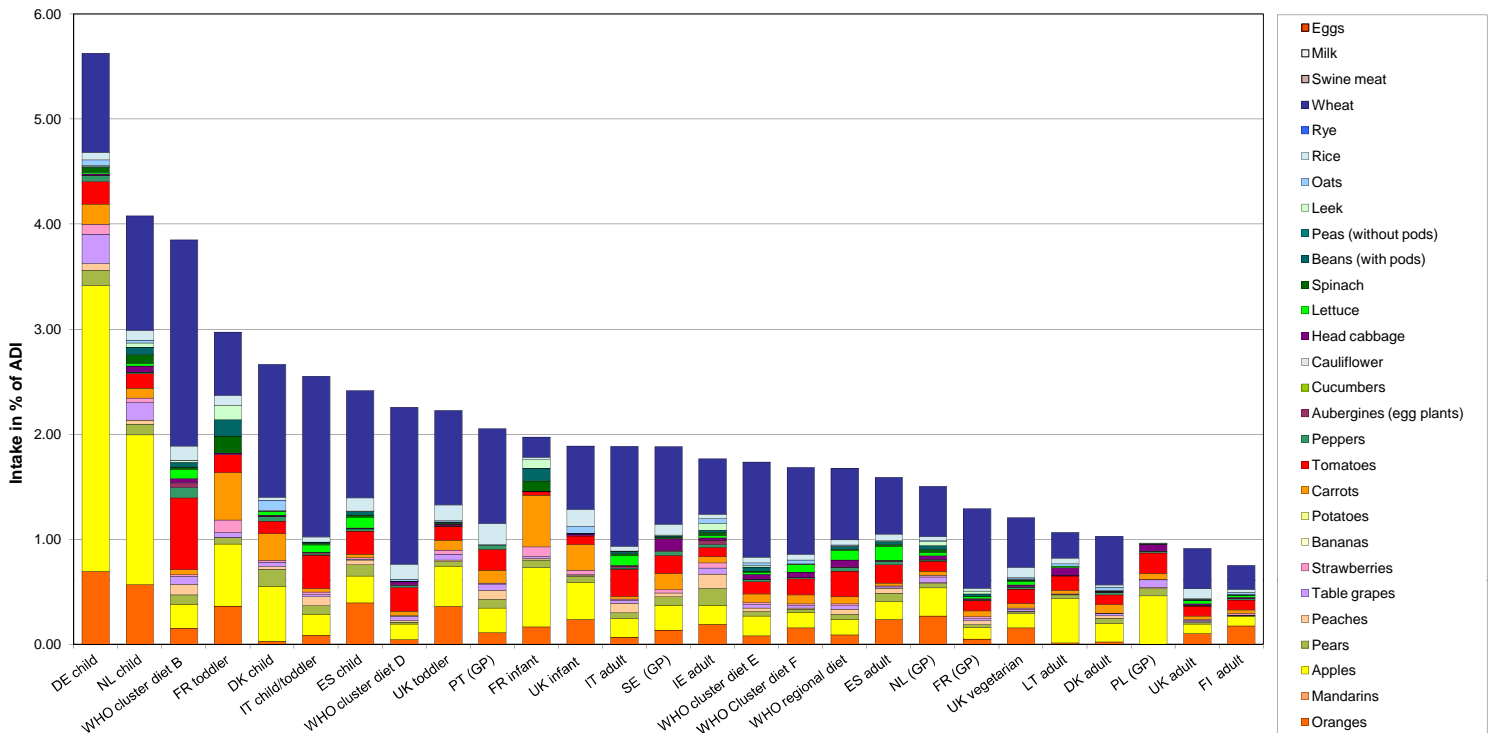
Highest calculated exposure in % of ADI		MS Diet		Exposure (range) in % of ADI minimum - maximum		No of diets exceeding ADI:	
				1 6		1 --- 6	
Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities		
5.63	DE child	2.72	Apples	0.95	Wheat	0.69	Oranges
4.08	NL child	1.43	Apples	1.09	Wheat	0.57	Oranges
3.85	WHO cluster diet B	1.96	Wheat	0.68	Tomatoes	0.23	Apples
2.97	FR toddler	0.60	Wheat	0.59	Apples	0.45	Carrots
2.67	DK child	1.27	Wheat	0.52	Apples	0.25	Carrots
2.55	IT child/toddler	1.53	Wheat	0.32	Tomatoes	0.20	Apples
2.41	ES child	1.02	Wheat	0.40	Oranges	0.26	Apples
2.26	WHO cluster diet D	1.49	Wheat	0.22	Tomatoes	0.15	Apples
2.23	UK toddler	0.90	Wheat	0.38	Apples	0.36	Oranges
2.05	PT (GP)	0.90	Wheat	0.24	Apples	0.20	Rice
1.97	FR infant	0.56	Apples	0.49	Carrots	0.19	Wheat
1.89	UK infant	0.60	Wheat	0.35	Apples	0.24	Carrots
1.88	IT adult	0.95	Wheat	0.26	Tomatoes	0.18	Apples
1.88	SE (GP)	0.74	Wheat	0.24	Apples	0.17	Tomatoes
1.77	IE adult	0.53	Wheat	0.19	Oranges	0.19	Apples
1.74	WHO cluster diet E	0.91	Wheat	0.19	Apples	0.12	Tomatoes
1.68	WHO Cluster diet F	0.83	Wheat	0.16	Oranges	0.15	Tomatoes
1.68	WHO regional diet	0.68	Wheat	0.24	Tomatoes	0.15	Apples
1.59	ES adult	0.54	Wheat	0.24	Oranges	0.17	Tomatoes
1.50	NL (GP)	0.48	Wheat	0.27	Oranges	0.27	Apples
1.29	FR (GP)	0.76	Wheat	0.11	Apples	0.10	Tomatoes
1.20	UK vegetarian	0.47	Wheat	0.16	Oranges	0.14	Tomatoes
1.06	LT adult	0.42	Apples	0.24	Wheat	0.14	Tomatoes
1.03	DK adult	0.46	Wheat	0.18	Apples	0.09	Tomatoes
0.97	PL (GP)	0.46	Apples	0.20	Tomatoes	0.07	Table grapes
0.91	UK adult	0.39	Wheat	0.10	Oranges	0.10	Tomatoes
0.75	FI adult	0.23	Wheat	0.18	Oranges	0.09	Tomatoes

**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.2	3151	0.13		0.04		35.27	UK infant	
2010	Peaches	0.1	1509	1.33	0.07	0.12		71.20	DE child	
2010	Strawberries	0.2	2349	0.21		0.08		11.85	DE child	
2010	Tomatoes	0.3	2581	1.28	0.04	0.22	2	127.92	BE child	
2010	Head cabbage	0.1	1261	0.08		0.02		10.53	NL child	
2010	Lettuce	0.5	2350	2.60		0.34		91.47	DE child	
2010	Leek	0.2	1001	0.20		0.02		11.79	BE child	
2010	Oats	2	265	1.51		0.41		16.32	DE child	
2010	Rye	2	458							
2010	Swine Meat	0.5	623							
2010	Milk	0.05	740							

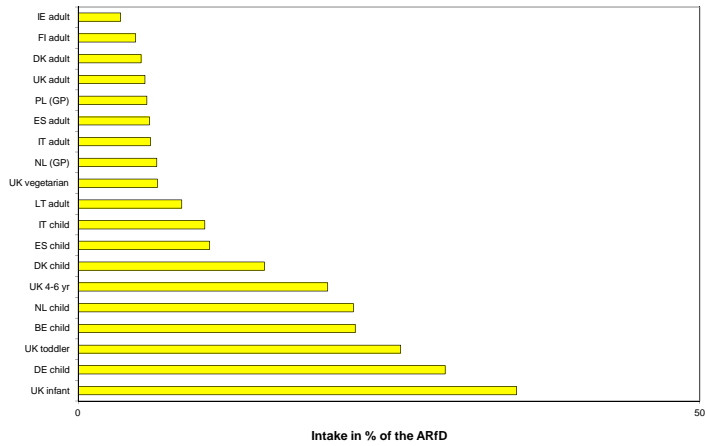
a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Deltamethrin**

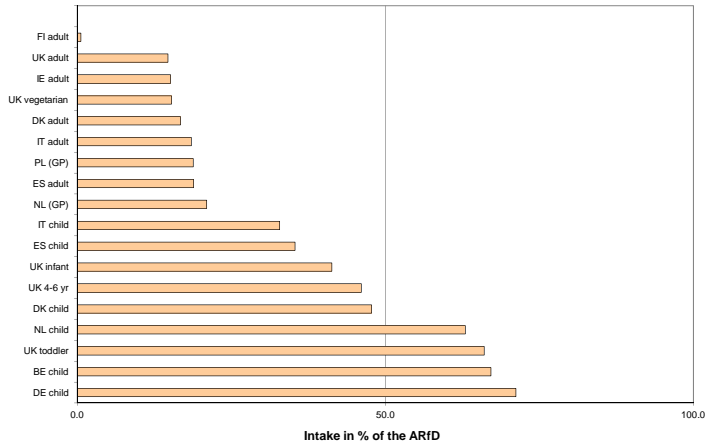


**Deltamethrin**

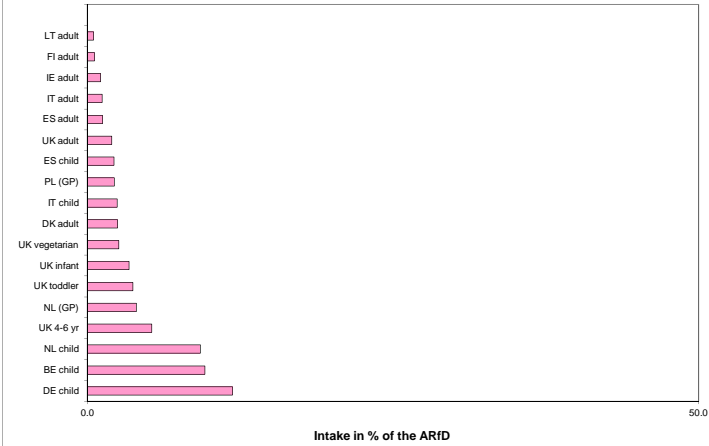
Acute exposure: Deltamethrin / Apples



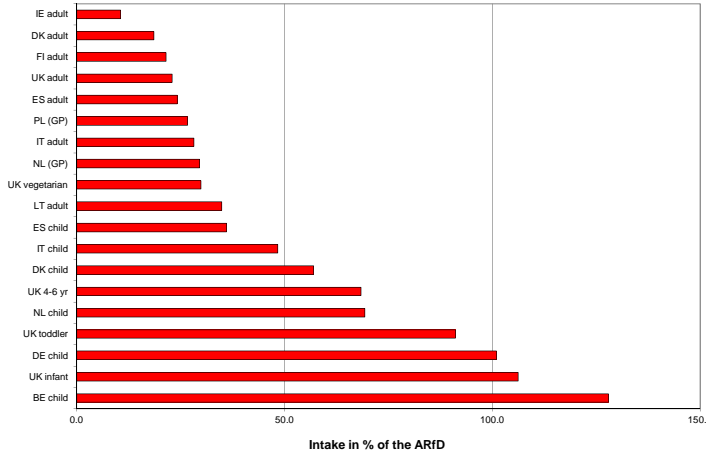
Acute exposure: Deltamethrin / Peaches



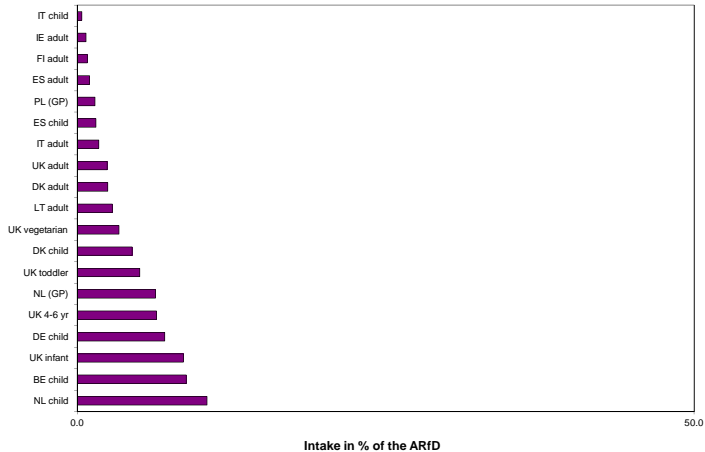
Acute exposure: Deltamethrin / Strawberries



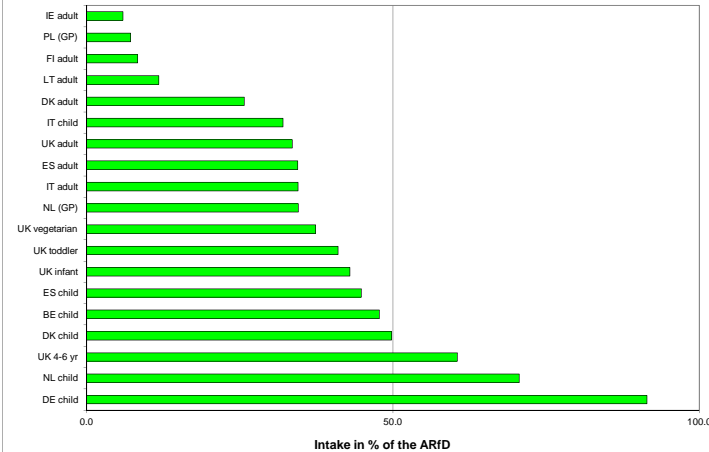
Acute exposure: Deltamethrin / Tomatoes



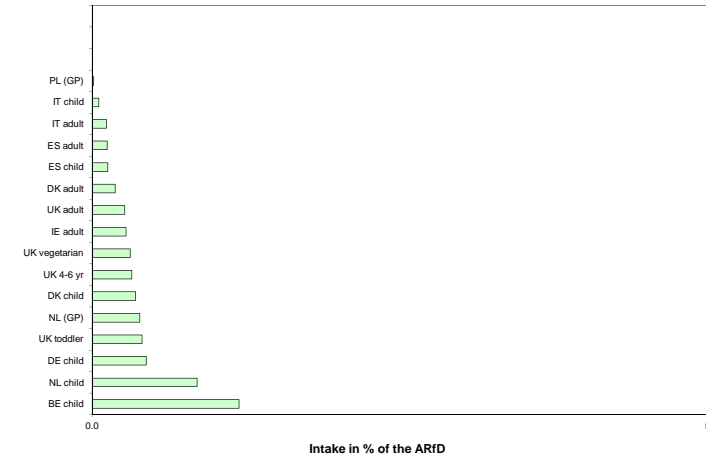
Acute exposure: Deltamethrin / Head cabbage



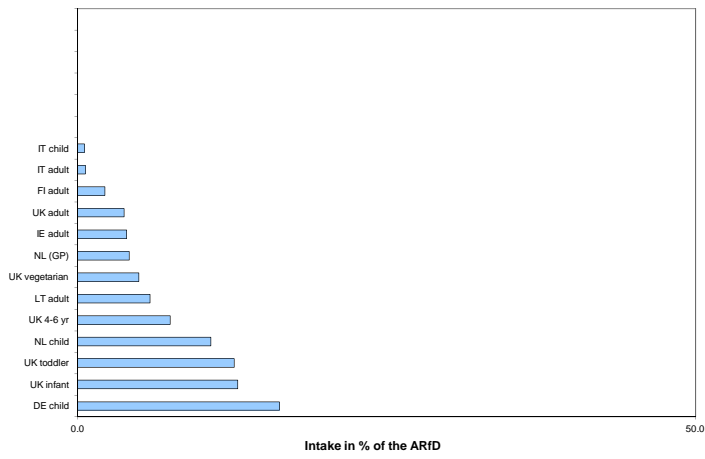
Acute exposure: Deltamethrin / Lettuce



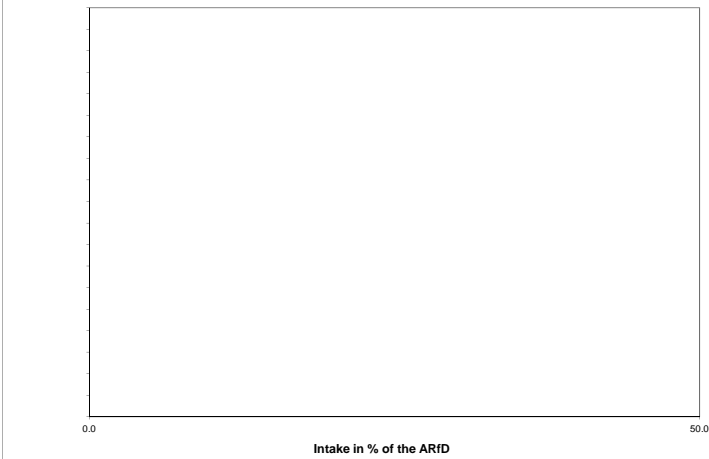
Acute exposure: Deltamethrin / Leek



Acute exposure: Deltamethrin / Oats



Acute exposure: Deltamethrin / Rye



## Diazinon

Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P and A
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.0002	ARfD (mg/kg bw):	0.025
Source of ADI:	EFSA	Source of ARfD:	EFSA
Year of evaluation:	2006	Year of evaluation:	2006

## Chronic risk assessment

Highest calculated exposure in % of ADI		MS Diet		Highest contributor to MS diet (in % of ADI)		Commodity / group of commodities		2nd contributor to MS diet (in % of ADI)		Commodity / group of commodities		3rd contributor to MS diet (in % of ADI)		Commodity / group of commodities	
93.19	DE child			58.69	Apples	18.25	Oranges	12.04	Potatoes						
82.55	NL child			30.80	Apples	27.69	Potatoes	14.94	Oranges						
47.99	FR toddler			23.80	Potatoes	12.75	Apples	9.59	Oranges						
36.36	FR infant			19.43	Potatoes	12.16	Apples	4.36	Oranges						
34.93	UK toddler			16.41	Potatoes	9.49	Oranges	8.29	Apples						
34.55	WHO regional diet			18.85	Potatoes	5.30	Swine meat	3.24	Apples						
34.17	PT (GP)			25.05	Potatoes	5.11	Apples	2.93	Oranges						
32.76	SE (GP)			19.57	Potatoes	5.11	Apples	3.58	Oranges						
32.68	ES child			10.39	Oranges	8.64	Potatoes	5.55	Apples						
31.72	NL (GP)			12.87	Potatoes	7.13	Oranges	5.74	Apples						
31.59	WHO Cluster diet F			16.03	Potatoes	4.86	Swine meat	4.17	Oranges						
31.01	LT adult			14.91	Potatoes	9.08	Apples	4.05	Swine meat						
30.63	WHO cluster diet B			12.59	Potatoes	4.90	Apples	4.09	Oranges						
29.68	UK infant			15.28	Potatoes	7.60	Apples	6.23	Oranges						
29.17	WHO cluster diet E			18.01	Potatoes	4.12	Apples	2.47	Swine meat						
28.67	PL (GP)			16.14	Potatoes	9.94	Apples	2.02	Head cabbage						
25.84	DK child			11.42	Potatoes	11.30	Apples	1.24	Peppers						
25.62	WHO cluster diet D			19.07	Potatoes	3.23	Apples	1.15	Oranges						
23.30	IE adult			10.76	Potatoes	5.00	Oranges	4.00	Apples						
20.91	ES adult			6.19	Oranges	4.37	Potatoes	3.74	Apples						
15.16	UK vegetarian			6.44	Potatoes	4.15	Oranges	2.88	Apples						
13.44	FI adult			5.76	Potatoes	4.65	Oranges	1.96	Apples						
12.59	IT child/toddler			4.31	Apples	4.21	Potatoes	2.30	Oranges						
12.46	UK adult			6.56	Potatoes	2.69	Oranges	2.00	Apples						
12.25	DK adult			6.85	Potatoes	3.82	Apples	0.65	Oranges						
11.10	FR (GP)			5.28	Potatoes	2.31	Apples	1.38	Oranges						
10.81	IT adult			3.86	Apples	2.82	Potatoes	1.81	Lettuce						

## Acute risk assessment

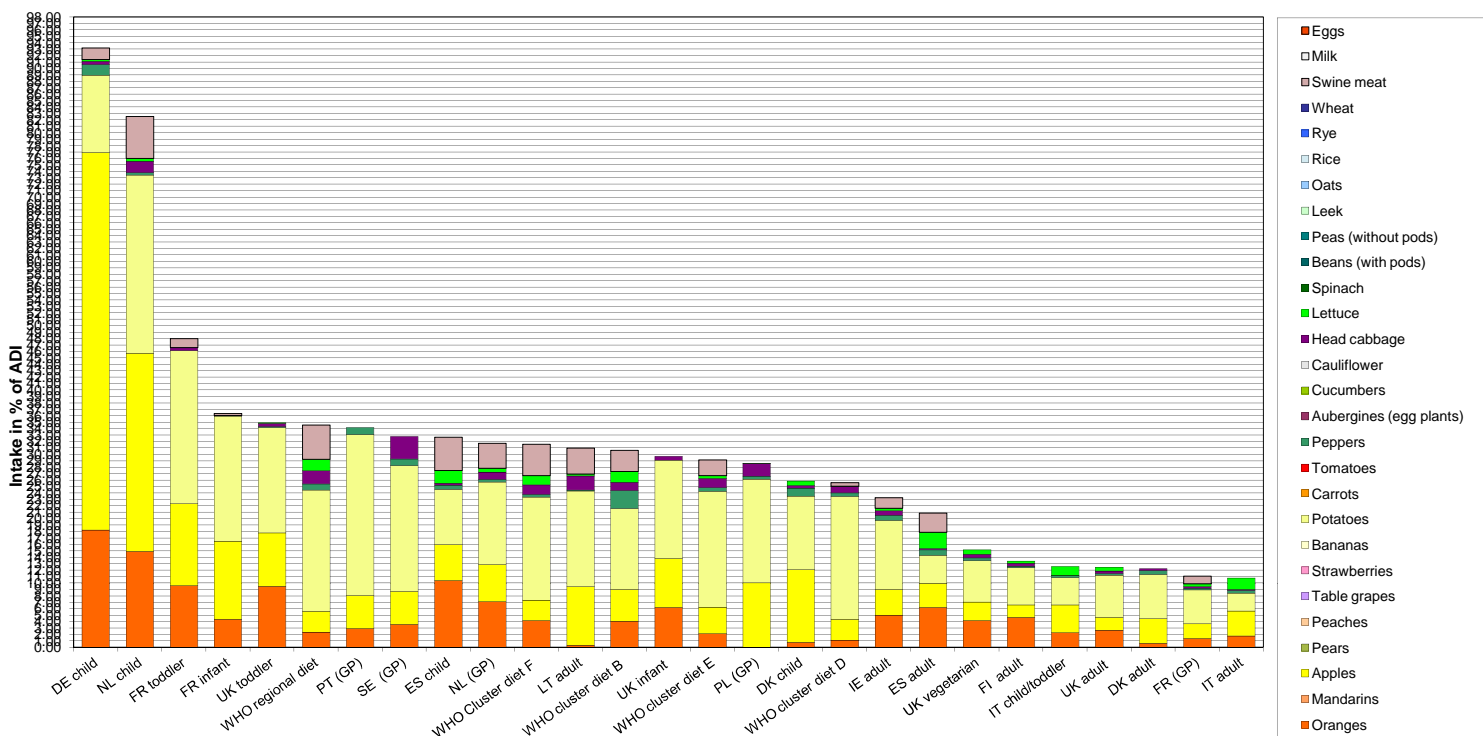
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.01	3240	0.06	0.06	0.20		78.37	UK infant	
2010	Peaches	0.01	1546							
2010	Strawberries	0.01	2388		0.04	0.01		0.75	DE child	
2010	Tomatoes	0.01	2693							
2010	Head cabbage	0.5	1293	0.08		0.01		2.53	NL child	
2010	Lettuce	0.01	2447		0.04	0.02		1.83	DE child	
2010	Leek	0.01	1029							
2010	Oats	0.02	267	1.12		0.02		0.24	DE child	
2010	Rye	0.02	477							
2010	Swine Meat	0.05	468	0.21		0.01		0.36	DE child	
2010	Milk	0.01	725							

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

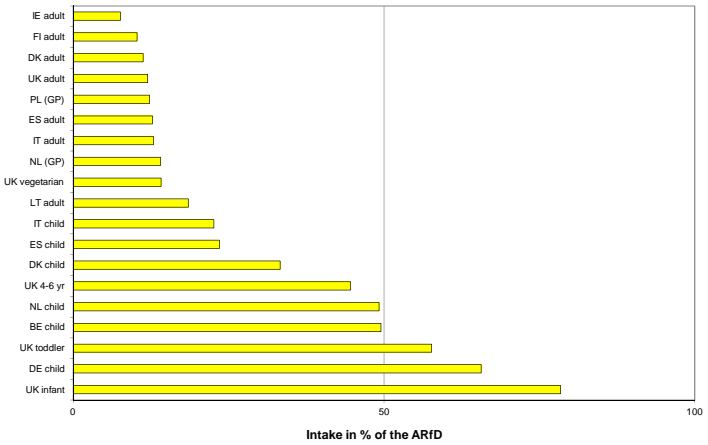
c) TRL: toxicological threshold level

## Chronic risk assessment: Diazinon

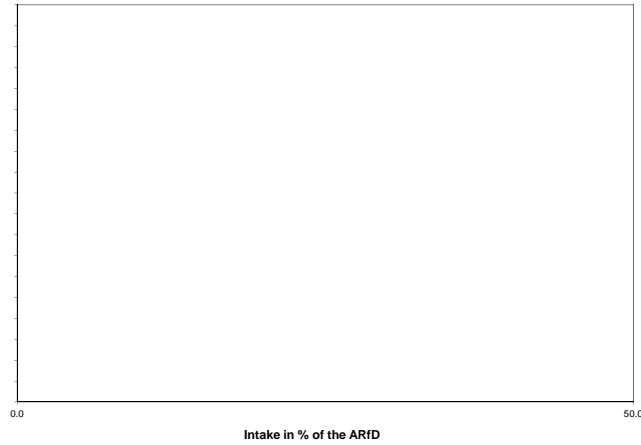


**Diazinon**

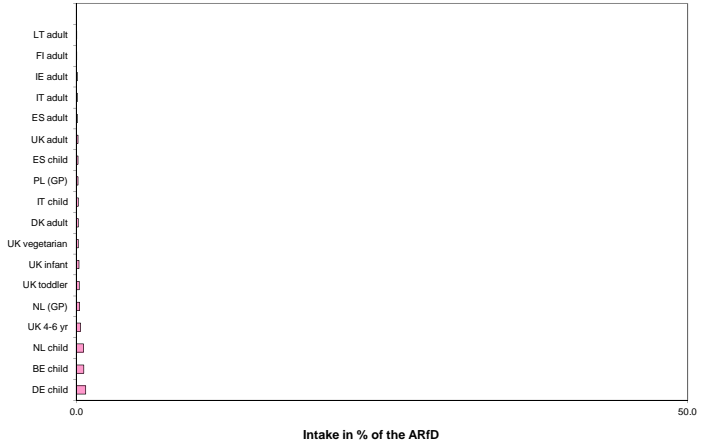
Acute exposure: Diazinon / Apples



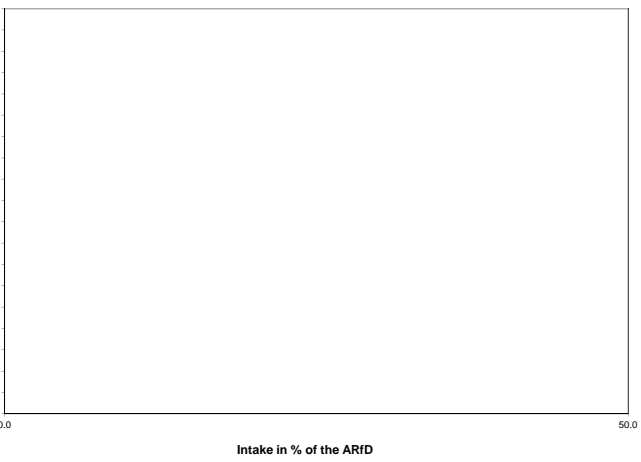
Acute exposure: Diazinon / Peaches



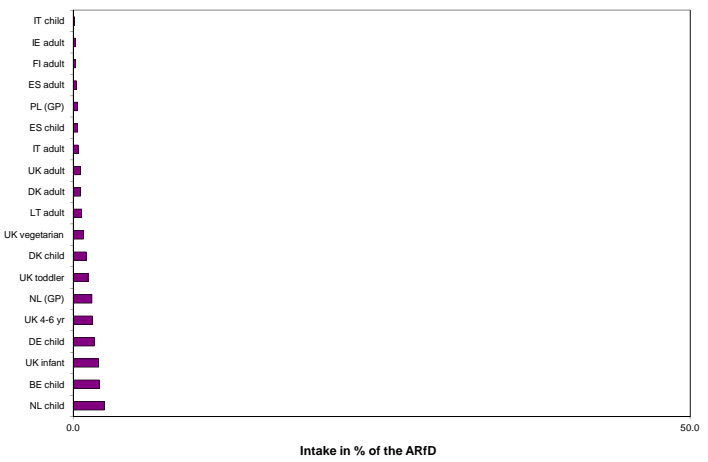
Acute exposure: Diazinon / Strawberries



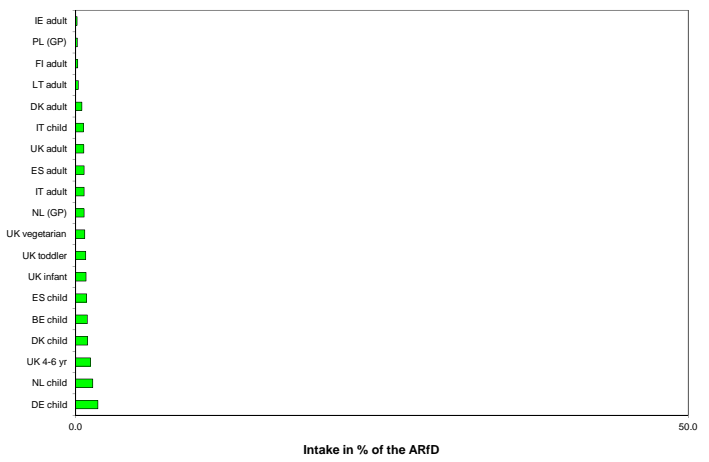
Acute exposure: Diazinon / Tomatoes



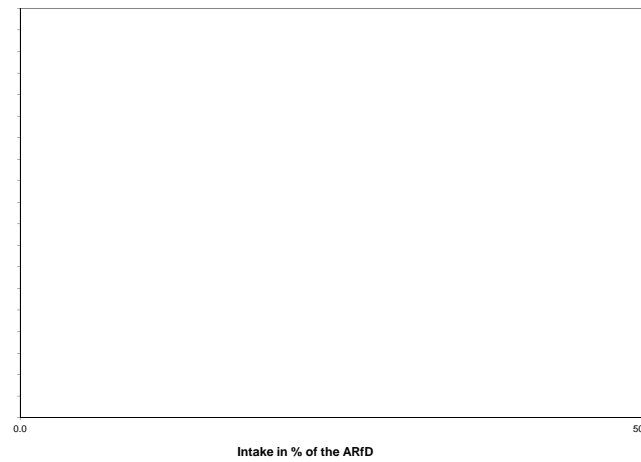
Acute exposure: Diazinon / Head cabbage



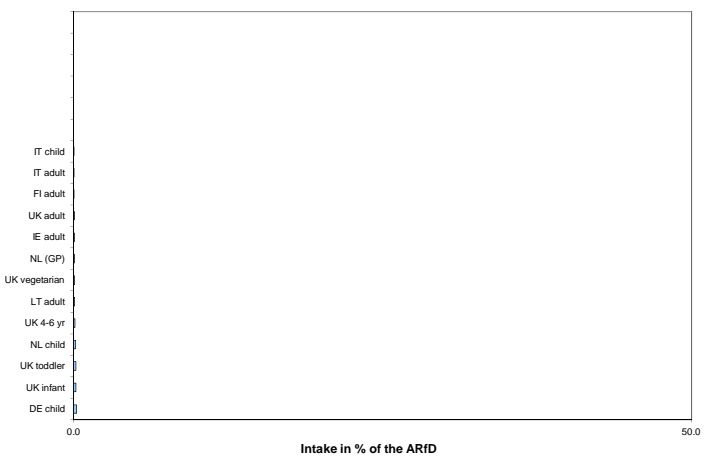
Acute exposure: Diazinon / Lettuce



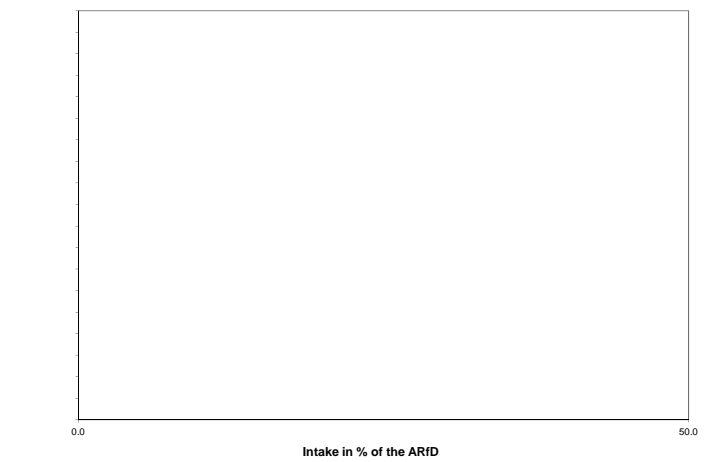
Acute exposure: Diazinon / Leek



Acute exposure: Diazinon / Oats



Acute exposure: Diazinon / Rye



Dichlofluanid			
Status of the active substance:	<b>Excluded</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
Toxicological end points			
ADI (mg/kg bw/day):	<b>0.3</b>	ARfD (mg/kg bw):	<b>0.3</b>
Source of ADI:	<b>JMPR</b>	Source of ARfD:	
Year of evaluation:	<b>1983</b>	Year of evaluation:	

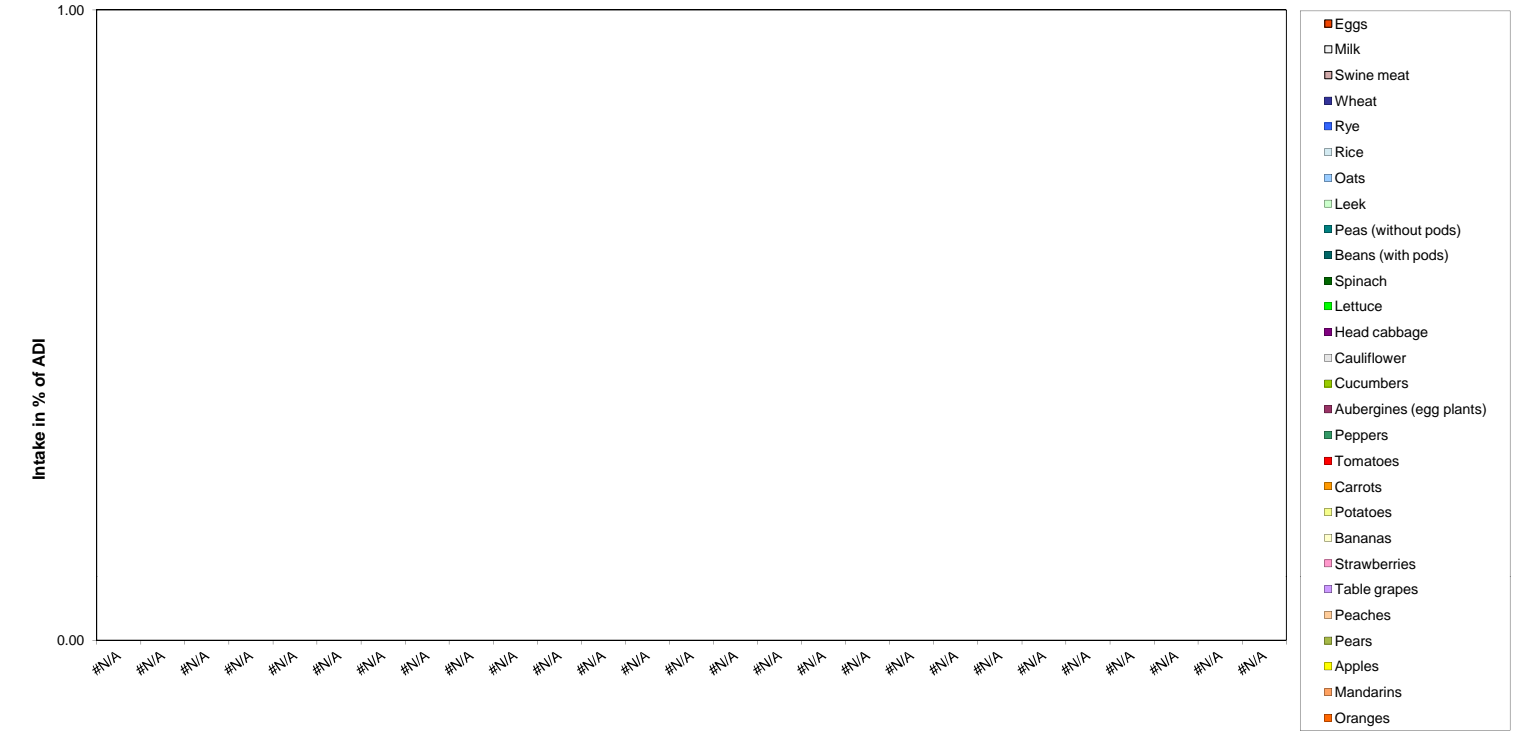
JMPR ADI (1983): 0.3, ARfD not assessed. Biocide evaluation 2006: ADI 0.35 based on human studies, ARfD not required for wood preservative. JMPR ADI is used as surrogate for ARfD.

Chronic risk assessment										
		Exposure (range) in % of ADI minimum - maximum #N/A #N/A								
No of diets exceeding ADI: ---										
	Highest calculated exposure in % of ADI		Highest contributor to MS diet (in % of ADI)		2nd contributor to MS diet (in % of ADI)		3rd contributor to MS diet (in % of ADI)			
	MS Diet		Commodity / group of commodities		Commodity / group of commodities		Commodity / group of commodities		Commodity / group of commodities	
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
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	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
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	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
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	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

Acute risk assessment										
Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.01	2962	0.03		0.16		5.22	UK infant	
2010	Peaches	0.01	1427							
2010	Strawberries	0.01	2283							
2010	Tomatoes	0.01	2449	0.08		0.00		0.06	BE child	
2010	Head cabbage	0.01	1180							
2010	Lettuce	0.01	2353							
2010	Leek	0.01	918							
2010	Oats	0.01	174							
2010	Rye	0.01	416							
2010	Swine Meat									
2010	Milk									

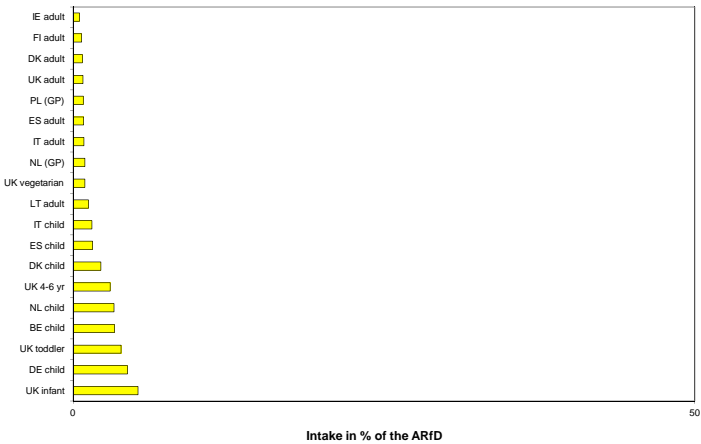
a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Dichlofluanid**

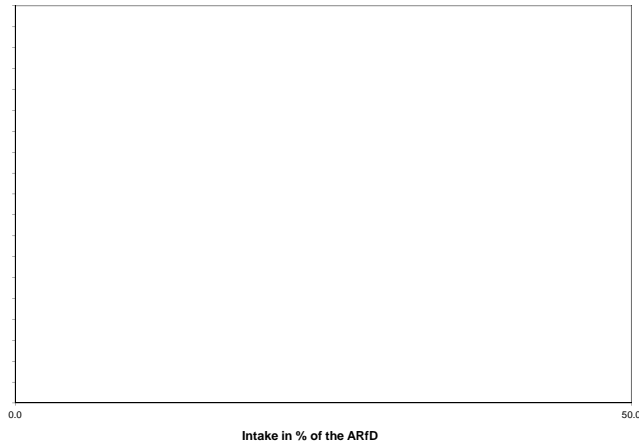


**Dichlofuanid**

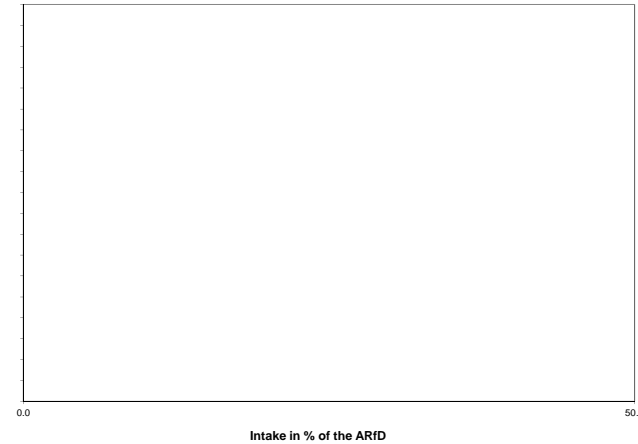
Acute exposure: Dichlofuanid / Apples



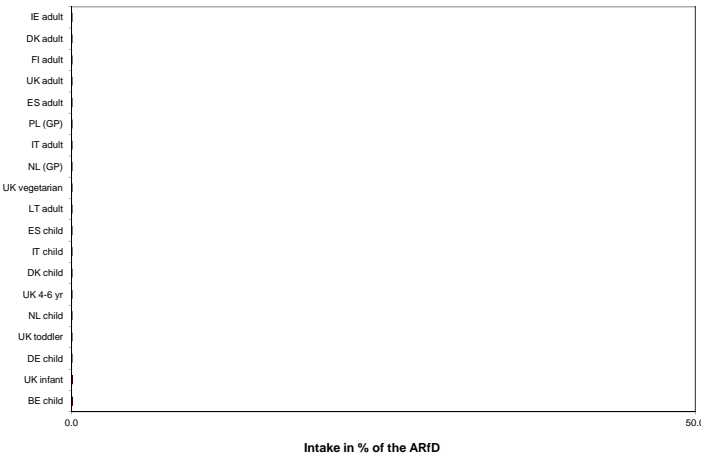
Acute exposure: Dichlofuanid / Peaches



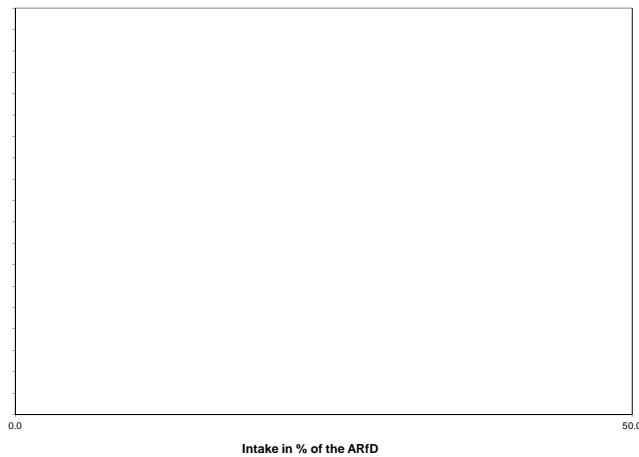
Acute exposure: Dichlofuanid / Strawberries



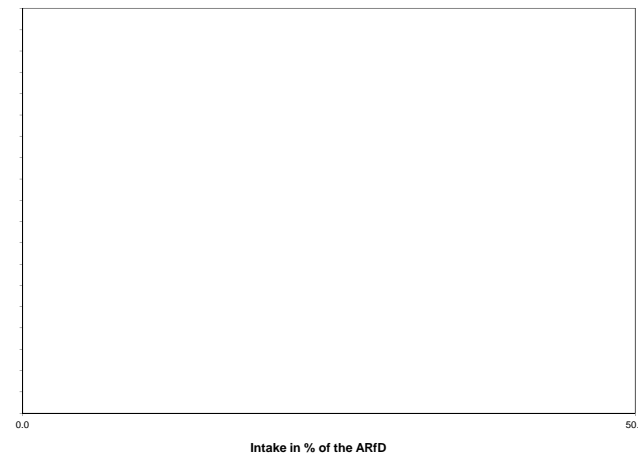
Acute exposure: Dichlofuanid / Tomatoes



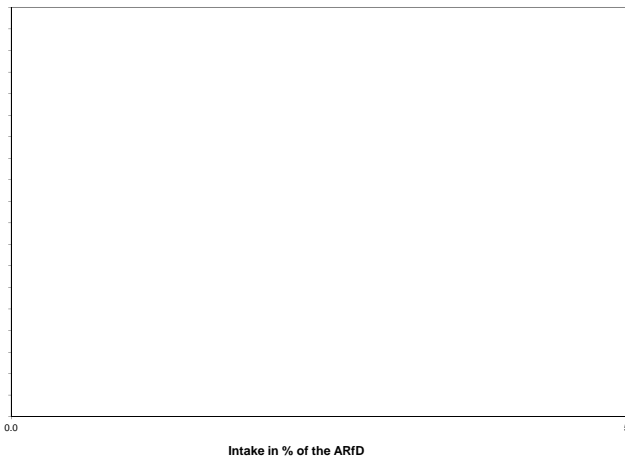
Acute exposure: Dichlofuanid / Head cabbage



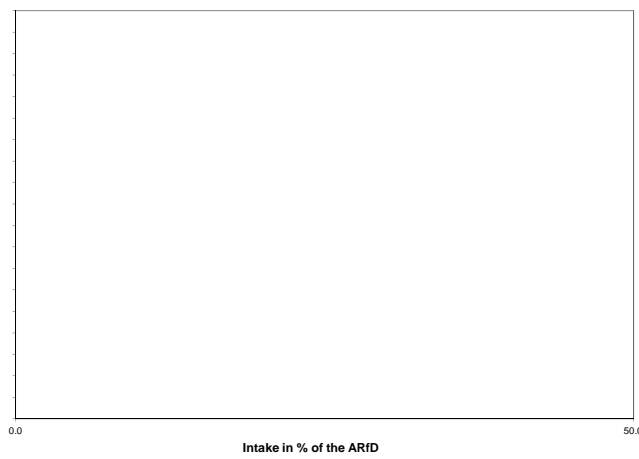
Acute exposure: Dichlofuanid / Lettuce



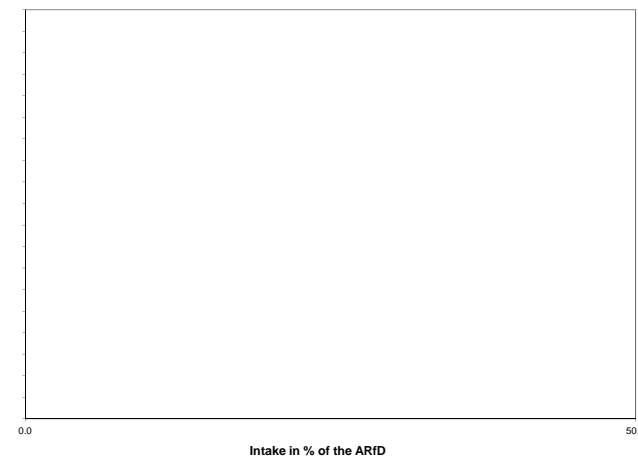
Acute exposure: Dichlofuanid / Leek



Acute exposure: Dichlofuanid / Oats



Acute exposure: Dichlofuanid / Rye





<b>Dichlorvos</b>			
Status of the active substance:	<b>Excluded</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.00008</b>	ARfD (mg/kg bw):	<b>0.002</b>
Source of ADI:	<b>EFSA</b>	Source of ARfD:	<b>EFSA</b>
Year of evaluation:	<b>2006</b>	Year of evaluation:	<b>2006</b>

No final ADI and ARfD were derived in the peer review. However, EFSA derived tentative values which are used for the risk assessment.

**Chronic risk assessment**

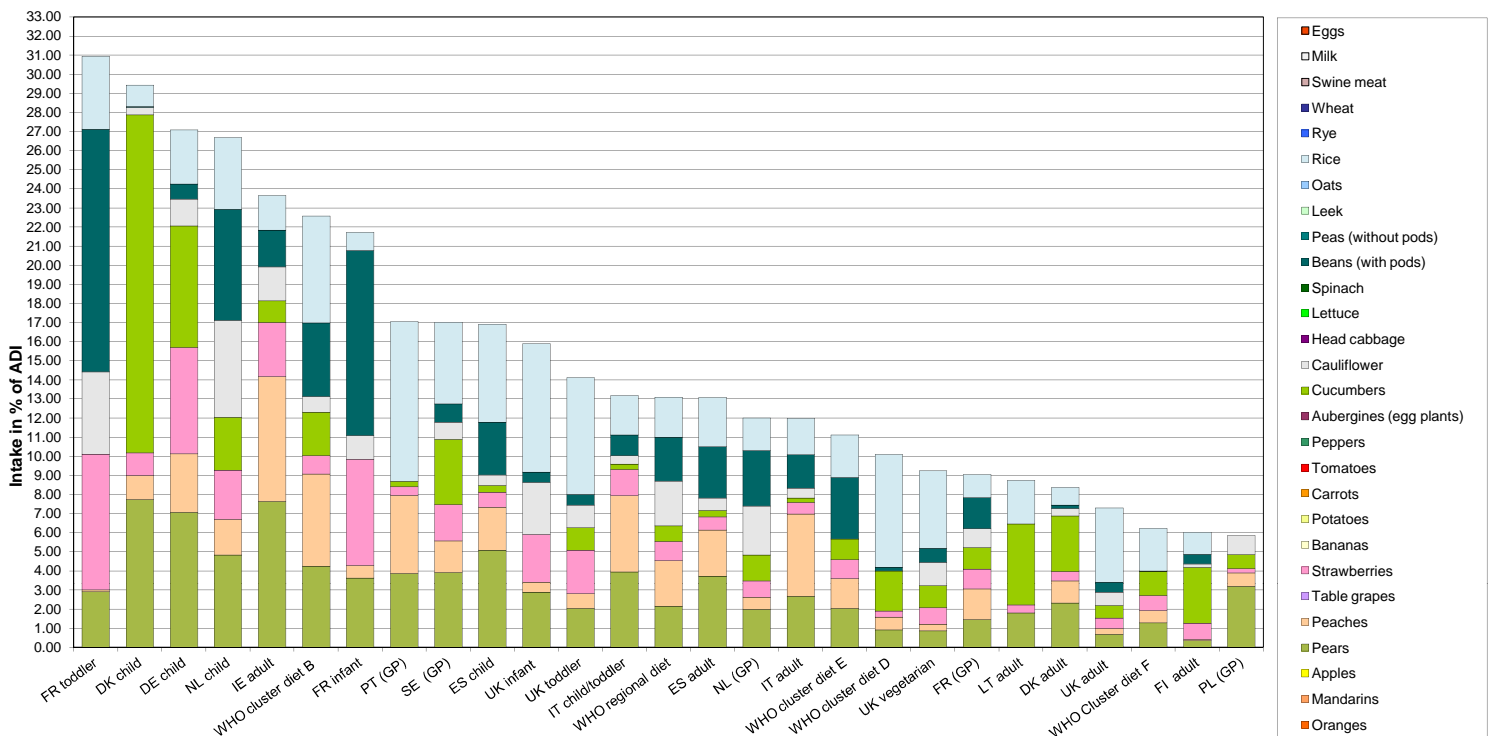
		Exposure (range) in % of ADI minimum - maximum					
		6	31				
		No of diets exceeding ADI:					
		---	---				
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
30.94	FR toddler	12.71	Beans (with pods)	7.09	Strawberries	4.30	Cauliflower
29.43	DK child	17.69	Cucumbers	7.74	Pears	1.25	Peaches
27.09	DE child	7.08	Pears	6.36	Cucumbers	5.57	Strawberries
26.68	NL child	5.81	Beans (with pods)	5.07	Cauliflower	4.84	Pears
23.66	IE adult	7.64	Pears	6.52	Peaches	2.83	Strawberries
22.59	WHO cluster diet B	5.60	Rice	4.83	Peaches	4.25	Pears
21.74	FR infant	9.68	Beans (with pods)	5.57	Strawberries	3.64	Pears
17.05	PT (GP)	8.35	Rice	4.09	Peaches	3.87	Pears
17.03	SE (GP)	4.27	Rice	3.92	Pears	3.42	Cucumbers
16.93	ES child	5.14	Rice	5.08	Pears	2.75	Beans (with pods)
15.90	UK infant	6.72	Rice	2.89	Pears	2.75	Cauliflower
14.13	UK toddler	6.12	Rice	2.26	Strawberries	2.04	Pears
13.18	IT child/toddler	3.99	Peaches	3.95	Pears	2.05	Rice
13.10	WHO regional diet	2.39	Peaches	2.35	Cauliflower	2.30	Beans (with pods)
13.08	ES adult	3.73	Pears	2.69	Beans (with pods)	2.57	Rice
12.01	NL (GP)	2.90	Beans (with pods)	2.57	Cauliflower	1.99	Pears
11.99	IT adult	4.31	Peaches	2.68	Pears	1.90	Rice
11.13	WHO cluster diet E	3.22	Beans (with pods)	2.23	Rice	2.04	Pears
10.09	WHO cluster diet D	5.89	Rice	2.09	Cucumbers	0.91	Pears
9.25	UK vegetarian	4.07	Rice	1.24	Cauliflower	1.15	Cucumbers
9.05	FR (GP)	1.63	Beans (with pods)	1.62	Peaches	1.45	Pears
8.75	LT adult	4.24	Cucumbers	2.28	Rice	1.81	Pears
8.38	DK adult	2.91	Cucumbers	2.33	Pears	1.15	Peaches
7.31	UK adult	3.89	Rice	0.70	Cauliflower	0.68	Pears
6.24	WHO Cluster diet F	2.23	Rice	1.30	Pears	1.28	Cucumbers
6.03	FI adult	2.91	Cucumbers	1.16	Rice	0.86	Strawberries
5.86	PL (GP)	3.20	Pears	1.00	Cauliflower	0.75	Cucumbers

**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.01	3081		0.03	0.08	1	391.86	UK infant	
2010	Peaches	0.01	1494		0.07	0.03		89.00	DE child	
2010	Strawberries	0.01	2329		0.26	0.03		22.61	DE child	
2010	Tomatoes	0.01	2595	0.04		0.01		29.07	BE child	
2010	Head cabbage	0.01	1238							
2010	Lettuce	0.01	2385							
2010	Leek	0.01	983							
2010	Oats	0.01	263							
2010	Rye	0.01	421							
2010	Swine Meat									
2010	Milk									

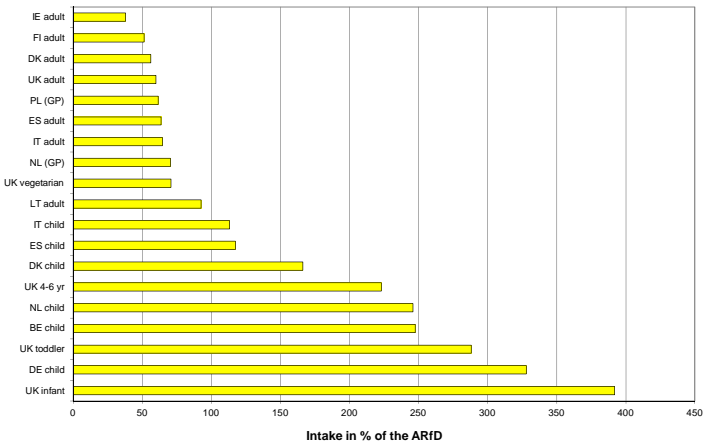
a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Dichlorvos**

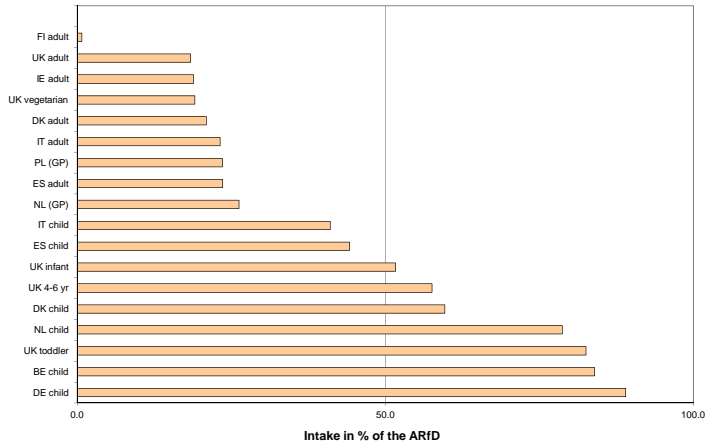


**Dichlorvos**

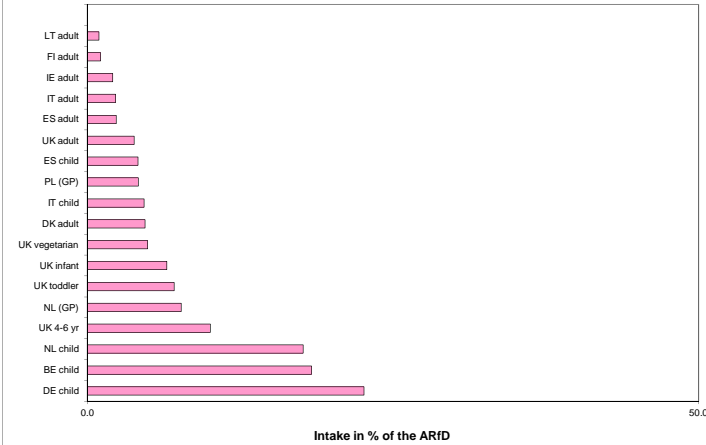
Acute exposure: Dichlorvos / Apples



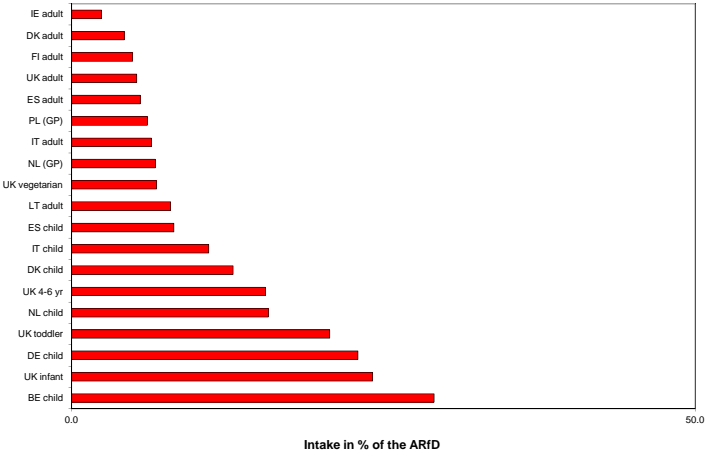
Acute exposure: Dichlorvos / Peaches



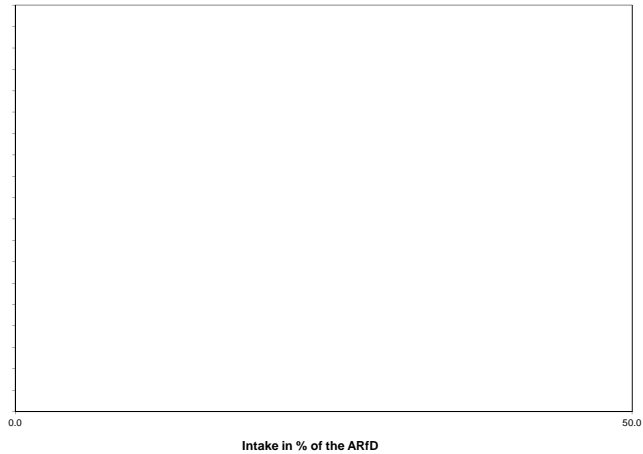
Acute exposure: Dichlorvos / Strawberries



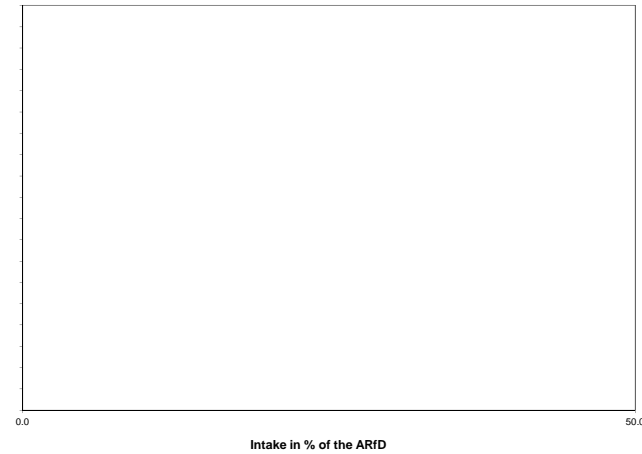
Acute exposure: Dichlorvos / Tomatoes



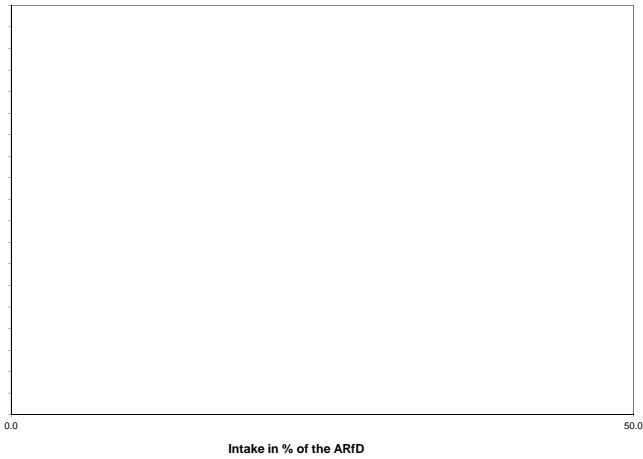
Acute exposure: Dichlorvos / Head cabbage



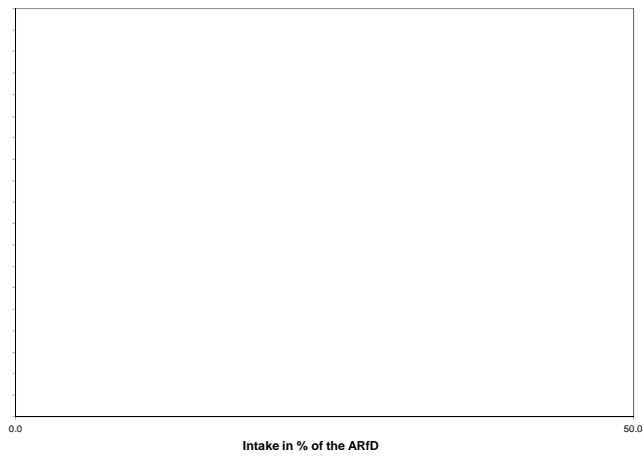
Acute exposure: Dichlorvos / Lettuce



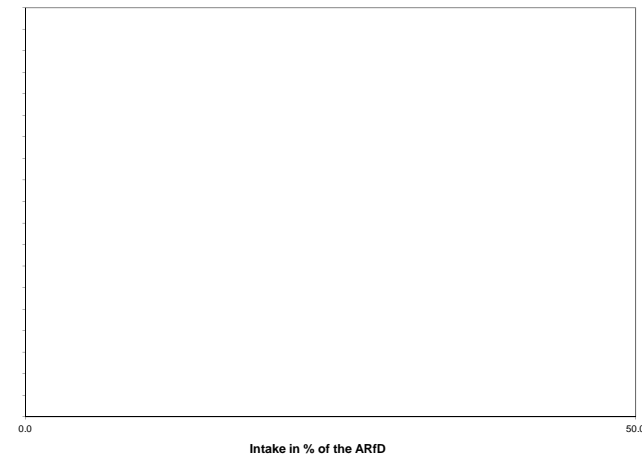
Acute exposure: Dichlorvos / Leek



Acute exposure: Dichlorvos / Oats



Acute exposure: Dichlorvos / Rye



Dicloran			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.005	ARfD (mg/kg bw):	0.025
Source of ADI:	EFSA	Source of ARfD:	EFSA
Year of evaluation:	2010	Year of evaluation:	2010

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
1

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
1.31	FR toddler	0.65	Carrots	0.40	Bananas	0.20	Tomatoes
1.25	WHO cluster diet B	0.82	Tomatoes	0.10	Lettuce	0.10	Bananas
1.07	NL child	0.53	Bananas	0.21	Table grapes	0.17	Tomatoes
1.00	SE (GP)	0.56	Bananas	0.23	Carrots	0.20	Tomatoes
0.99	FR infant	0.70	Carrots	0.22	Bananas	0.04	Tomatoes
0.95	DK child	0.36	Carrots	0.35	Bananas	0.14	Tomatoes
0.91	UK infant	0.45	Bananas	0.35	Carrots	0.10	Tomatoes
0.75	ES child	0.31	Bananas	0.26	Tomatoes	0.12	Lettuce
0.73	IT child/toddler	0.38	Tomatoes	0.17	Bananas	0.08	Lettuce
0.70	UK toddler	0.33	Bananas	0.16	Tomatoes	0.14	Carrots
0.67	WHO regional diet	0.29	Tomatoes	0.12	Bananas	0.11	Lettuce
0.60	WHO Cluster diet F	0.18	Tomatoes	0.17	Bananas	0.13	Carrots
0.60	IE adult	0.24	Bananas	0.11	Tomatoes	0.09	Carrots
0.60	PT (GP)	0.24	Tomatoes	0.18	Carrots	0.10	Bananas
0.58	IT adult	0.31	Tomatoes	0.11	Lettuce	0.06	Bananas
0.53	ES adult	0.21	Tomatoes	0.15	Lettuce	0.11	Bananas
0.47	PL (GP)	0.23	Tomatoes	0.09	Table grapes	0.08	Carrots
0.44	WHO cluster diet E	0.14	Tomatoes	0.12	Carrots	0.11	Bananas
0.43	WHO cluster diet D	0.27	Tomatoes	0.06	Carrots	0.05	Table grapes
0.41	UK vegetarian	0.16	Tomatoes	0.12	Bananas	0.06	Carrots
0.37	DK adult	0.12	Carrots	0.12	Bananas	0.11	Tomatoes
0.37	NL (GP)	0.11	Tomatoes	0.10	Bananas	0.06	Table grapes
0.33	FR (GP)	0.11	Tomatoes	0.08	Carrots	0.08	Bananas
0.32	UK adult	0.12	Tomatoes	0.11	Bananas	0.05	Carrots
0.27	FI adult	0.11	Tomatoes	0.08	Bananas	0.05	Carrots
0.26	LT adult	0.16	Tomatoes	0.05	Carrots	0.02	Bananas

## Acute risk assessment

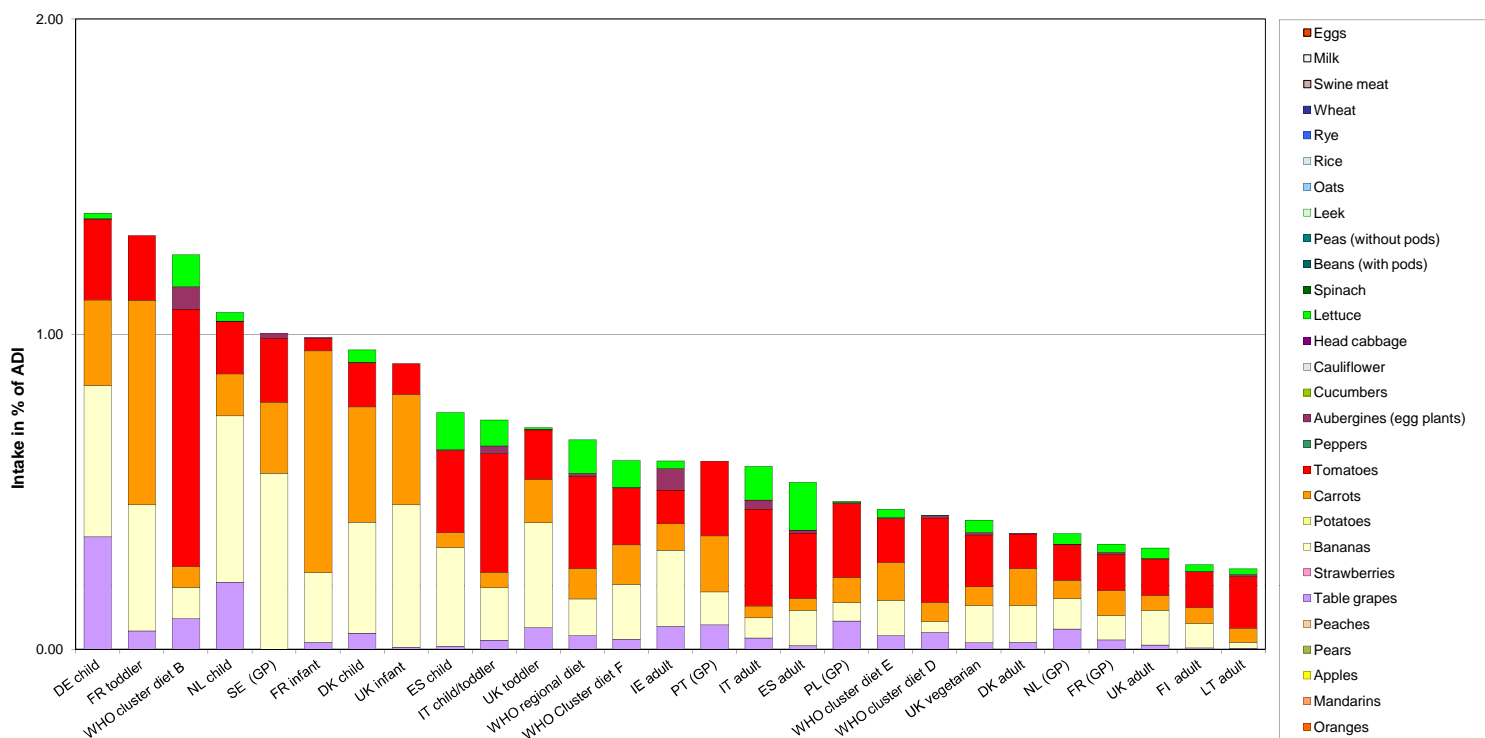
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.1	2478							
2010	Peaches	0.1	1238							
2010	Strawberries	0.3	2057							
2010	Tomatoes	0.3	1920	0.21		0.18		41.87	BE child	
2010	Head cabbage	0.1	1006	0.20		0.02		3.58	NL child	
2010	Lettuce	0.1	1945	0.05	0.10	0.44		47.35	DE child	
2010	Leek	0.1	829							
2010	Oats	0.01	120							
2010	Rye	0.01	365							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

c) TRL: toxicological threshold level

## Chronic risk assessment: Dicloran



**Dicloran**

Acute exposure: Dicloran / Apples



Intake in % of the ARfD

Acute exposure: Dicloran / Peaches



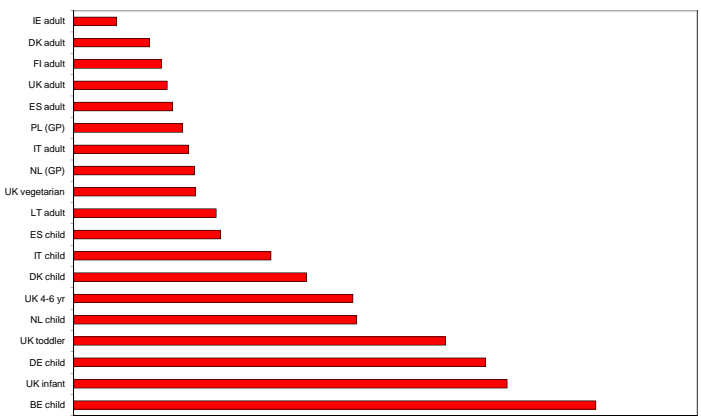
Intake in % of the ARfD

Acute exposure: Dicloran / Strawberries



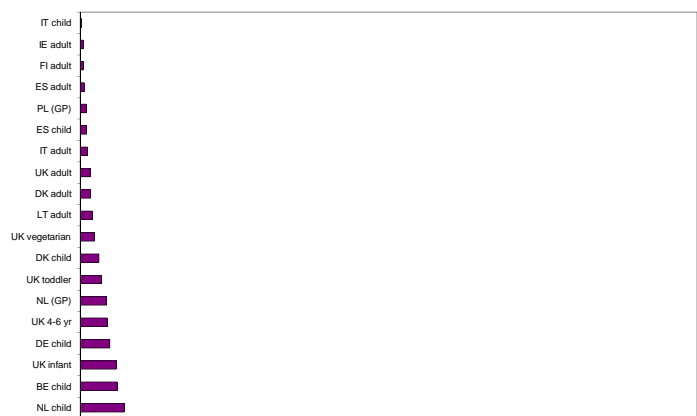
Intake in % of the ARfD

Acute exposure: Dicloran / Tomatoes



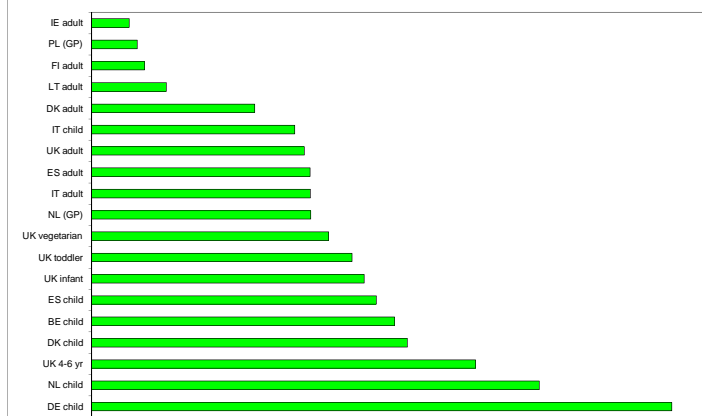
Intake in % of the ARfD

Acute exposure: Dicloran / Head cabbage



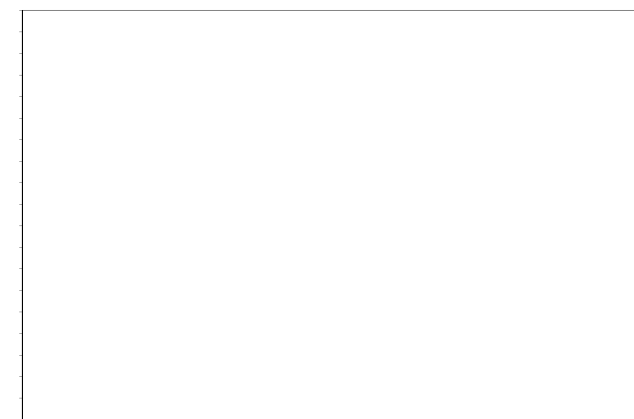
Intake in % of the ARfD

Acute exposure: Dicloran / Lettuce



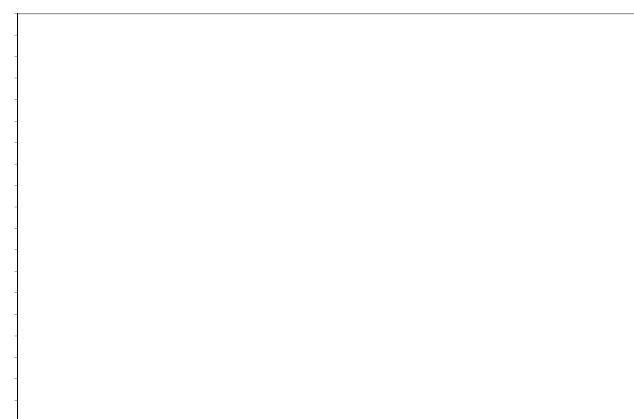
Intake in % of the ARfD

Acute exposure: Dicloran / Leek



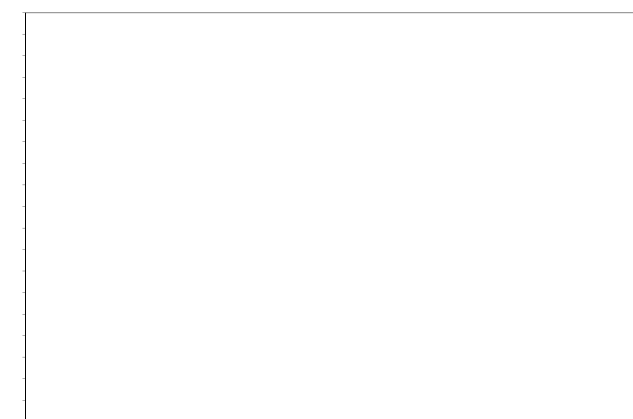
Intake in % of the ARfD

Acute exposure: Dicloran / Oats



Intake in % of the ARfD

Acute exposure: Dicloran / Rye



Intake in % of the ARfD

Dicofol			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.002	ARfD (mg/kg bw):	0.2
Source of ADI:	JMPR	Source of ARfD:	JMPR
Year of evaluation:	1992	Year of evaluation:	2011

**Chronic risk assessment**

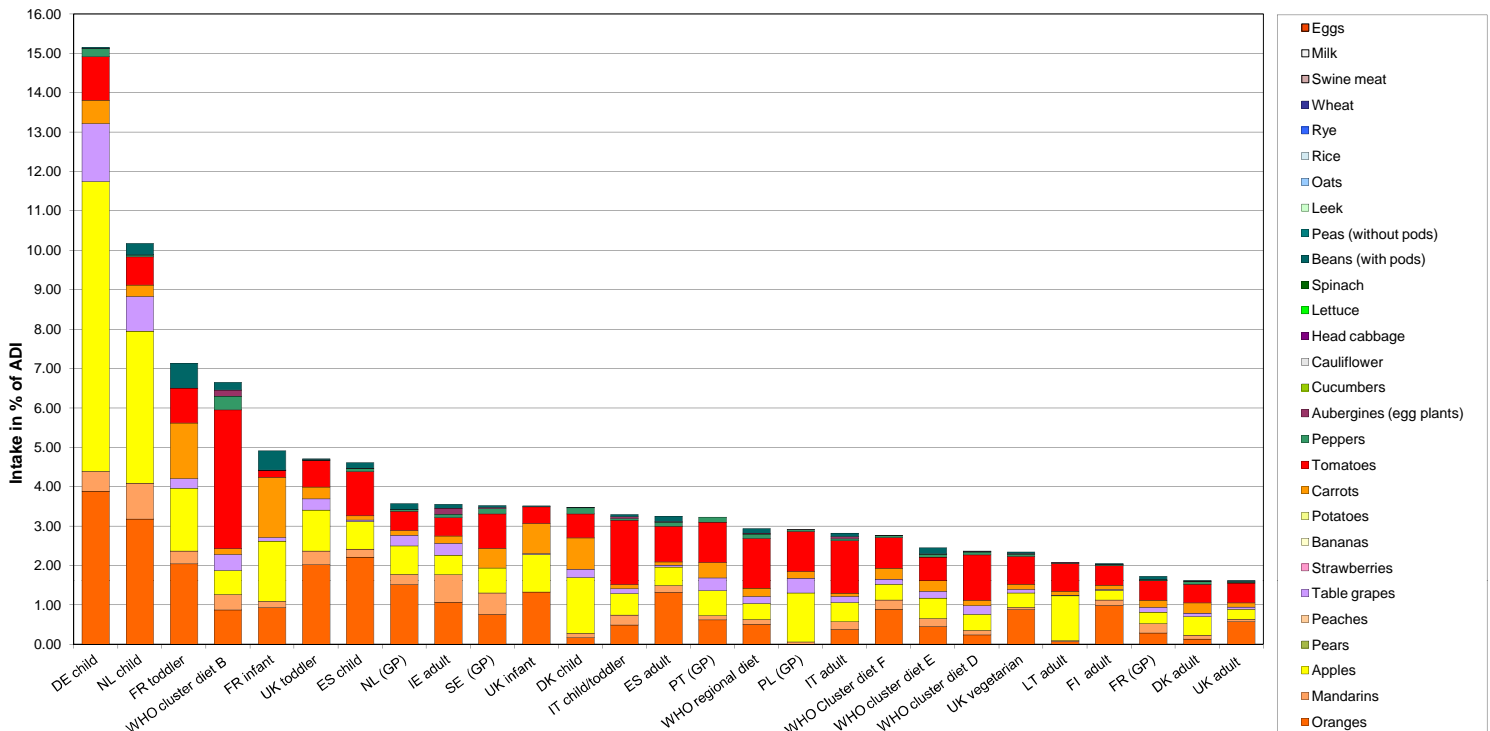
		Exposure (range) in % of ADI minimum - maximum					
		2	15				
No of diets exceeding ADI:		---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
15.16	DE child	7.36	Apples	3.89	Oranges	1.47	Table grapes
10.18	NL child	3.86	Apples	3.19	Oranges	0.91	Mandarins
7.14	FR toddler	2.04	Oranges	1.60	Apples	1.41	Carrots
6.65	WHO cluster diet B	3.53	Tomatoes	0.87	Oranges	0.61	Apples
4.91	FR infant	1.53	Carrots	1.52	Apples	0.93	Oranges
4.71	UK toddler	2.02	Oranges	1.04	Apples	0.67	Tomatoes
4.61	ES child	2.22	Oranges	1.12	Tomatoes	0.70	Apples
3.58	NL (GP)	1.52	Oranges	0.72	Apples	0.49	Tomatoes
3.56	IE adult	1.07	Oranges	0.70	Mandarins	0.50	Apples
3.52	SE (GP)	0.88	Tomatoes	0.76	Oranges	0.64	Apples
3.52	UK infant	1.33	Oranges	0.95	Apples	0.76	Carrots
3.47	DK child	1.42	Apples	0.79	Carrots	0.61	Tomatoes
3.30	IT child/toddler	1.63	Tomatoes	0.54	Apples	0.49	Oranges
3.26	ES adult	1.32	Oranges	0.90	Tomatoes	0.47	Apples
3.23	PT (GP)	1.02	Tomatoes	0.64	Apples	0.63	Oranges
2.94	WHO regional diet	1.26	Tomatoes	0.51	Oranges	0.41	Apples
2.92	PL (GP)	1.25	Apples	1.01	Tomatoes	0.37	Table grapes
2.83	IT adult	1.33	Tomatoes	0.48	Apples	0.38	Oranges
2.76	WHO Cluster diet F	0.89	Oranges	0.78	Tomatoes	0.40	Apples
2.46	WHO cluster diet E	0.60	Tomatoes	0.52	Apples	0.45	Oranges
2.37	WHO cluster diet D	1.16	Tomatoes	0.41	Apples	0.25	Oranges
2.34	UK vegetarian	0.89	Oranges	0.71	Tomatoes	0.36	Apples
2.08	LT adult	1.14	Apples	0.71	Tomatoes	0.10	Carrots
2.06	FI adult	0.99	Oranges	0.49	Tomatoes	0.25	Apples
1.73	FR (GP)	0.50	Tomatoes	0.29	Oranges	0.29	Apples
1.62	DK adult	0.48	Apples	0.47	Tomatoes	0.26	Carrots
1.61	UK adult	0.57	Oranges	0.50	Tomatoes	0.25	Apples

**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.02	2502	0.04	0.12	0.16		7.64	UK infant	
2010	Peaches	0.02	1226							
2010	Strawberries	0.02	1901							
2010	Tomatoes	1	1968	0.25		0.05		1.45	BE child	
2010	Head cabbage	0.02	913							
2010	Lettuce	0.02	2041							
2010	Leek	0.02	830							
2010	Oats	0.02	155							
2010	Rye	0.02	350							
2010	Swine Meat									
2010	Milk									

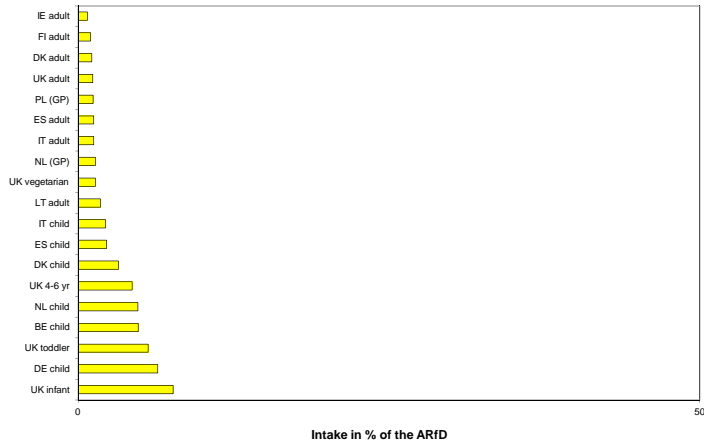
a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Dicofol**

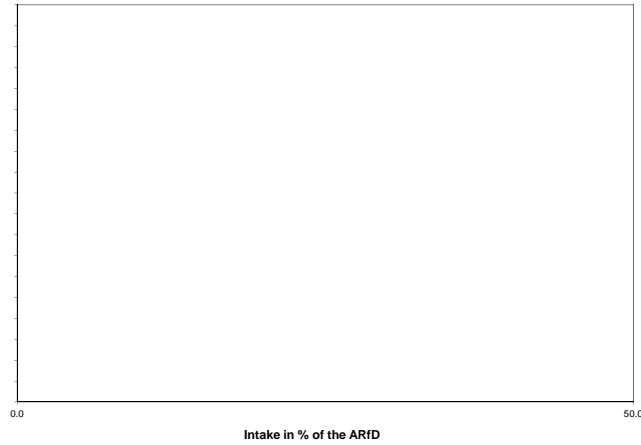


**Dicofol**

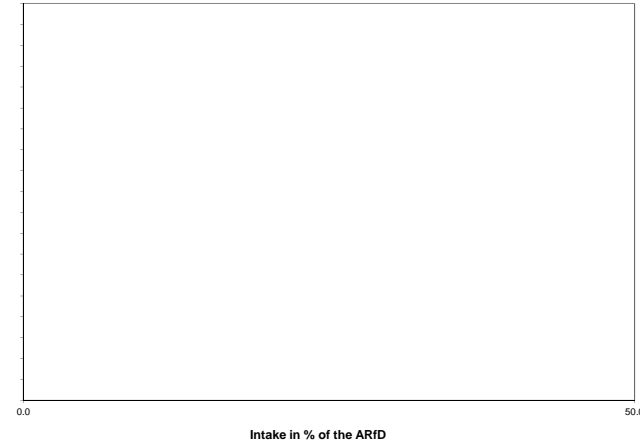
**Acute exposure: Dicofol / Apples**



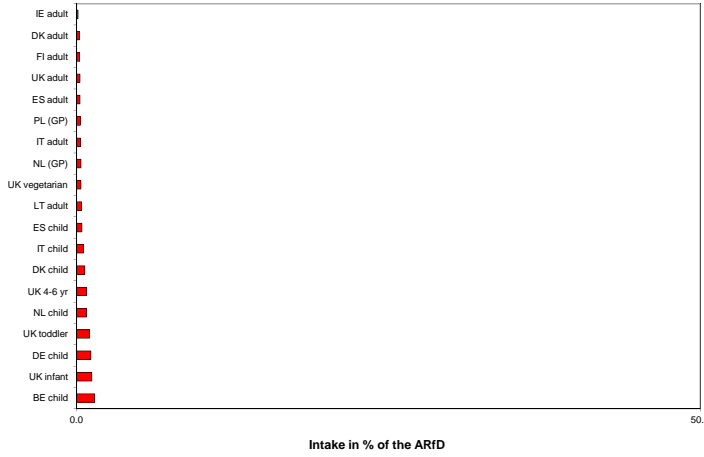
**Acute exposure: Dicofol / Peaches**



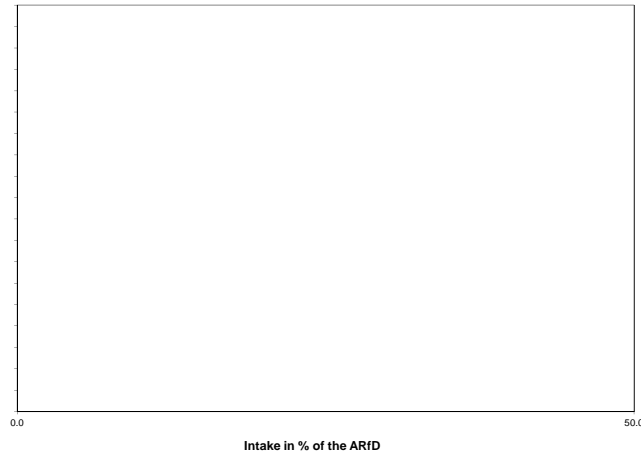
**Acute exposure: Dicofol / Strawberries**



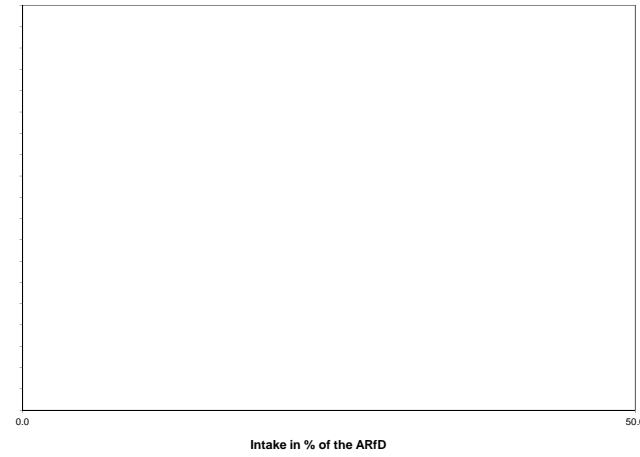
**Acute exposure: Dicofol / Tomatoes**



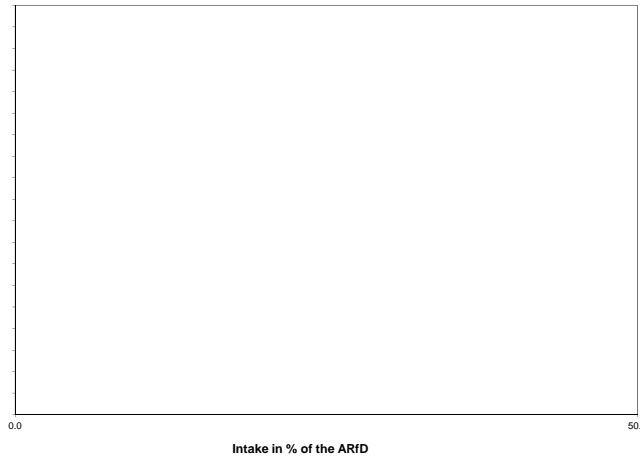
**Acute exposure: Dicofol / Head cabbage**



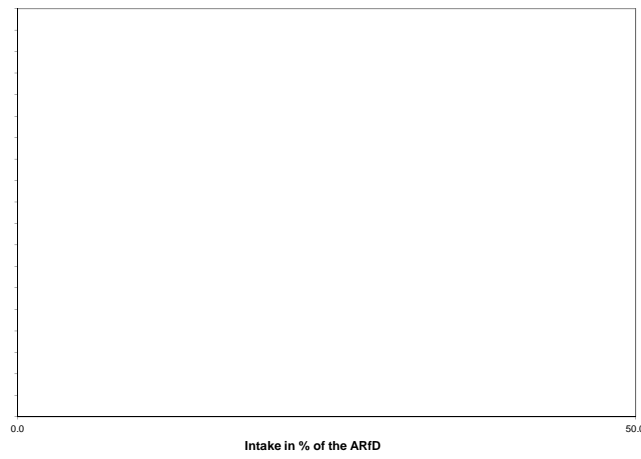
**Acute exposure: Dicofol / Lettuce**



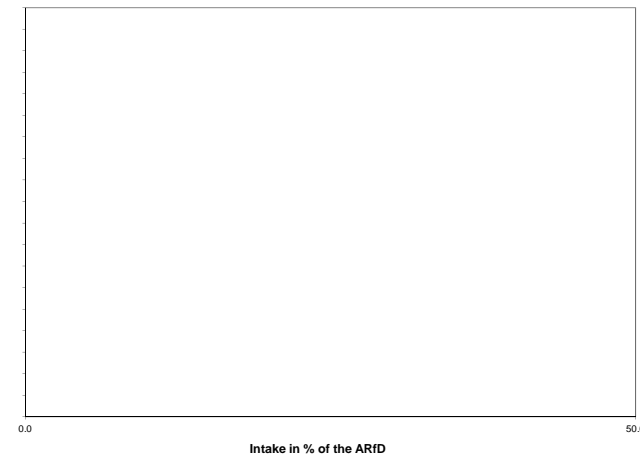
**Acute exposure: Dicofol / Leek**



**Acute exposure: Dicofol / Oats**



**Acute exposure: Dicofol / Rye**



## Difenoconazole

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.01</b>	ARfD (mg/kg bw):	<b>0.2</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2008</b>	Year of evaluation:	<b>2008</b>

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum						
		2						
		<b>No of diets exceeding ADI:</b>		---				
	Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
	2.44	DE child	1.52	Apples	0.17	Table grapes	0.15	Tomatoes
	1.56	NL child	0.80	Apples	0.10	Table grapes	0.09	Tomatoes
	1.32	FR toddler	0.33	Apples	0.31	Carrots	0.12	Beans (with pods)
	1.18	WHO cluster diet B	0.46	Tomatoes	0.13	Apples	0.09	Peaches
	1.06	FR infant	0.34	Carrots	0.31	Apples	0.09	Beans (with pods)
	1.01	DK child	0.29	Apples	0.22	Cucumbers	0.18	Carrots
	0.74	SE (GP)	0.13	Apples	0.12	Tomatoes	0.11	Carrots
	0.72	IE adult	0.13	Peaches	0.10	Apples	0.09	Pears
	0.66	PT (GP)	0.13	Tomatoes	0.13	Apples	0.10	Rice
	0.65	ES child	0.15	Tomatoes	0.14	Apples	0.06	Lettuce
	0.63	IT child/toddler	0.21	Tomatoes	0.11	Apples	0.08	Peaches
	0.62	UK toddler	0.21	Apples	0.09	Tomatoes	0.07	Rice
	0.61	WHO regional diet	0.17	Tomatoes	0.08	Apples	0.06	Lettuce
	0.61	PL (GP)	0.26	Apples	0.13	Tomatoes	0.05	Head cabbage
	0.60	UK infant	0.20	Apples	0.17	Carrots	0.08	Rice
	0.58	IT adult	0.18	Tomatoes	0.10	Apples	0.08	Peaches
	0.54	ES adult	0.12	Tomatoes	0.10	Apples	0.08	Lettuce
	0.52	LT adult	0.23	Apples	0.09	Tomatoes	0.05	Head cabbage
	0.51	NL (GP)	0.15	Apples	0.06	Tomatoes	0.03	Table grapes
	0.50	WHO cluster diet E	0.11	Apples	0.08	Tomatoes	0.06	Carrots
	0.47	WHO cluster diet D	0.15	Tomatoes	0.08	Apples	0.07	Rice
	0.46	WHO Cluster diet F	0.10	Tomatoes	0.08	Apples	0.06	Carrots
	0.37	DK adult	0.10	Apples	0.06	Tomatoes	0.06	Carrots
	0.37	UK vegetarian	0.09	Tomatoes	0.07	Apples	0.05	Rice
	0.35	FR (GP)	0.07	Tomatoes	0.06	Apples	0.04	Carrots
	0.27	UK adult	0.07	Tomatoes	0.05	Apples	0.05	Rice
	0.26	FI adult	0.06	Tomatoes	0.05	Apples	0.04	Cucumbers

### Acute risk assessment

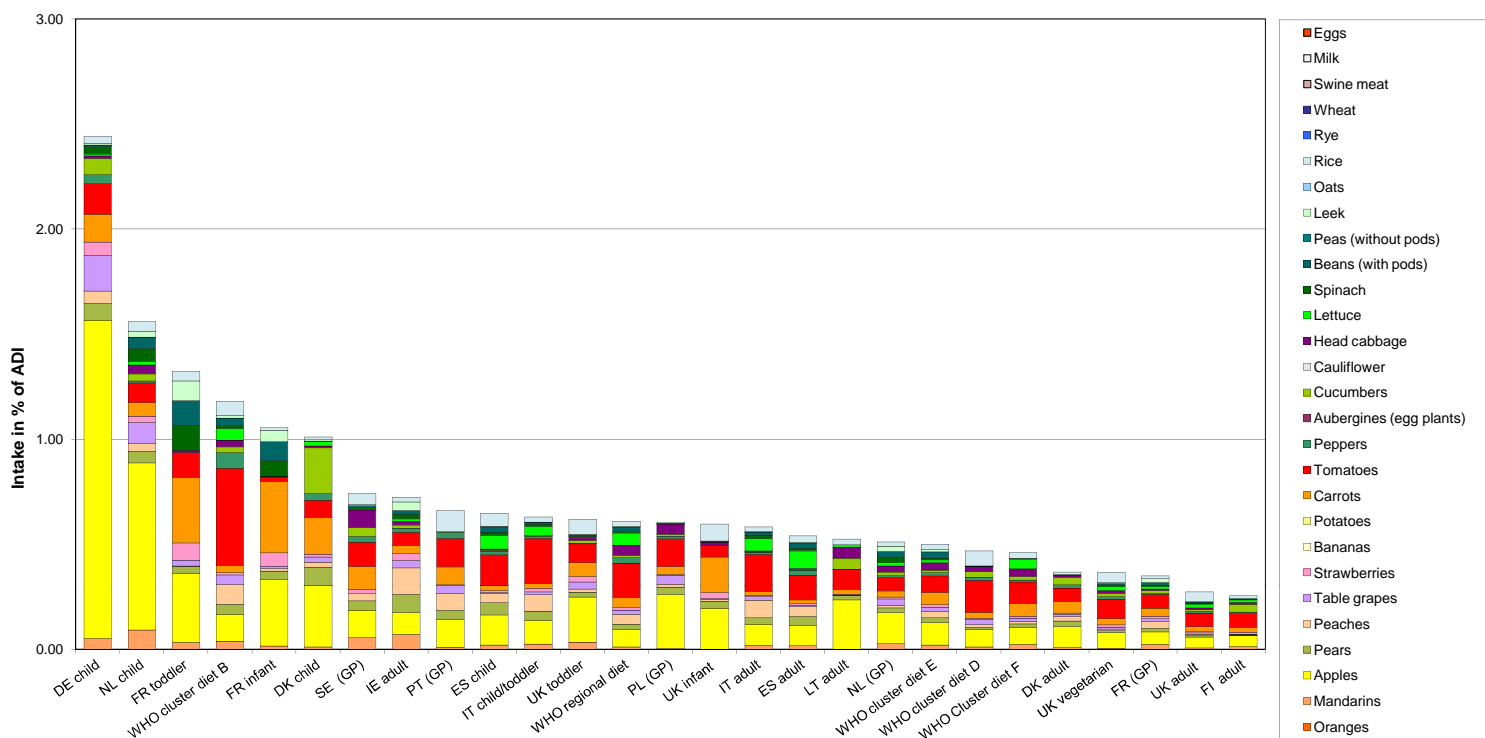
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.5	2915	1.78		0.08		3.92	UK infant	
2010	Peaches	0.5	1422	1.62		0.07		2.08	DE child	
2010	Strawberries	0.1	2223	0.27		0.02		0.19	DE child	
2010	Tomatoes	2	2364	1.06		0.77		22.39	BE child	
2010	Head cabbage	0.2	1176	1.45	0.09	0.38		10.00	NL child	
2010	Lettuce	3	2278	0.53	0.04	0.18		2.42	DE child	
2010	Leek	0.5	934	4.71		0.09		2.65	BE child	
2010	Oats	0.05	244							
2010	Rye	0.1	396							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

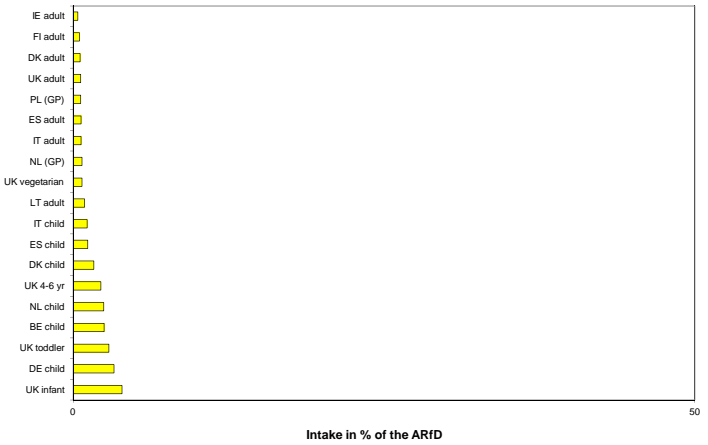
<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Difenoconazole

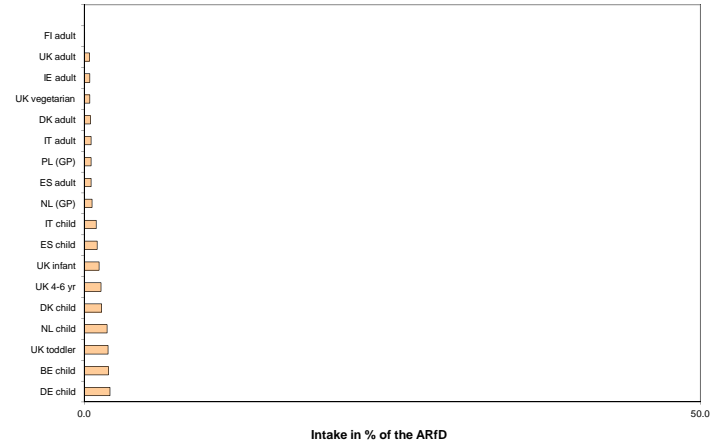


**Difenoconazole**

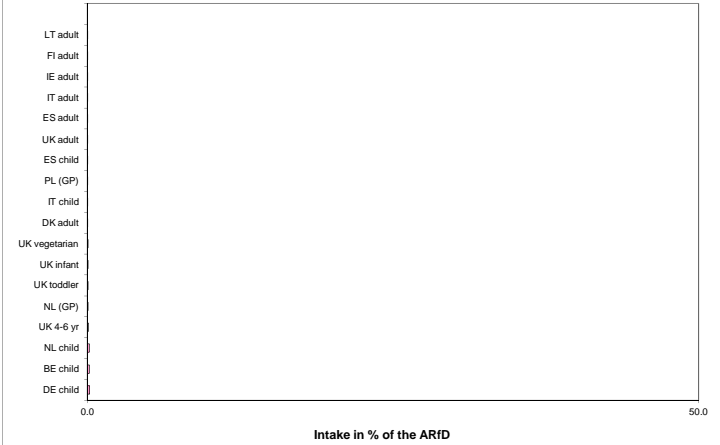
Acute exposure: Difenoconazole / Apples



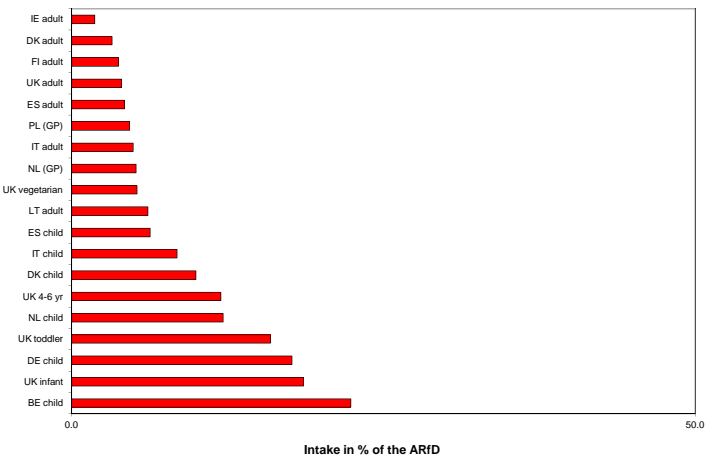
Acute exposure: Difenoconazole / Peaches



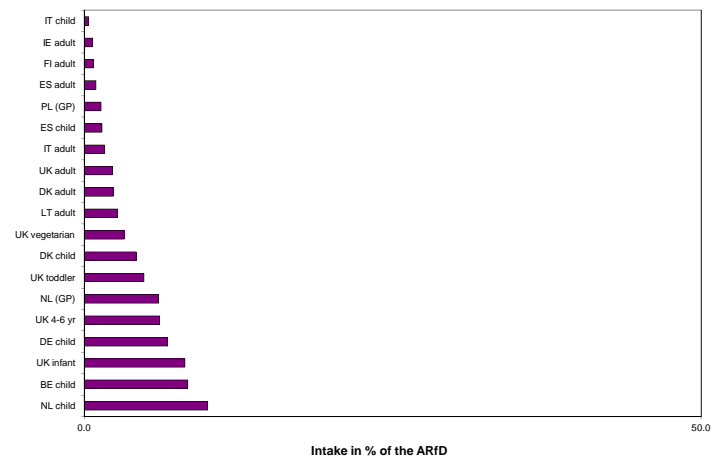
Acute exposure: Difenoconazole / Strawberries



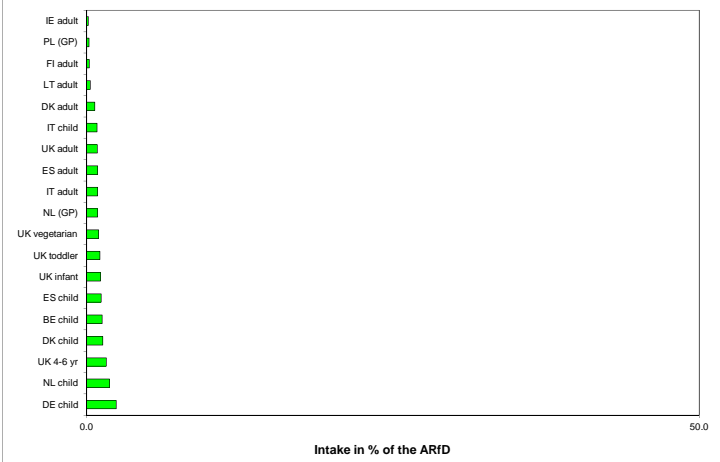
Acute exposure: Difenoconazole / Tomatoes



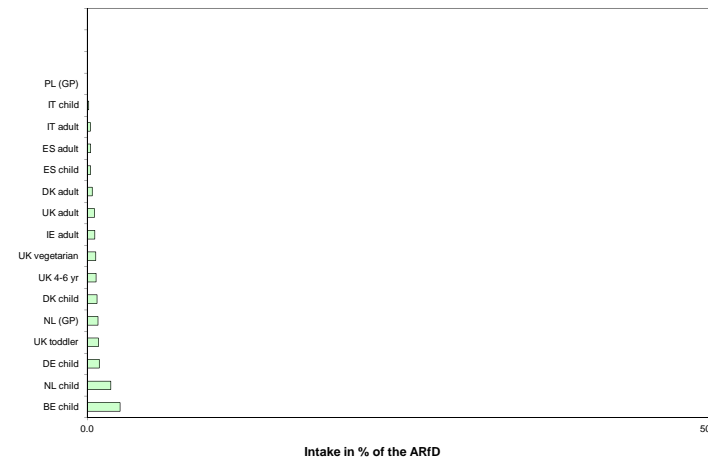
Acute exposure: Difenoconazole / Head cabbage



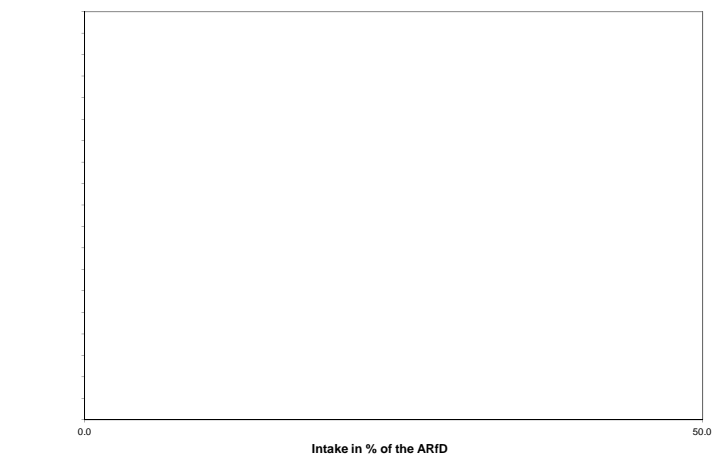
Acute exposure: Difenoconazole / Lettuce



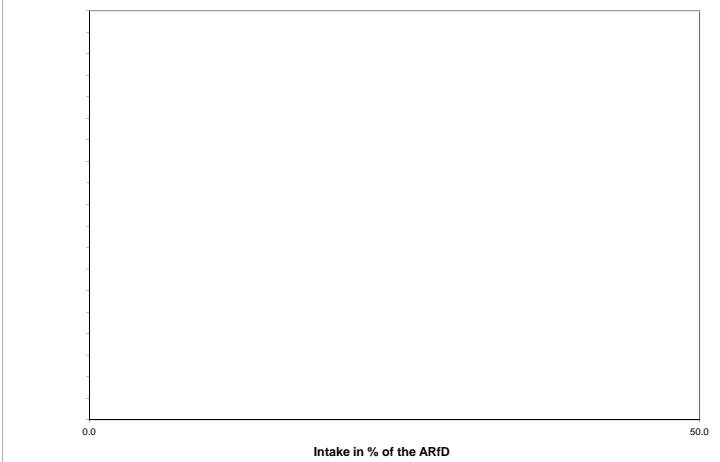
Acute exposure: Difenoconazole / Leek



Acute exposure: Difenoconazole / Oats



Acute exposure: Difenoconazole / Rye





Dimethoate- dimethoate scenario			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0,001	ARfD (mg/kg bw):	0,01
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2007	Year of evaluation:	2007

The chronic exposure assessment is based on the mean residue concentrations reported (results compliant with the residue definition), expressed in % of the ARfD set for dimethoate. For the acute exposure assessment the highest residue reported is considered to comprise only dimethoate.

**Chronic risk assessment**

		Exposure (range) in % of ADI minimum - maximum					
		3 26					
		No of diets exceeding ADI:		---			
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
26,17	DE child	13,61	Apples	4,01	Oranges	1,63	Bananas
18,55	NL child	7,14	Apples	3,28	Oranges	1,79	Bananas
14,04	FR toddler	2,96	Apples	2,44	Carrots	2,10	Oranges
10,39	FR infant	2,82	Apples	2,64	Carrots	1,03	Beans (with pods)
9,91	WHO cluster diet B	3,16	Tomatoes	1,14	Apples	0,90	Oranges
9,39	DK child	2,62	Apples	1,68	Cucumbers	1,37	Carrots
8,31	SE (GP)	1,90	Bananas	1,18	Apples	0,85	Carrots
8,07	ES child	2,28	Oranges	1,29	Apples	1,06	Bananas
8,06	UK toddler	2,08	Oranges	1,92	Apples	1,13	Bananas
7,96	UK infant	1,76	Apples	1,54	Bananas	1,37	Oranges
7,68	IE adult	1,10	Oranges	0,93	Apples	0,82	Bananas
6,15	NL (GP)	1,56	Oranges	1,33	Apples	0,44	Tomatoes
5,87	ES adult	1,36	Oranges	0,87	Apples	0,80	Tomatoes
5,86	IT child/toddler	1,46	Tomatoes	1,00	Apples	0,56	Bananas
5,83	WHO regional diet	1,13	Tomatoes	0,75	Apples	0,52	Oranges
5,44	PT (GP)	1,18	Apples	0,92	Tomatoes	0,67	Carrots
5,16	PL (GP)	2,30	Apples	0,91	Tomatoes	0,38	Head cabbage
5,05	IT adult	1,19	Tomatoes	0,90	Apples	0,47	Lettuce
4,93	WHO Cluster diet F	0,92	Oranges	0,74	Apples	0,70	Tomatoes
4,76	WHO cluster diet E	0,95	Apples	0,54	Tomatoes	0,47	Oranges
4,27	LT adult	2,11	Apples	0,64	Tomatoes	0,42	Head cabbage
4,05	UK vegetarian	0,91	Oranges	0,67	Apples	0,64	Tomatoes
3,47	DK adult	0,89	Apples	0,44	Carrots	0,42	Tomatoes
3,45	WHO cluster diet D	1,04	Tomatoes	0,75	Apples	0,25	Oranges
3,21	FI adult	1,02	Oranges	0,45	Apples	0,44	Tomatoes
3,19	FR (GP)	0,54	Apples	0,44	Tomatoes	0,30	Oranges
2,92	UK adult	0,59	Oranges	0,46	Apples	0,45	Tomatoes

**Acute risk assessment**

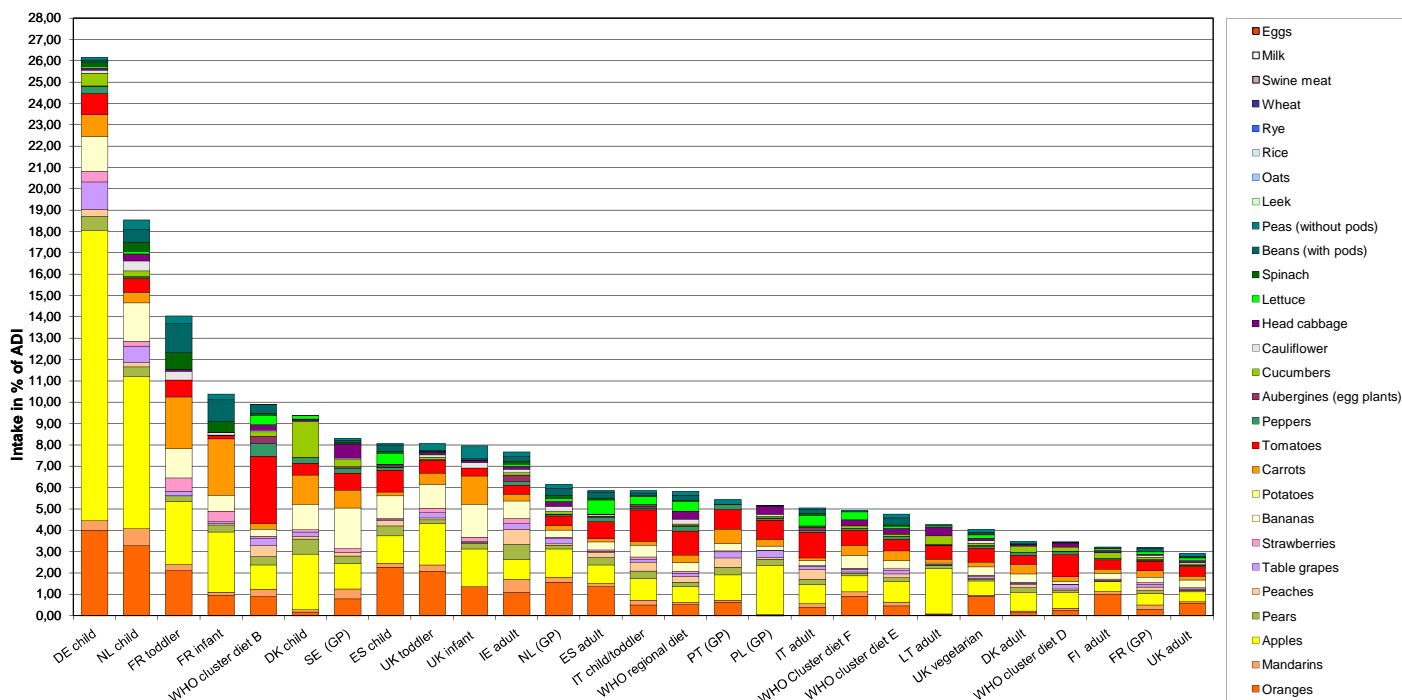
Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0,02	2719	0,33	0,15	1,20	1	1175,59	UK infant	
2010	Peaches	0,02	1256	0,08	0,16	1,27	2	753,51	DE child	
2010	Strawberries	0,02	2105	0,19	0,05	0,03		5,15	DE child	
2010	Tomatoes	0,02	2244	0,36	0,04	0,04		25,88	BE child	
2010	Head cabbage	1	1057	0,38	0,19	0,09		46,84	NL child	
2010	Lettuce	0,02	2139	1,78	0,37	0,70	2	188,33	DE child	
2010	Leek	0,02	778							
2010	Oats	0,02	171							
2010	Rye	0,05	427							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

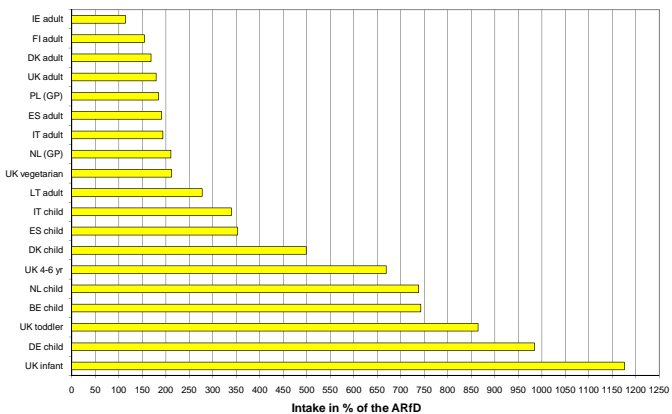
c) TRL: toxicological threshold level

**Chronic risk assessment: Dimethoate- dimethoate scenario**

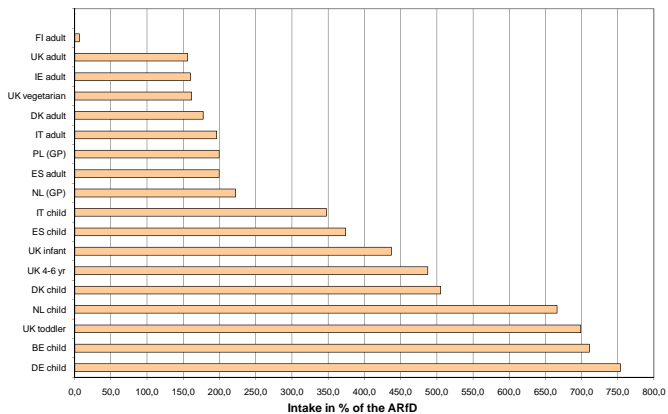


Dimethoate- dimethoate scenario

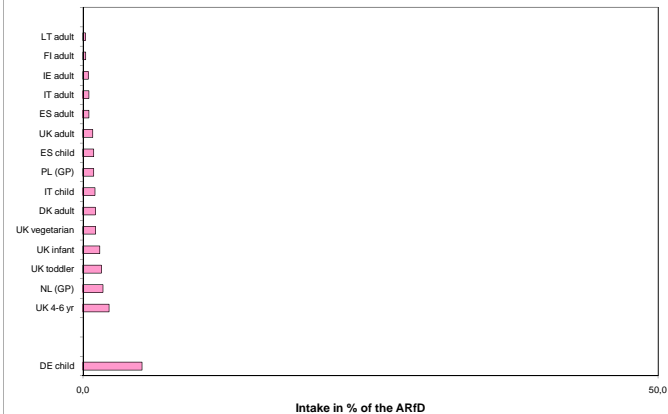
Acute exposure: Dimethoate- dimethoate scenario / Apples



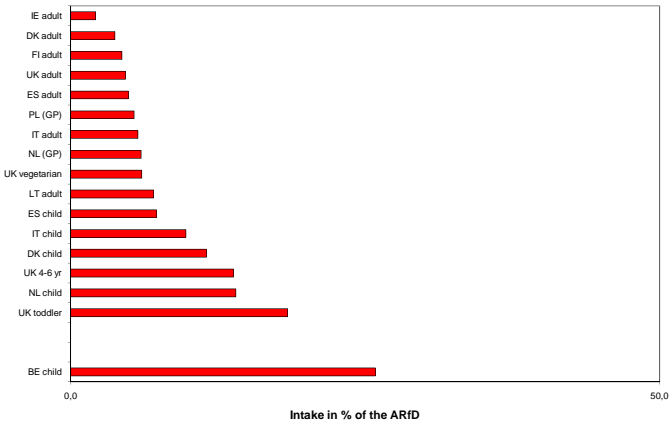
Acute exposure: Dimethoate- dimethoate scenario / Peaches



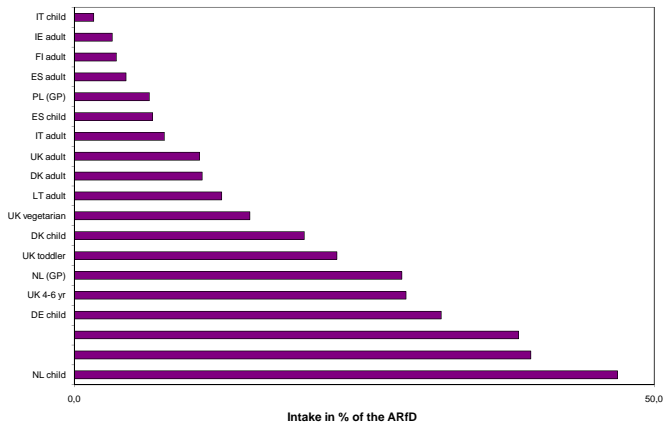
Acute exposure: Dimethoate- dimethoate scenario / Strawberries



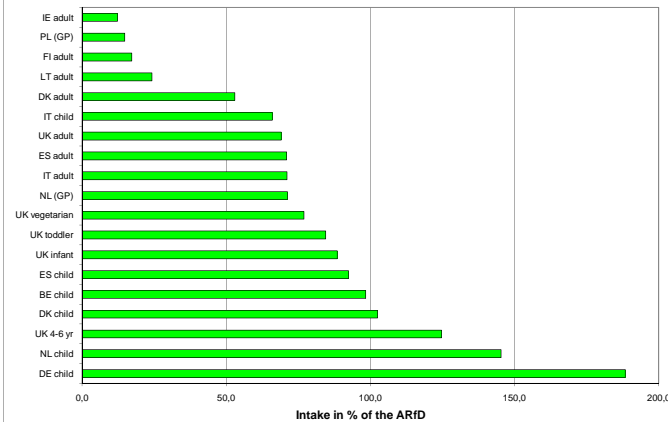
Acute exposure: Dimethoate- dimethoate scenario / Tomatoes



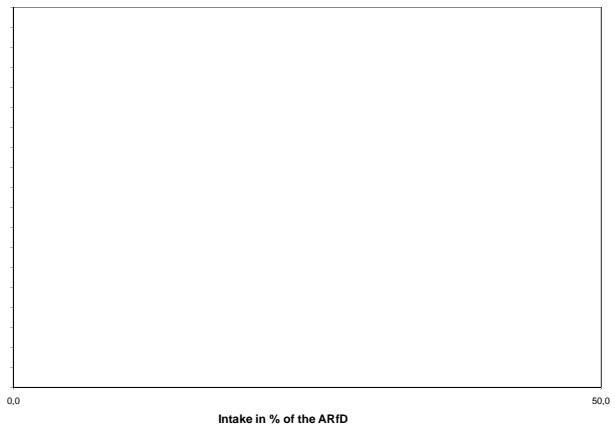
Acute exposure: Dimethoate- dimethoate scenario / Head cabbage



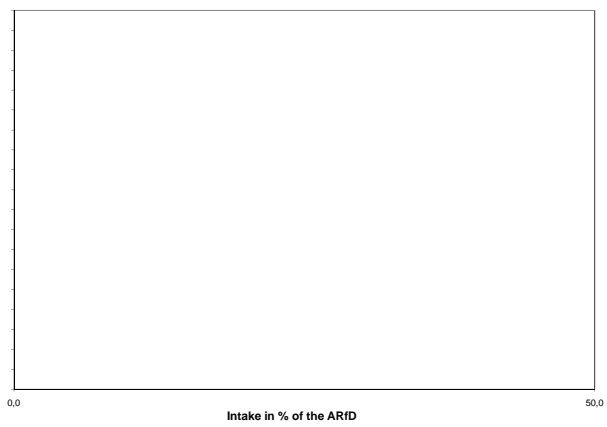
Acute exposure: Dimethoate- dimethoate scenario / Lettuce



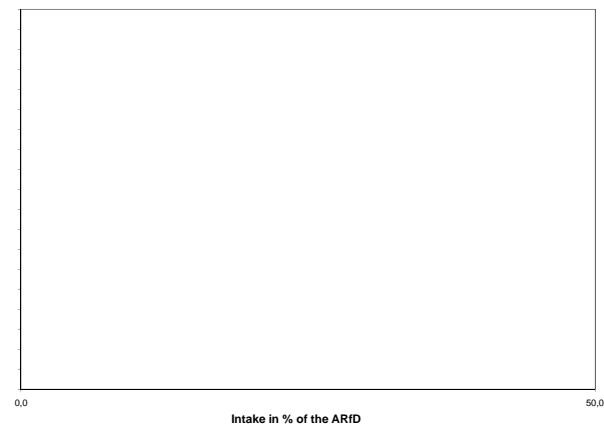
Acute exposure: Dimethoate- dimethoate scenario / Leek



Acute exposure: Dimethoate- dimethoate scenario / Oats



Acute exposure: Dimethoate- dimethoate scenario / Rye



### Dimethoate-omethoate scenario

Status of the active substance:	<b>Excluded</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.0003</b>	ARfD (mg/kg bw):	<b>0.002</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2007</b>	Year of evaluation:	<b>2007</b>

See also dimethoate

#### Chronic risk assessment

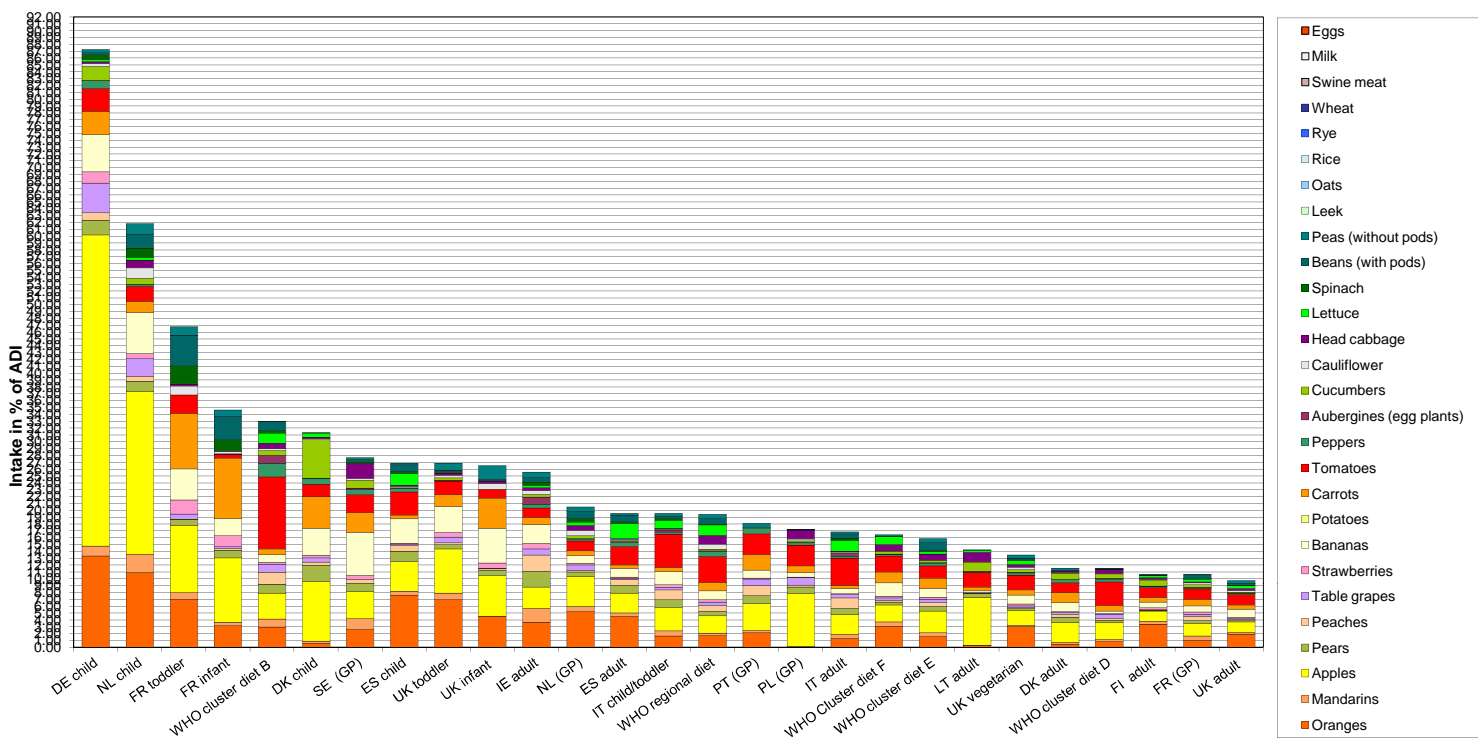
		Exposure (range) in % of ADI minimum - maximum						
		10	87					
<b>No of diets exceeding ADI: ---</b>								
	Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
	87.24	DE child	45.36	Apples	13.36	Oranges	5.43	Bananas
	61.82	NL child	23.80	Apples	10.93	Oranges	5.98	Bananas
	46.81	FR toddler	9.86	Apples	8.14	Carrots	7.01	Oranges
	34.64	FR infant	9.40	Apples	8.82	Carrots	3.43	Beans (with pods)
	33.02	WHO cluster diet B	10.53	Tomatoes	3.79	Apples	2.99	Oranges
	31.30	DK child	8.73	Apples	5.61	Cucumbers	4.57	Carrots
	27.71	SE (GP)	6.34	Bananas	3.95	Apples	2.82	Carrots
	26.90	ES child	7.60	Oranges	4.29	Apples	3.55	Bananas
	26.88	UK toddler	6.94	Oranges	6.41	Apples	3.77	Bananas
	26.52	UK infant	5.88	Apples	5.12	Bananas	4.56	Oranges
	25.59	IE adult	3.66	Oranges	3.09	Apples	2.73	Bananas
	20.52	NL (GP)	5.22	Oranges	4.44	Apples	1.46	Tomatoes
	19.56	ES adult	4.53	Oranges	2.89	Apples	2.68	Tomatoes
	19.55	IT child/toddler	4.87	Tomatoes	3.33	Apples	1.88	Bananas
	19.42	WHO regional diet	3.76	Tomatoes	2.51	Apples	1.74	Oranges
	18.12	PT (GP)	3.95	Apples	3.06	Tomatoes	2.22	Carrots
	17.21	PL (GP)	7.68	Apples	3.02	Tomatoes	1.28	Head cabbage
	16.83	IT adult	3.98	Tomatoes	2.98	Apples	1.55	Lettuce
	16.44	WHO Cluster diet F	3.05	Oranges	2.47	Apples	2.33	Tomatoes
	15.86	WHO cluster diet E	3.18	Apples	1.80	Tomatoes	1.56	Oranges
	14.23	LT adult	7.02	Apples	2.12	Tomatoes	1.40	Head cabbage
	13.51	UK vegetarian	3.04	Oranges	2.23	Apples	2.13	Tomatoes
	11.57	DK adult	2.95	Apples	1.48	Carrots	1.41	Tomatoes
	11.51	WHO cluster diet D	3.46	Tomatoes	2.50	Apples	0.84	Oranges
	10.71	FI adult	3.40	Oranges	1.52	Apples	1.46	Tomatoes
	10.63	FR (GP)	1.79	Apples	1.48	Tomatoes	1.01	Oranges
	9.74	UK adult	1.97	Oranges	1.54	Apples	1.49	Tomatoes

#### Acute risk assessment

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.02	2719	0.33	0.15	1.20	5	5877.93	UK infant	
2010	Peaches	0.02	1256	0.08	0.16	1.27	2	3767.54	DE child	
2010	Strawberries	0.02	2105	0.19	0.05	0.03		25.73	DE child	
2010	Tomatoes	0.02	2244	0.36	0.04	0.04	1	129.38	BE child	
2010	Head cabbage	1	1057	0.38	0.19	0.09	2	234.21	NL child	
2010	Lettuce	0.02	2139	1.78	0.37	0.70	13	941.64	DE child	
2010	Leek	0.02	778							
2010	Oats	0.02	171							
2010	Rye	0.05	427							
2010	Swine Meat									
2010	Milk									

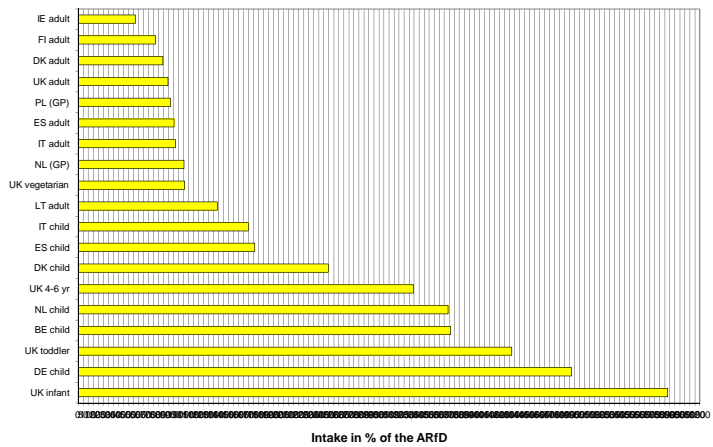
a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

#### Chronic risk assessment: Dimethoate-omethoate scenario

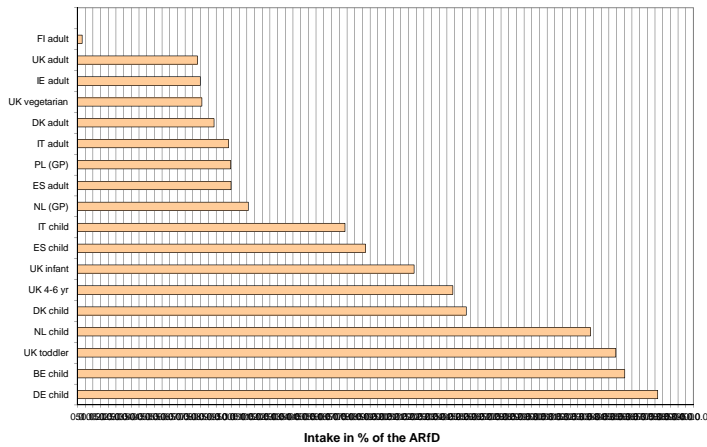


**Dimethoate-omethoate scenario**

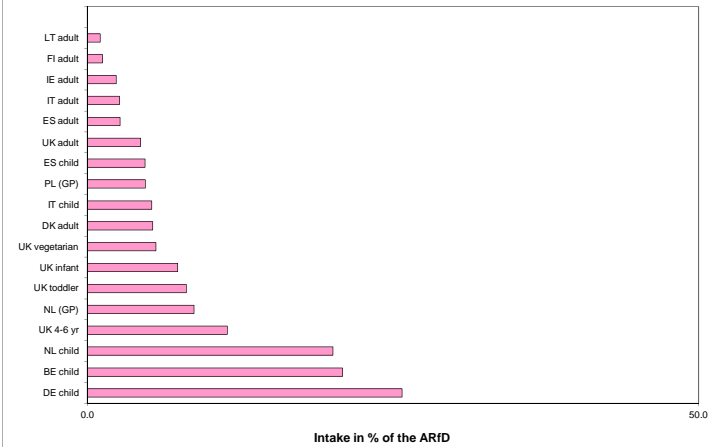
Acute exposure: Dimethoate-omethoate scenario / Apples



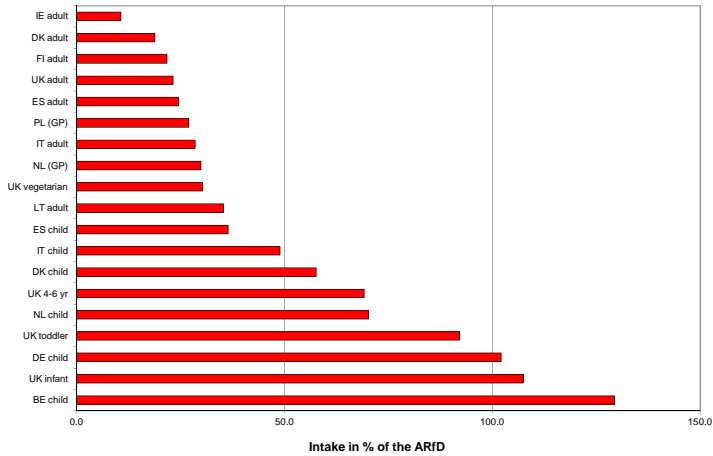
Acute exposure: Dimethoate-omethoate scenario / Peaches



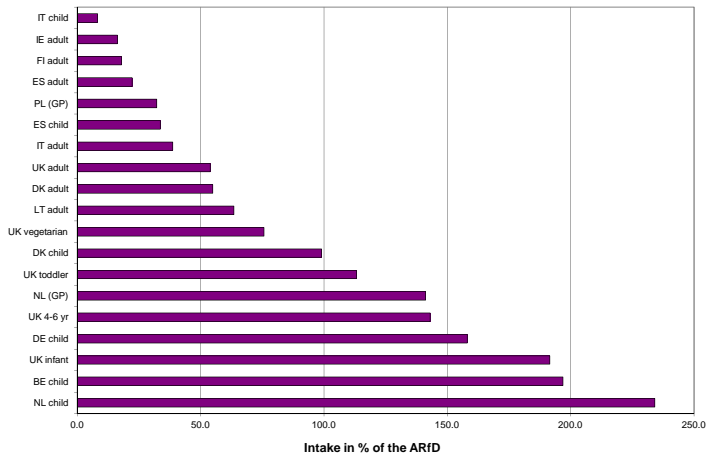
Acute exposure: Dimethoate-omethoate scenario / Strawberries



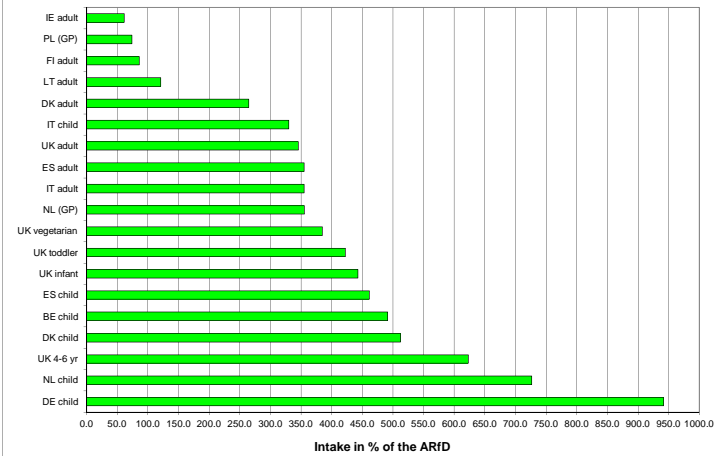
Acute exposure: Dimethoate-omethoate scenario / Tomatoes



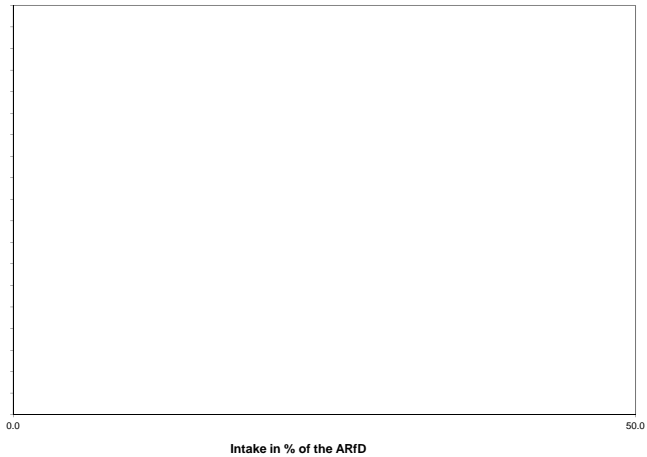
Acute exposure: Dimethoate-omethoate scenario / Head cabbage



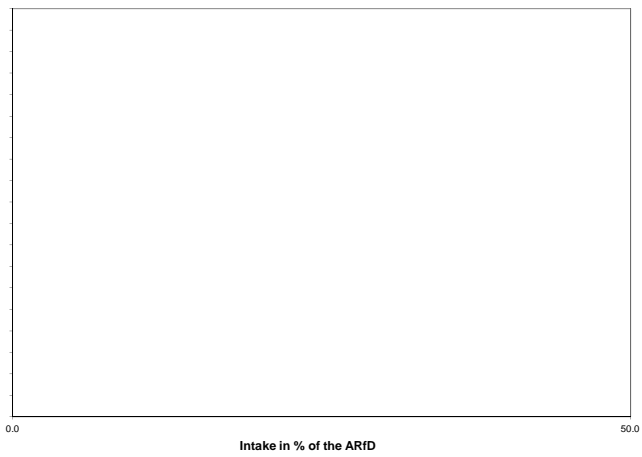
Acute exposure: Dimethoate-omethoate scenario / Lettuce



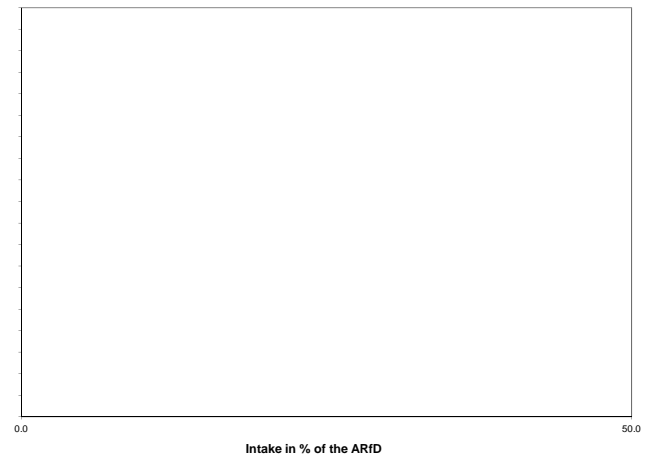
Acute exposure: Dimethoate-omethoate scenario / Leek



Acute exposure: Dimethoate-omethoate scenario / Oats



Acute exposure: Dimethoate-omethoate scenario / Rye



Dimethomorph			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.05	ARfD (mg/kg bw):	0.6
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2007	Year of evaluation:	2007

**Chronic risk assessment**

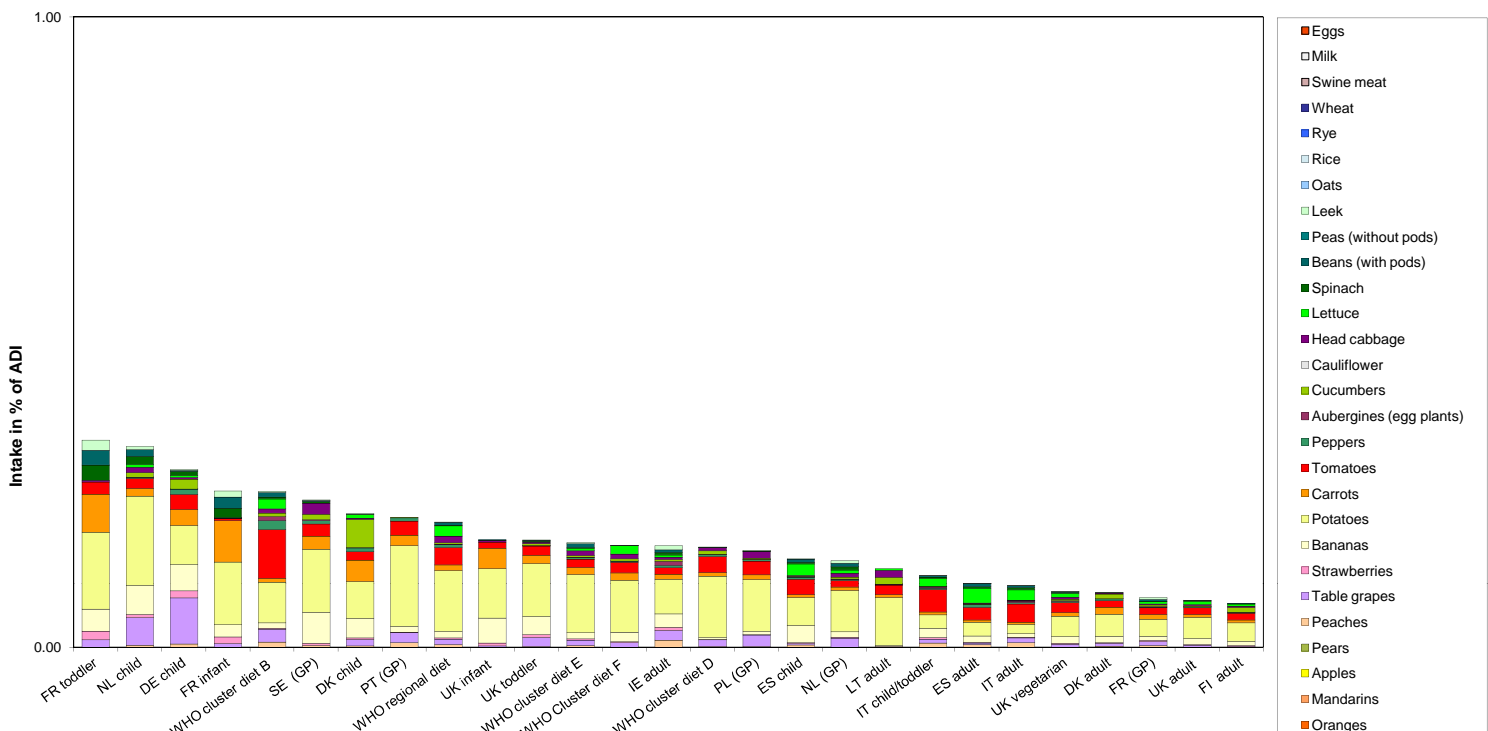
		Exposure (range) in % of ADI minimum - maximum					
		No of diets exceeding ADI: ---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.33	FR toddler	0.12	Potatoes	0.06	Carrots	0.04	Bananas
0.32	NL child	0.14	Potatoes	0.05	Bananas	0.04	Table grapes
0.28	DE child	0.07	Table grapes	0.06	Potatoes	0.04	Bananas
0.25	FR infant	0.10	Potatoes	0.07	Carrots	0.02	Bananas
0.25	WHO cluster diet B	0.08	Tomatoes	0.06	Potatoes	0.02	Table grapes
0.23	SE (GP)	0.10	Potatoes	0.05	Bananas	0.02	Carrots
0.21	DK child	0.06	Potatoes	0.04	Cucumbers	0.03	Carrots
0.21	PT (GP)	0.13	Potatoes	0.02	Tomatoes	0.02	Carrots
0.20	WHO regional diet	0.10	Potatoes	0.03	Tomatoes	0.02	Lettuce
0.17	UK infant	0.08	Potatoes	0.04	Bananas	0.03	Carrots
0.17	UK toddler	0.08	Potatoes	0.03	Bananas	0.01	Tomatoes
0.17	WHO cluster diet E	0.09	Potatoes	0.01	Tomatoes	0.01	Carrots
0.16	WHO Cluster diet F	0.08	Potatoes	0.02	Tomatoes	0.02	Bananas
0.16	IE adult	0.05	Potatoes	0.02	Bananas	0.01	Table grapes
0.16	WHO cluster diet D	0.10	Potatoes	0.03	Tomatoes	0.01	Table grapes
0.15	PL (GP)	0.08	Potatoes	0.02	Tomatoes	0.02	Table grapes
0.14	ES child	0.04	Potatoes	0.03	Bananas	0.02	Tomatoes
0.14	NL (GP)	0.07	Potatoes	0.01	Table grapes	0.01	Tomatoes
0.13	LT adult	0.08	Potatoes	0.02	Tomatoes	0.01	Head cabbage
0.11	IT child/toddler	0.04	Tomatoes	0.02	Potatoes	0.01	Bananas
0.10	ES adult	0.02	Lettuce	0.02	Potatoes	0.02	Tomatoes
0.10	IT adult	0.03	Tomatoes	0.02	Lettuce	0.01	Potatoes
0.09	UK vegetarian	0.03	Potatoes	0.02	Tomatoes	0.01	Bananas
0.09	DK adult	0.03	Potatoes	0.01	Carrots	0.01	Tomatoes
0.08	FR (GP)	0.03	Potatoes	0.01	Tomatoes	0.01	Carrots
0.08	UK adult	0.03	Potatoes	0.01	Tomatoes	0.01	Bananas
0.07	FI adult	0.03	Potatoes	0.01	Tomatoes	0.01	Cucumbers

**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	2564	0.04		0.05		0.82	UK infant	
2010	Peaches	0.05	1298	0.23		0.01		0.10	DE child	
2010	Strawberries	0.05	2048	0.83	0.05	0.06		0.17	DE child	
2010	Tomatoes	1	2039	2.21		0.27		2.62	BE child	
2010	Head cabbage	0.05	1059	0.09	0.28	1.60		14.04	NL child	
2010	Lettuce	10	2116	8.03		10.00		44.84	DE child	
2010	Leek	0.2	854	1.87		0.03		0.30	BE child	
2010	Oats	0.05	173							
2010	Rye	0.05	403							
2010	Swine Meat									
2010	Milk									

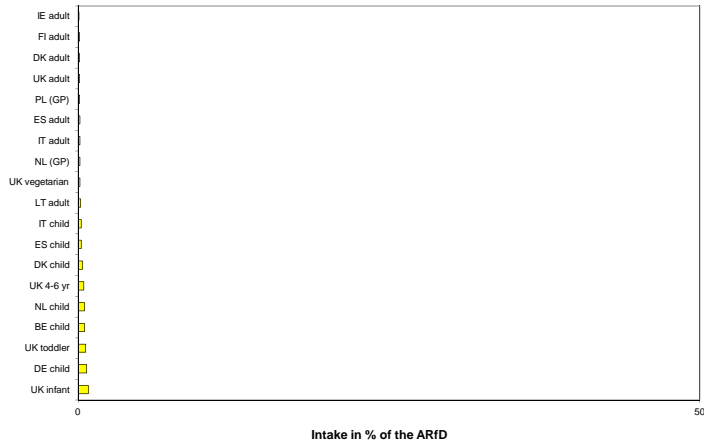
a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Dimethomorph**

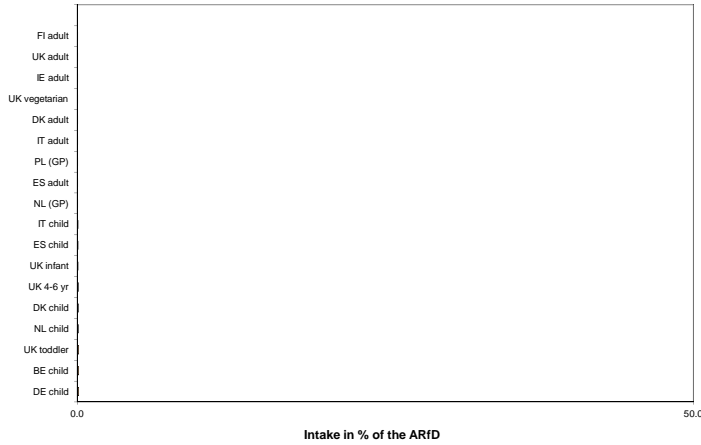


**Dimethomorph**

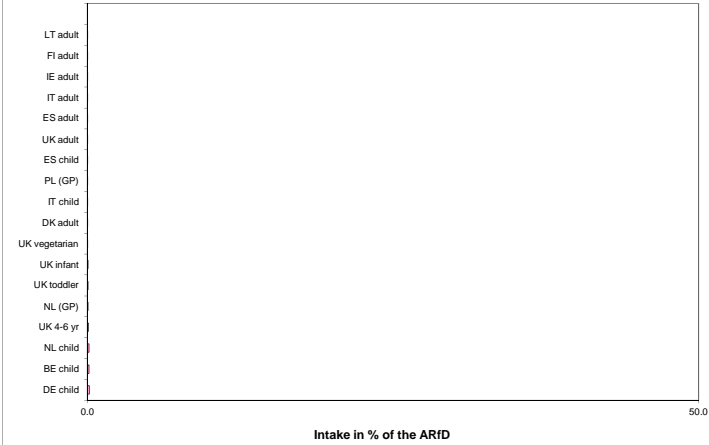
Acute exposure: Dimethomorph / Apples



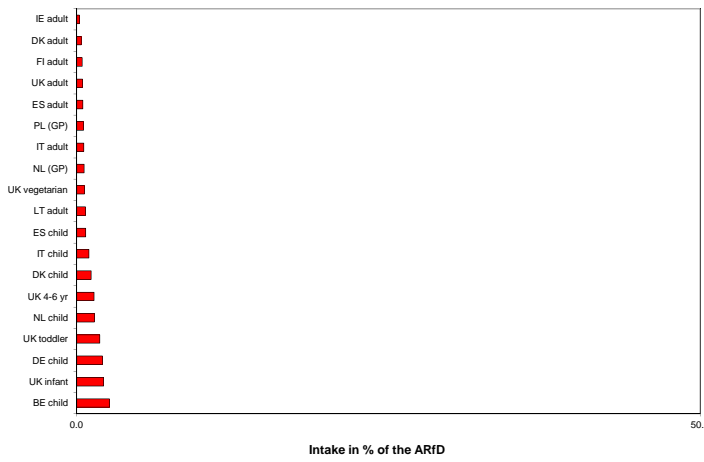
Acute exposure: Dimethomorph / Peaches



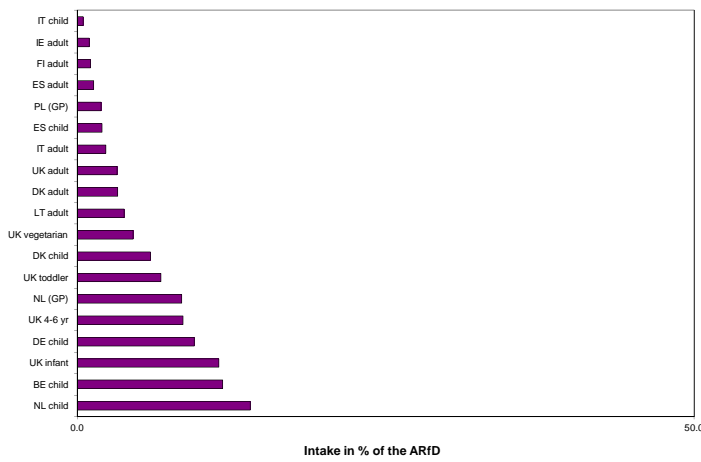
Acute exposure: Dimethomorph / Strawberries



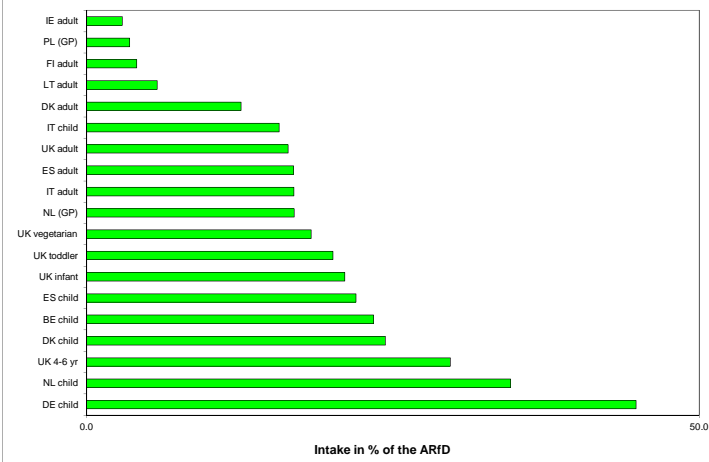
Acute exposure: Dimethomorph / Tomatoes



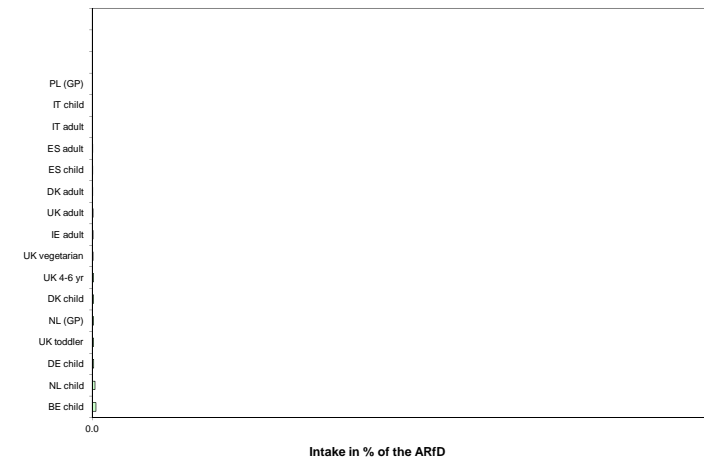
Acute exposure: Dimethomorph / Head cabbage



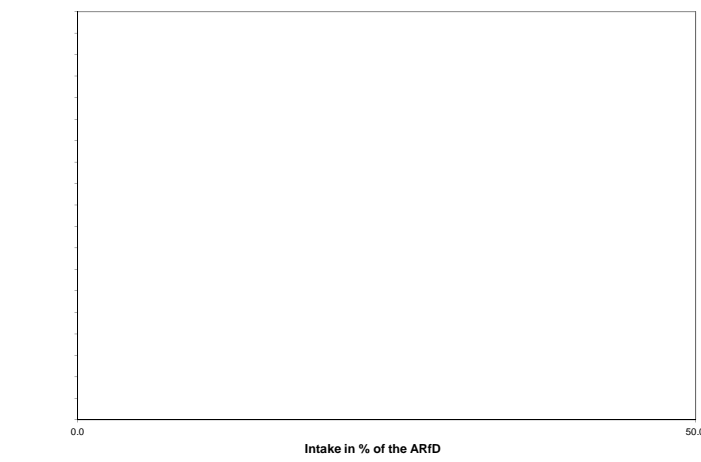
Acute exposure: Dimethomorph / Lettuce



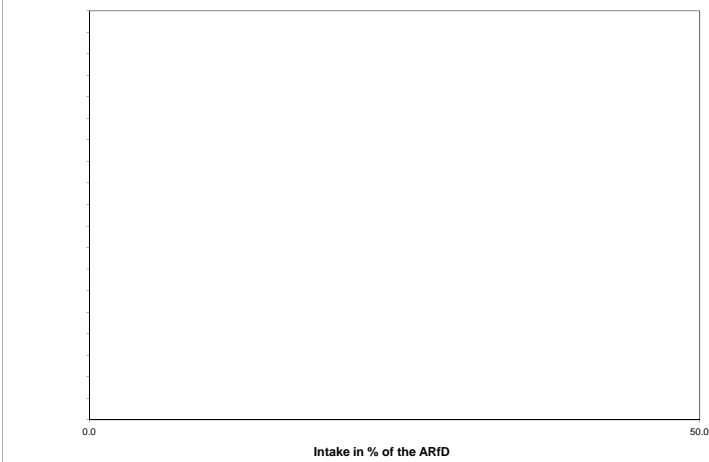
Acute exposure: Dimethomorph / Leek



Acute exposure: Dimethomorph / Oats



Acute exposure: Dimethomorph / Rye



Dinocap			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:	Yes	Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.004	ARfD (mg/kg bw):	0.004
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2007	Year of evaluation:	2007

For meptyldinocap ADI and ARfD not yet established at EU level. JMPR: ADI 0,02, ARfD n.n.

**Chronic risk assessment**

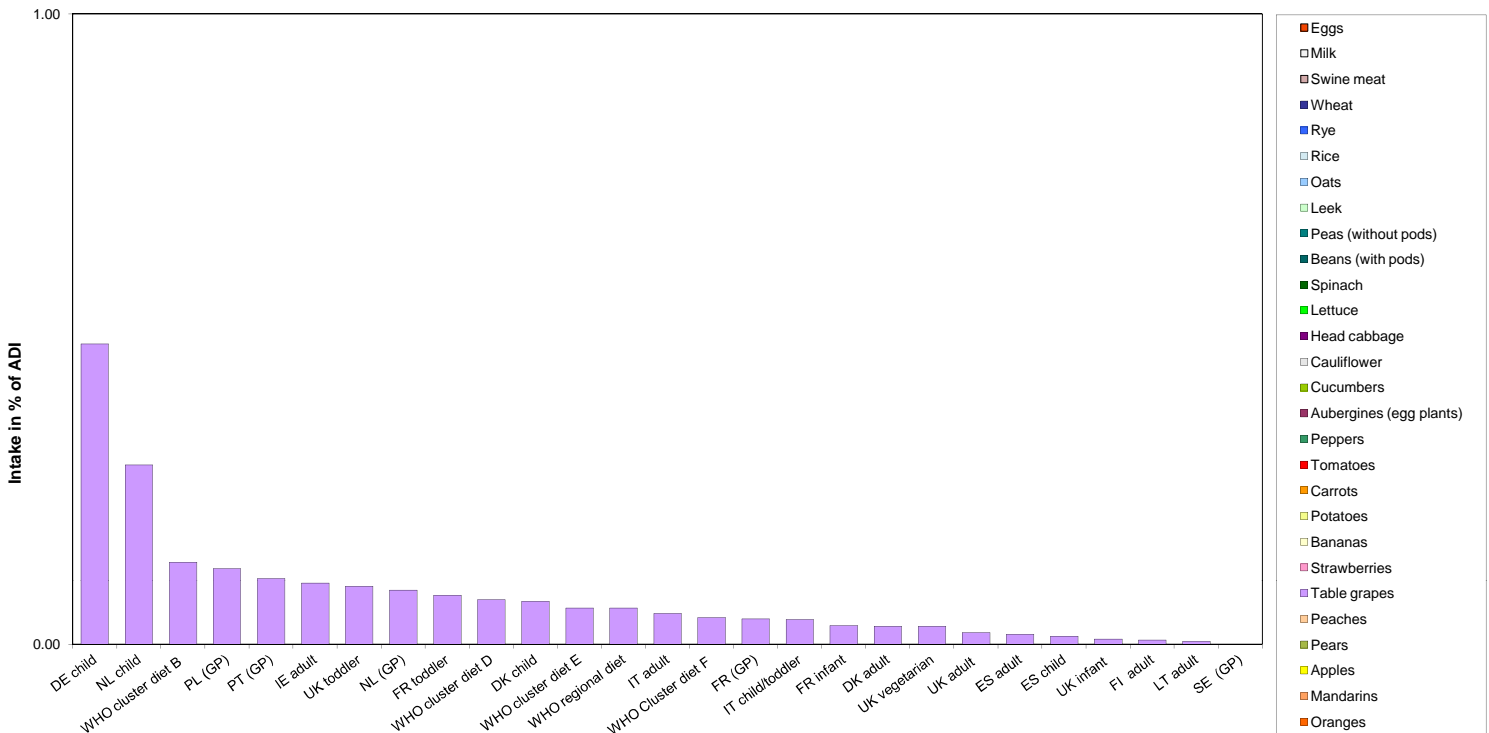
Highest calculated exposure in % of ADI		MS Diet		Highest contributor to MS diet (in % of ADI)		Commodity / group of commodities		2nd contributor to MS diet (in % of ADI)		Commodity / group of commodities		3rd contributor to MS diet (in % of ADI)		Commodity / group of commodities	
0.48	DE child	0.48	Table grapes	0.48	Table grapes	FRUIT (FRESH OR	FRUIT (FRESH OR FROZEN)								
0.28	NL child	0.28	Table grapes	0.28	Table grapes	FRUIT (FRESH OR	FRUIT (FRESH OR FROZEN)								
0.13	WHO cluster diet B	0.13	Table grapes	0.13	Table grapes	FRUIT (FRESH OR	FRUIT (FRESH OR FROZEN)								
0.12	PL (GP)	0.12	Table grapes	0.12	Table grapes	FRUIT (FRESH OR	FRUIT (FRESH OR FROZEN)								
0.10	PT (GP)	0.10	Table grapes	0.10	Table grapes	FRUIT (FRESH OR	FRUIT (FRESH OR FROZEN)								
0.10	IE adult	0.10	Table grapes	0.10	Table grapes	FRUIT (FRESH OR	FRUIT (FRESH OR FROZEN)								
0.09	UK toddler	0.09	Table grapes	0.09	Table grapes	FRUIT (FRESH OR	FRUIT (FRESH OR FROZEN)								
0.09	NL (GP)	0.09	Table grapes	0.09	Table grapes	FRUIT (FRESH OR	FRUIT (FRESH OR FROZEN)								
0.08	FR toddler	0.08	Table grapes	0.08	Table grapes	FRUIT (FRESH OR	FRUIT (FRESH OR FROZEN)								
0.07	WHO cluster diet D	0.07	Table grapes	0.07	Table grapes	FRUIT (FRESH OR	FRUIT (FRESH OR FROZEN)								
0.07	DK child	0.07	Table grapes	0.07	Table grapes	FRUIT (FRESH OR	FRUIT (FRESH OR FROZEN)								
0.06	WHO cluster diet E	0.06	Table grapes	0.06	Table grapes	FRUIT (FRESH OR	FRUIT (FRESH OR FROZEN)								
0.06	WHO regional diet	0.06	Table grapes	0.06	Table grapes	FRUIT (FRESH OR	FRUIT (FRESH OR FROZEN)								
0.05	IT adult	0.05	Table grapes	0.05	Table grapes	FRUIT (FRESH OR	FRUIT (FRESH OR FROZEN)								
0.04	WHO Cluster diet F	0.04	Table grapes	0.04	Table grapes	FRUIT (FRESH OR	FRUIT (FRESH OR FROZEN)								
0.04	FR (GP)	0.04	Table grapes	0.04	Table grapes	FRUIT (FRESH OR	FRUIT (FRESH OR FROZEN)								
0.04	IT child/toddler	0.04	Table grapes	0.04	Table grapes	FRUIT (FRESH OR	FRUIT (FRESH OR FROZEN)								
0.03	FR infant	0.03	Table grapes	0.03	Table grapes	FRUIT (FRESH OR	FRUIT (FRESH OR FROZEN)								
0.03	DK adult	0.03	Table grapes	0.03	Table grapes	FRUIT (FRESH OR	FRUIT (FRESH OR FROZEN)								
0.03	UK vegetarian	0.03	Table grapes	0.03	Table grapes	FRUIT (FRESH OR	FRUIT (FRESH OR FROZEN)								
0.02	UK adult	0.02	Table grapes	0.02	Table grapes	FRUIT (FRESH OR	FRUIT (FRESH OR FROZEN)								
0.02	ES adult	0.02	Table grapes	0.02	Table grapes	FRUIT (FRESH OR	FRUIT (FRESH OR FROZEN)								
0.01	ES child	0.01	Table grapes	0.01	Table grapes	FRUIT (FRESH OR	FRUIT (FRESH OR FROZEN)								
0.01	UK infant	0.01	Table grapes	0.01	Table grapes	FRUIT (FRESH OR	FRUIT (FRESH OR FROZEN)								
0.01	FI adult	0.01	Table grapes	0.01	Table grapes	FRUIT (FRESH OR	FRUIT (FRESH OR FROZEN)								
0.00	LT adult	0.00	Table grapes	0.00	Table grapes	FRUIT (FRESH OR	FRUIT (FRESH OR FROZEN)								
	SE (GP)		FRUIT (FRESH		FRUIT (FRESH		FRUIT (FRESH OR								

**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	546							
2010	Peaches	0.05	223							
2010	Strawberries	0.05	481							
2010	Tomatoes	0.05	339							
2010	Head cabbage	0.05	334							
2010	Lettuce	0.05	416							
2010	Leek	0.05	346							
2010	Oats	0.05	46							
2010	Rye	0.05	142							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Dinocap**



**Dinocap**

Acute exposure: Dinocap / Apples



Intake in % of the ARfD

Acute exposure: Dinocap / Peaches



Intake in % of the ARfD

Acute exposure: Dinocap / Strawberries



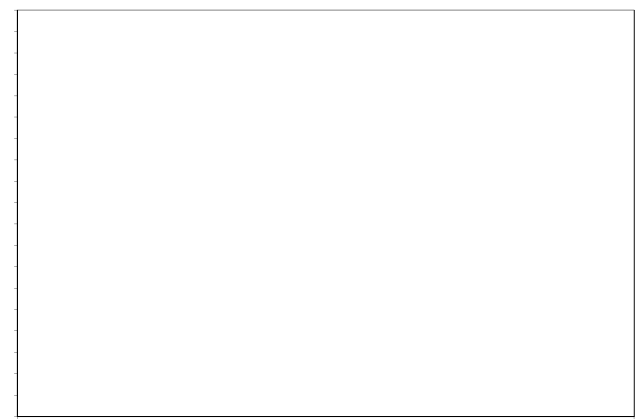
Intake in % of the ARfD

Acute exposure: Dinocap / Tomatoes



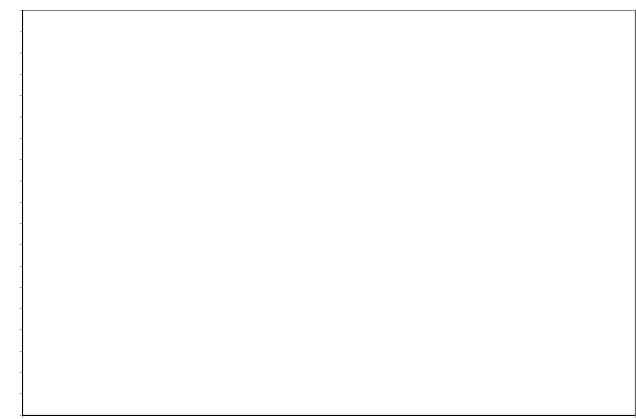
Intake in % of the ARfD

Acute exposure: Dinocap / Head cabbage



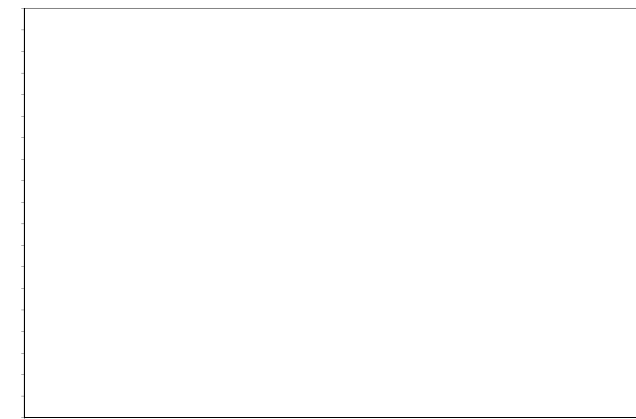
Intake in % of the ARfD

Acute exposure: Dinocap / Lettuce



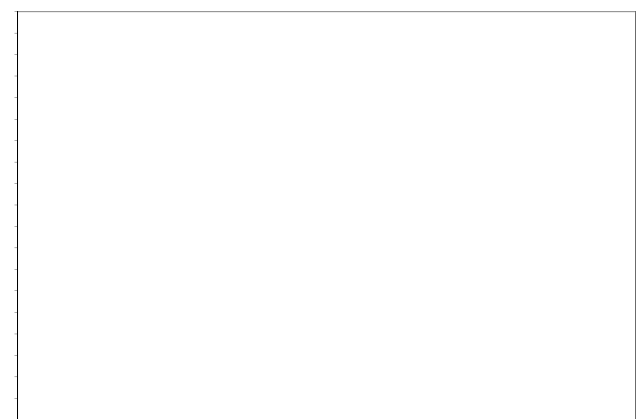
Intake in % of the ARfD

Acute exposure: Dinocap / Leek



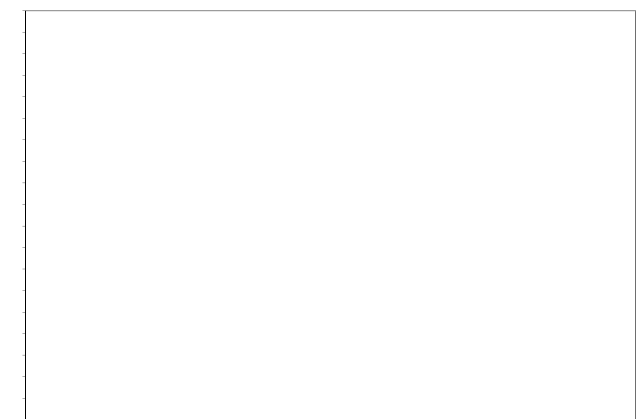
Intake in % of the ARfD

Acute exposure: Dinocap / Oats



Intake in % of the ARfD

Acute exposure: Dinocap / Rye



Intake in % of the ARfD



## Diphenylamine

Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.075	ARfD (mg/kg bw):	n.n.
Source of ADI:	EFSA	Source of ARfD:	EFSA
Year of evaluation:	2008	Year of evaluation:	2008

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
2

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
1.66	DE child	1.47	Apples	0.07	Oranges	0.04	Pears
0.92	NL child	0.77	Apples	0.06	Oranges	0.03	Pears
0.43	FR toddler	0.32	Apples	0.04	Carrots	0.04	Oranges
0.40	FR infant	0.30	Apples	0.05	Carrots	0.02	Pears
0.38	DK child	0.28	Apples	0.05	Pears	0.02	Carrots
0.29	PL (GP)	0.25	Apples	0.02	Pears	0.01	Head cabbage
0.29	UK toddler	0.21	Apples	0.04	Oranges	0.01	Pears
0.28	UK infant	0.19	Apples	0.02	Oranges	0.02	Carrots
0.26	LT adult	0.23	Apples	0.01	Pears	0.01	Head cabbage
0.23	ES child	0.14	Apples	0.04	Oranges	0.03	Pears
0.22	WHO cluster diet B	0.12	Apples	0.03	Pears	0.02	Oranges
0.22	SE (GP)	0.13	Apples	0.02	Pears	0.01	Head cabbage
0.22	IE adult	0.10	Apples	0.05	Pears	0.02	Oranges
0.21	PT (GP)	0.13	Apples	0.02	Pears	0.01	Rice
0.21	NL (GP)	0.14	Apples	0.03	Oranges	0.01	Pears
0.16	IT child/toddler	0.11	Apples	0.03	Pears	0.01	Peaches
0.16	ES adult	0.09	Apples	0.02	Oranges	0.02	Pears
0.16	WHO cluster diet E	0.10	Apples	0.01	Pears	0.01	Oranges
0.14	IT adult	0.10	Apples	0.02	Pears	0.01	Peaches
0.14	WHO regional diet	0.08	Apples	0.01	Pears	0.01	Oranges
0.13	WHO Cluster diet F	0.08	Apples	0.02	Oranges	0.01	Carrots
0.13	DK adult	0.10	Apples	0.01	Pears	0.01	Carrots
0.12	WHO cluster diet D	0.08	Apples	0.01	Rice	0.01	Pears
0.11	UK vegetarian	0.07	Apples	0.02	Oranges	0.01	Rice
0.09	FR (GP)	0.06	Apples	0.01	Pears	0.01	Oranges
0.08	FI adult	0.05	Apples	0.02	Oranges	0.00	Carrots
0.08	UK adult	0.05	Apples	0.01	Oranges	0.01	Rice

## Acute risk assessment

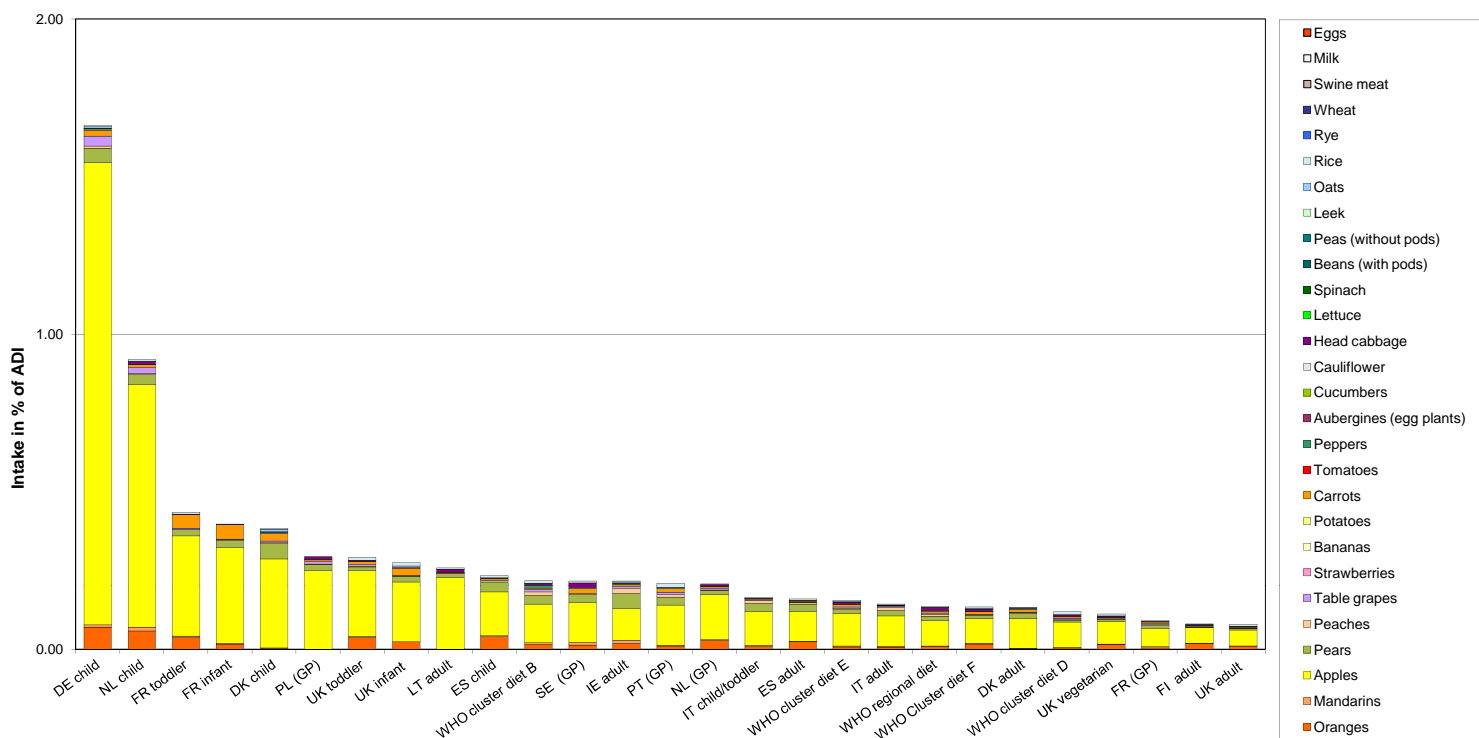
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	5	2953	12.09		4.20				
2010	Peaches	0.05	1383	0.07		0.01				
2010	Strawberries	0.05	2198							
2010	Tomatoes	0.05	2249							
2010	Head cabbage	0.05	1153	0.09		0.01				
2010	Lettuce	0.05	2272	0.04		0.01				
2010	Leek	0.05	947							
2010	Oats	0.05	178	0.56		0.02				
2010	Rye	0.05	384							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

<sup>c)</sup> TRL: toxicological threshold level

## Chronic risk assessment: Diphenylamine



**Diphenylamine**

Acute exposure: Diphenylamine / Apples



Intake in % of the ARfD

Acute exposure: Diphenylamine / Peaches



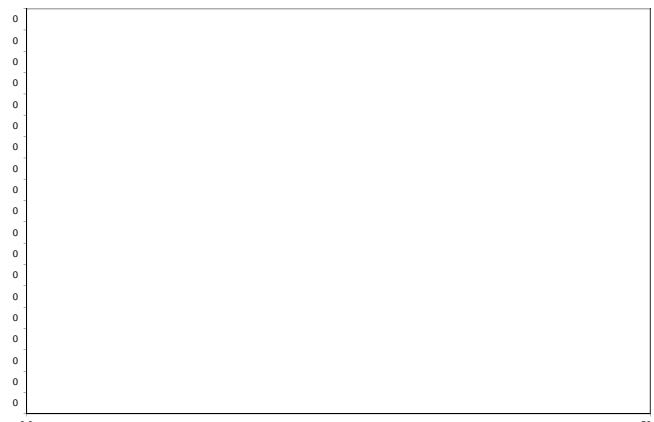
Intake in % of the ARfD

Acute exposure: Diphenylamine / Strawberries



Intake in % of the ARfD

Acute exposure: Diphenylamine / Tomatoes



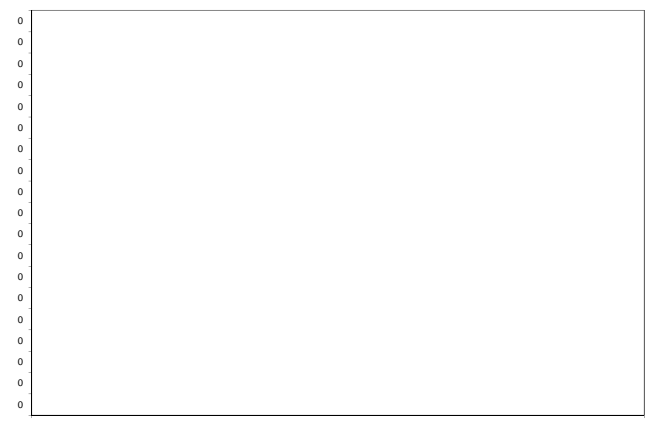
Intake in % of the ARfD

Acute exposure: Diphenylamine / Head cabbage



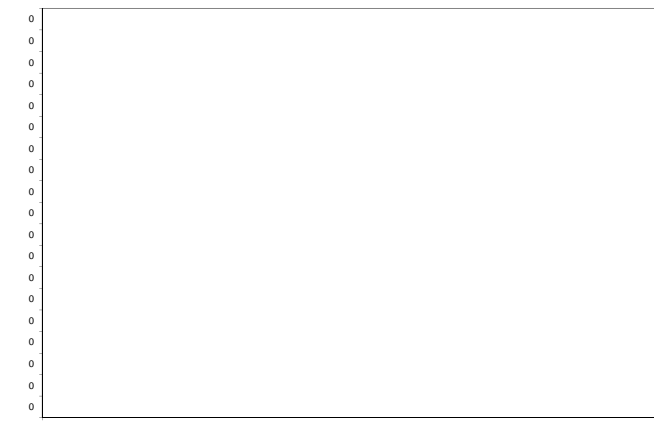
Intake in % of the ARfD

Acute exposure: Diphenylamine / Lettuce



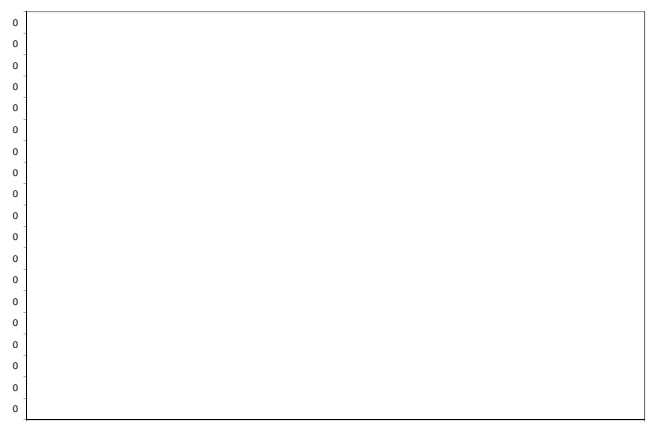
Intake in % of the ARfD

Acute exposure: Diphenylamine / Leek



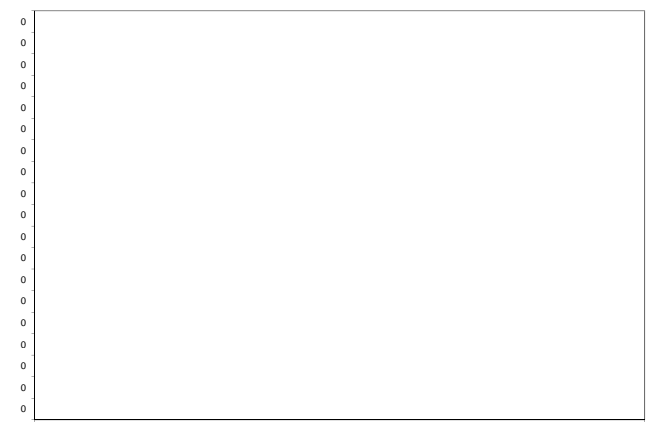
Intake in % of the ARfD

Acute exposure: Diphenylamine / Oats



Intake in % of the ARfD

Acute exposure: Diphenylamine / Rye



Intake in % of the ARfD

## Dithiocarbamate - mancozeb scenario

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0,028	ARfD (mg/kg bw):	0,34
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2005	Year of evaluation:	2005

For the risk assessment of the dithiocarbamates the ADI and ARfD of mancozeb were selected. A second scenario is calculated with the ADI and ARfD of ziram. ARfD for mancozeb (0.6 mg/kg bw) was recalculated to CS2 to match with the residue definition, by multiplying with a molecular weight conversion factor of 0.56. ADI for mancozeb (0.05 mg/kg bw/d) was also recalculated with the same conversion factor.

## Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum					
		1		9			
		No of diets exceeding ADI:		---			
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
9,19	DE child	4,19	Apples	1,33	Oranges	0,58	Table grapes
7,36	NL child	2,20	Apples	1,09	Oranges	1,00	Potatoes
5,33	FR toddler	0,91	Apples	0,86	Potatoes	0,70	Oranges
5,06	DK child	1,34	Rye	0,81	Apples	0,74	Cucumbers
4,13	WHO cluster diet B	1,11	Tomatoes	0,45	Potatoes	0,44	Lettuce
3,69	FR infant	0,87	Apples	0,70	Potatoes	0,46	Carrots
3,45	SE (GP)	0,70	Potatoes	0,47	Bananas	0,36	Apples
3,26	ES child	0,76	Oranges	0,51	Lettuce	0,40	Apples
3,23	IE adult	0,39	Potatoes	0,37	Oranges	0,36	Pears
3,16	UK toddler	0,69	Oranges	0,59	Apples	0,59	Potatoes
3,04	WHO regional diet	0,68	Potatoes	0,46	Lettuce	0,40	Tomatoes
2,95	UK infant	0,55	Potatoes	0,54	Apples	0,45	Oranges
2,81	NL (GP)	0,52	Oranges	0,46	Potatoes	0,41	Apples
2,66	WHO Cluster diet F	0,58	Potatoes	0,37	Lettuce	0,30	Oranges
2,59	PT (GP)	0,90	Potatoes	0,36	Apples	0,32	Tomatoes
2,51	ES adult	0,65	Lettuce	0,45	Oranges	0,28	Tomatoes
2,44	PL (GP)	0,71	Apples	0,58	Potatoes	0,32	Tomatoes
2,40	LT adult	0,65	Apples	0,54	Potatoes	0,33	Rye
2,35	WHO cluster diet E	0,65	Potatoes	0,29	Apples	0,19	Tomatoes
2,28	IT child/toddler	0,51	Tomatoes	0,35	Lettuce	0,31	Apples
2,04	IT adult	0,46	Lettuce	0,42	Tomatoes	0,28	Apples
1,99	WHO cluster diet D	0,69	Potatoes	0,36	Tomatoes	0,23	Apples
1,72	UK vegetarian	0,30	Oranges	0,23	Potatoes	0,22	Tomatoes
1,59	DK adult	0,27	Apples	0,25	Potatoes	0,21	Rye
1,56	FI adult	0,34	Oranges	0,21	Rye	0,21	Potatoes
1,41	FR (GP)	0,19	Potatoes	0,16	Apples	0,16	Tomatoes
1,28	UK adult	0,24	Potatoes	0,20	Oranges	0,16	Tomatoes

## Acute risk assessment

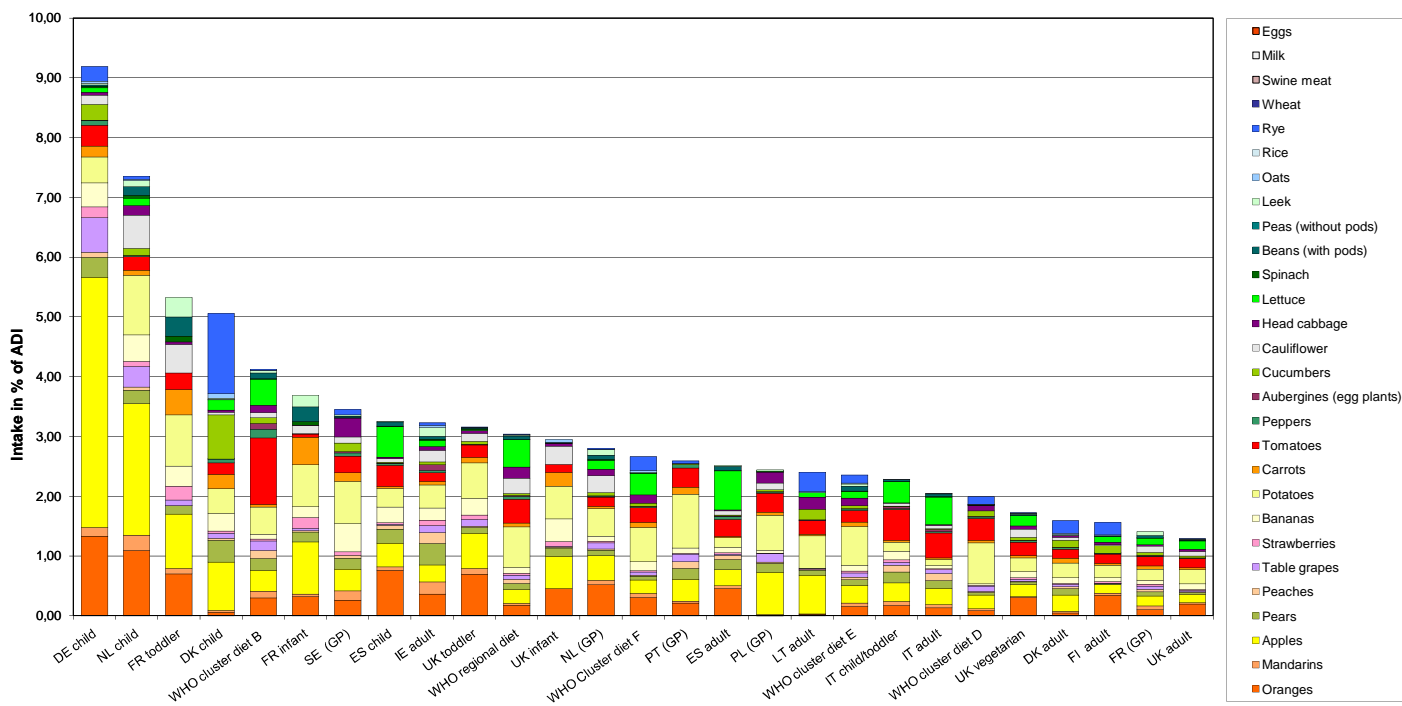
Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	5	1197	22,06		1,90		54,75	UK infant	
2010	Peaches	2	815	18,40		1,29		22,51	DE child	MRL is based on uses of mancozeb and thiram.
2010	Strawberries	10	1031	4,17		7,00		32,10	DE child	MRL is based on uses of thiram.
2010	Tomatoes	3	1190	15,97		1,11		18,98	BE child	MRL based on uses of mz, ma, me and pr.
2010	Head cabbage	3	445	50,79		3,00		46,44	NL child	MRL based on uses of mancozeb.
2010	Lettuce	5	1310	21,07	0,69	13,40	1	106,03	DE child	MRL based on uses of mz, me and t.
2010	Leek	3	515	40,39		2,01		34,85	BE child	MRL based on uses of maneb and mancozeb.
2010	Oats	2	50	2,00		0,05		0,06	DE child	MRL based on uses of maneb and mancozeb.
2010	Rye	1	233	1,29		0,90		1,67	UK infant	MRL based on uses of maneb and mancozeb.
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

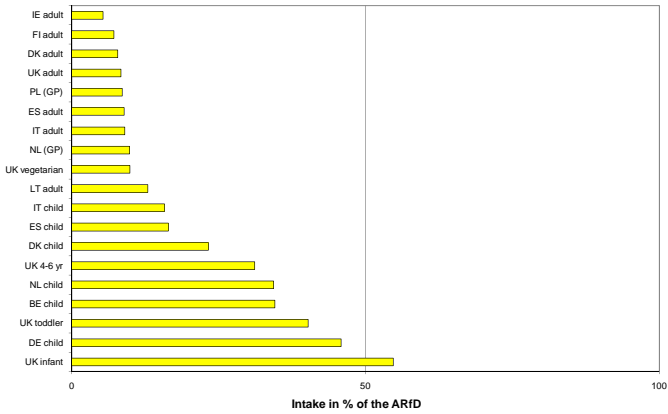
c) TRL: toxicological threshold level

## Chronic risk assessment: Dithiocarbamate - mancozeb scenario

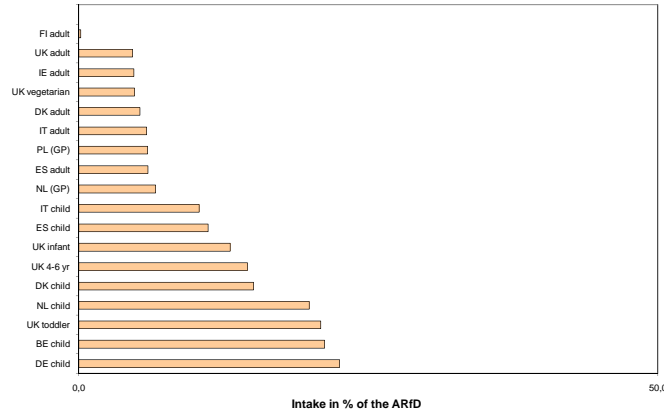


**Dithiocarbamate - mancozeb scenario**

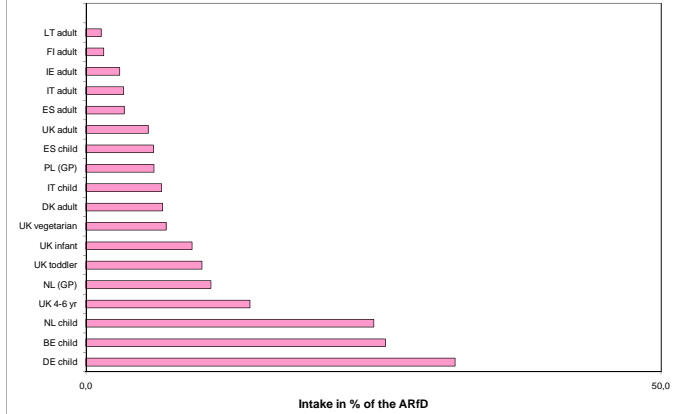
Acute exposure: Dithiocarbamate - mancozeb scenario / Apples



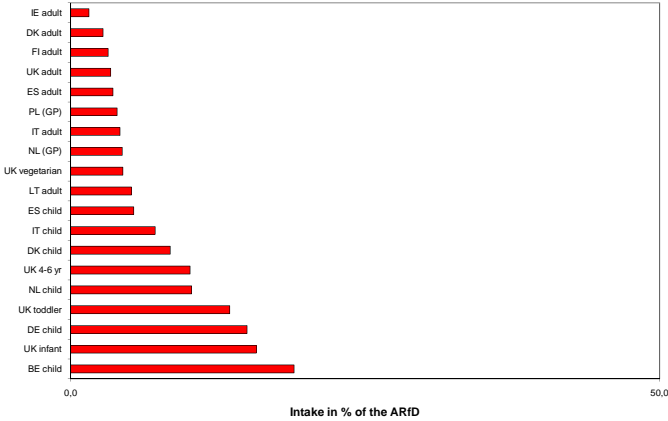
Acute exposure: Dithiocarbamate - mancozeb scenario / Peaches



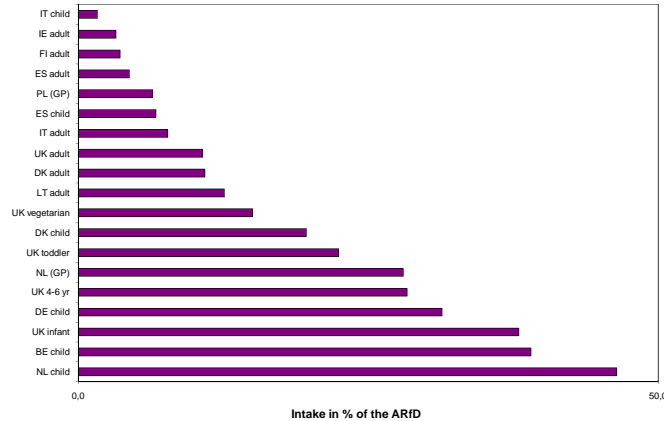
Acute exposure: Dithiocarbamate - mancozeb scenario / Strawberries



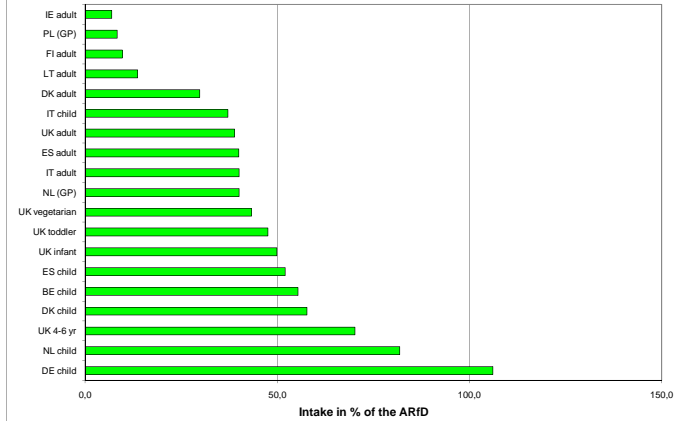
Acute exposure: Dithiocarbamate - mancozeb scenario / Tomatoes



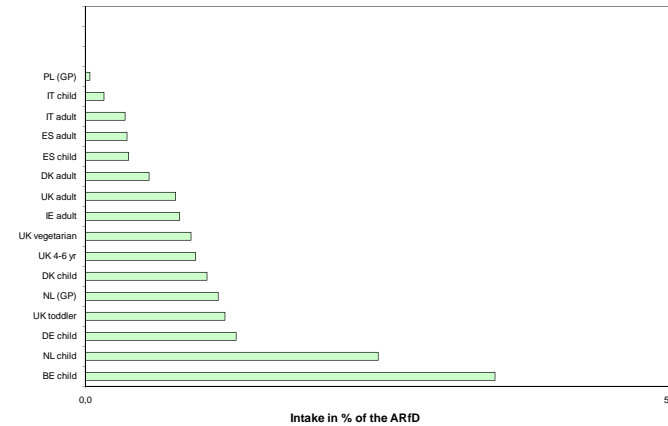
Acute exposure: Dithiocarbamate - mancozeb scenario / Head cabbage



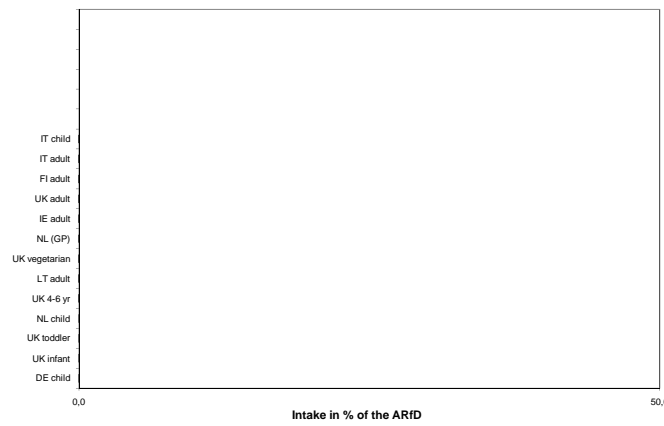
Acute exposure: Dithiocarbamate - mancozeb scenario / Lettuce



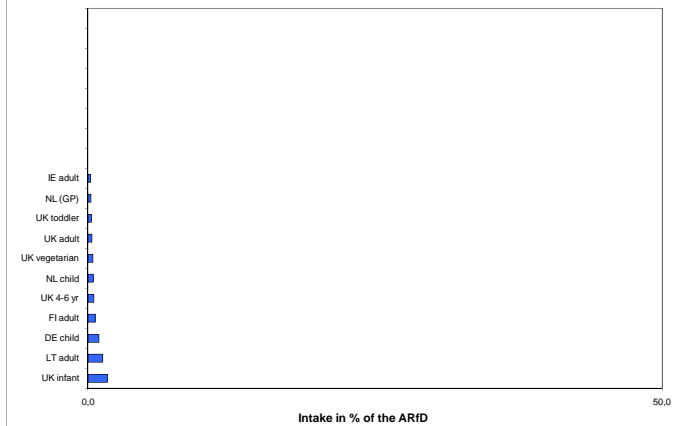
Acute exposure: Dithiocarbamate - mancozeb scenario / Leek



Acute exposure: Dithiocarbamate - mancozeb scenario / Oats



Acute exposure: Dithiocarbamate - mancozeb scenario / Rye



Dithiocarbamate- ziram scenario			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0,003	ARfD (mg/kg bw):	0,04
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2004	Year of evaluation:	2004

Ziram is the dithiocarbamate with the lowest toxicological reference values (ADI 0,006 mg/kg bw/d, ARfD: 0,08 mg/kg bw). Toxicological reference values for the other dithiocarbamates (maneb: ADI 0,05 mg/kg bw/d, ARfD 0,2 mg/kg bw, metiram: ADI 0,03 mg/kg bw/d, ARfD not necessary, propineb: ADI 0,007 mg/kg bw/d, ARfD 0,1 mg/kg bw and thiram: ADI 0,01 mg/kg bw/d, ARfD 0,6 mg/kg bw). The ADI/ARfD values for ziram were recalculated to CS2 to match with the residue definition, by multiplying with a molecular weight conversion factor of 0,5.

**Chronic risk assessment**

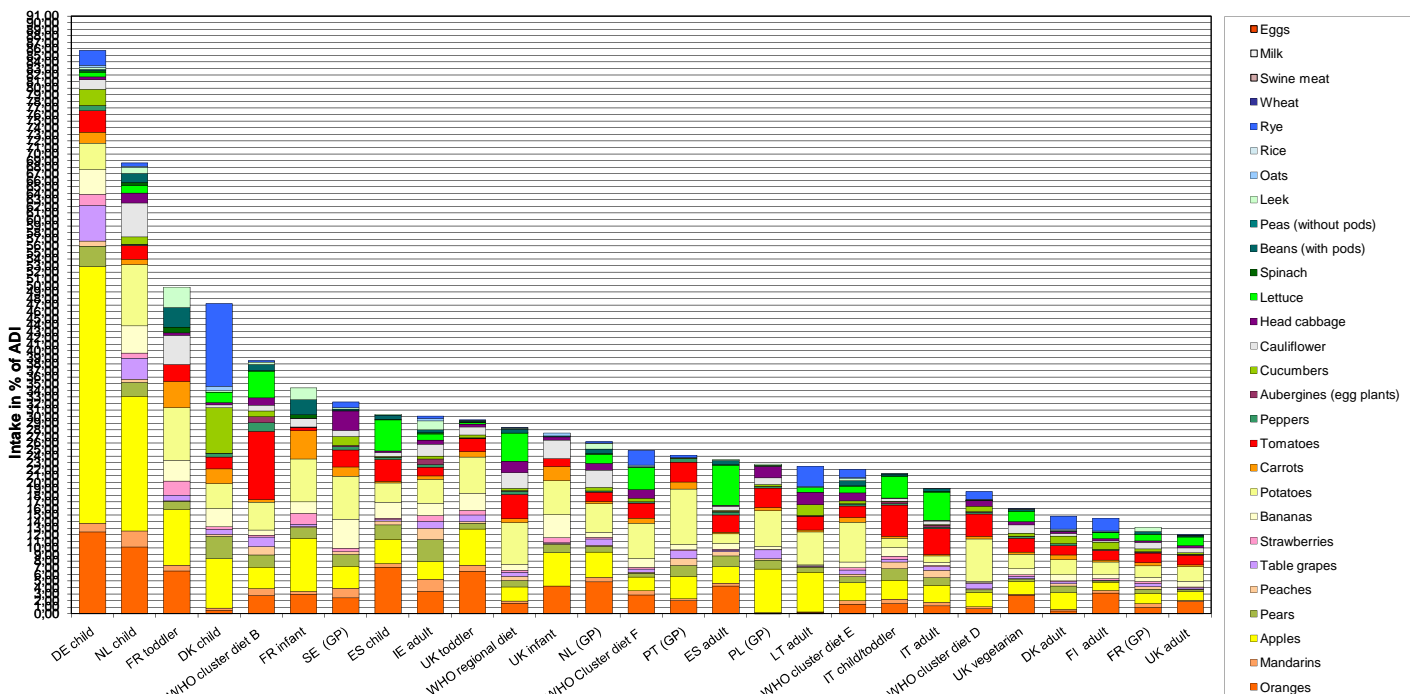
		Exposure (range) in % of ADI minimum - maximum					
		12	86				
No of diets exceeding ADI:		---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
85,75	DE child	39,10	Apples	12,44	Oranges	5,39	Table grapes
68,66	NL child	20,52	Apples	10,18	Oranges	9,30	Potatoes
49,73	FR toddler	8,50	Apples	7,99	Potatoes	6,53	Oranges
47,20	DK child	12,55	Rye	7,53	Apples	6,92	Cucumbers
38,51	WHO cluster diet B	10,38	Tomatoes	4,23	Potatoes	4,07	Lettuce
34,41	FR infant	8,10	Apples	6,52	Potatoes	4,31	Carrots
32,23	SE (GP)	6,57	Potatoes	4,39	Bananas	3,40	Apples
30,40	ES child	7,08	Oranges	4,74	Lettuce	3,70	Apples
30,12	IE adult	3,61	Potatoes	3,41	Oranges	3,35	Pears
29,47	UK toddler	6,47	Oranges	5,53	Apples	5,51	Potatoes
28,36	WHO regional diet	6,33	Potatoes	4,28	Lettuce	3,70	Tomatoes
27,53	UK infant	5,13	Potatoes	5,06	Apples	4,24	Oranges
26,20	NL (GP)	4,86	Oranges	4,32	Potatoes	3,83	Apples
24,83	WHO Cluster diet F	5,38	Potatoes	3,41	Lettuce	2,84	Oranges
24,16	PT (GP)	8,41	Potatoes	3,40	Apples	3,01	Tomatoes
23,46	ES adult	6,08	Lettuce	4,22	Oranges	2,64	Tomatoes
22,78	PL (GP)	6,62	Apples	5,42	Potatoes	2,97	Tomatoes
22,45	LT adult	6,05	Apples	5,01	Potatoes	3,06	Rye
21,96	WHO cluster diet E	6,05	Potatoes	2,74	Apples	1,77	Tomatoes
21,27	IT child/toddler	4,80	Tomatoes	3,30	Lettuce	2,87	Apples
19,06	IT adult	4,29	Lettuce	3,92	Tomatoes	2,57	Apples
18,60	WHO cluster diet D	6,40	Potatoes	3,40	Tomatoes	2,15	Apples
16,09	UK vegetarian	2,83	Oranges	2,16	Potatoes	2,09	Tomatoes
14,83	DK adult	2,54	Apples	2,30	Potatoes	1,93	Rye
14,57	FI adult	3,17	Oranges	1,94	Rye	1,93	Potatoes
13,13	FR (GP)	1,77	Potatoes	1,54	Apples	1,46	Tomatoes
11,98	UK adult	2,20	Potatoes	1,84	Oranges	1,47	Tomatoes

**Acute risk assessment**

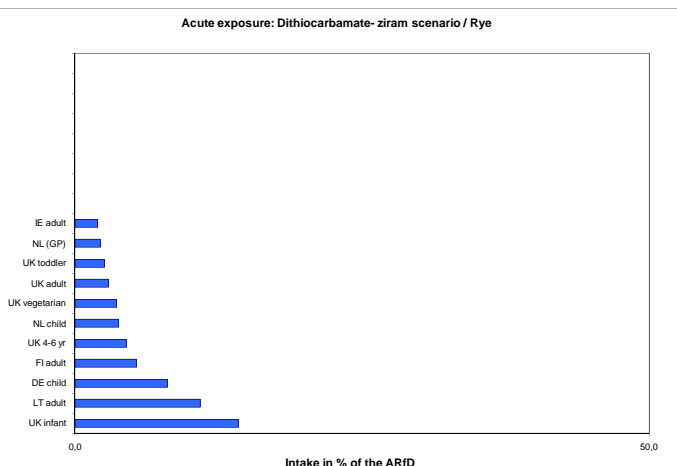
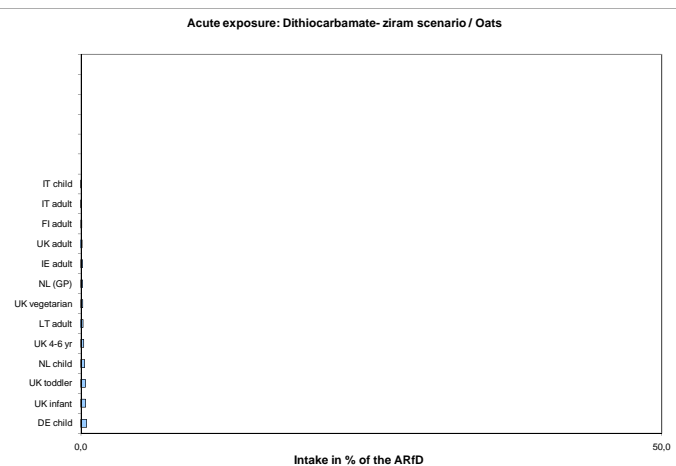
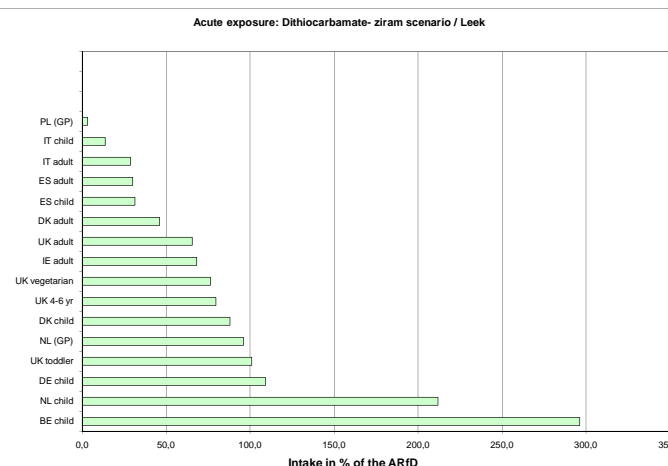
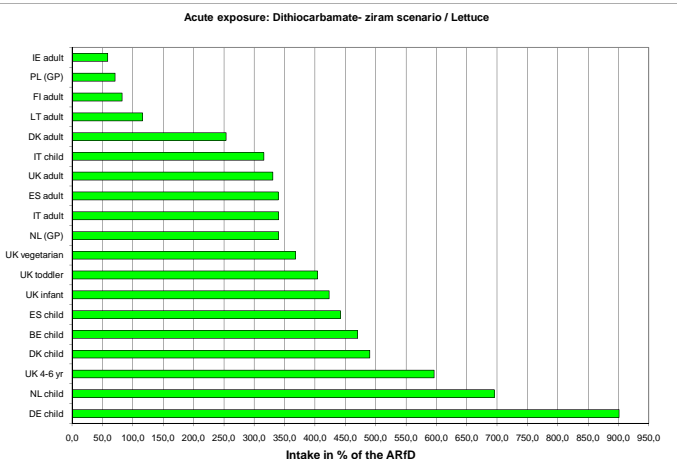
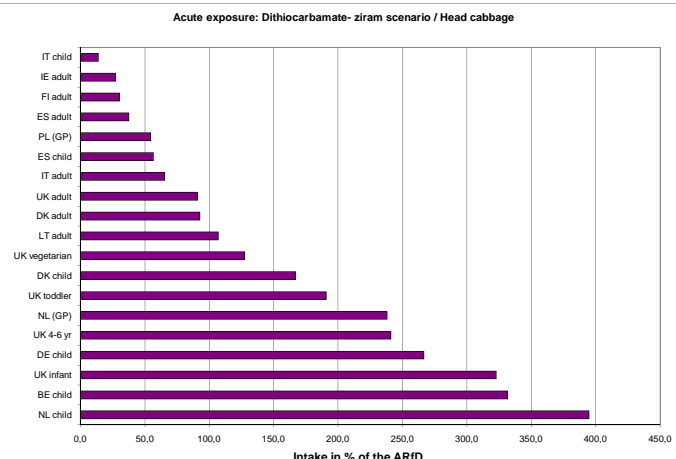
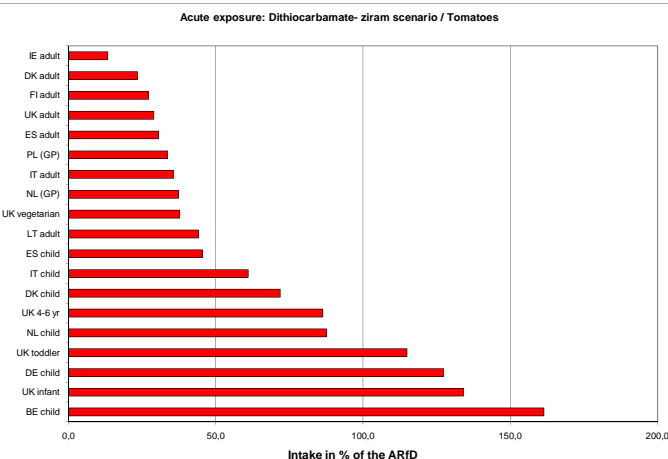
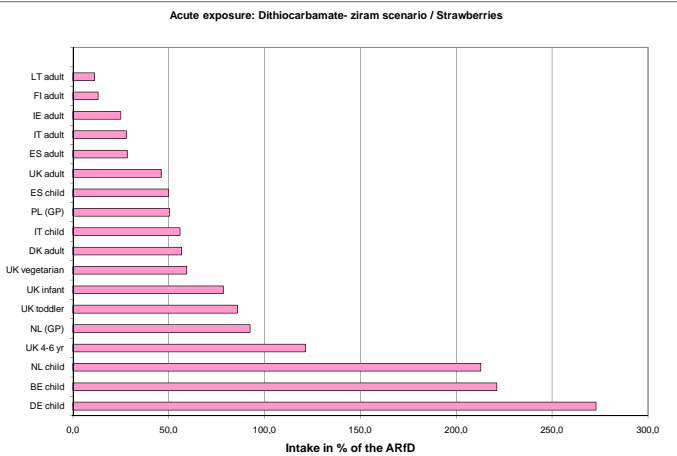
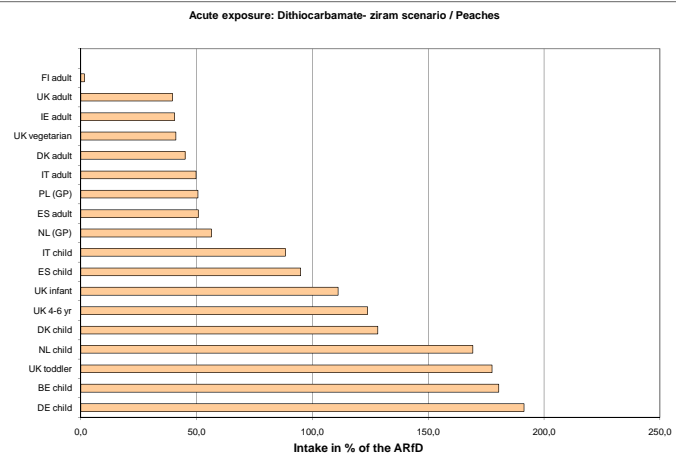
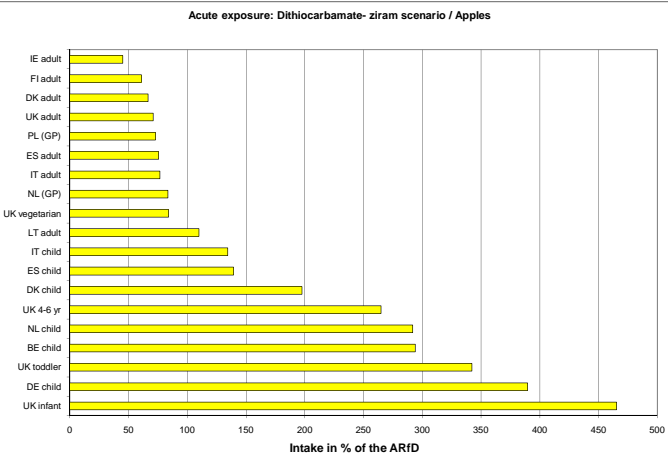
Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	5	1197	22,06		1,90	18	465,34	UK infant	
2010	Peaches	2	815	18,40		1,29	3	191,34	DE child	MRL is based on uses of mancozeb and thiram.
2010	Strawberries	10	1031	4,17		7,00	1	272,85	DE child	MRL is based on uses of thiram.
2010	Tomatoes	3	1190	15,97		1,11	7	161,36	BE child	MRL based on uses of mz, ma, me and pr.
2010	Head cabbage	3	445	50,79		3,00	10	394,74	NL child	MRL based on uses of mancozeb.
2010	Lettuce	5	1310	21,07	0,69	13,40	55	901,28	DE child	MRL based on uses of mz, me and t.
2010	Leek	3	515	40,39		2,01	7	296,22	BE child	MRL based on uses of maneb and mancozeb.
2010	Oats	2	50	2,00		0,05		0,50	DE child	MRL based on uses of maneb and mancozeb.
2010	Rye	1	233	1,29		0,90		14,22	UK infant	MRL based on uses of maneb and mancozeb.
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Dithiocarbamate- ziram scenario**



**Dithiocarbamate- ziram scenario**



## Endosulfan

Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P and A
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.006	ARfD (mg/kg bw):	0.015
Source of ADI:	JMPR	Source of ARfD:	ECCO
Year of evaluation:	2006	Year of evaluation:	2001

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
1 6

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
6.37	DE child	3.75	Apples	0.91	Oranges	0.32	Tomatoes
3.92	NL child	1.97	Apples	0.75	Oranges	0.21	Tomatoes
2.98	FR toddler	0.82	Apples	0.60	Carrots	0.48	Oranges
2.54	WHO cluster diet B	1.03	Tomatoes	0.31	Apples	0.20	Oranges
2.20	FR infant	0.78	Apples	0.66	Carrots	0.22	Oranges
2.08	DK child	0.72	Apples	0.38	Cucumbers	0.34	Carrots
1.90	UK toddler	0.53	Apples	0.47	Oranges	0.20	Tomatoes
1.84	ES child	0.52	Oranges	0.36	Apples	0.33	Tomatoes
1.77	UK infant	0.49	Apples	0.33	Carrots	0.31	Oranges
1.59	SE (GP)	0.33	Apples	0.25	Tomatoes	0.21	Carrots
1.42	IE adult	0.26	Apples	0.25	Oranges	0.17	Peaches
1.37	PT (GP)	0.33	Apples	0.30	Tomatoes	0.19	Rice
1.37	ES adult	0.31	Oranges	0.26	Tomatoes	0.24	Apples
1.32	WHO regional diet	0.37	Tomatoes	0.21	Apples	0.13	Eggs
1.30	IT child/toddler	0.47	Tomatoes	0.28	Apples	0.12	Oranges
1.29	NL (GP)	0.37	Apples	0.36	Oranges	0.14	Tomatoes
1.17	IT adult	0.39	Tomatoes	0.25	Apples	0.11	Peaches
1.15	PL (GP)	0.64	Apples	0.29	Tomatoes	0.08	Carrots
1.14	WHO Cluster diet F	0.23	Tomatoes	0.21	Oranges	0.20	Apples
1.11	WHO cluster diet E	0.26	Apples	0.18	Tomatoes	0.14	Eggs
1.10	LT adult	0.58	Apples	0.21	Tomatoes	0.09	Cucumbers
1.05	WHO cluster diet D	0.34	Tomatoes	0.21	Apples	0.13	Rice
0.98	UK vegetarian	0.21	Oranges	0.21	Tomatoes	0.18	Apples
0.79	DK adult	0.24	Apples	0.14	Tomatoes	0.11	Carrots
0.78	FI adult	0.23	Oranges	0.14	Tomatoes	0.13	Apples
0.75	FR (GP)	0.15	Apples	0.14	Tomatoes	0.07	Carrots
0.72	UK adult	0.15	Tomatoes	0.13	Oranges	0.13	Apples

## Acute risk assessment

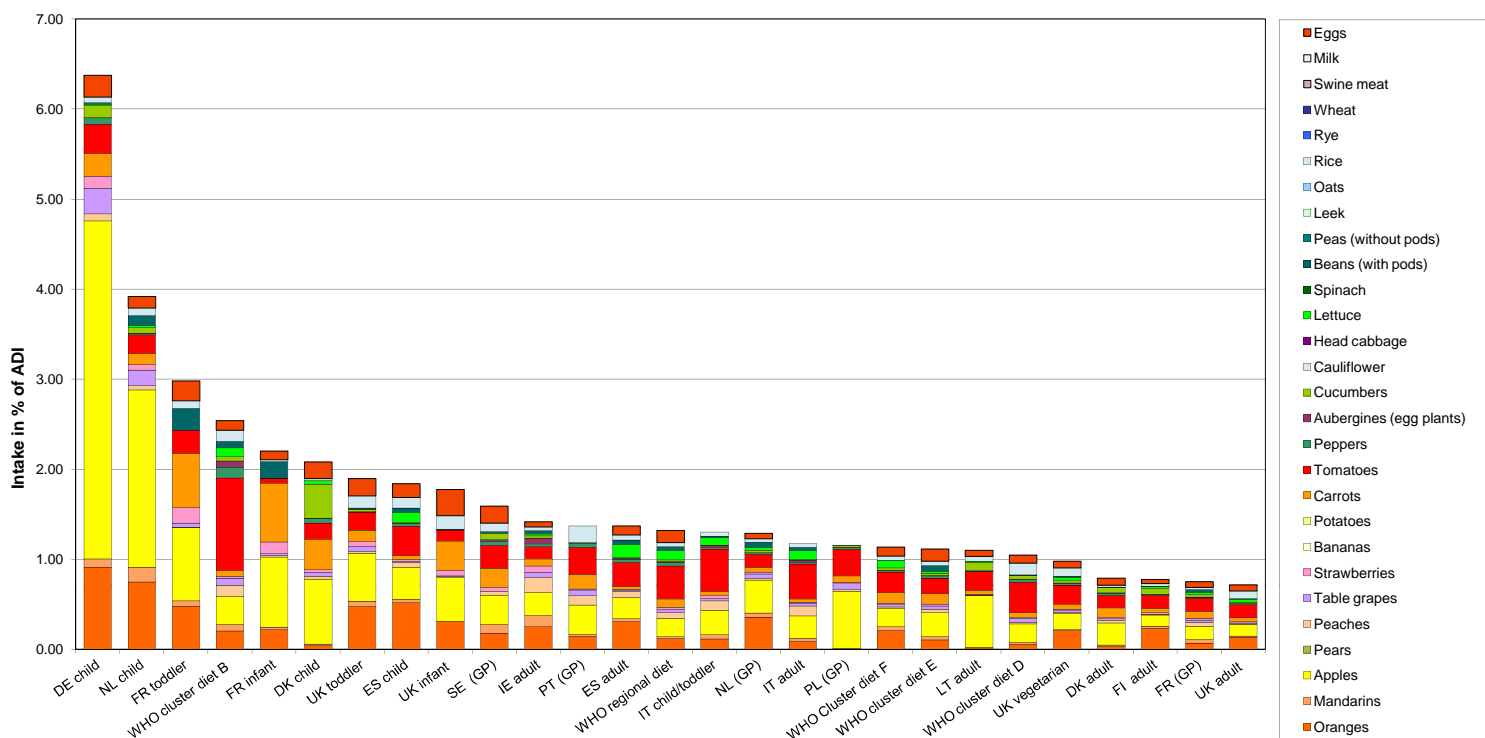
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	3115	0.03		0.05		35.27	UK infant	
2010	Peaches	0.05	1483		0.13	0.07		28.08	DE child	
2010	Strawberries	0.05	2323	0.22	0.04	0.08		8.32	DE child	
2010	Tomatoes	0.5	2499	0.24		0.30	1	116.29	BE child	
2010	Head cabbage	0.05	1246							
2010	Lettuce	0.05	2389		0.04	0.14		25.11	DE child	
2010	Leek	0.05	982							
2010	Oats	0.05	264							
2010	Rye	0.05	446							
2010	Swine Meat	0.05	581							
2010	Milk	0.05	758							

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

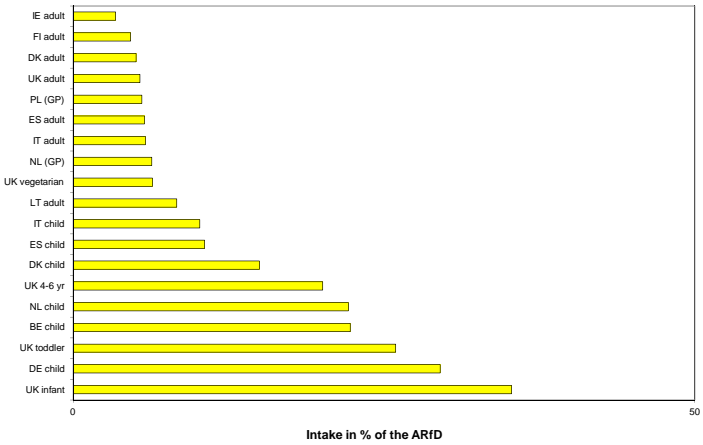
<sup>c)</sup> TRL: toxicological threshold level

## Chronic risk assessment: Endosulfan

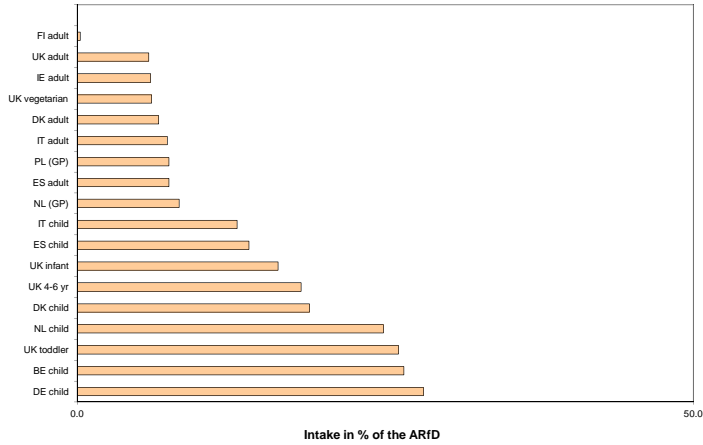


**Endosulfan**

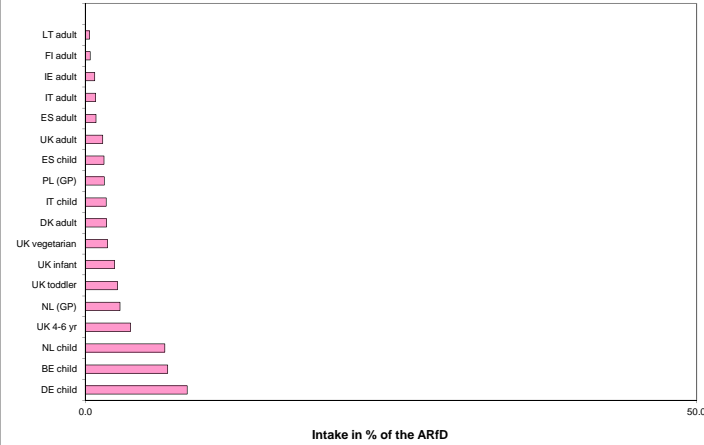
Acute exposure: Endosulfan / Apples



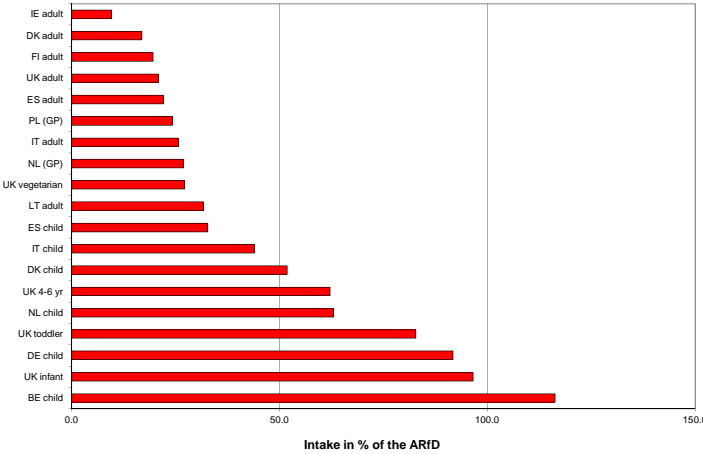
Acute exposure: Endosulfan / Peaches



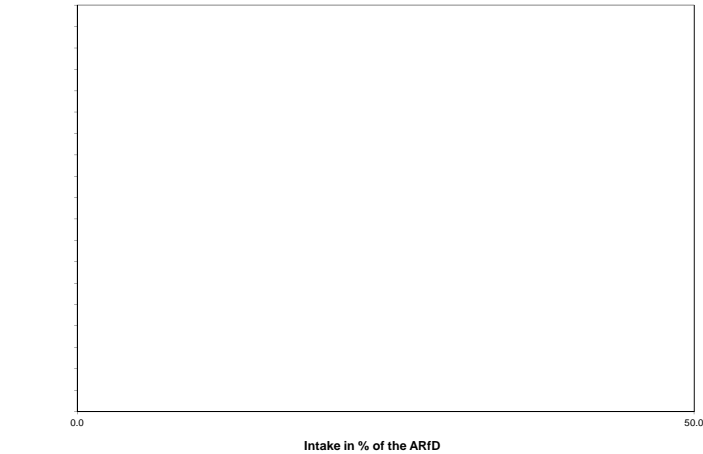
Acute exposure: Endosulfan / Strawberries



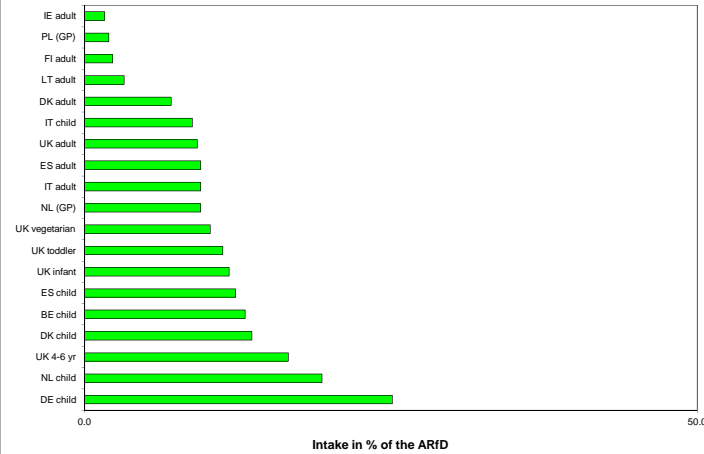
Acute exposure: Endosulfan / Tomatoes



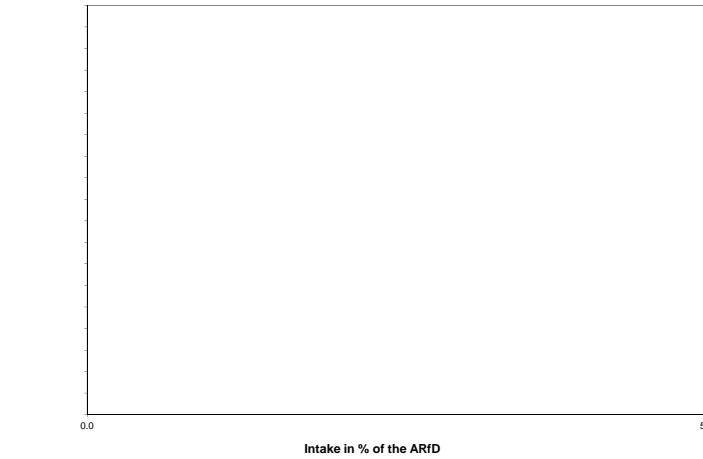
Acute exposure: Endosulfan / Head cabbage



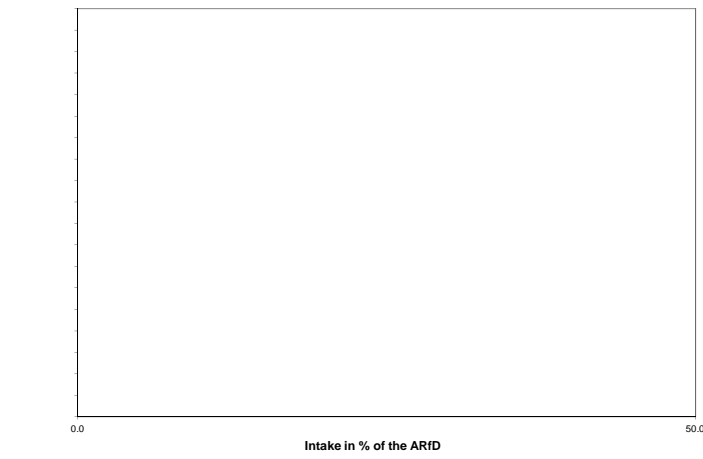
Acute exposure: Endosulfan / Lettuce



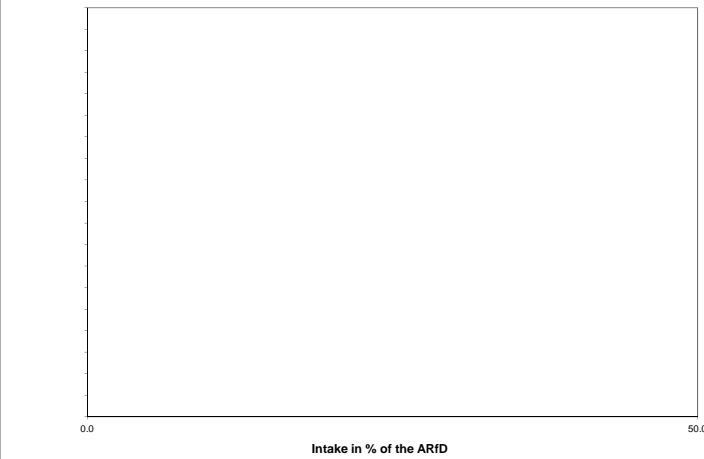
Acute exposure: Endosulfan / Leek



Acute exposure: Endosulfan / Oats



Acute exposure: Endosulfan / Rye





Endrin			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	A
Toxicological end points			
ADI (mg/kg bw/day):	0.0002	ARfD (mg/kg bw):	0.0002
Source of ADI:	JMPR	Source of ARfD:	
Year of evaluation:	1994	Year of evaluation:	

Active substance was not assessed regarding the setting of an ARfD. ADI is used as a surrogate.

**Chronic risk assessment**

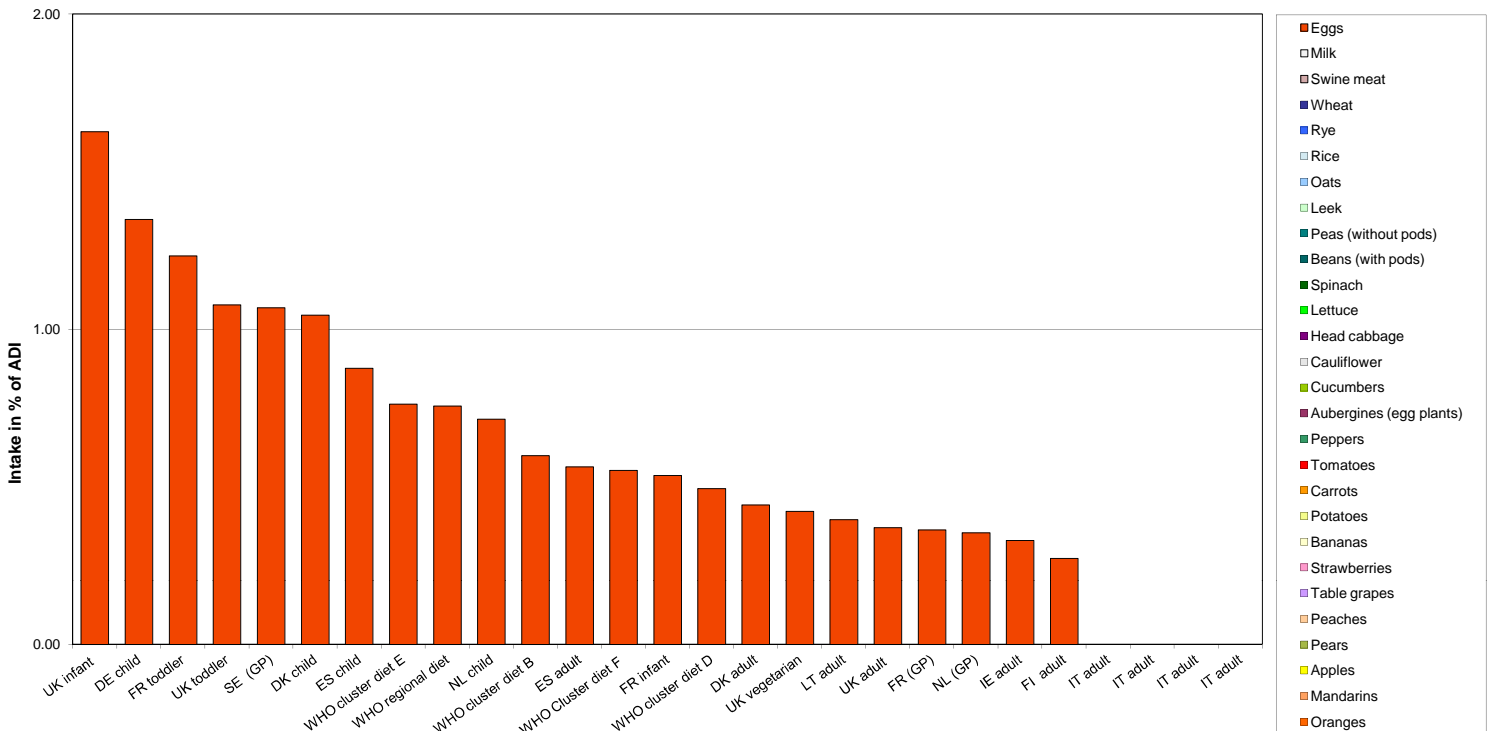
		Exposure (range) in % of ADI minimum - maximum					
		2					
		No of diets exceeding ADI: ---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
1.63	UK infant	1.63	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
1.35	DE child	1.35	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
1.23	FR toddler	1.23	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
1.08	UK toddler	1.08	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
1.07	SE (GP)	1.07	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
1.04	DK child	1.04	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.88	ES child	0.88	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.76	WHO cluster diet E	0.76	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.76	WHO regional diet	0.76	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.72	NL child	0.72	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.60	WHO cluster diet B	0.60	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.56	ES adult	0.56	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.55	WHO Cluster diet F	0.55	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.54	FR infant	0.54	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.49	WHO cluster diet D	0.49	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.44	DK adult	0.44	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.42	UK vegetarian	0.42	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.40	LT adult	0.40	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.37	UK adult	0.37	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.36	FR (GP)	0.36	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.35	NL (GP)	0.35	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.33	IE adult	0.33	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.27	FI adult	0.27	Eggs		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	IT adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	IT adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	IT adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	IT adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)

**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples									
2010	Peaches									
2010	Strawberries									
2010	Tomatoes									
2010	Head cabbage									
2010	Lettuce									
2010	Leek									
2010	Oats									
2010	Rye									
2010	Swine Meat	0.05	625							
2010	Milk	0.0008	842	0.12		0.00		4.97	UK infant	

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Endrin**



**Endrin**

Acute exposure: Endrin / Apples



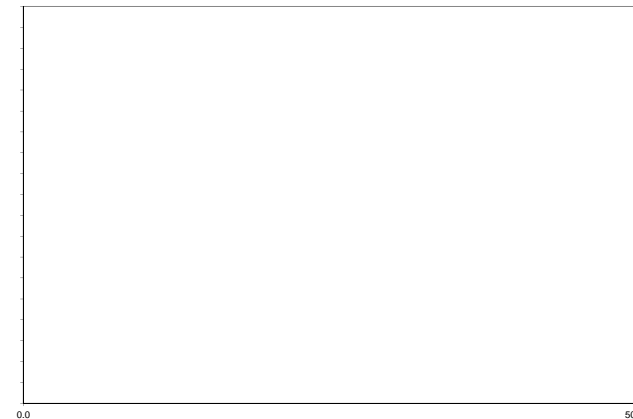
Intake in % of the ARfD

Acute exposure: Endrin / Peaches



Intake in % of the ARfD

Acute exposure: Endrin / Strawberries



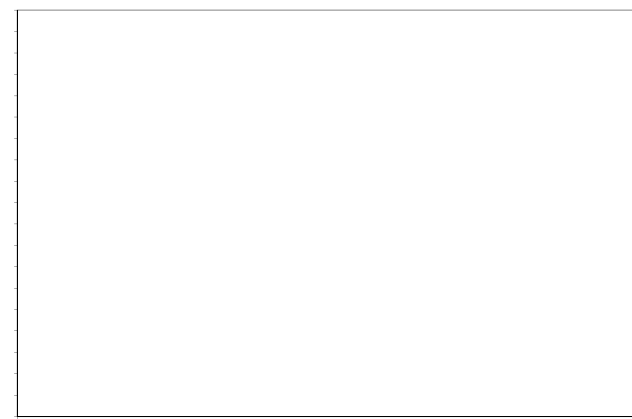
Intake in % of the ARfD

Acute exposure: Endrin / Tomatoes



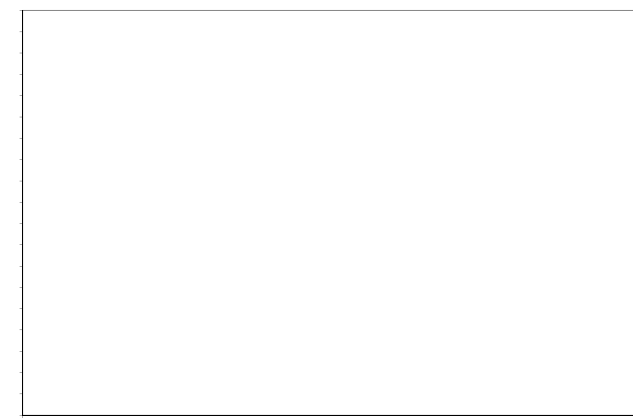
Intake in % of the ARfD

Acute exposure: Endrin / Head cabbage



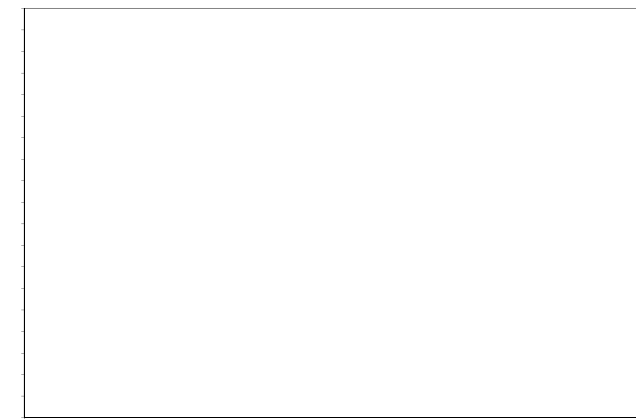
Intake in % of the ARfD

Acute exposure: Endrin / Lettuce



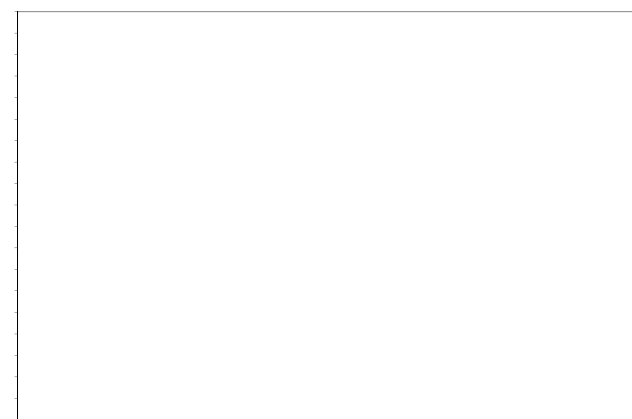
Intake in % of the ARfD

Acute exposure: Endrin / Leek



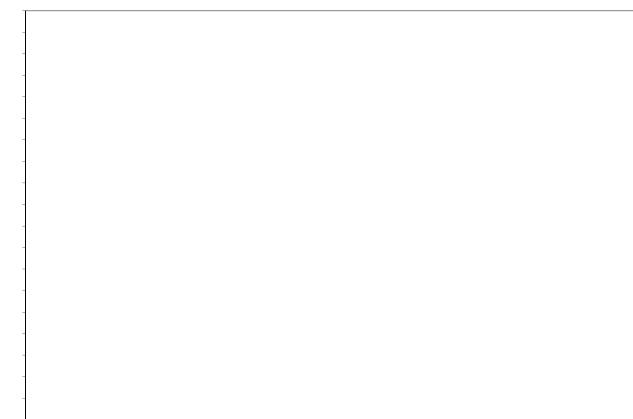
Intake in % of the ARfD

Acute exposure: Endrin / Oats



Intake in % of the ARfD

Acute exposure: Endrin / Rye



Intake in % of the ARfD

Epoxiconazole			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.008	ARfD (mg/kg bw):	0.023
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2008	Year of evaluation:	2008

**Chronic risk assessment**

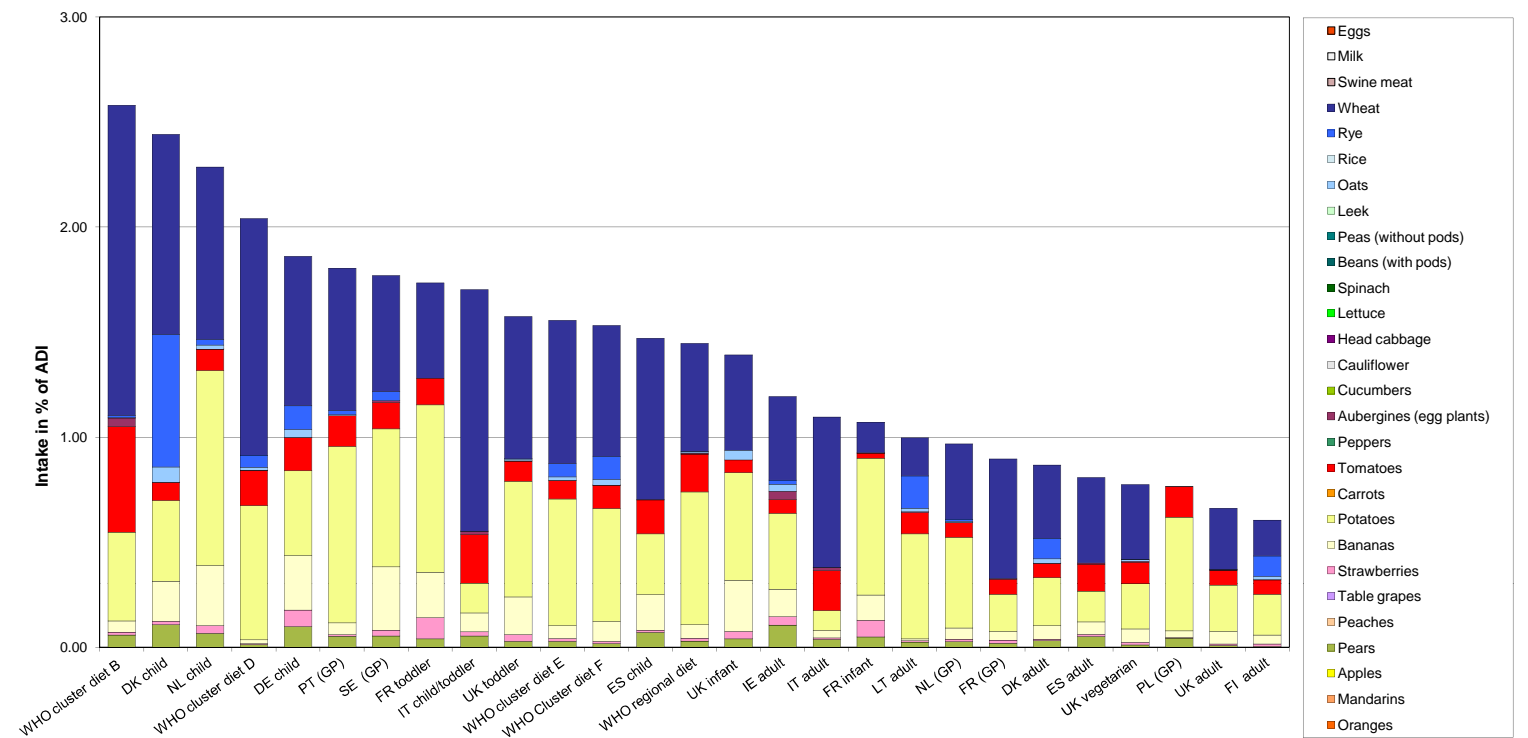
		Exposure (range) in % of ADI minimum - maximum					
		1	3				
No of diets exceeding ADI:		---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
2.58	WHO cluster diet B	1.48	Wheat	0.50	Potatoes	0.42	Potatoes
2.44	DK child	0.95	Wheat	0.63	Rye	0.38	Potatoes
2.29	NL child	0.93	Potatoes	0.82	Wheat	0.29	Bananas
2.04	WHO cluster diet D	1.13	Wheat	0.64	Potatoes	0.17	Tomatoes
1.86	DE child	0.71	Wheat	0.40	Potatoes	0.26	Bananas
1.81	PT (GP)	0.84	Potatoes	0.68	Wheat	0.15	Tomatoes
1.77	SE (GP)	0.66	Potatoes	0.55	Wheat	0.30	Bananas
1.74	FR toddler	0.80	Potatoes	0.45	Wheat	0.22	Bananas
1.70	IT child/toddler	1.15	Wheat	0.23	Tomatoes	0.14	Potatoes
1.58	UK toddler	0.68	Wheat	0.55	Potatoes	0.18	Bananas
1.56	WHO cluster diet E	0.68	Wheat	0.60	Potatoes	0.09	Tomatoes
1.53	WHO Cluster diet F	0.62	Wheat	0.54	Potatoes	0.11	Tomatoes
1.47	ES child	0.77	Wheat	0.29	Potatoes	0.17	Bananas
1.45	WHO regional diet	0.63	Potatoes	0.51	Wheat	0.18	Tomatoes
1.39	UK infant	0.51	Potatoes	0.45	Wheat	0.24	Bananas
1.19	IE adult	0.40	Wheat	0.36	Potatoes	0.13	Bananas
1.10	IT adult	0.72	Wheat	0.19	Tomatoes	0.09	Potatoes
1.07	FR infant	0.65	Potatoes	0.15	Wheat	0.12	Bananas
1.00	LT adult	0.50	Potatoes	0.18	Wheat	0.15	Rye
0.97	NL (GP)	0.43	Potatoes	0.36	Wheat	0.07	Tomatoes
0.90	FR (GP)	0.57	Wheat	0.18	Potatoes	0.07	Tomatoes
0.87	DK adult	0.35	Wheat	0.23	Potatoes	0.10	Rye
0.81	ES adult	0.41	Wheat	0.15	Potatoes	0.13	Tomatoes
0.77	UK vegetarian	0.35	Wheat	0.22	Potatoes	0.10	Tomatoes
0.77	PL (GP)	0.54	Potatoes	0.14	Tomatoes	0.04	Pears
0.66	UK adult	0.29	Wheat	0.22	Potatoes	0.07	Tomatoes
0.61	FI adult	0.19	Potatoes	0.17	Wheat	0.10	Rye

**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	2758							
2010	Peaches	0.05	1292							
2010	Strawberries	0.05	2051	0.20		0.06		4.07	DE child	
2010	Tomatoes	0.05	2093	0.10		0.05		12.64	BE child	
2010	Head cabbage	0.2	1092							
2010	Lettuce	0.05	2004							
2010	Leek	0.05	833							
2010	Oats	1	237	2.95		0.06		1.04	DE child	
2010	Rye	0.2	381	0.79		0.02		0.49	UK infant	
2010	Swine Meat									
2010	Milk									

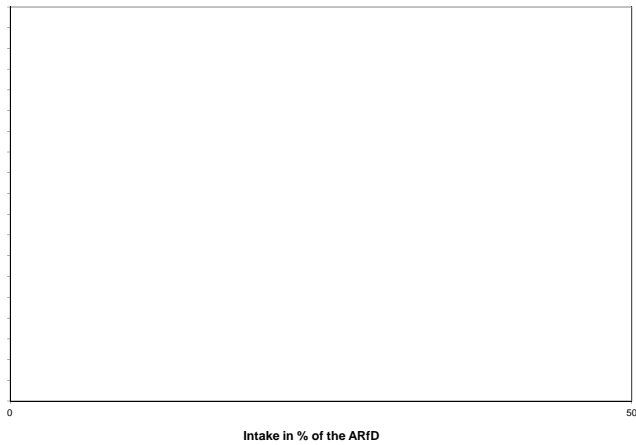
a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Epoxiconazole**

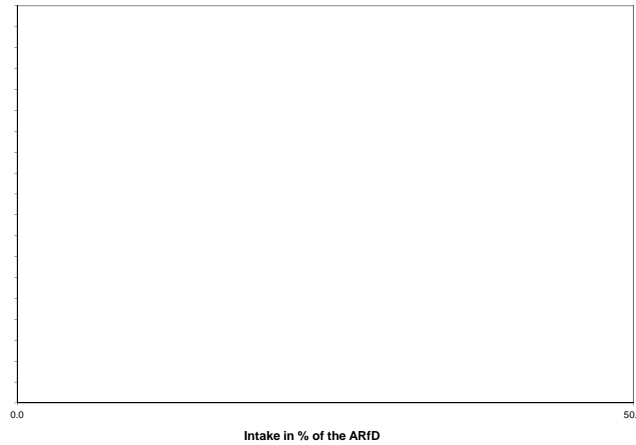


**Epoxiconazole**

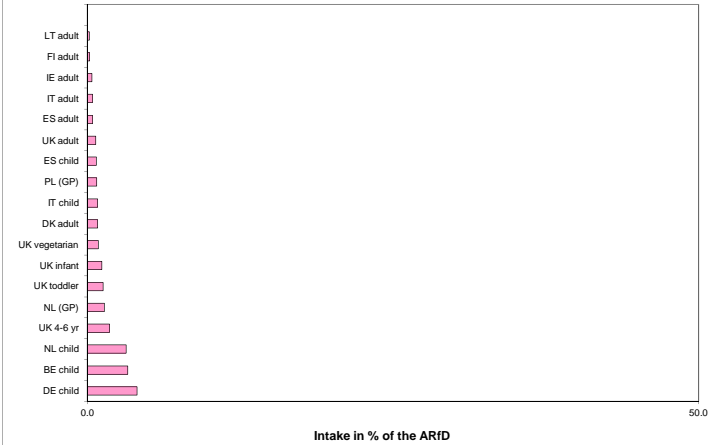
Acute exposure: Epoxiconazole / Apples



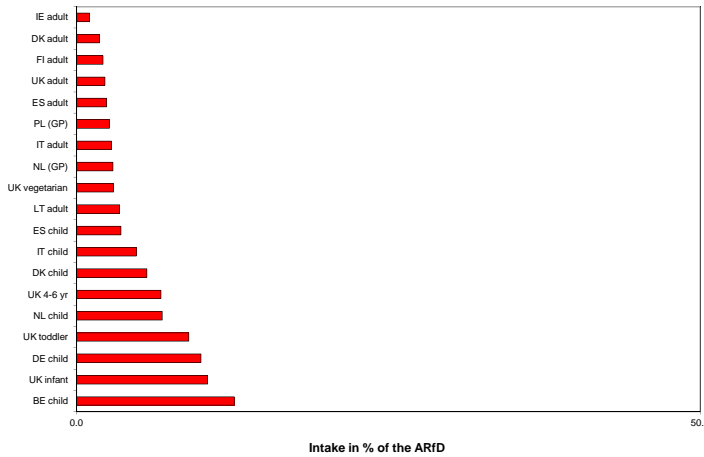
Acute exposure: Epoxiconazole / Peaches



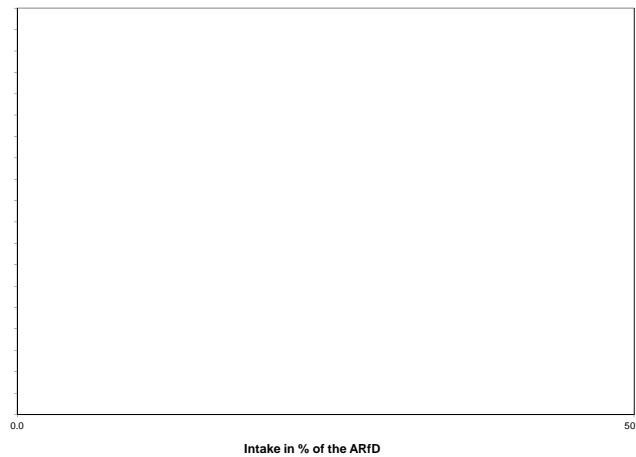
Acute exposure: Epoxiconazole / Strawberries



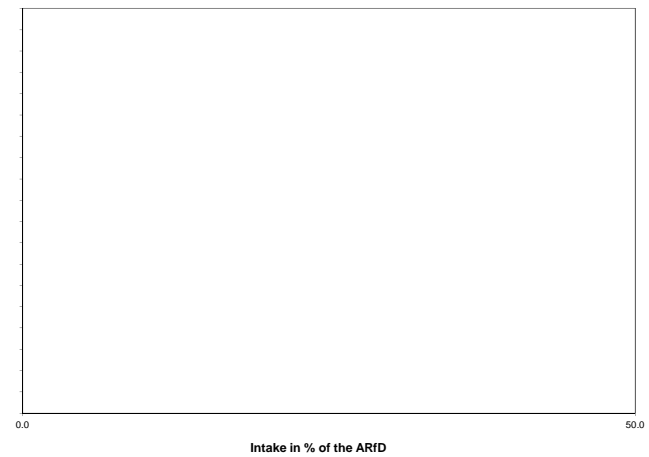
Acute exposure: Epoxiconazole / Tomatoes



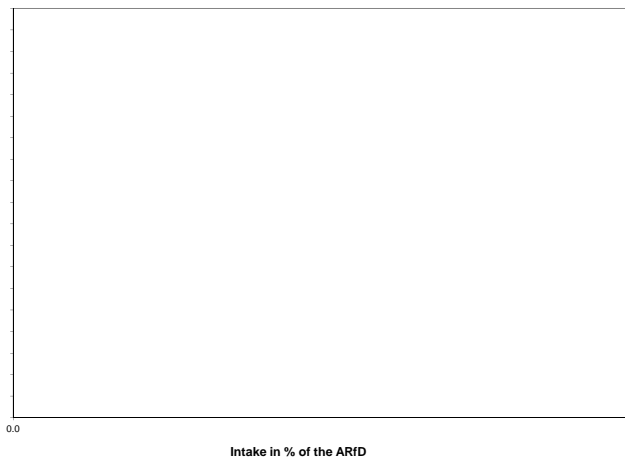
Acute exposure: Epoxiconazole / Head cabbage



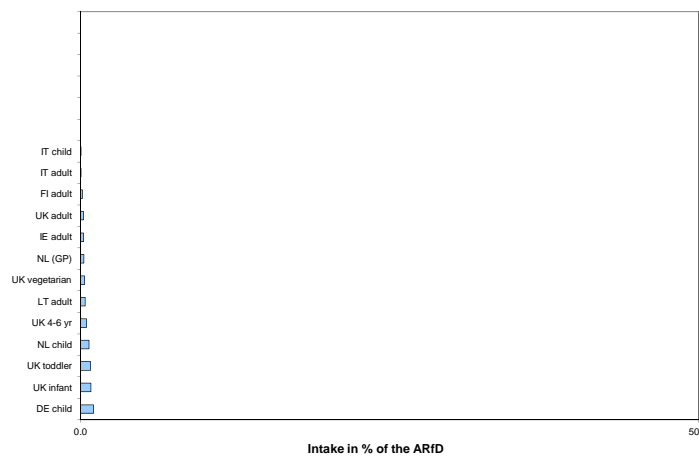
Acute exposure: Epoxiconazole / Lettuce



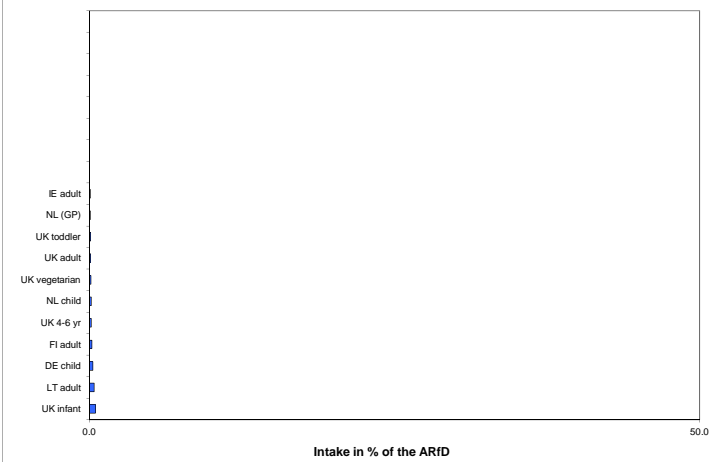
Acute exposure: Epoxiconazole / Leek



Acute exposure: Epoxiconazole / Oats



Acute exposure: Epoxiconazole / Rye



Ethephon			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:	Yes	Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.03	ARfD (mg/kg bw):	0.05
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2006	Year of evaluation:	2008

**Chronic risk assessment**

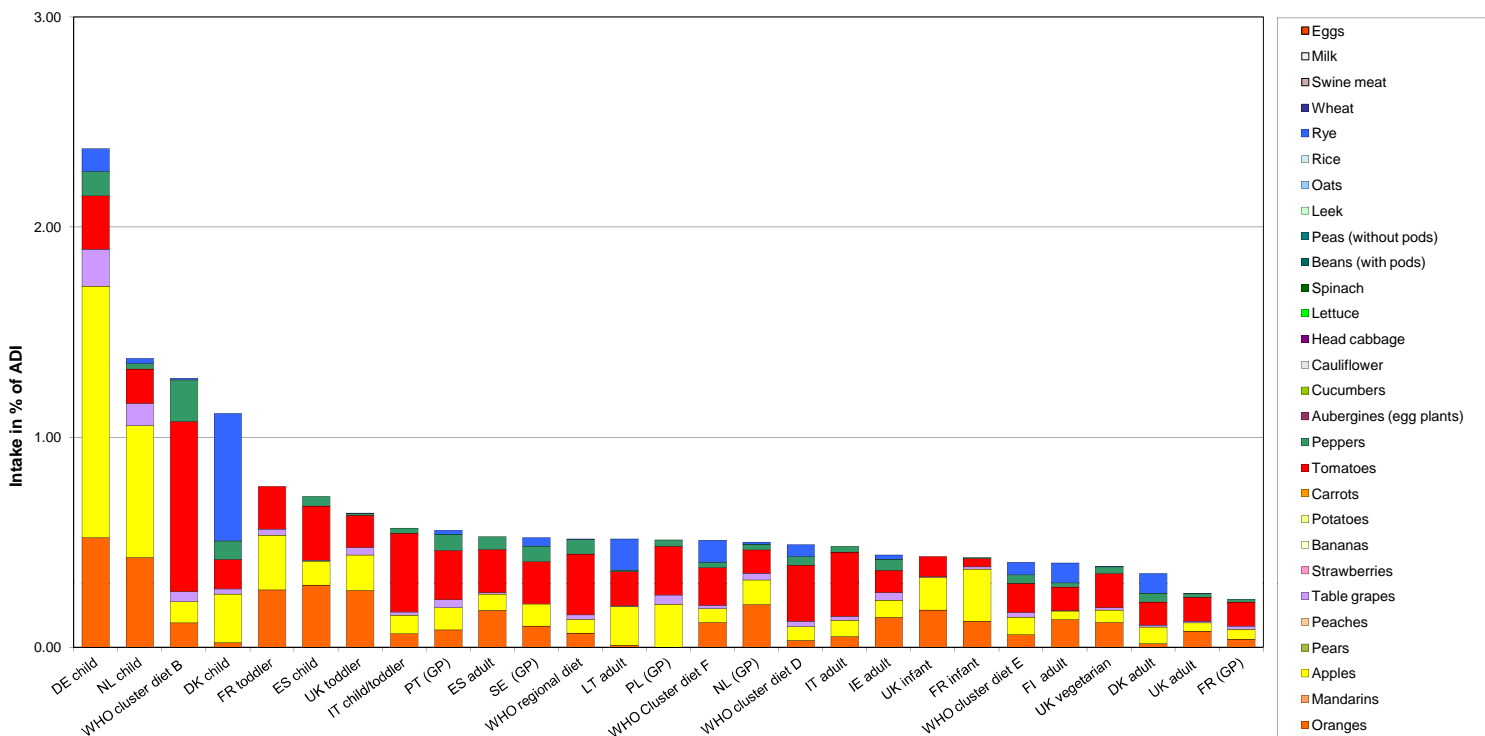
		Exposure (range) in % of ADI minimum - maximum					
		2					
		No of diets exceeding ADI: ---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
2.37	DE child	1.20	Apples	0.52	Oranges	0.25	Tomatoes
1.38	NL child	0.63	Apples	0.43	Oranges	0.16	Tomatoes
1.28	WHO cluster diet B	0.81	Tomatoes	0.20	Peppers	0.12	Oranges
1.11	DK child	0.61	Rye	0.23	Apples	0.14	Tomatoes
0.77	FR toddler	0.27	Oranges	0.26	Apples	0.20	Tomatoes
0.72	ES child	0.30	Oranges	0.26	Tomatoes	0.11	Apples
0.64	UK toddler	0.27	Oranges	0.17	Apples	0.15	Tomatoes
0.57	IT child/toddler	0.37	Tomatoes	0.09	Apples	0.07	Oranges
0.56	PT (GP)	0.24	Tomatoes	0.10	Apples	0.08	Oranges
0.53	ES adult	0.21	Tomatoes	0.18	Oranges	0.08	Apples
0.52	SE (GP)	0.20	Tomatoes	0.10	Apples	0.10	Oranges
0.52	WHO regional diet	0.29	Tomatoes	0.07	Peppers	0.07	Oranges
0.52	LT adult	0.19	Apples	0.16	Tomatoes	0.15	Rye
0.51	PL (GP)	0.23	Tomatoes	0.20	Apples	0.04	Table grapes
0.51	WHO Cluster diet F	0.18	Tomatoes	0.12	Oranges	0.10	Rye
0.50	NL (GP)	0.20	Oranges	0.12	Apples	0.11	Tomatoes
0.49	WHO cluster diet D	0.27	Tomatoes	0.07	Apples	0.06	Rye
0.48	IT adult	0.31	Tomatoes	0.08	Apples	0.05	Oranges
0.44	IE adult	0.14	Oranges	0.11	Tomatoes	0.08	Apples
0.43	UK infant	0.18	Oranges	0.16	Apples	0.10	Tomatoes
0.43	FR infant	0.25	Apples	0.12	Oranges	0.04	Tomatoes
0.40	WHO cluster diet E	0.14	Tomatoes	0.08	Apples	0.06	Oranges
0.40	FI adult	0.13	Oranges	0.11	Tomatoes	0.09	Rye
0.39	UK vegetarian	0.16	Tomatoes	0.12	Oranges	0.06	Apples
0.35	DK adult	0.11	Tomatoes	0.09	Rye	0.08	Apples
0.26	UK adult	0.11	Tomatoes	0.08	Oranges	0.04	Apples
0.23	FR (GP)	0.11	Tomatoes	0.05	Apples	0.04	Oranges

**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.5	155	1.29		0.04		8.43	UK infant	
2010	Peaches	0.05	49							
2010	Strawberries	0.05	76							
2010	Tomatoes	1	351	7.41	1.42	3.80	5	441.91	BE child	
2010	Head cabbage	0.05	33							
2010	Lettuce	0.05	41							
2010	Leek	0.05	30							
2010	Oats	0.05	84							
2010	Rye	0.5	83	1.20		0.01		0.13	UK infant	
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Ethephon**



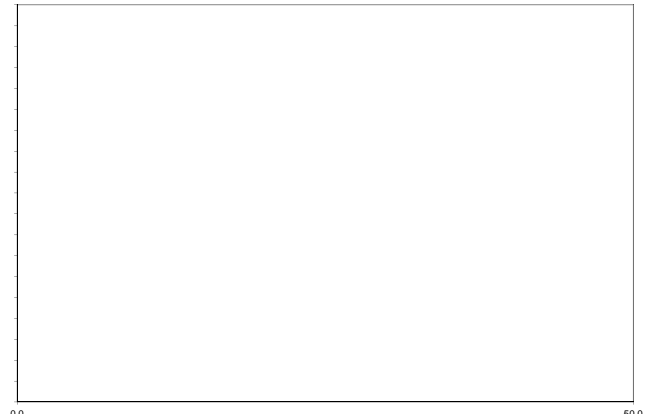
**Ethephon**

Acute exposure: Ethephon / Apples



Intake in % of the ARfD

Acute exposure: Ethephon / Peaches



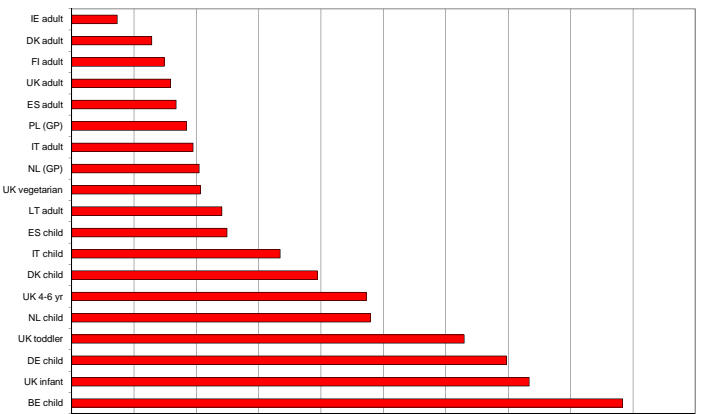
Intake in % of the ARfD

Acute exposure: Ethephon / Strawberries



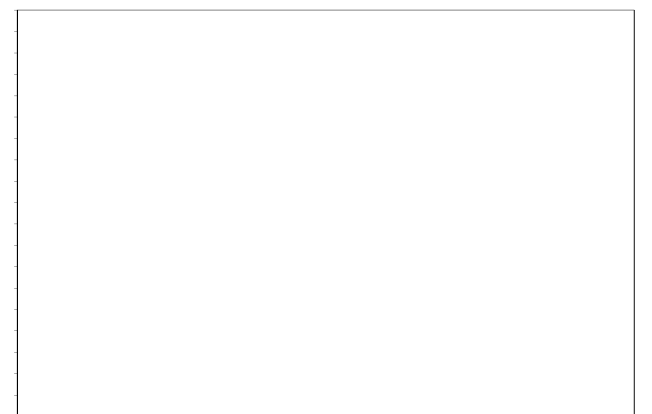
Intake in % of the ARfD

Acute exposure: Ethephon / Tomatoes



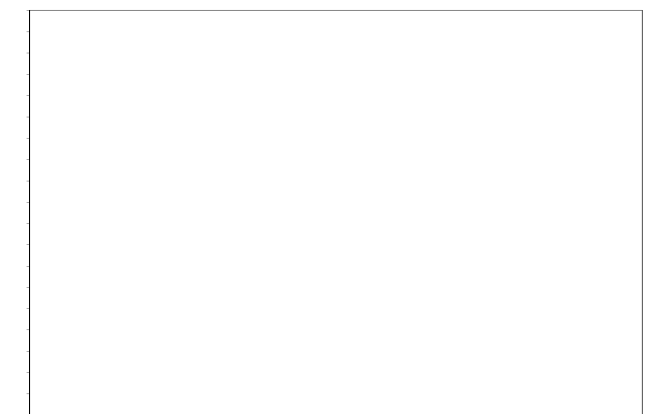
Intake in % of the ARfD

Acute exposure: Ethephon / Head cabbage



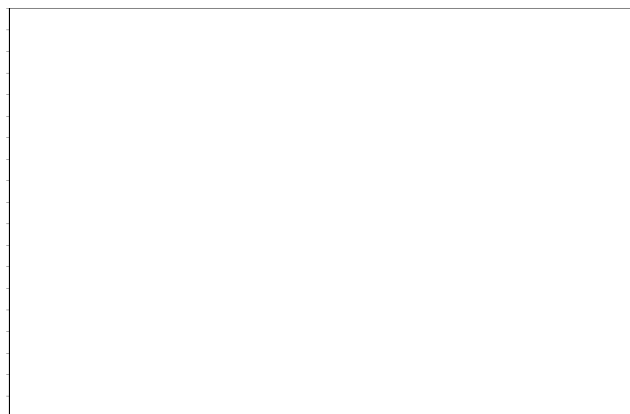
Intake in % of the ARfD

Acute exposure: Ethephon / Lettuce



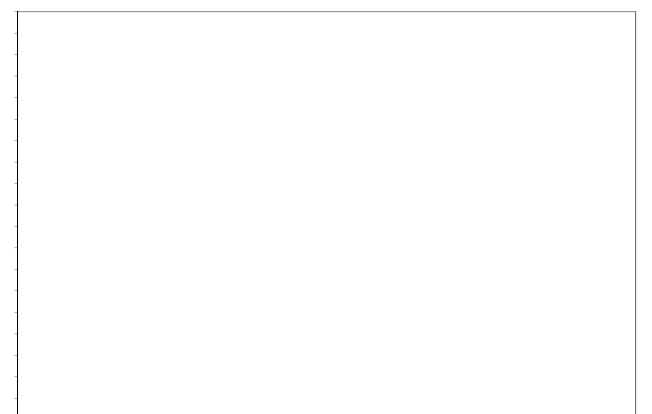
Intake in % of the ARfD

Acute exposure: Ethephon / Leek



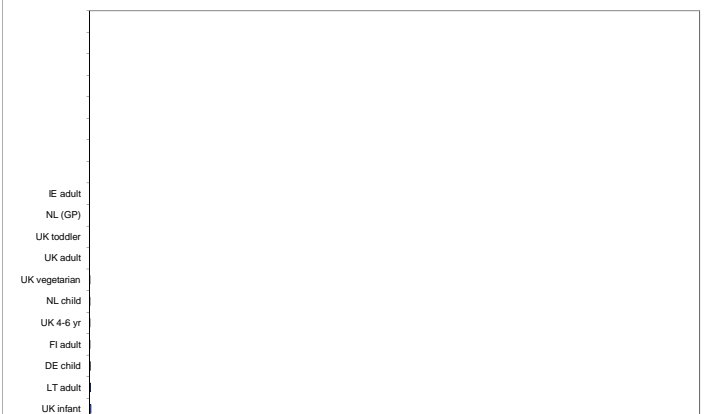
Intake in % of the ARfD

Acute exposure: Ethephon / Oats



Intake in % of the ARfD

Acute exposure: Ethephon / Rye



Intake in % of the ARfD

Ethion			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.002	ARfD (mg/kg bw):	0.002
Source of ADI:	JMPR	Source of ARfD:	
Year of evaluation:	1990	Year of evaluation:	

Active substance was not assessed regarding the setting of an ARfD. ADI is used as a surrogate.

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum					
		3					
		No of diets exceeding ADI:		---			
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
3.23	DE child	1.76	Oranges	0.57	Table grapes	0.45	Carrots
3.02	FR toddler	1.06	Carrots	0.92	Oranges	0.62	Beans (with pods)
2.56	NL child	1.44	Oranges	0.34	Table grapes	0.28	Beans (with pods)
2.31	FR infant	1.15	Carrots	0.47	Beans (with pods)	0.42	Oranges
1.42	UK toddler	0.91	Oranges	0.23	Carrots	0.11	Table grapes
1.36	UK infant	0.60	Oranges	0.57	Carrots	0.10	Strawberries
1.34	ES child	1.00	Oranges	0.13	Beans (with pods)	0.08	Carrots
1.25	WHO cluster diet B	0.39	Oranges	0.26	Peppers	0.19	Beans (with pods)
1.21	SE (GP)	0.37	Carrots	0.35	Oranges	0.28	Head cabbage
1.19	NL (GP)	0.69	Oranges	0.14	Beans (with pods)	0.10	Table grapes
1.07	IE adult	0.48	Oranges	0.14	Carrots	0.12	Table grapes
0.95	DK child	0.60	Carrots	0.12	Peppers	0.08	Table grapes
0.93	ES adult	0.60	Oranges	0.13	Beans (with pods)	0.08	Peppers
0.86	WHO regional diet	0.23	Oranges	0.16	Head cabbage	0.16	Carrots
0.85	WHO Cluster diet F	0.40	Oranges	0.21	Carrots	0.12	Head cabbage
0.83	WHO cluster diet E	0.21	Oranges	0.20	Carrots	0.16	Beans (with pods)
0.82	PT (GP)	0.29	Carrots	0.28	Oranges	0.12	Table grapes
0.69	UK vegetarian	0.40	Oranges	0.10	Carrots	0.04	Head cabbage
0.66	FI adult	0.45	Oranges	0.08	Carrots	0.03	Strawberries
0.49	PL (GP)	0.16	Head cabbage	0.14	Table grapes	0.13	Carrots
0.49	IT child/toddler	0.22	Oranges	0.08	Carrots	0.05	Strawberries
0.47	FR (GP)	0.13	Oranges	0.13	Carrots	0.08	Beans (with pods)
0.46	UK adult	0.26	Oranges	0.08	Carrots	0.03	Head cabbage
0.45	WHO cluster diet D	0.11	Oranges	0.10	Carrots	0.08	Table grapes
0.45	IT adult	0.17	Oranges	0.09	Beans (with pods)	0.06	Carrots
0.40	DK adult	0.19	Carrots	0.06	Oranges	0.06	Peppers
0.32	LT adult	0.18	Head cabbage	0.08	Carrots	0.03	Oranges

### Acute risk assessment

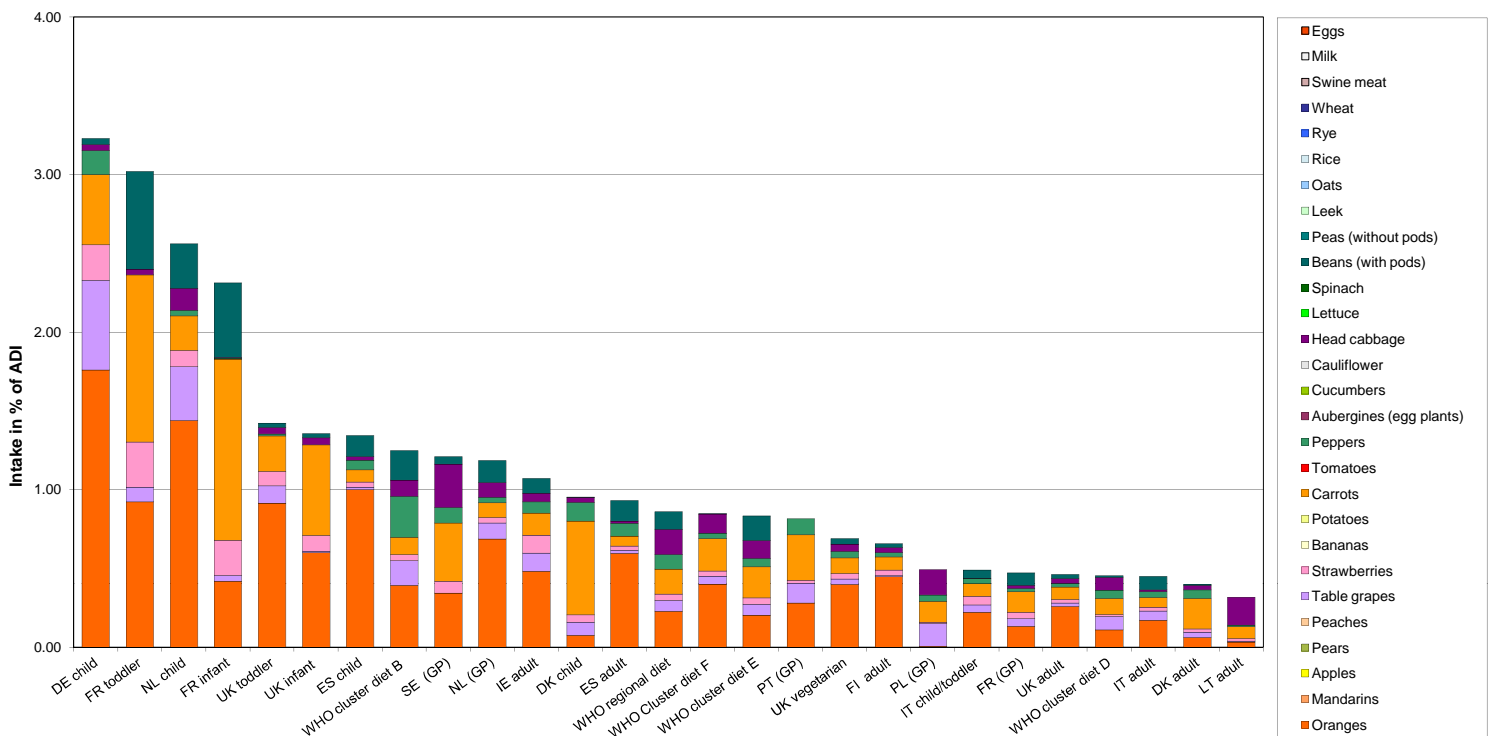
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.01	3045							
2010	Peaches	0.01	1476							
2010	Strawberries	0.01	2303		0.22	0.32	1	249.46	DE child	
2010	Tomatoes	0.01	2527							
2010	Head cabbage	0.01	1184		0.08	0.02		47.37	NL child	
2010	Lettuce	0.01	2342							
2010	Leek	0.01	951							
2010	Oats	0.01	181							
2010	Rye	0.01	436							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Ethion



**Ethion**

Acute exposure: Ethion / Apples



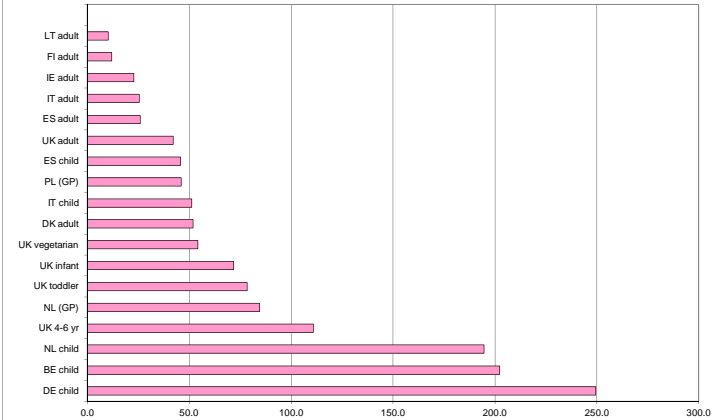
Intake in % of the ARfD

Acute exposure: Ethion / Peaches



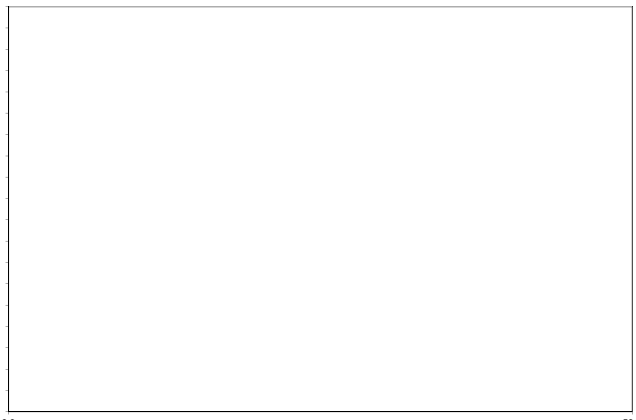
Intake in % of the ARfD

Acute exposure: Ethion / Strawberries



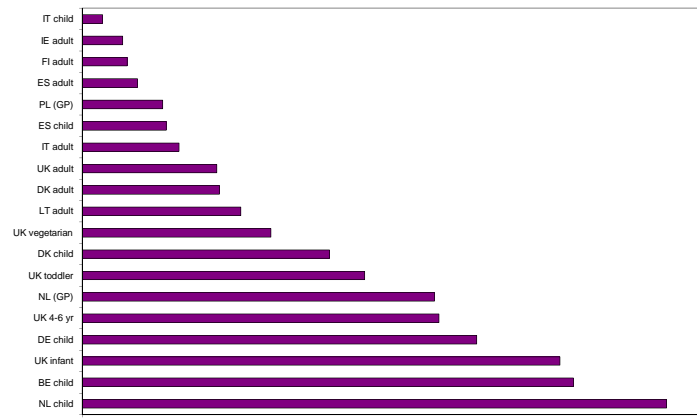
Intake in % of the ARfD

Acute exposure: Ethion / Tomatoes



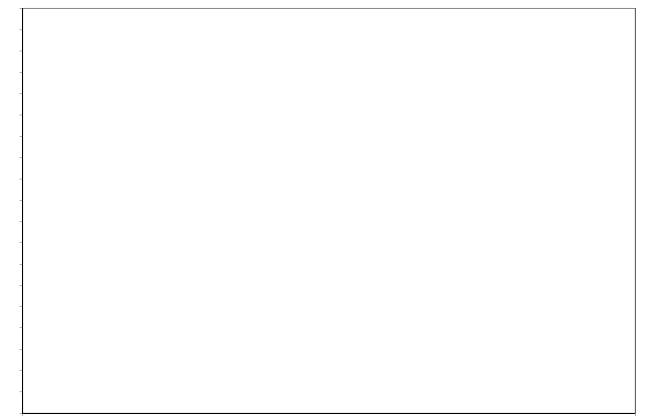
Intake in % of the ARfD

Acute exposure: Ethion / Head cabbage



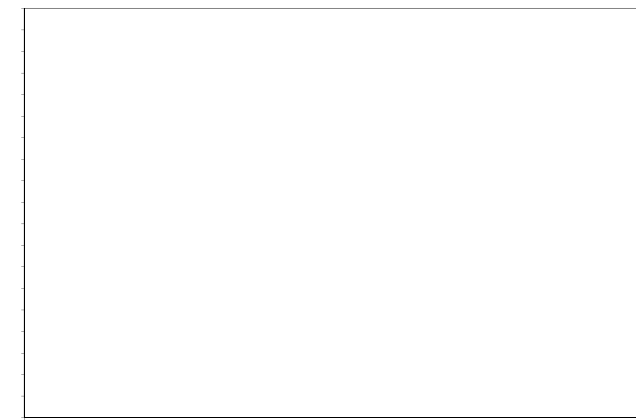
Intake in % of the ARfD

Acute exposure: Ethion / Lettuce



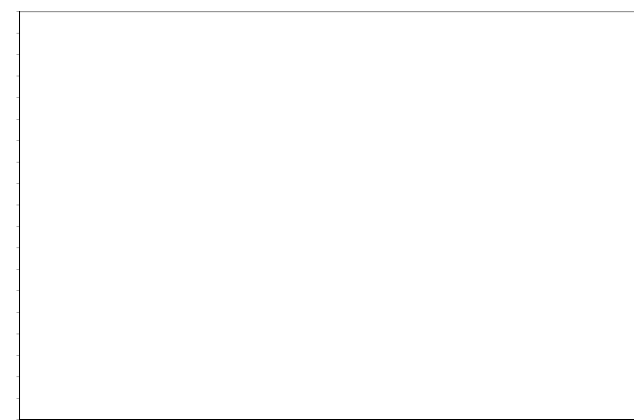
Intake in % of the ARfD

Acute exposure: Ethion / Leek



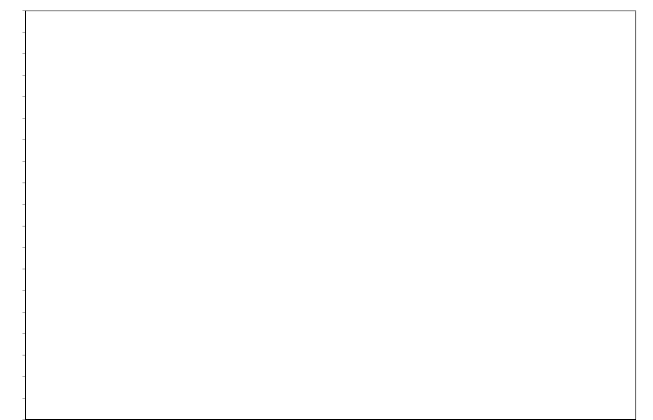
Intake in % of the ARfD

Acute exposure: Ethion / Oats



Intake in % of the ARfD

Acute exposure: Ethion / Rye



Intake in % of the ARfD



Ethoprophos			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:	Yes	Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.0004	ARfD (mg/kg bw):	0.01
Source of ADI:	EFSA	Source of ARfD:	EFSA
Year of evaluation:	2006	Year of evaluation:	2006

### Chronic risk assessment

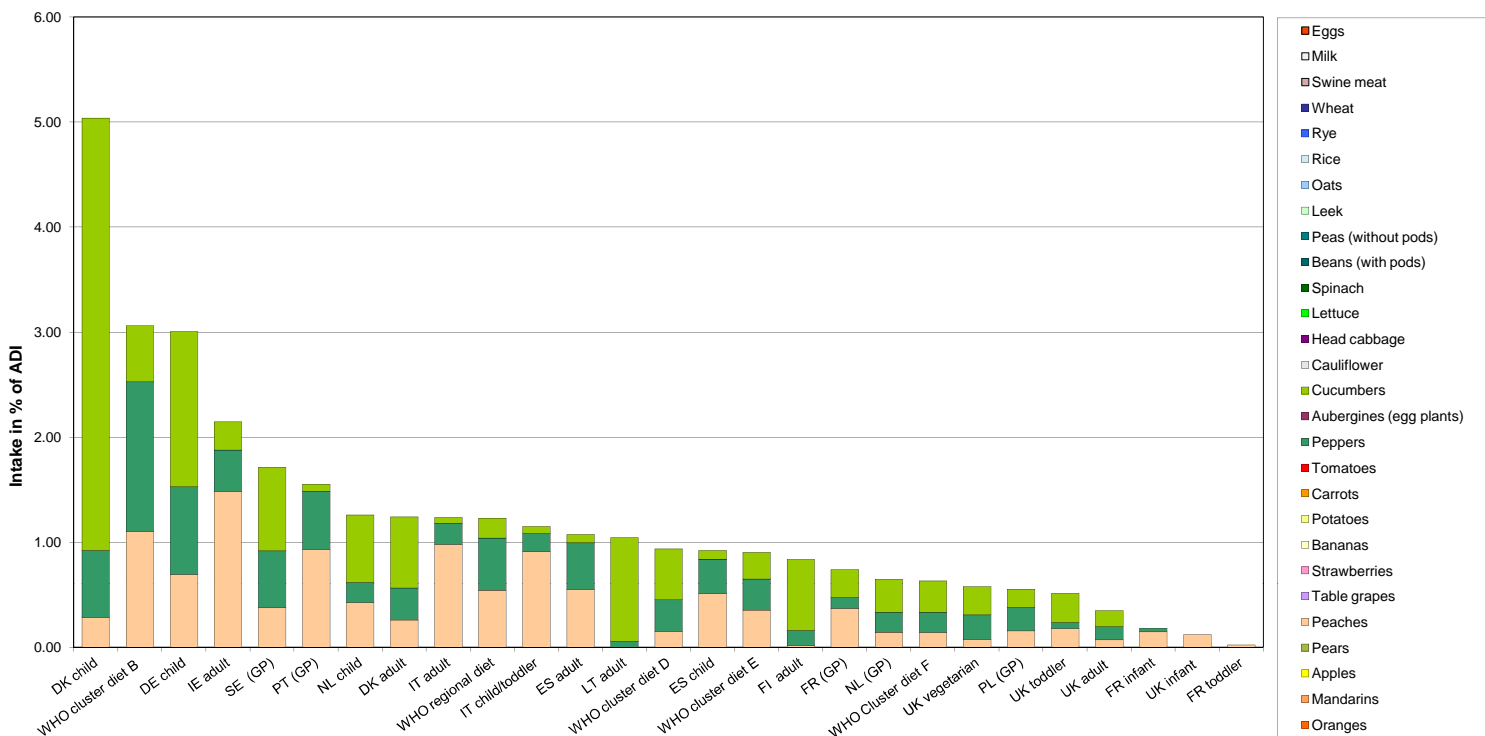
Highest calculated exposure in % of ADI		MS Diet		Exposure (range) in % of ADI minimum - maximum		No of diets exceeding ADI:	
				5		---	
Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities		
5.04	DK child	0.64	Peppers	0.28	Peaches		
3.06	WHO cluster diet B	1.10	Peaches	0.53	Cucumbers		
3.01	DE child	0.83	Peppers	0.70	Peaches		
2.15	IE adult	0.39	Peppers	0.27	Cucumbers		
1.71	SE (GP)	0.54	Peppers	0.38	Peaches		
1.55	PT (GP)	0.55	Peppers	0.07	Cucumbers		
1.26	NL child	0.42	Peaches	0.19	Peppers		
1.24	DK adult	0.31	Peppers	0.26	Peaches		
1.24	IT adult	0.20	Peppers	0.06	Cucumbers		
1.23	WHO regional diet	0.50	Peppers	0.19	Cucumbers		
1.15	IT child/toddler	0.17	Peppers	0.07	Cucumbers		
1.08	ES adult	0.44	Peppers	0.08	Cucumbers		
1.04	LT adult	0.06	Peppers		FRUIT (FRESH OR FROZEN)		
0.94	WHO cluster diet D	0.30	Peppers	0.15	Peaches		
0.92	ES child	0.33	Peppers	0.08	Cucumbers		
0.90	WHO cluster diet E	0.30	Peppers	0.25	Cucumbers		
0.84	FI adult	0.14	Peppers	0.02	Peaches		
0.74	FR (GP)	0.26	Cucumbers	0.11	Peppers		
0.65	NL (GP)	0.19	Peppers	0.15	Peaches		
0.63	WHO Cluster diet F	0.19	Peppers	0.14	Peaches		
0.58	UK vegetarian	0.23	Peppers	0.08	Peaches		
0.55	PL (GP)	0.17	Cucumbers	0.16	Peaches		
0.51	UK toddler	0.18	Peaches	0.06	Peppers		
0.35	UK adult	0.12	Peppers	0.07	Peaches		
0.18	FR infant	0.03	Peppers		FRUIT (FRESH OR FROZEN)		
0.12	UK infant		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		
0.02	FR toddler		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		

### Acute risk assessment

Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.02	2536							
2010	Peaches	0.02	1284	0.08		0.01		6.53	DE child	
2010	Strawberries	0.02	2039							
2010	Tomatoes	0.02	2042							
2010	Head cabbage	0.02	1054							
2010	Lettuce	0.02	2093							
2010	Leek	0.02	866							
2010	Oats	0.02	162							
2010	Rye	0.02	394							
2010	Swine Meat									
2010	Milk									

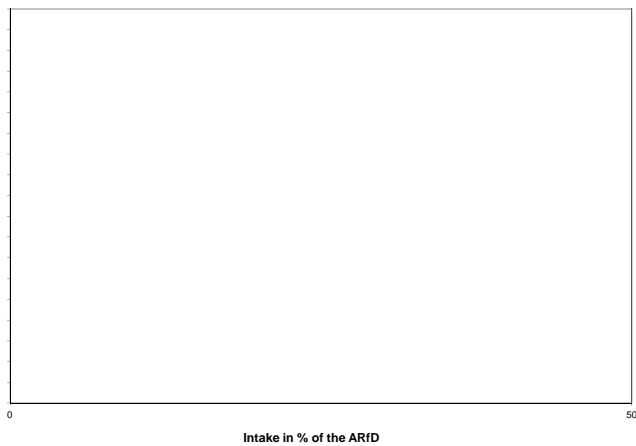
<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
<sup>b)</sup> MRL in place on 01/01/2010  
<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Ethoprophos

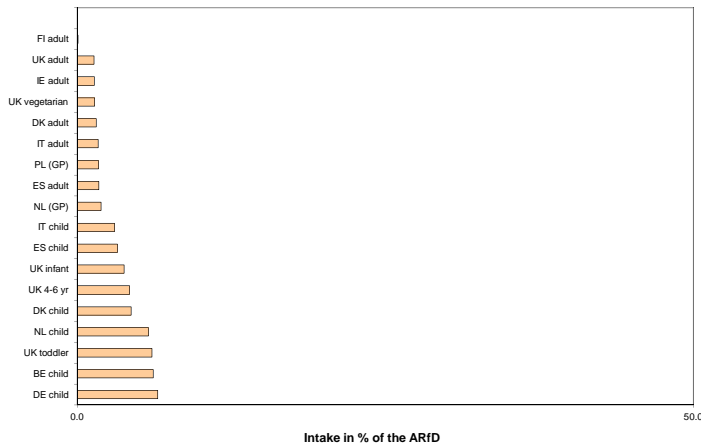


**Ethoprophos**

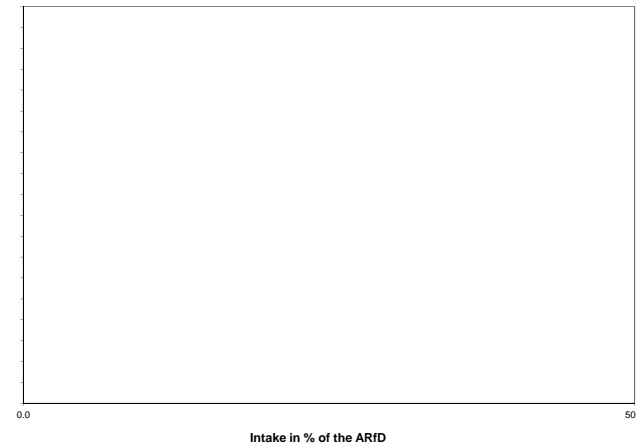
Acute exposure: Ethoprophos / Apples



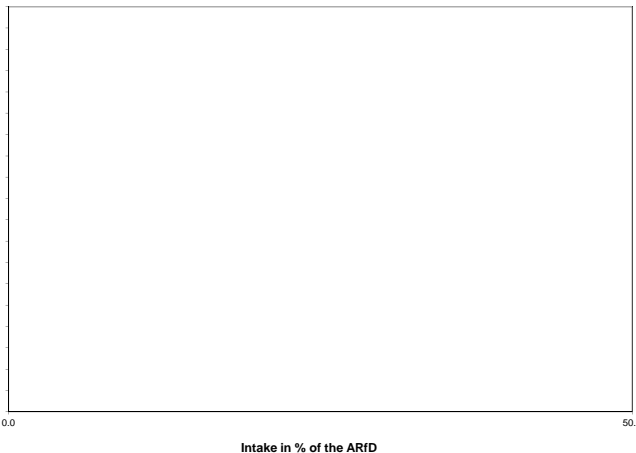
Acute exposure: Ethoprophos / Peaches



Acute exposure: Ethoprophos / Strawberries



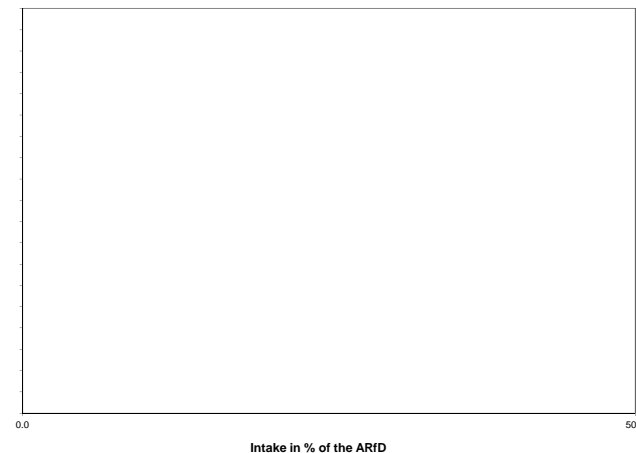
Acute exposure: Ethoprophos / Tomatoes



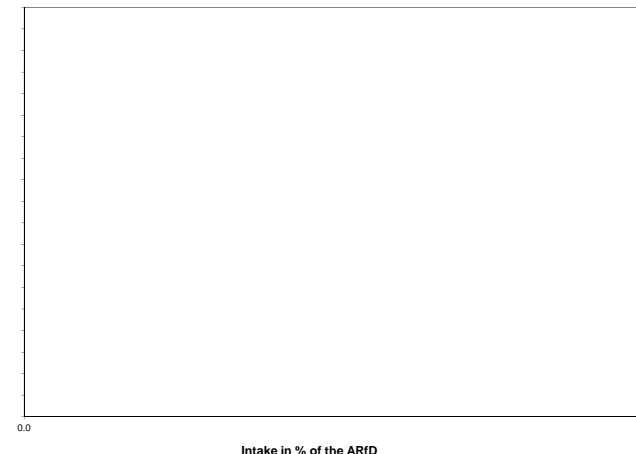
Acute exposure: Ethoprophos / Head cabbage



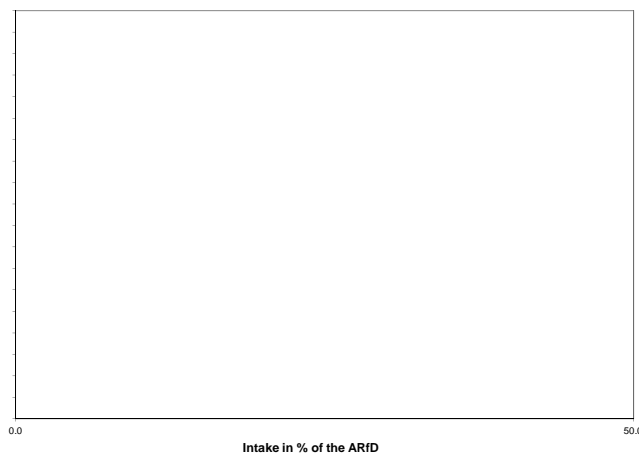
Acute exposure: Ethoprophos / Lettuce



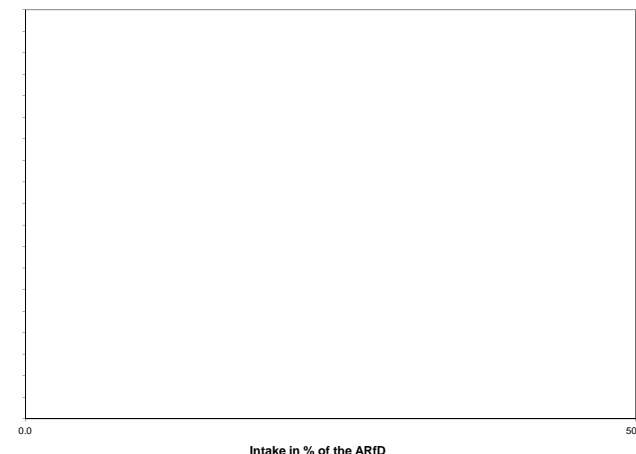
Acute exposure: Ethoprophos / Leek



Acute exposure: Ethoprophos / Oats



Acute exposure: Ethoprophos / Rye



Etofenprox			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:	Yes	Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.03	ARfD (mg/kg bw):	1
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2009	Year of evaluation:	2009

**Chronic risk assessment**

Exposure (range) in % of ADI minimum - maximum  
1

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.48	NL child	0.21	Apples	0.11	Oranges	0.03	Mandarins
0.30	WHO cluster diet B	0.11	Tomatoes	0.03	Apples	0.03	Oranges
0.30	FR toddler	0.09	Apples	0.07	Oranges	0.04	Beans (with pods)
0.22	ES child	0.08	Oranges	0.04	Apples	0.04	Tomatoes
0.20	FR infant	0.08	Apples	0.03	Oranges	0.03	Beans (with pods)
0.20	IE adult	0.04	Oranges	0.03	Peaches	0.03	Apples
0.19	UK toddler	0.07	Oranges	0.06	Apples	0.02	Tomatoes
0.17	ES adult	0.05	Oranges	0.03	Tomatoes	0.03	Apples
0.17	SE (GP)	0.03	Apples	0.03	Tomatoes	0.03	Oranges
0.16	IT child/toddler	0.05	Tomatoes	0.03	Apples	0.02	Peaches
0.16	NL (GP)	0.05	Oranges	0.04	Apples	0.02	Tomatoes
0.16	DK child	0.08	Apples	0.02	Pears	0.02	Tomatoes
0.15	IT adult	0.04	Tomatoes	0.03	Apples	0.02	Peaches
0.15	WHO regional diet	0.04	Tomatoes	0.02	Apples	0.02	Oranges
0.14	PL (GP)	0.07	Apples	0.03	Tomatoes	0.01	Head cabbage
0.14	PT (GP)	0.03	Apples	0.03	Tomatoes	0.02	Oranges
0.14	UK infant	0.05	Apples	0.05	Oranges	0.01	Tomatoes
0.12	WHO Cluster diet F	0.03	Oranges	0.02	Tomatoes	0.02	Apples
0.12	WHO cluster diet E	0.03	Apples	0.02	Tomatoes	0.02	Oranges
0.11	LT adult	0.06	Apples	0.02	Tomatoes	0.01	Head cabbage
0.10	UK vegetarian	0.03	Oranges	0.02	Tomatoes	0.02	Apples
0.10	WHO cluster diet D	0.04	Tomatoes	0.02	Apples	0.01	Oranges
0.08	FI adult	0.03	Oranges	0.02	Tomatoes	0.01	Apples
0.08	FR (GP)	0.02	Tomatoes	0.02	Apples	0.01	Oranges
0.07	DK adult	0.03	Apples	0.02	Tomatoes	0.01	Pears
0.07	UK adult	0.02	Oranges	0.02	Tomatoes	0.01	Apples

**Acute risk assessment**

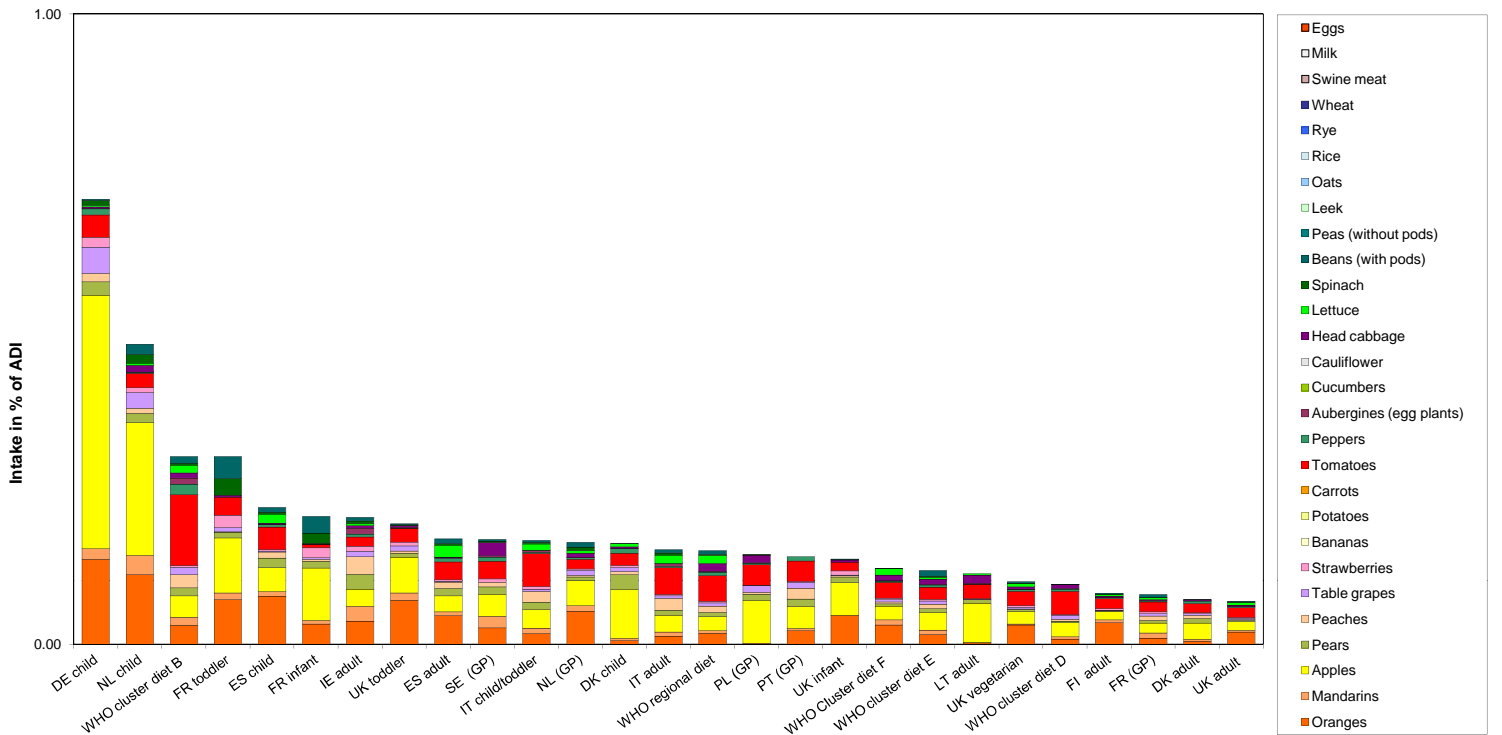
Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	1	2158	0.46		0.05		0.50	UK infant	
2010	Peaches	0.5	1026	11.89		0.20		1.19	DE child	
2010	Strawberries	1	1722	0.17		0.06		0.09	DE child	
2010	Tomatoes	1	1553	1.29		0.21		1.22	BE child	
2010	Head cabbage	2	859	0.12		0.60		3.16	NL child	
2010	Lettuce	3	1720	0.76		0.78		2.10	DE child	
2010	Leek	0.01	669							
2010	Oats	0.5	130							
2010	Rye	0.5	317							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

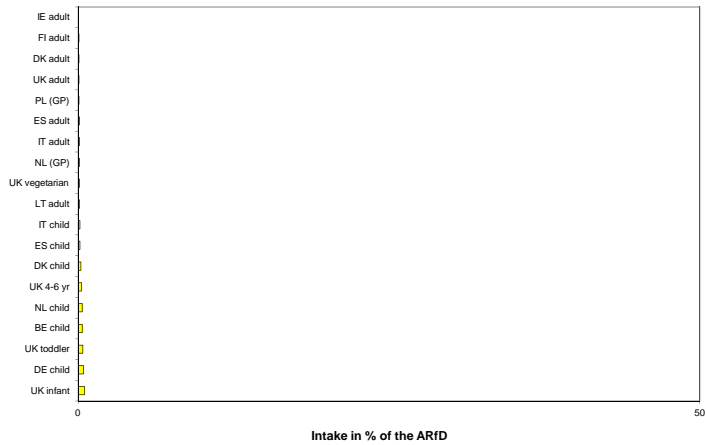
c) TRL: toxicological threshold level

**Chronic risk assessment: Etofenprox**

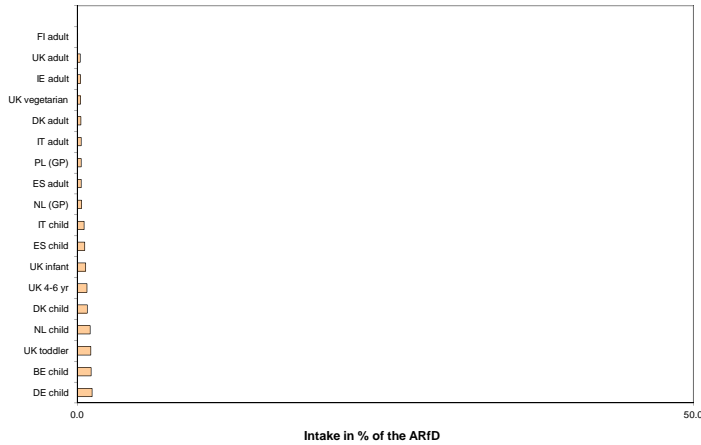


**Etofenprox**

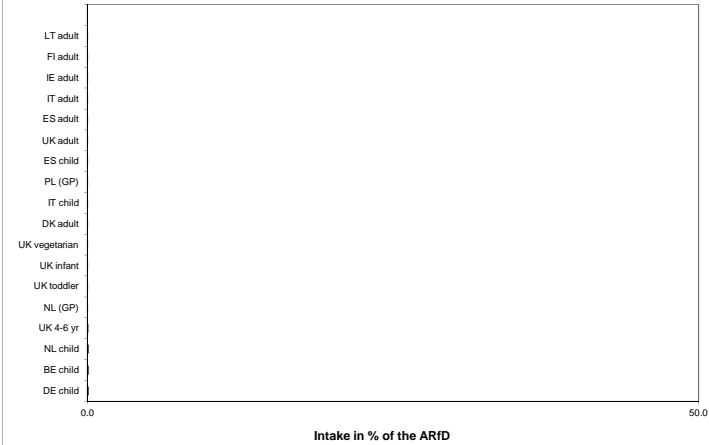
Acute exposure: Etofenprox / Apples



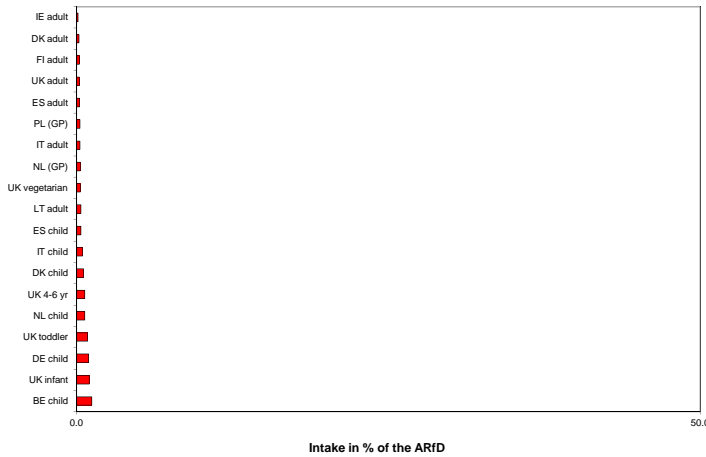
Acute exposure: Etofenprox / Peaches



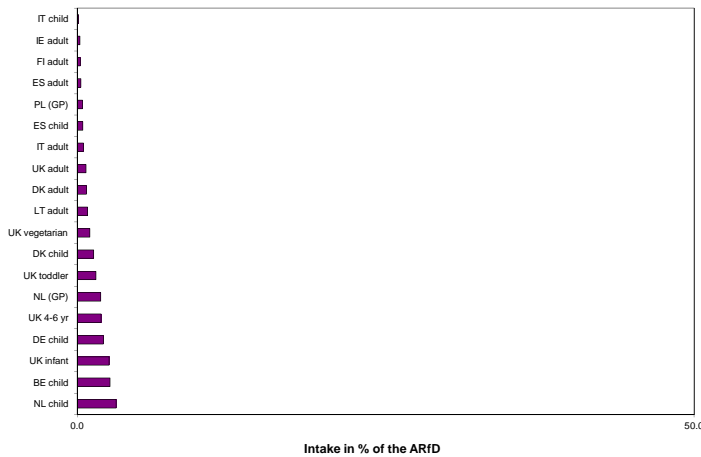
Acute exposure: Etofenprox / Strawberries



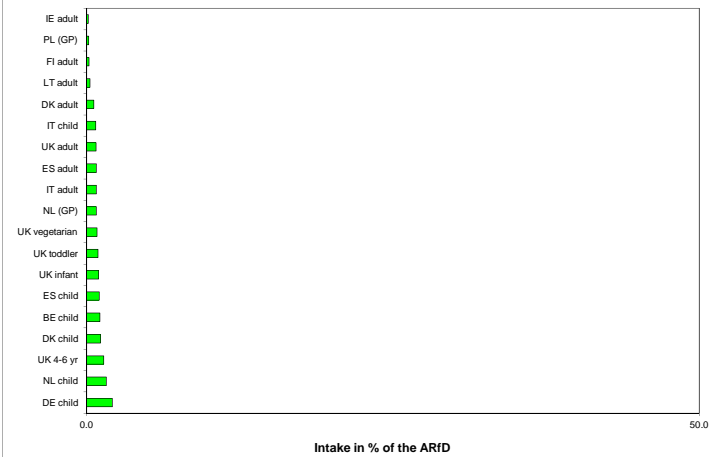
Acute exposure: Etofenprox / Tomatoes



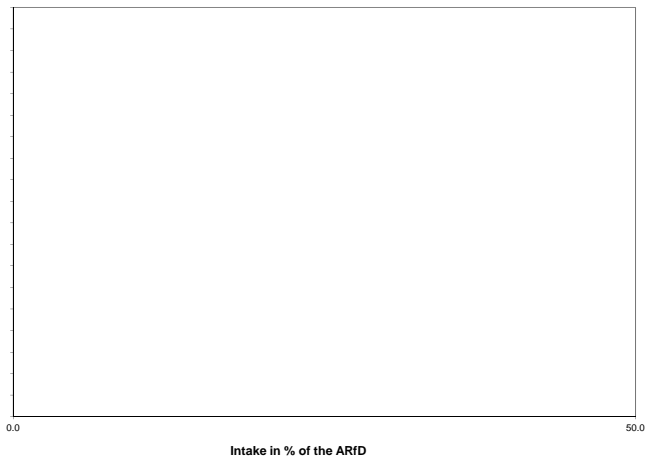
Acute exposure: Etofenprox / Head cabbage



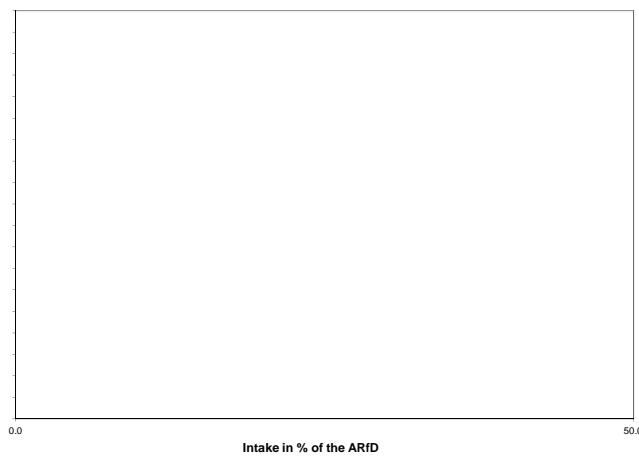
Acute exposure: Etofenprox / Lettuce



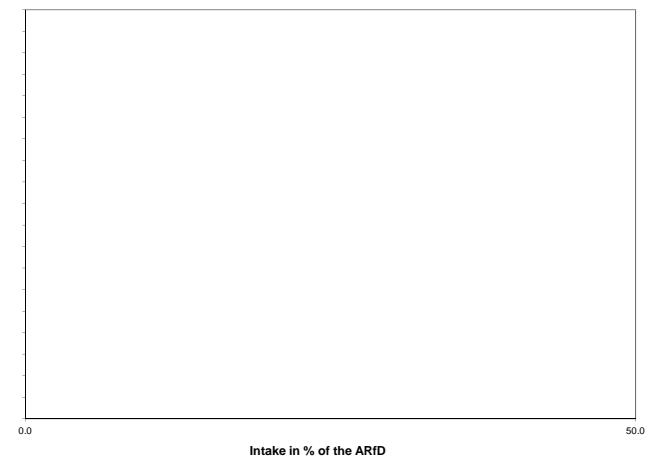
Acute exposure: Etofenprox / Leek



Acute exposure: Etofenprox / Oats



Acute exposure: Etofenprox / Rye



## Fenamiphos

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:	Yes	Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.0008	ARfD (mg/kg bw):	0.0025
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2006	Year of evaluation:	2006

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
5

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)		2nd contributor to MS diet (in % of ADI)		3rd contributor to MS diet (in % of ADI)	
		Commodity / group of commodities	Commodity / group of commodities	Commodity / group of commodities	Commodity / group of commodities		
5.10	WHO cluster diet B	4.33	Tomatoes	0.77	Peppers		FRUIT (FRESH OR FROZEN)
2.10	IT child/toddler	2.00	Tomatoes	0.09	Peppers		FRUIT (FRESH OR FROZEN)
1.81	WHO regional diet	1.54	Tomatoes	0.27	Peppers		FRUIT (FRESH OR FROZEN)
1.81	DE child	1.36	Tomatoes	0.45	Peppers		FRUIT (FRESH OR FROZEN)
1.74	IT adult	1.63	Tomatoes	0.11	Peppers		FRUIT (FRESH OR FROZEN)
1.58	WHO cluster diet D	1.42	Tomatoes	0.16	Peppers		FRUIT (FRESH OR FROZEN)
1.56	ES child	1.38	Tomatoes	0.18	Peppers		FRUIT (FRESH OR FROZEN)
1.56	PT (GP)	1.26	Tomatoes	0.30	Peppers		FRUIT (FRESH OR FROZEN)
1.37	SE (GP)	1.07	Tomatoes	0.29	Peppers		FRUIT (FRESH OR FROZEN)
1.36	PL (GP)	1.24	Tomatoes	0.12	Peppers		FRUIT (FRESH OR FROZEN)
1.34	ES adult	1.10	Tomatoes	0.24	Peppers		FRUIT (FRESH OR FROZEN)
1.09	DK child	0.75	Tomatoes	0.35	Peppers		FRUIT (FRESH OR FROZEN)
1.09	FR toddler	1.09	Tomatoes		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
1.06	WHO Cluster diet F	0.96	Tomatoes	0.10	Peppers		FRUIT (FRESH OR FROZEN)
1.00	UK vegetarian	0.87	Tomatoes	0.13	Peppers		FRUIT (FRESH OR FROZEN)
0.98	NL child	0.88	Tomatoes	0.10	Peppers		FRUIT (FRESH OR FROZEN)
0.90	LT adult	0.87	Tomatoes	0.03	Peppers		FRUIT (FRESH OR FROZEN)
0.90	WHO cluster diet E	0.74	Tomatoes	0.16	Peppers		FRUIT (FRESH OR FROZEN)
0.86	UK toddler	0.83	Tomatoes	0.03	Peppers		FRUIT (FRESH OR FROZEN)
0.78	IE adult	0.56	Tomatoes	0.21	Peppers		FRUIT (FRESH OR FROZEN)
0.75	DK adult	0.58	Tomatoes	0.17	Peppers		FRUIT (FRESH OR FROZEN)
0.70	NL (GP)	0.60	Tomatoes	0.10	Peppers		FRUIT (FRESH OR FROZEN)
0.68	UK adult	0.61	Tomatoes	0.07	Peppers		FRUIT (FRESH OR FROZEN)
0.68	FI adult	0.60	Tomatoes	0.08	Peppers		FRUIT (FRESH OR FROZEN)
0.67	FR (GP)	0.61	Tomatoes	0.06	Peppers		FRUIT (FRESH OR FROZEN)
0.52	UK infant	0.52	Tomatoes		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.23	FR infant	0.21	Tomatoes	0.02	Peppers		FRUIT (FRESH OR FROZEN)

## Acute risk assessment

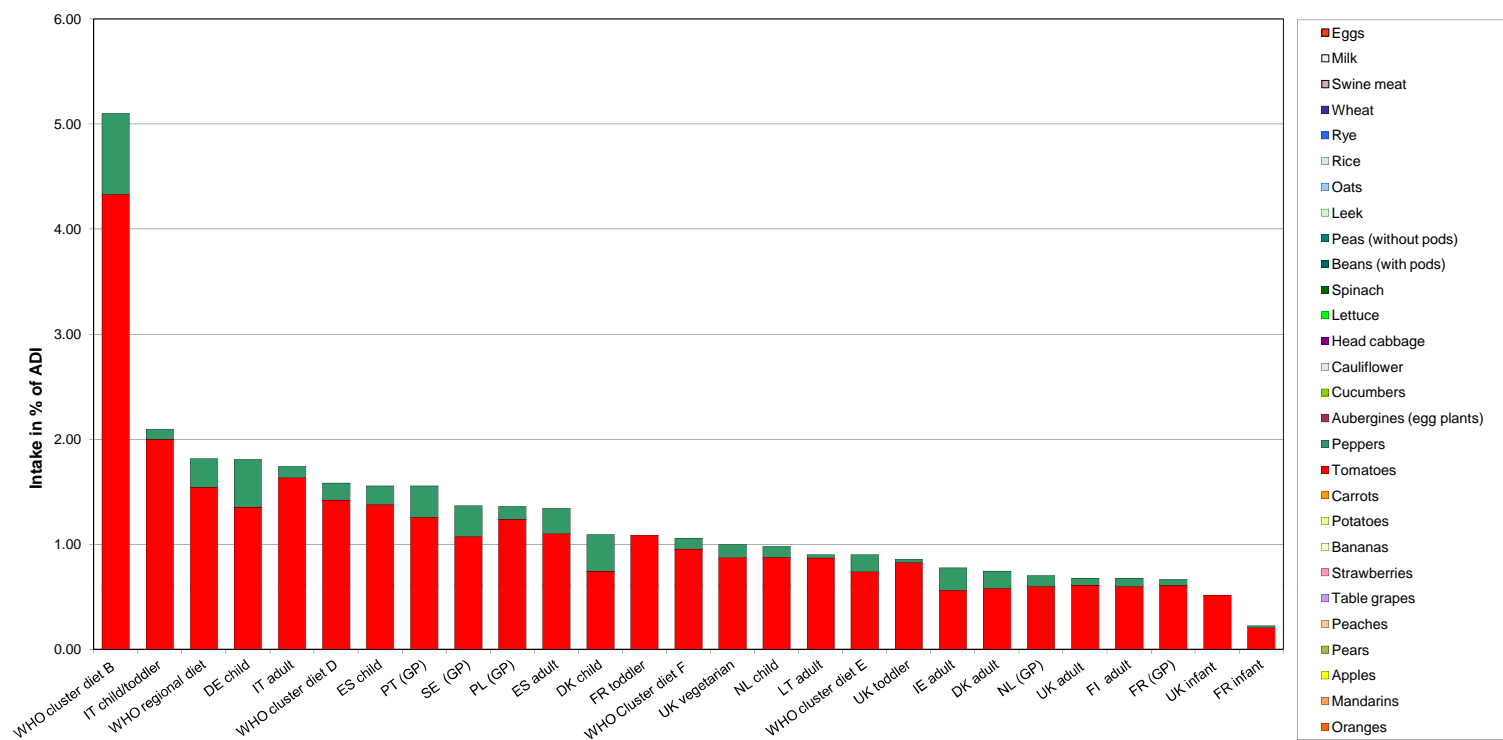
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.02	1880							
2010	Peaches	0.02	836							
2010	Strawberries	0.02	1480							
2010	Tomatoes	0.05	1462	0.21		0.03		69.78	BE child	
2010	Head cabbage	0.02	806	0.12		0.01		18.95	NL child	
2010	Lettuce	0.02	1557							
2010	Leek	0.02	550							
2010	Oats	0.02	105							
2010	Rye	0.02	302							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

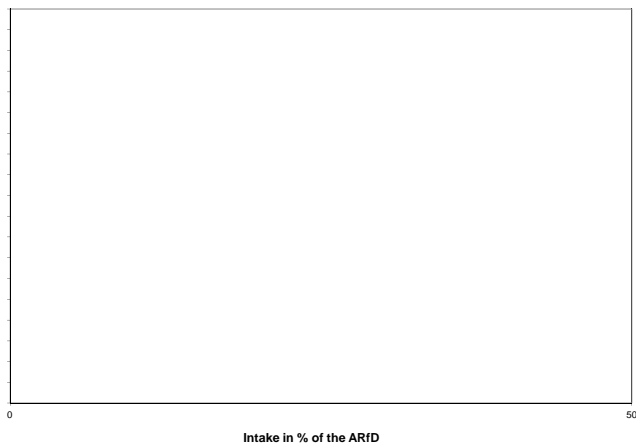
<sup>c)</sup> TRL: toxicological threshold level

## Chronic risk assessment: Fenamiphos

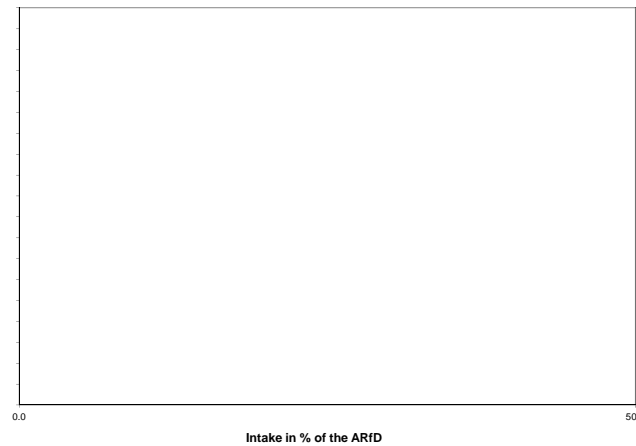


**Fenamiphos**

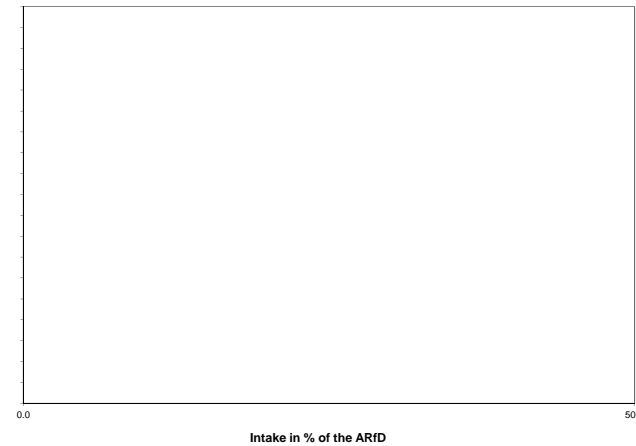
Acute exposure: Fenamiphos / Apples



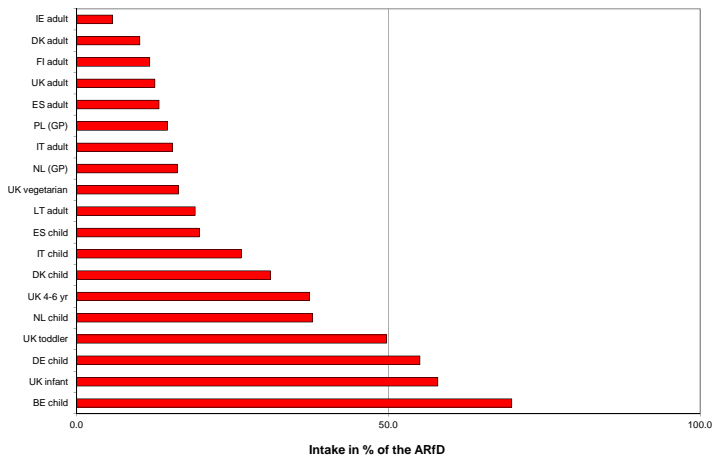
Acute exposure: Fenamiphos / Peaches



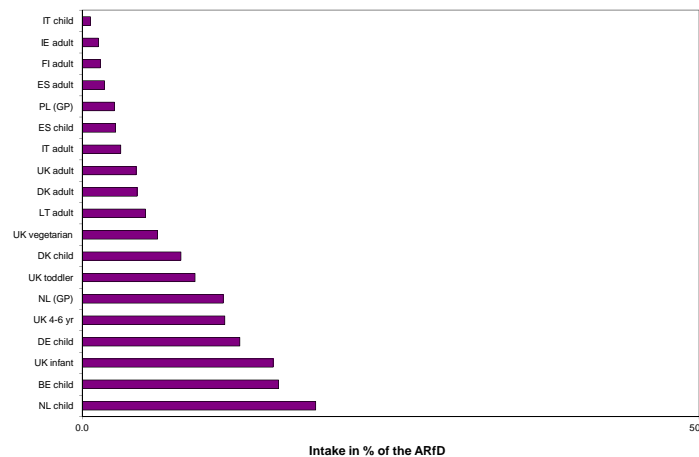
Acute exposure: Fenamiphos / Strawberries



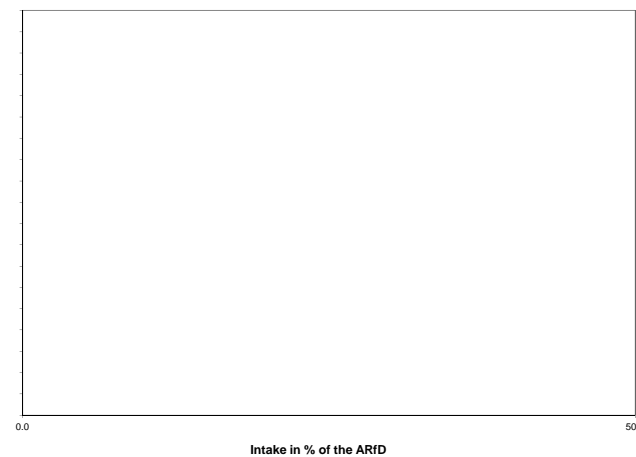
Acute exposure: Fenamiphos / Tomatoes



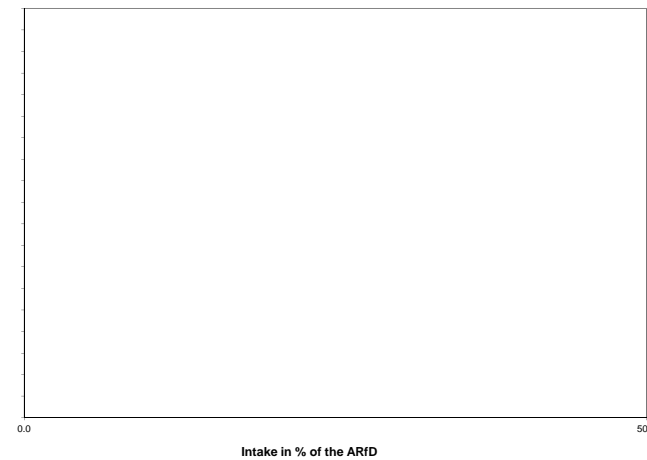
Acute exposure: Fenamiphos / Head cabbage



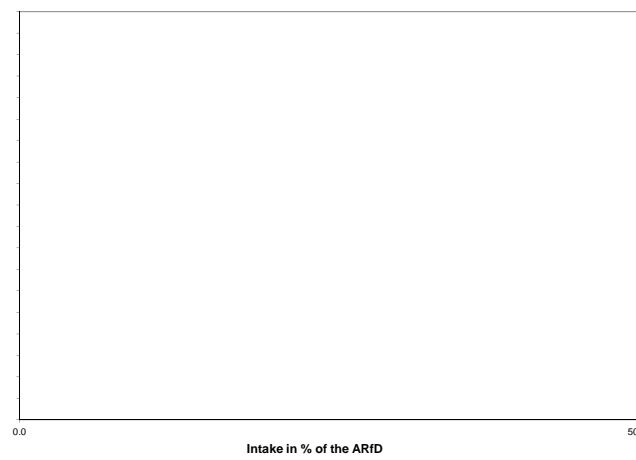
Acute exposure: Fenamiphos / Lettuce



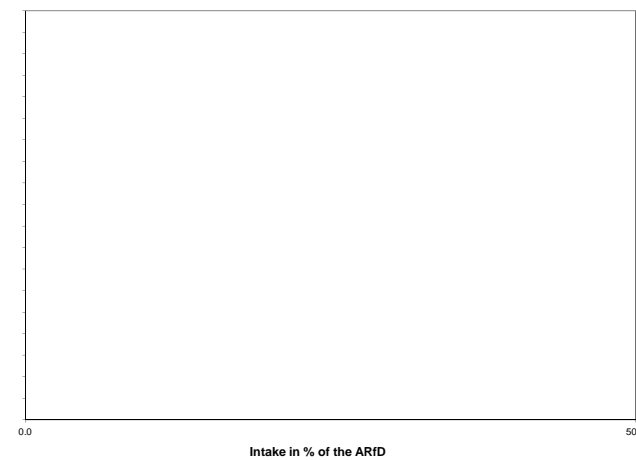
Acute exposure: Fenamiphos / Leek



Acute exposure: Fenamiphos / Oats



Acute exposure: Fenamiphos / Rye



Fenarimol			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.01	ARfD (mg/kg bw):	0.02
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2006	Year of evaluation:	2006

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
2

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
1.13	NL child	0.92	Apples	0.09	Table grapes	0.08	Mandarins
0.51	FR toddler	0.38	Apples	0.08	Strawberries	0.03	Mandarins
0.45	FR infant	0.36	Apples	0.06	Strawberries	0.01	Mandarins
0.42	DK child	0.34	Apples	0.03	Peppers	0.02	Table grapes
0.35	PL (GP)	0.30	Apples	0.04	Table grapes	0.01	Peppers
0.34	UK toddler	0.25	Apples	0.03	Table grapes	0.03	Mandarins
0.31	WHO cluster diet B	0.15	Apples	0.07	Peppers	0.04	Table grapes
0.28	LT adult	0.27	Apples	0.00	Strawberries	0.00	Peppers
0.26	IE adult	0.12	Apples	0.06	Mandarins	0.03	Strawberries
0.26	UK infant	0.23	Apples	0.03	Strawberries	0.00	Table grapes
0.25	SE (GP)	0.15	Apples	0.05	Mandarins	0.03	Peppers
0.24	NL (GP)	0.17	Apples	0.03	Table grapes	0.02	Mandarins
0.23	PT (GP)	0.15	Apples	0.03	Table grapes	0.03	Peppers
0.21	ES child	0.17	Apples	0.02	Mandarins	0.02	Peppers
0.19	IT child/toddler	0.13	Apples	0.02	Mandarins	0.02	Strawberries
0.19	WHO cluster diet E	0.12	Apples	0.02	Table grapes	0.02	Mandarins
0.17	IT adult	0.12	Apples	0.02	Mandarins	0.02	Table grapes
0.16	WHO regional diet	0.10	Apples	0.03	Peppers	0.02	Table grapes
0.16	ES adult	0.11	Apples	0.02	Peppers	0.02	Mandarins
0.15	DK adult	0.11	Apples	0.02	Peppers	0.01	Table grapes
0.15	WHO cluster diet D	0.10	Apples	0.02	Table grapes	0.02	Peppers
0.15	WHO Cluster diet F	0.10	Apples	0.02	Mandarins	0.01	Table grapes
0.12	UK vegetarian	0.09	Apples	0.01	Peppers	0.01	Strawberries
0.12	FR (GP)	0.07	Apples	0.02	Mandarins	0.01	Table grapes
0.09	FI adult	0.06	Apples	0.01	Mandarins	0.01	Strawberries
0.08	UK adult	0.06	Apples	0.01	Peppers	0.01	Table grapes

## Acute risk assessment

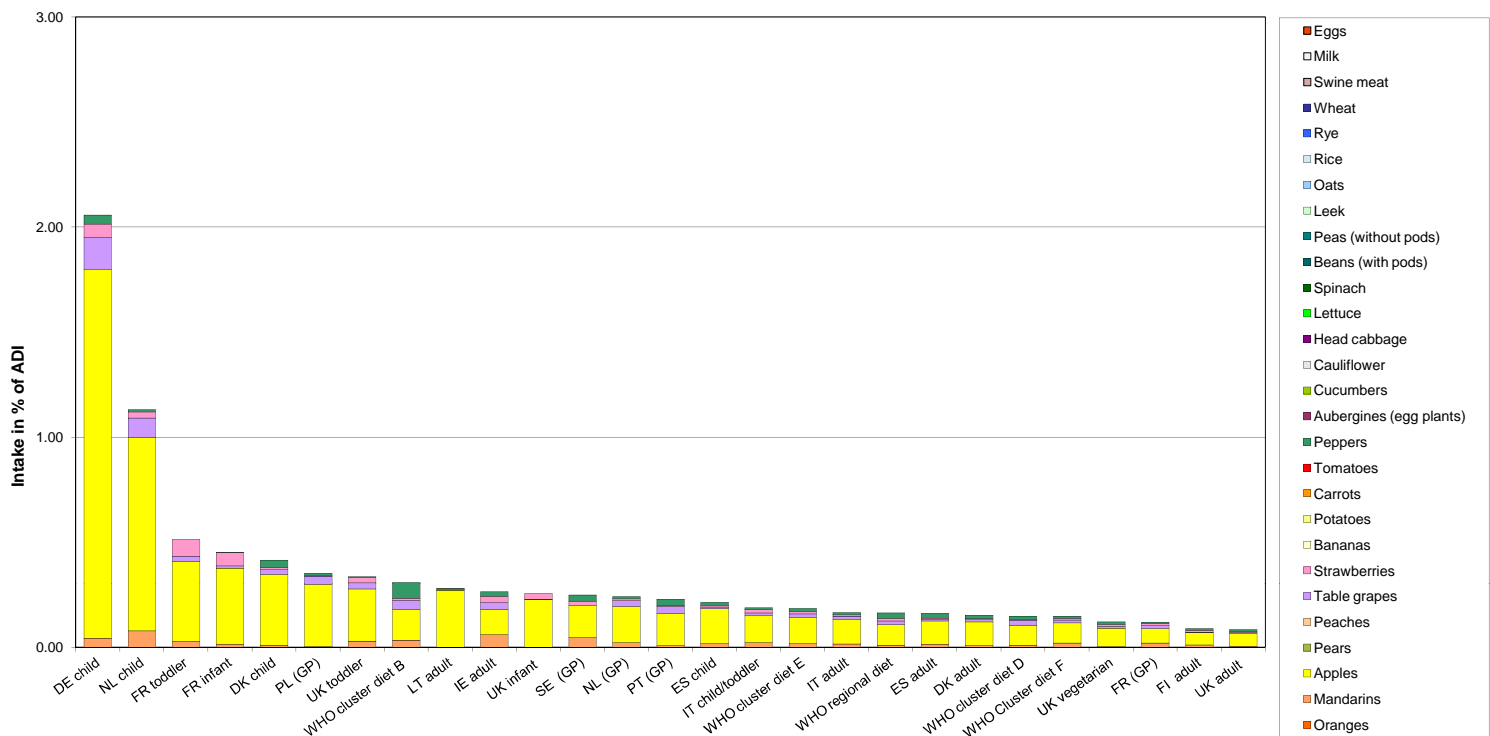
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.3	2931	0.03		0.03		14.69	UK infant	
2010	Peaches	0.5	1390							
2010	Strawberries	0.3	2251	0.22		0.08		6.08	DE child	
2010	Tomatoes	0.5	2423	0.04		0.02		4.65	BE child	
2010	Head cabbage	0.02	1185							
2010	Lettuce	0.02	2366	0.08		0.02		2.69	DE child	
2010	Leek	0.02	922							
2010	Oats	0.02	184							
2010	Rye	0.02	418							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

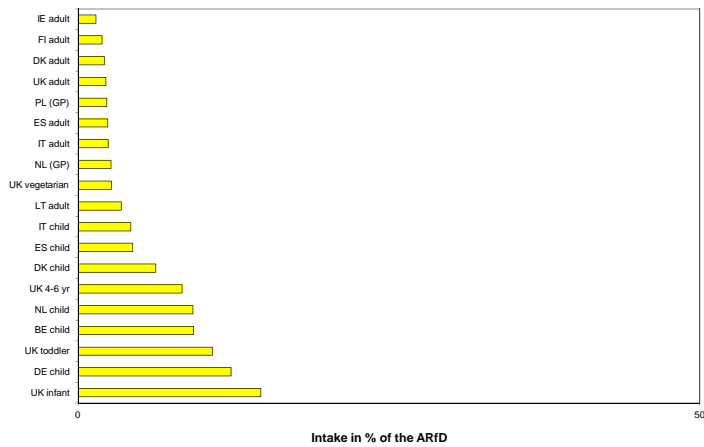
<sup>c)</sup> TRL: toxicological threshold level

## Chronic risk assessment: Fenarimol

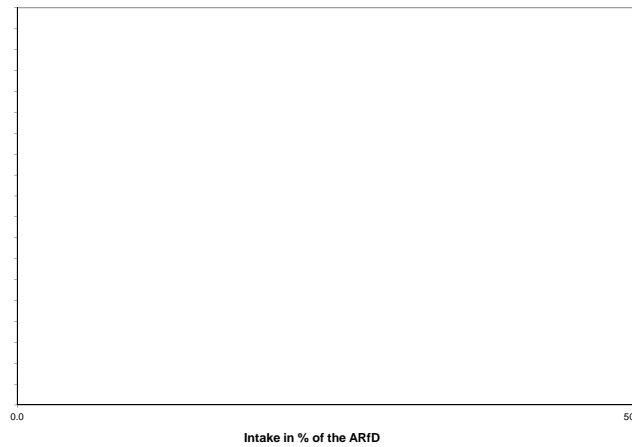


**Fenarimol**

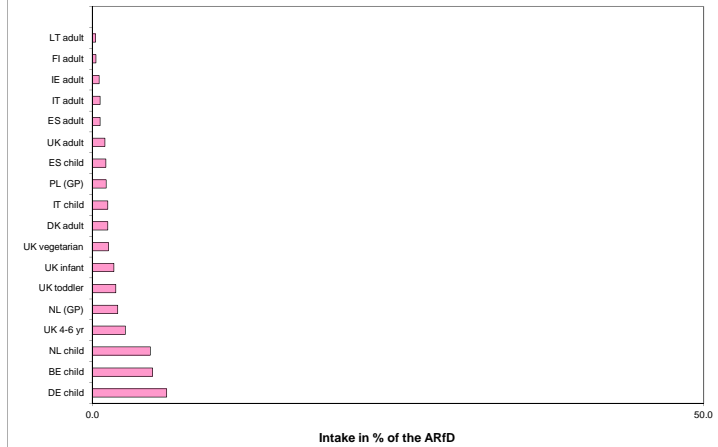
Acute exposure: Fenarimol / Apples



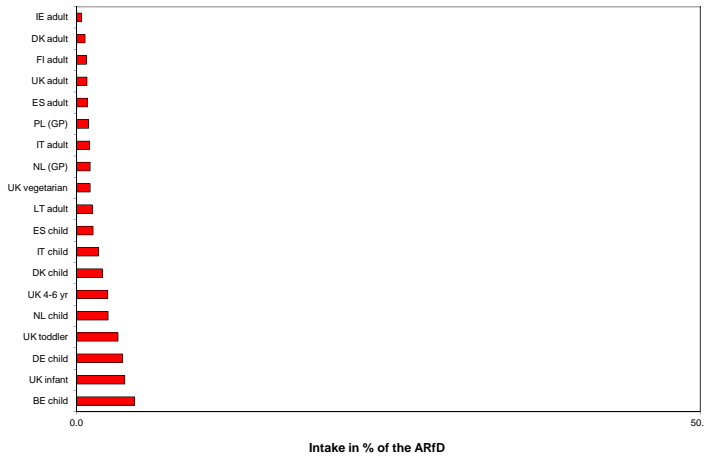
Acute exposure: Fenarimol / Peaches



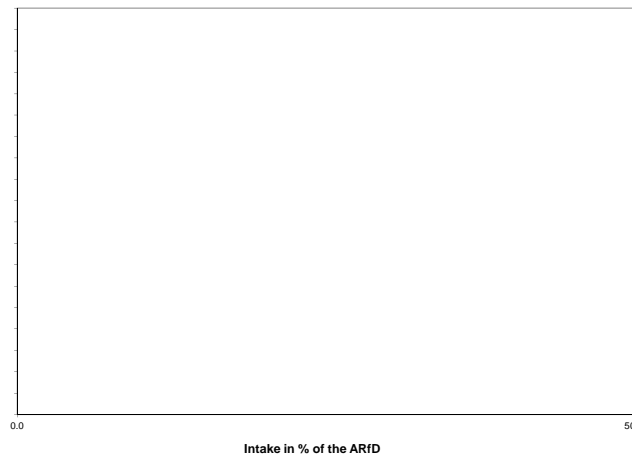
Acute exposure: Fenarimol / Strawberries



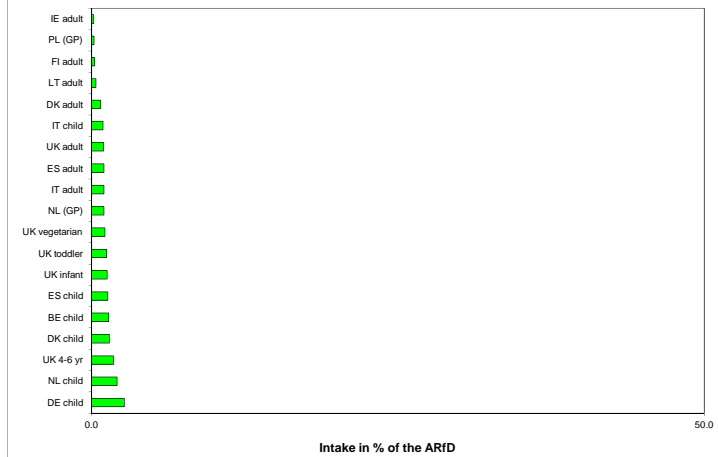
Acute exposure: Fenarimol / Tomatoes



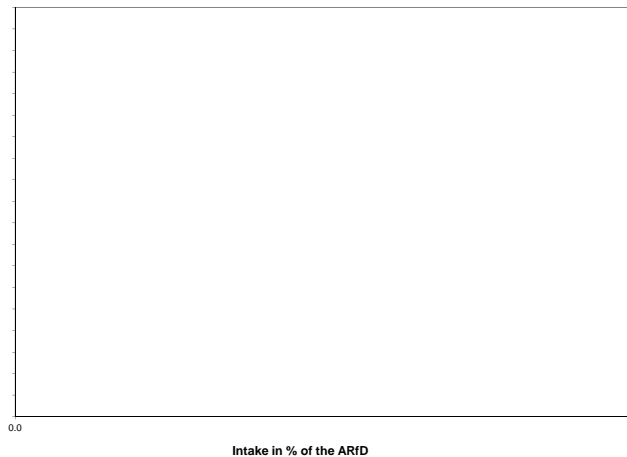
Acute exposure: Fenarimol / Head cabbage



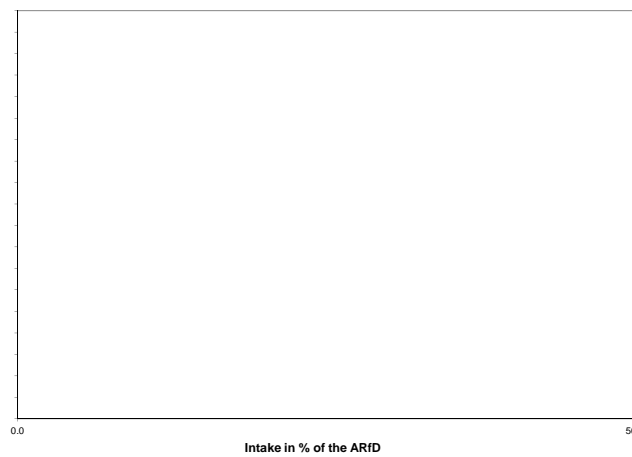
Acute exposure: Fenarimol / Lettuce



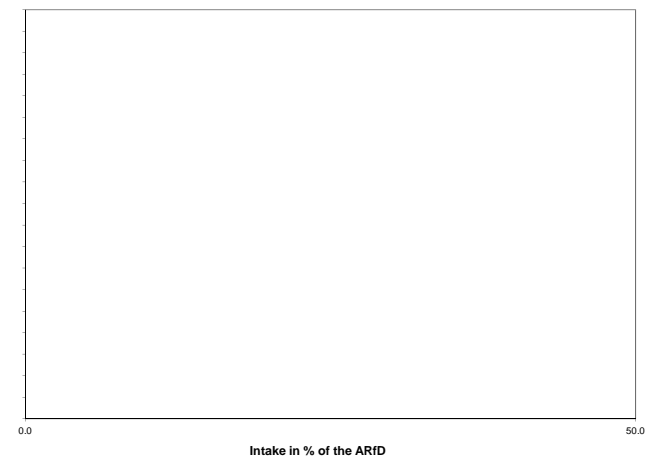
Acute exposure: Fenarimol / Leek



Acute exposure: Fenarimol / Oats



Acute exposure: Fenarimol / Rye





## Fenazaquin

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.005	ARfD (mg/kg bw):	0.1
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2011	Year of evaluation:	2011

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
1 5

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
5.19	DE child	2.68	Apples	0.84	Oranges	0.39	Bananas
3.35	NL child	1.41	Apples	0.69	Oranges	0.43	Bananas
2.28	FR toddler	0.58	Apples	0.45	Carrots	0.44	Oranges
1.87	DK child	0.52	Apples	0.34	Cucumbers	0.29	Bananas
1.81	WHO cluster diet B	0.69	Tomatoes	0.22	Apples	0.19	Oranges
1.71	FR infant	0.56	Apples	0.49	Carrots	0.20	Oranges
1.57	UK toddler	0.44	Oranges	0.38	Apples	0.27	Bananas
1.56	SE (GP)	0.46	Bananas	0.23	Apples	0.17	Tomatoes
1.49	ES child	0.48	Oranges	0.26	Bananas	0.25	Apples
1.45	UK infant	0.37	Bananas	0.35	Apples	0.29	Oranges
1.41	IE adult	0.23	Oranges	0.20	Bananas	0.18	Apples
1.09	IT child/toddler	0.32	Tomatoes	0.20	Apples	0.14	Bananas
1.07	PT (GP)	0.23	Apples	0.20	Tomatoes	0.14	Oranges
1.02	NL (GP)	0.33	Oranges	0.26	Apples	0.09	Tomatoes
0.98	ES adult	0.29	Oranges	0.17	Tomatoes	0.17	Apples
0.95	PL (GP)	0.45	Apples	0.20	Tomatoes	0.07	Table grapes
0.90	WHO regional diet	0.24	Tomatoes	0.15	Apples	0.11	Oranges
0.89	WHO Cluster diet F	0.19	Oranges	0.15	Tomatoes	0.15	Apples
0.86	IT adult	0.26	Tomatoes	0.18	Apples	0.09	Peaches
0.79	WHO cluster diet E	0.19	Apples	0.12	Tomatoes	0.10	Oranges
0.76	LT adult	0.41	Apples	0.14	Tomatoes	0.08	Cucumbers
0.72	UK vegetarian	0.19	Oranges	0.14	Tomatoes	0.13	Apples
0.67	DK adult	0.17	Apples	0.10	Bananas	0.09	Tomatoes
0.67	WHO cluster diet D	0.22	Tomatoes	0.15	Apples	0.05	Oranges
0.62	FI adult	0.21	Oranges	0.09	Tomatoes	0.09	Apples
0.57	FR (GP)	0.11	Apples	0.10	Tomatoes	0.06	Oranges
0.51	UK adult	0.12	Oranges	0.10	Tomatoes	0.09	Apples

## Acute risk assessment

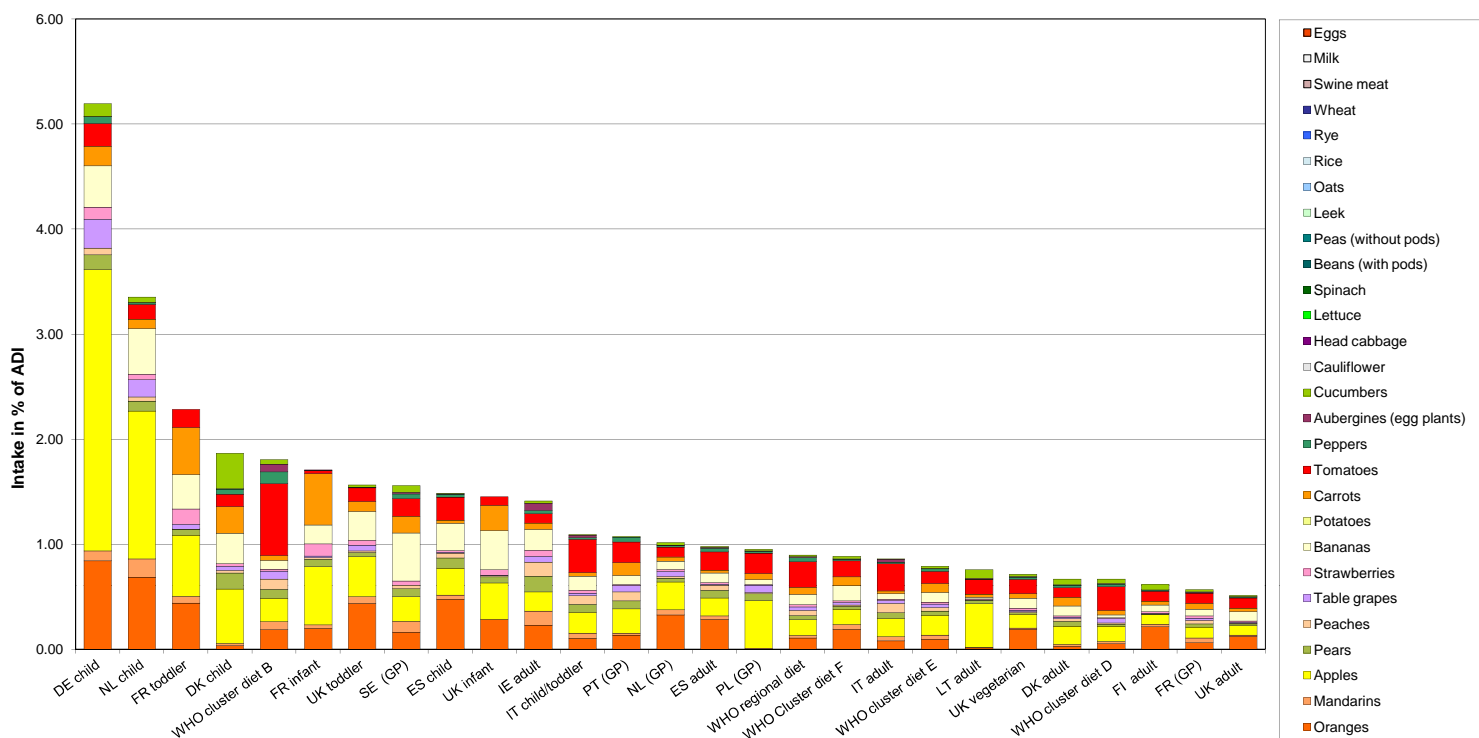
Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.1	2429	0.62		0.05		4.90	UK infant	
2010	Peaches	0.5	1215	0.41		0.08		4.57	DE child	
2010	Strawberries	1	1962	0.36		0.21		3.27	DE child	
2010	Tomatoes	0.5	1833	0.22		0.04		2.38	BE child	
2010	Head cabbage	0.01	966							
2010	Lettuce	0.01	1935							
2010	Leek	0.01	788							
2010	Oats	0.01	154							
2010	Rye	0.01	357							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

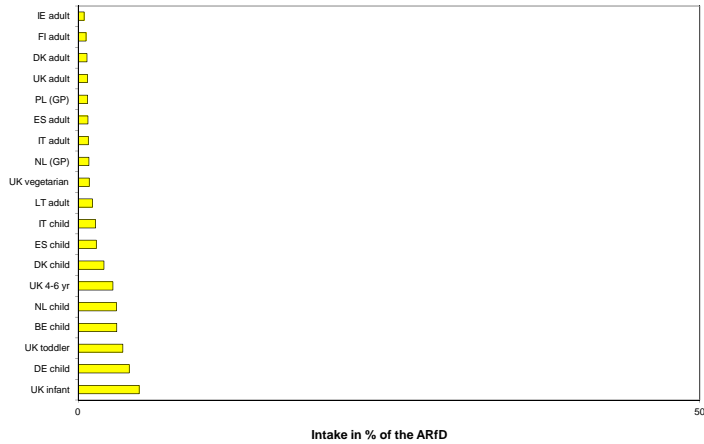
c) TRL: toxicological threshold level

## Chronic risk assessment: Fenazaquin

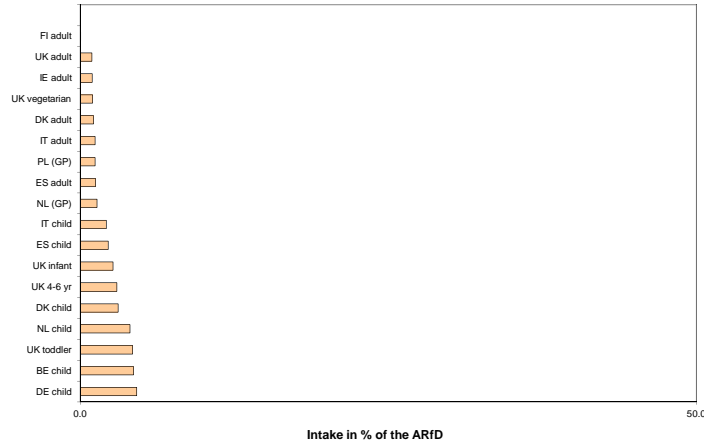


**Fenazaquin**

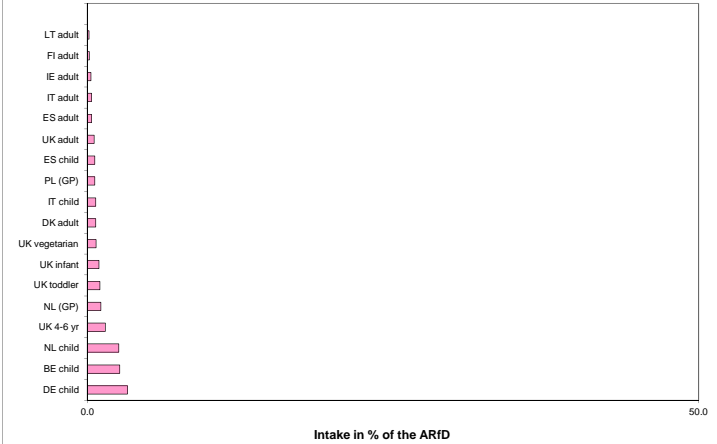
Acute exposure: Fenazaquin / Apples



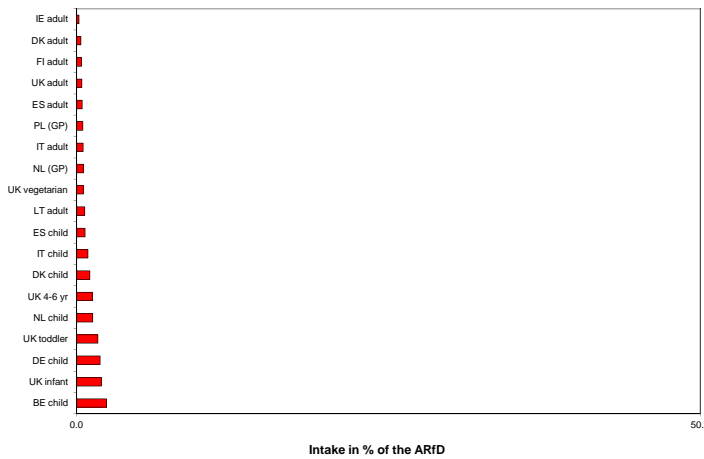
Acute exposure: Fenazaquin / Peaches



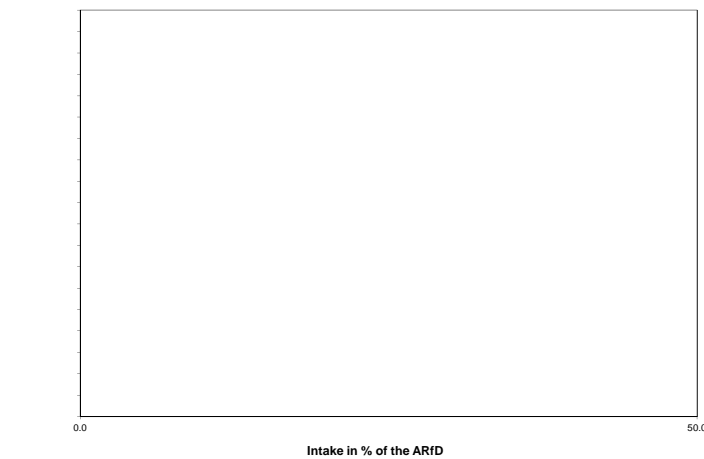
Acute exposure: Fenazaquin / Strawberries



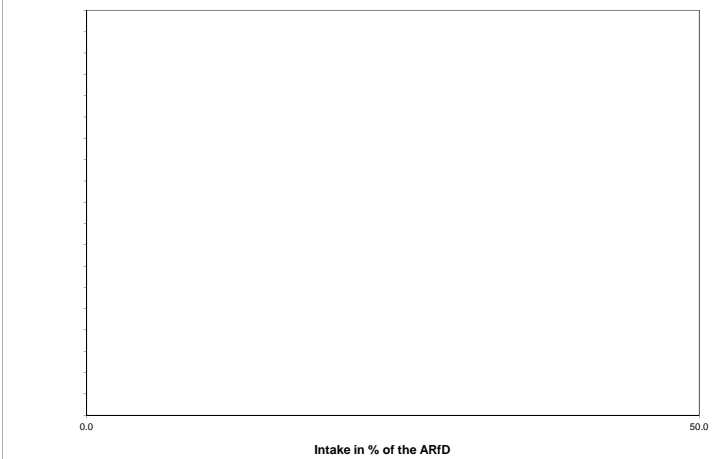
Acute exposure: Fenazaquin / Tomatoes



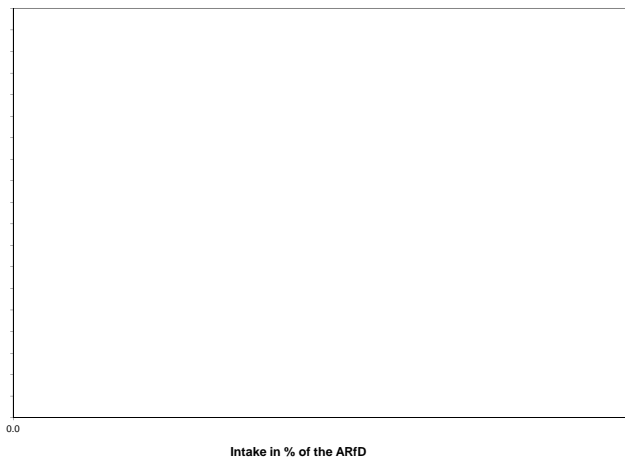
Acute exposure: Fenazaquin / Head cabbage



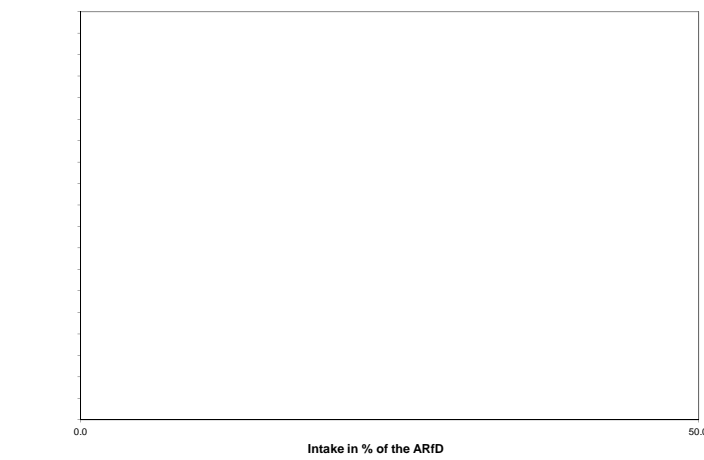
Acute exposure: Fenazaquin / Lettuce



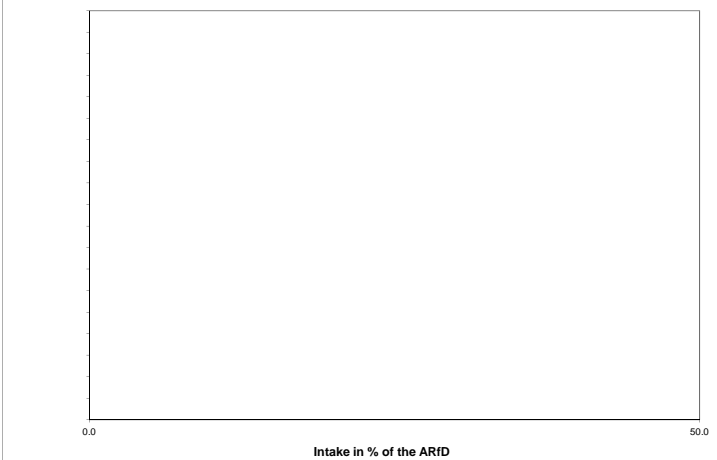
Acute exposure: Fenazaquin / Leek



Acute exposure: Fenazaquin / Oats



Acute exposure: Fenazaquin / Rye



## Fenbuconazole

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:	<b>Yes</b>	Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.006</b>	ARfD (mg/kg bw):	<b>0.3</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2010</b>	Year of evaluation:	<b>2010</b>

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum						
		3						
		<b>No of diets exceeding ADI:</b>		---				
	Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
	3.08	DE child	2.64	Apples	0.29	Table grapes	0.09	Strawberries
	1.64	NL child	1.39	Apples	0.17	Table grapes	0.04	Strawberries
	0.74	FR toddler	0.57	Apples	0.12	Strawberries	0.05	Table grapes
	0.67	FR infant	0.55	Apples	0.09	Strawberries	0.02	Table grapes
	0.59	DK child	0.51	Apples	0.04	Table grapes	0.02	Peaches
	0.54	PL (GP)	0.45	Apples	0.07	Table grapes	0.01	Peaches
	0.48	UK toddler	0.37	Apples	0.06	Table grapes	0.04	Strawberries
	0.42	LT adult	0.41	Apples	0.01	Strawberries	0.00	Table grapes
	0.41	IE adult	0.18	Apples	0.12	Peaches	0.06	Table grapes
	0.41	WHO cluster diet B	0.22	Apples	0.09	Peaches	0.08	Table grapes
	0.40	UK infant	0.34	Apples	0.04	Strawberries	0.01	Peaches
	0.38	PT (GP)	0.23	Apples	0.08	Peaches	0.06	Table grapes
	0.34	NL (GP)	0.26	Apples	0.05	Table grapes	0.01	Strawberries
	0.32	IT child/toddler	0.19	Apples	0.07	Peaches	0.02	Table grapes
	0.31	ES child	0.25	Apples	0.04	Peaches	0.01	Strawberries
	0.29	IT adult	0.17	Apples	0.08	Peaches	0.03	Table grapes
	0.29	SE (GP)	0.23	Apples	0.03	Peaches	0.03	Strawberries
	0.27	WHO cluster diet E	0.19	Apples	0.04	Table grapes	0.03	Peaches
	0.24	WHO regional diet	0.15	Apples	0.04	Peaches	0.04	Table grapes
	0.23	ES adult	0.17	Apples	0.05	Peaches	0.01	Strawberries
	0.22	DK adult	0.17	Apples	0.02	Peaches	0.02	Table grapes
	0.21	WHO cluster diet D	0.15	Apples	0.04	Table grapes	0.01	Peaches
	0.19	WHO Cluster diet F	0.14	Apples	0.03	Table grapes	0.01	Strawberries
	0.18	FR (GP)	0.10	Apples	0.03	Peaches	0.02	Table grapes
	0.17	UK vegetarian	0.13	Apples	0.02	Table grapes	0.01	Strawberries
	0.12	UK adult	0.09	Apples	0.01	Table grapes	0.01	Strawberries
	0.11	FI adult	0.09	Apples	0.01	Strawberries	0.00	Table grapes

### Acute risk assessment

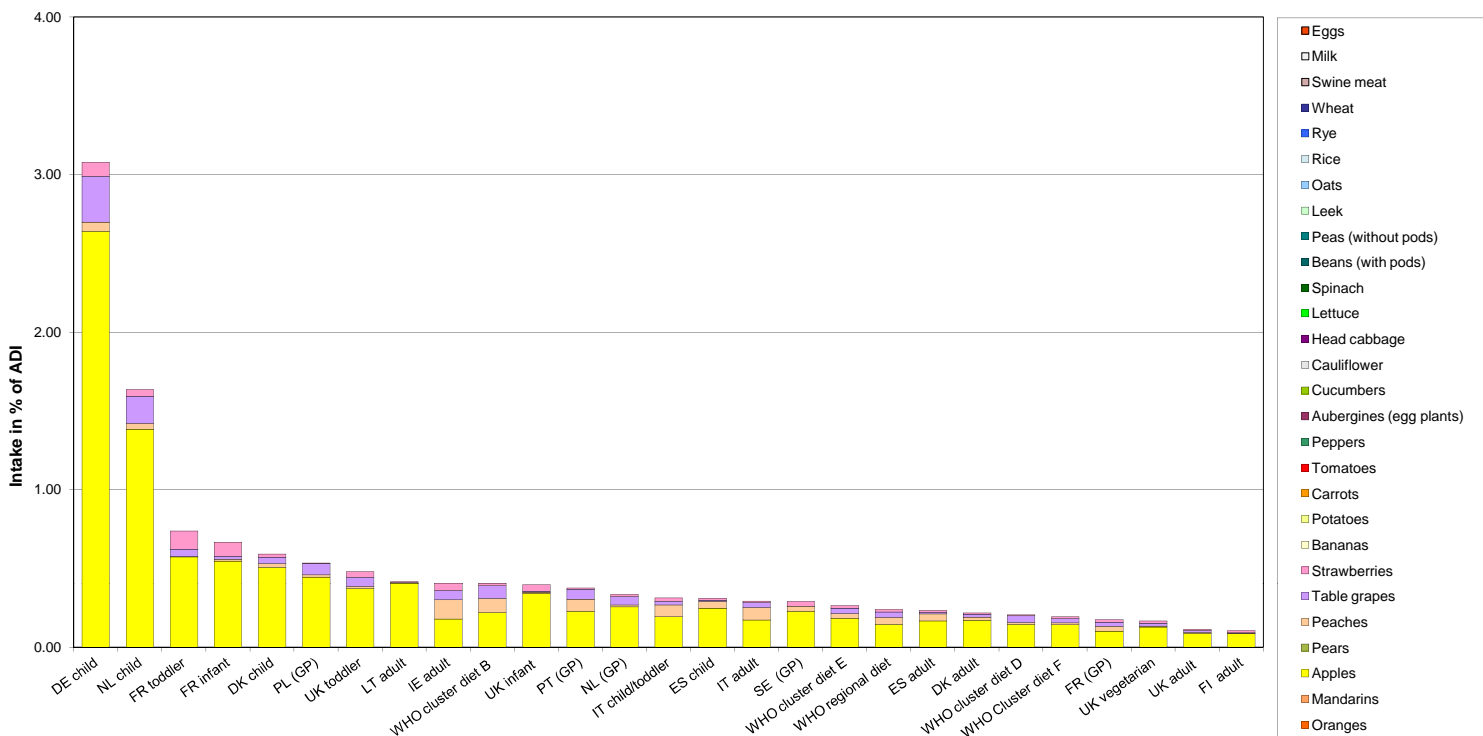
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.4	2382	0.17		0.02		0.72	UK infant	
2010	Peaches	0.5	1166	9.18		0.14		2.77	DE child	
2010	Strawberries	0.05	1858	0.11		0.02		0.10	DE child	
2010	Tomatoes	0.5	1822							
2010	Head cabbage	0.05	927							
2010	Lettuce	0.05	1882							
2010	Leek	0.05	752							
2010	Oats	0.05	214							
2010	Rye	0.1	317							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

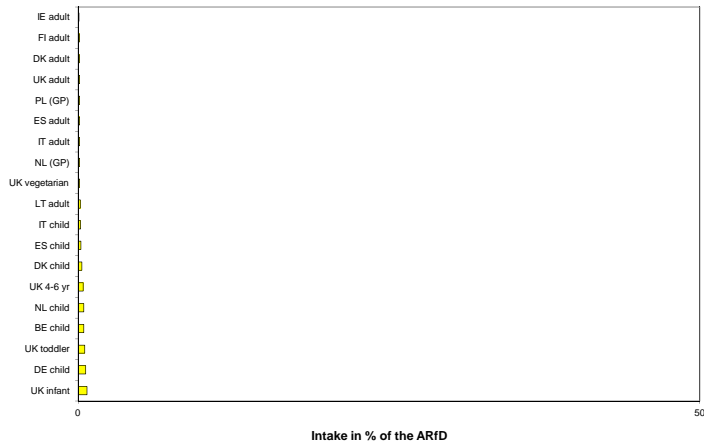
<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Fenbuconazole

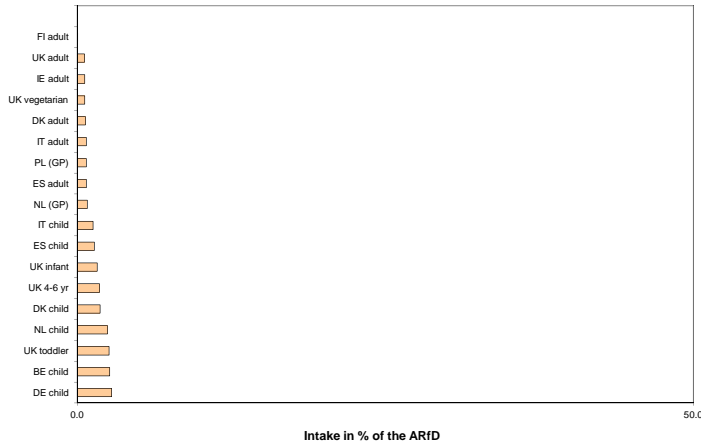


**Fenbuconazole**

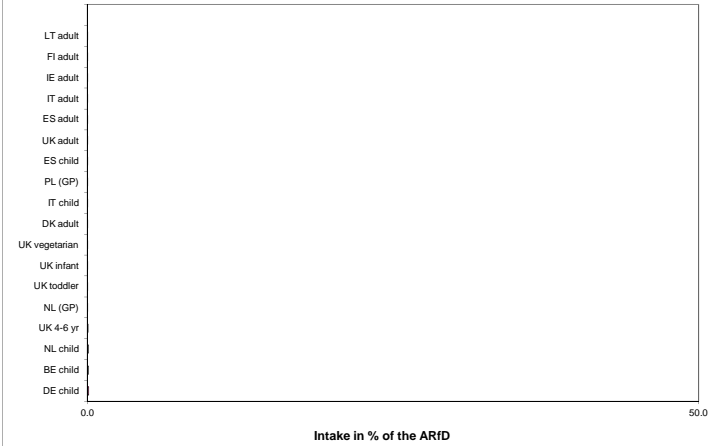
Acute exposure: Fenbuconazole / Apples



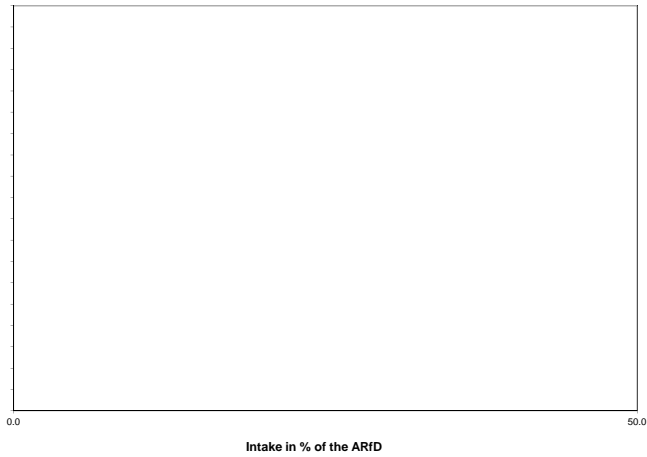
Acute exposure: Fenbuconazole / Peaches



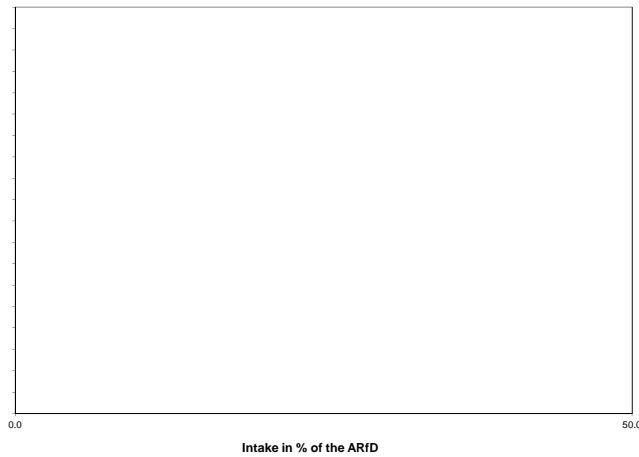
Acute exposure: Fenbuconazole / Strawberries



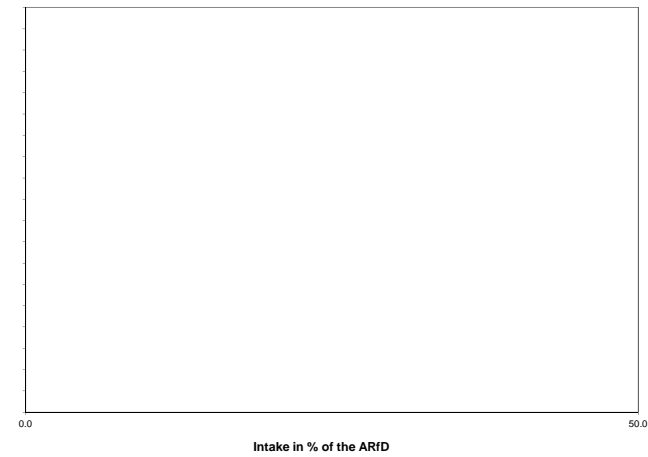
Acute exposure: Fenbuconazole / Tomatoes



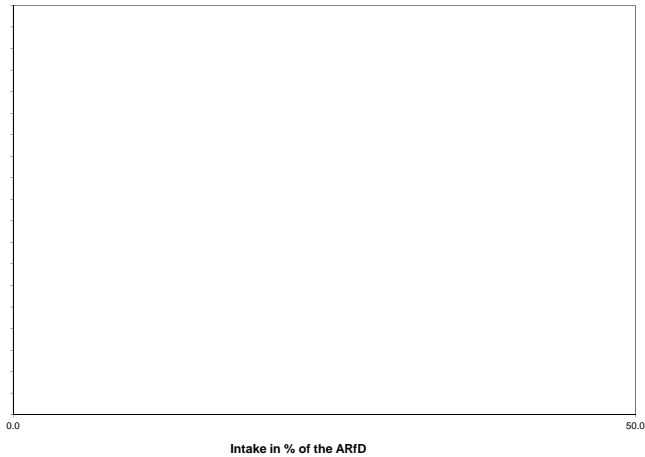
Acute exposure: Fenbuconazole / Head cabbage



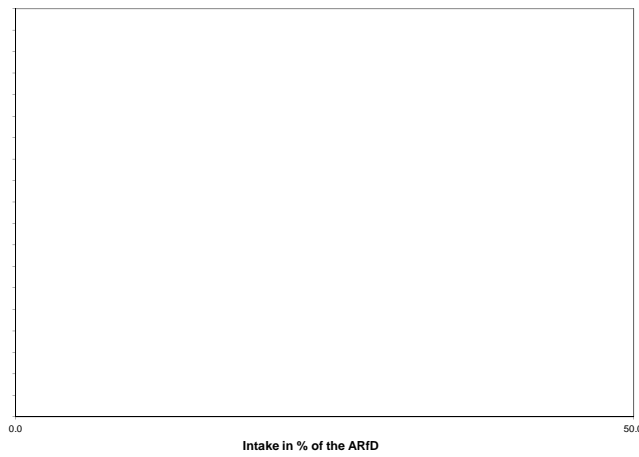
Acute exposure: Fenbuconazole / Lettuce



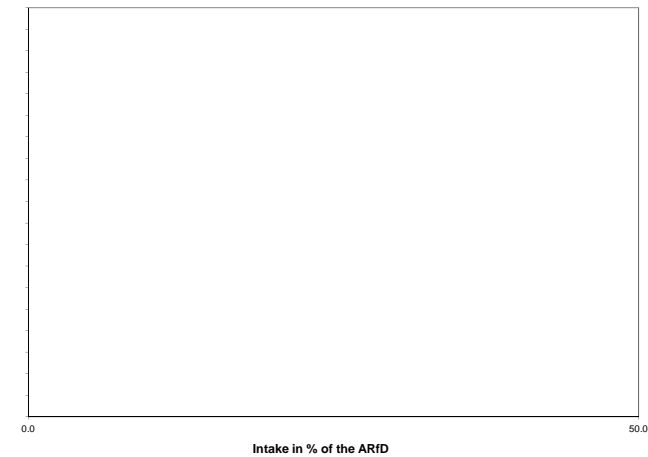
Acute exposure: Fenbuconazole / Leek



Acute exposure: Fenbuconazole / Oats



Acute exposure: Fenbuconazole / Rye



Fenbutatin oxide			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:	Yes	Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.05	ARfD (mg/kg bw):	0.1
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2011	Year of evaluation:	2011

**Chronic risk assessment**

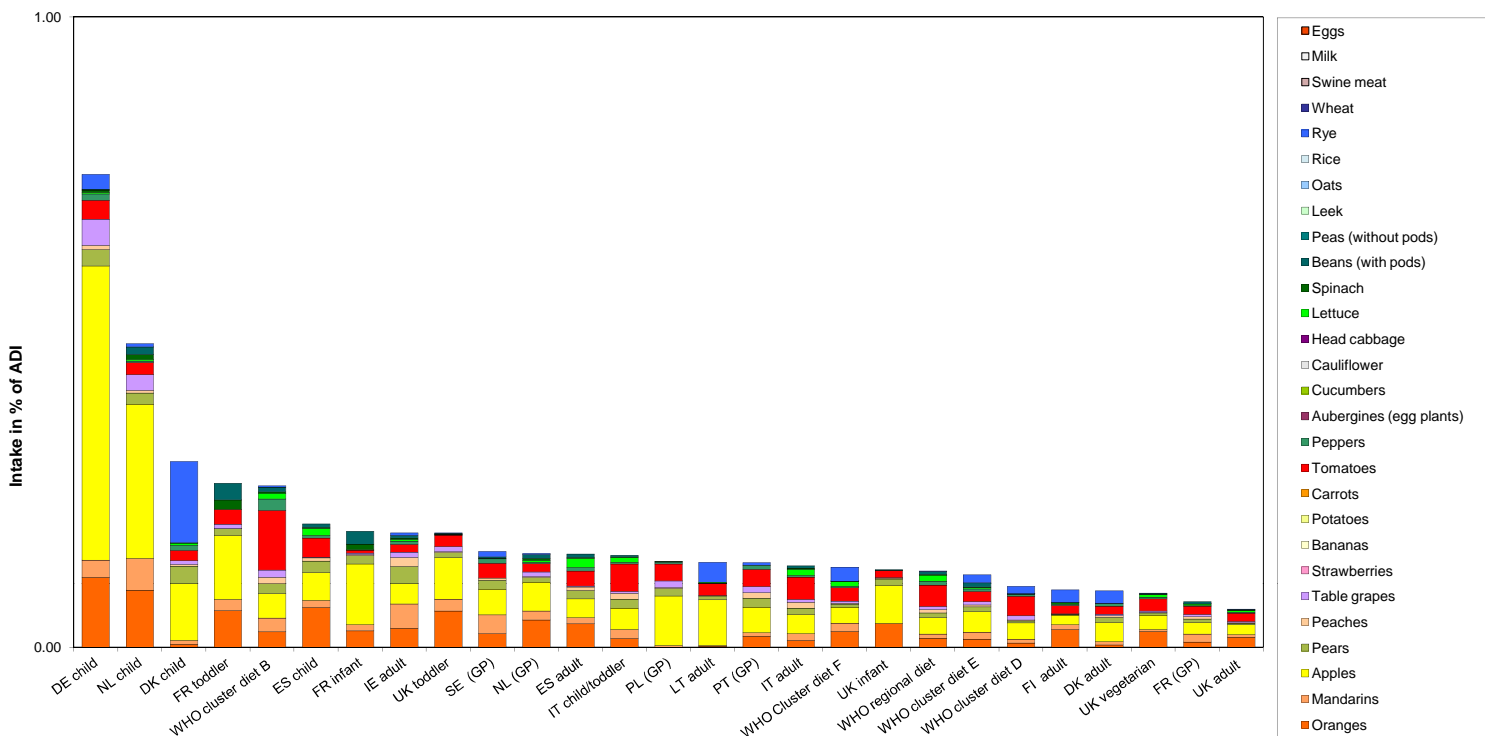
		Exposure (range) in % of ADI minimum - maximum					
		1					
		No of diets exceeding ADI: ---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.75	DE child	0.47	Apples	0.11	Oranges	0.04	Table grapes
0.48	NL child	0.24	Apples	0.09	Oranges	0.05	Mandarins
0.29	DK child	0.13	Rye	0.09	Apples	0.03	Pears
0.26	FR toddler	0.10	Apples	0.06	Oranges	0.03	Beans (with pods)
0.26	WHO cluster diet B	0.09	Tomatoes	0.04	Apples	0.02	Oranges
0.20	ES child	0.06	Oranges	0.04	Apples	0.03	Tomatoes
0.18	FR infant	0.10	Apples	0.03	Oranges	0.02	Beans (with pods)
0.18	IE adult	0.04	Mandarins	0.03	Apples	0.03	Oranges
0.18	UK toddler	0.07	Apples	0.06	Oranges	0.02	Mandarins
0.15	SE (GP)	0.04	Apples	0.03	Mandarins	0.02	Tomatoes
0.15	NL (GP)	0.05	Apples	0.04	Oranges	0.01	Mandarins
0.15	ES adult	0.04	Oranges	0.03	Apples	0.02	Tomatoes
0.15	IT child/toddler	0.04	Tomatoes	0.03	Apples	0.01	Pears
0.14	PL (GP)	0.08	Apples	0.03	Tomatoes	0.01	Pears
0.14	LT adult	0.07	Apples	0.03	Rye	0.02	Tomatoes
0.13	PT (GP)	0.04	Apples	0.03	Tomatoes	0.02	Oranges
0.13	IT adult	0.04	Tomatoes	0.03	Apples	0.01	Oranges
0.13	WHO Cluster diet F	0.03	Oranges	0.03	Apples	0.02	Rye
0.12	UK infant	0.06	Apples	0.04	Oranges	0.01	Tomatoes
0.12	WHO regional diet	0.03	Tomatoes	0.03	Apples	0.01	Oranges
0.12	WHO cluster diet E	0.03	Apples	0.02	Tomatoes	0.01	Oranges
0.10	WHO cluster diet D	0.03	Tomatoes	0.03	Apples	0.01	Rye
0.09	FI adult	0.03	Oranges	0.02	Rye	0.02	Apples
0.09	DK adult	0.03	Apples	0.02	Rye	0.01	Tomatoes
0.09	UK vegetarian	0.03	Oranges	0.02	Apples	0.02	Tomatoes
0.07	FR (GP)	0.02	Apples	0.01	Tomatoes	0.01	Mandarins
0.06	UK adult	0.02	Oranges	0.02	Apples	0.01	Tomatoes

**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	2	371	0.81		0.20		19.50	UK infant	
2010	Peaches	0.05	241	0.83		0.02		1.31	DE child	
2010	Strawberries	1	482	0.21		0.01		0.17	DE child	
2010	Tomatoes	2	306	1.96		0.05		2.97	BE child	
2010	Head cabbage	0.05	278							
2010	Lettuce	0.05	374	1.60		0.01		0.38	DE child	
2010	Leek	0.05	265							
2010	Oats	0.05	11							
2010	Rye	0.05	118	0.85		0.00		0.03	UK infant	
2010	Swine Meat									
2010	Milk									

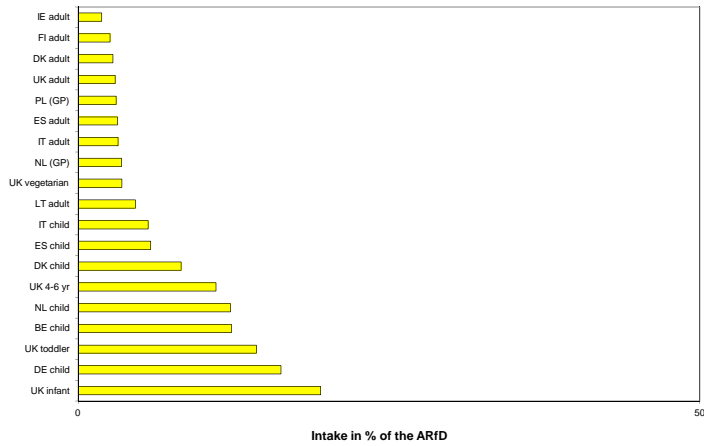
a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Fenbutatin oxide**

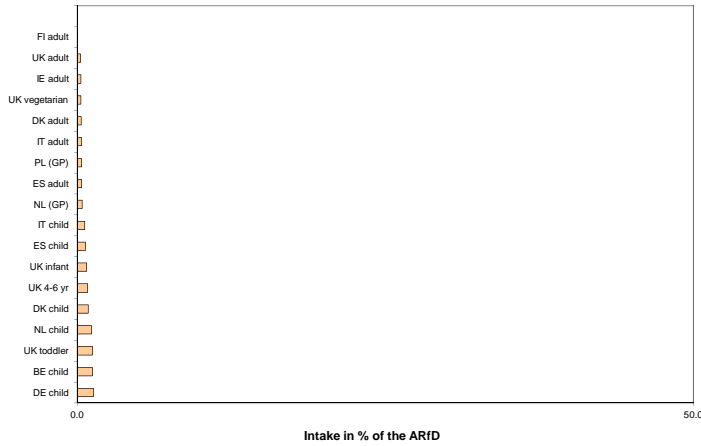


**Fenbutatin oxide**

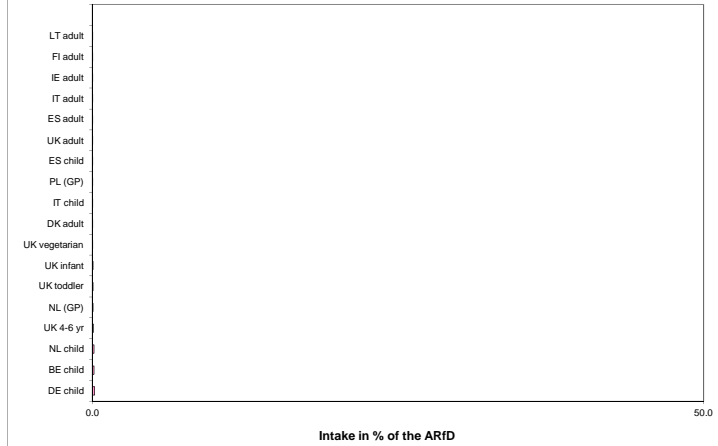
Acute exposure: Fenbutatin oxide / Apples



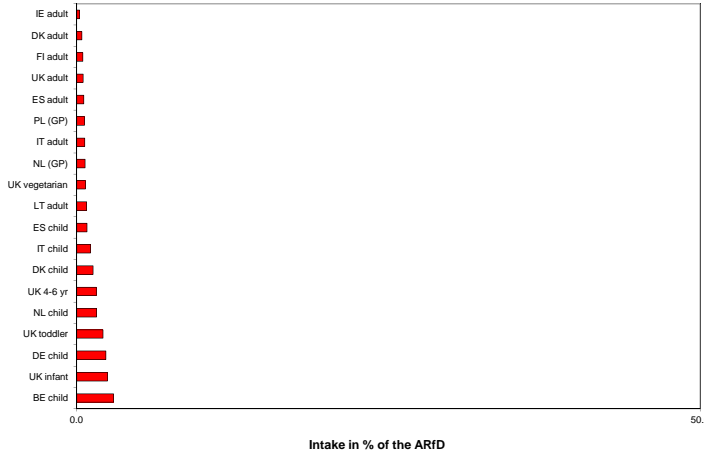
Acute exposure: Fenbutatin oxide / Peaches



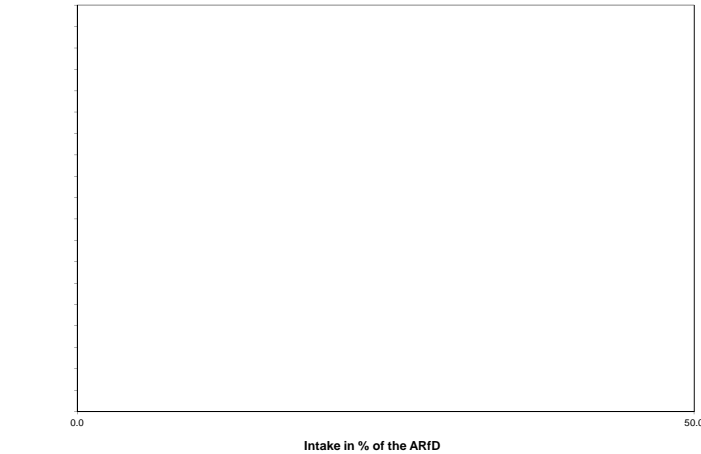
Acute exposure: Fenbutatin oxide / Strawberries



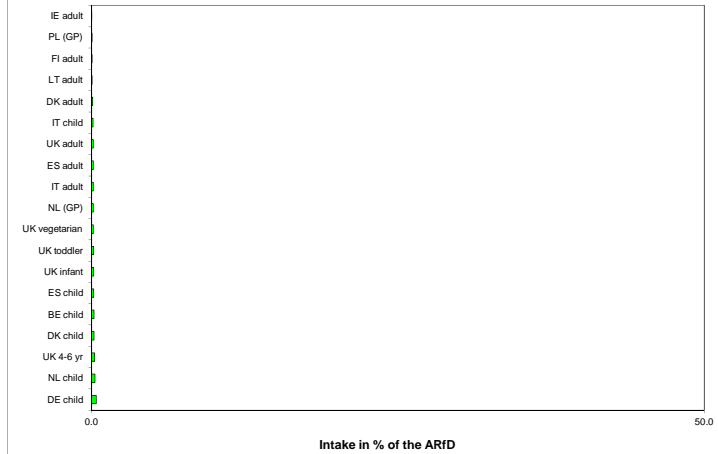
Acute exposure: Fenbutatin oxide / Tomatoes



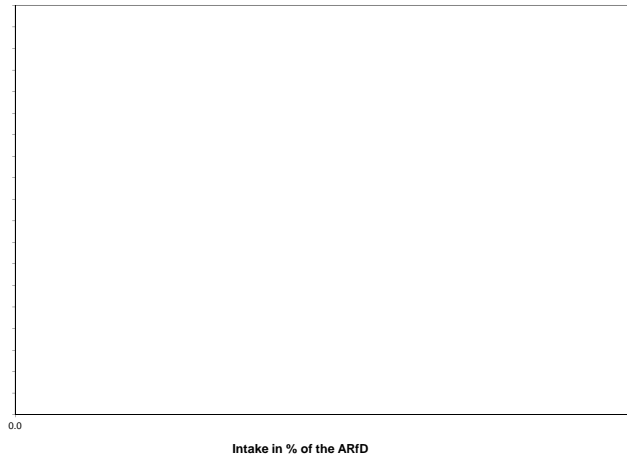
Acute exposure: Fenbutatin oxide / Head cabbage



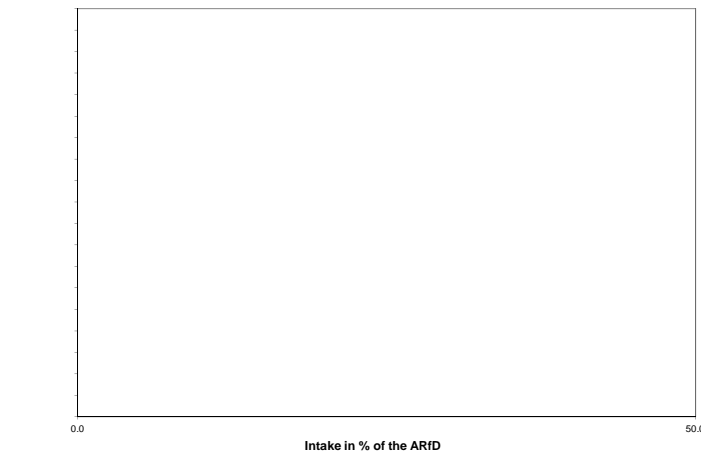
Acute exposure: Fenbutatin oxide / Lettuce



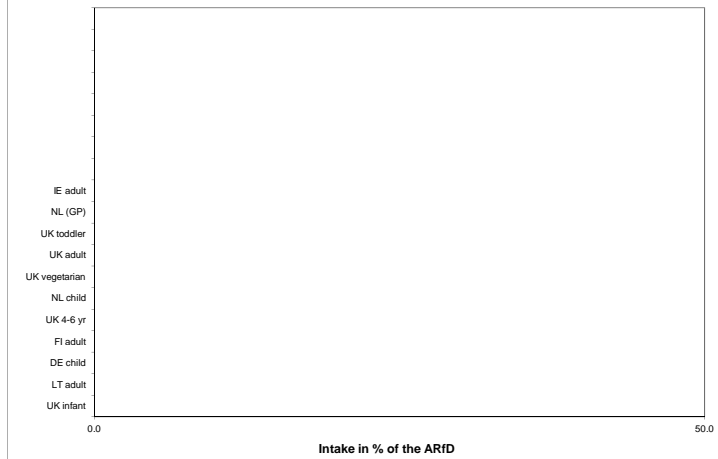
Acute exposure: Fenbutatin oxide / Leek



Acute exposure: Fenbutatin oxide / Oats



Acute exposure: Fenbutatin oxide / Rye



## Fenhexamid

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.2	ARfD (mg/kg bw):	n.n.
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2001	Year of evaluation:	2001

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.31	DE child	0.12	Apples	0.09	Table grapes	0.03	Oranges
0.19	NL child	0.06	Apples	0.05	Table grapes	0.02	Oranges
0.13	FR toddler	0.03	Strawberries	0.03	Apples	0.02	Carrots
0.12	WHO cluster diet B	0.03	Tomatoes	0.03	Table grapes	0.01	Apples
0.10	DK child	0.03	Cucumbers	0.02	Apples	0.01	Table grapes
0.09	FR infant	0.03	Apples	0.02	Strawberries	0.02	Carrots
0.08	IE adult	0.02	Table grapes	0.01	Strawberries	0.01	Apples
0.08	UK toddler	0.02	Table grapes	0.02	Apples	0.01	Oranges
0.07	ES child	0.02	Oranges	0.01	Apples	0.01	Tomatoes
0.07	PT (GP)	0.02	Table grapes	0.01	Apples	0.01	Tomatoes
0.06	NL (GP)	0.02	Table grapes	0.01	Apples	0.01	Oranges
0.06	PL (GP)	0.02	Table grapes	0.02	Apples	0.01	Tomatoes
0.06	IT child/toddler	0.02	Tomatoes	0.01	Apples	0.01	Table grapes
0.06	WHO regional diet	0.01	Tomatoes	0.01	Table grapes	0.01	Lettuce
0.06	UK infant	0.02	Apples	0.01	Carrots	0.01	Strawberries
0.06	ES adult	0.01	Lettuce	0.01	Oranges	0.01	Tomatoes
0.06	SE (GP)	0.01	Apples	0.01	Tomatoes	0.01	Strawberries
0.06	IT adult	0.01	Tomatoes	0.01	Lettuce	0.01	Table grapes
0.05	WHO Cluster diet F	0.01	Table grapes	0.01	Lettuce	0.01	Tomatoes
0.05	WHO cluster diet E	0.01	Table grapes	0.01	Apples	0.01	Tomatoes
0.05	WHO cluster diet D	0.01	Table grapes	0.01	Tomatoes	0.01	Apples
0.04	LT adult	0.02	Apples	0.01	Tomatoes	0.01	Cucumbers
0.04	UK vegetarian	0.01	Tomatoes	0.01	Oranges	0.01	Apples
0.04	FR (GP)	0.01	Table grapes	0.00	Apples	0.00	Tomatoes
0.04	DK adult	0.01	Apples	0.01	Table grapes	0.00	Tomatoes
0.03	FI adult	0.01	Oranges	0.00	Tomatoes	0.00	Cucumbers
0.03	UK adult	0.00	Tomatoes	0.00	Apples	0.00	Oranges

## Acute risk assessment

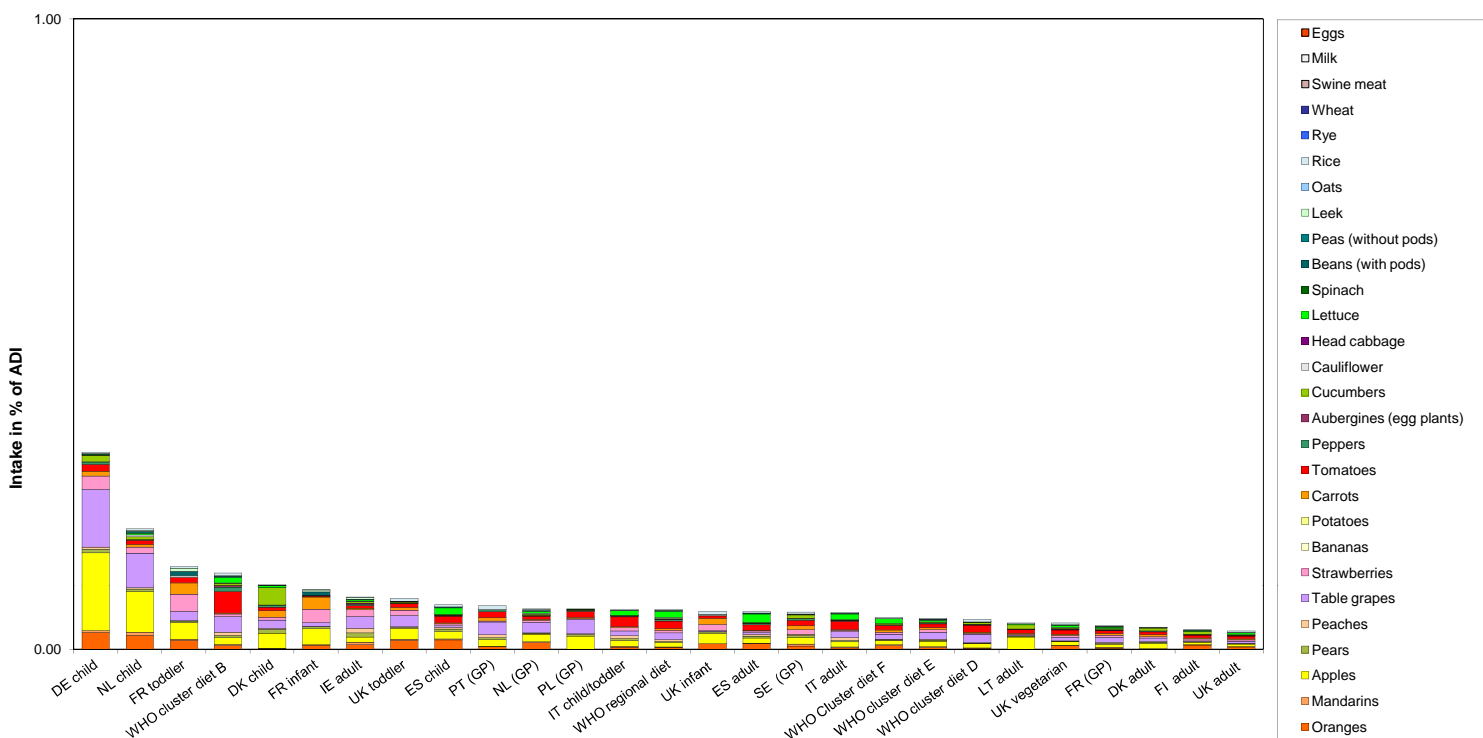
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	2910	0.58		0.05				
2010	Peaches	5	1456	5.77		0.79				
2010	Strawberries	5	2238	32.75	0.04	7.88				
2010	Tomatoes	1	2384	4.15		0.79				
2010	Head cabbage	0.05	1210							
2010	Lettuce		2317	3.37		17.00				
2010	Leek	0.05	926	0.32		0.01				
2010	Oats	0.05	252							
2010	Rye	0.05	429							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

c) TRL: toxicological threshold level

## Chronic risk assessment: Fenhexamid



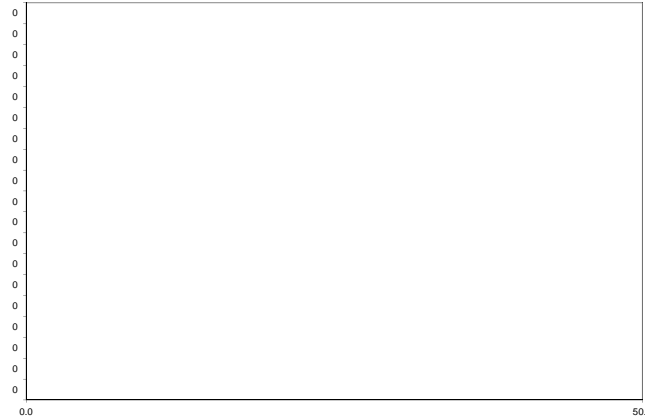
**Fenhexamid**

Acute exposure: Fenhexamid / Apples



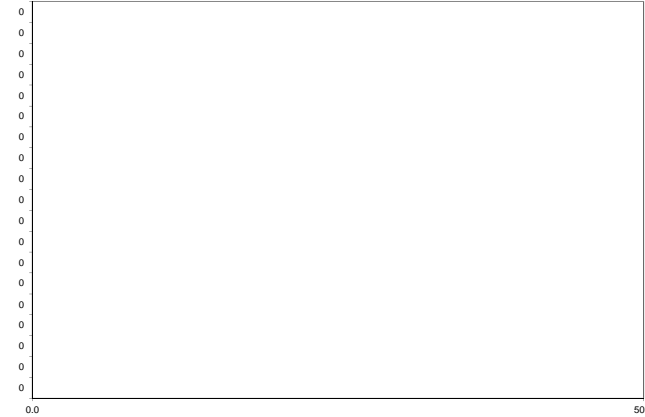
Intake in % of the ARfD

Acute exposure: Fenhexamid / Peaches



Intake in % of the ARfD

Acute exposure: Fenhexamid / Strawberries



Intake in % of the ARfD

Acute exposure: Fenhexamid / Tomatoes



Intake in % of the ARfD

Acute exposure: Fenhexamid / Head cabbage



Intake in % of the ARfD

Acute exposure: Fenhexamid / Lettuce



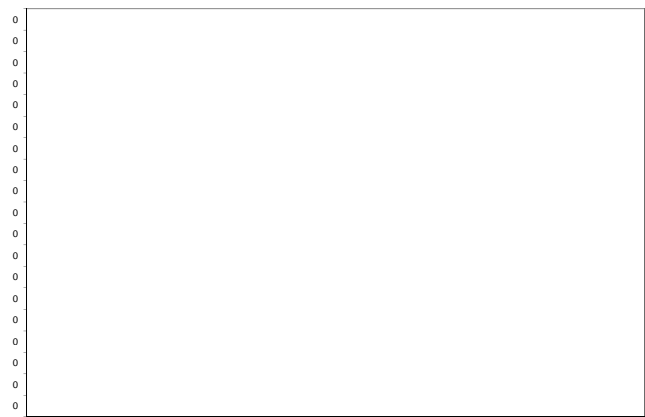
Intake in % of the ARfD

Acute exposure: Fenhexamid / Leek



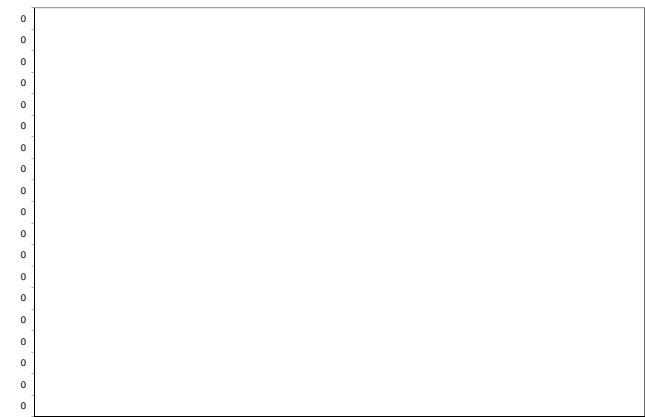
Intake in % of the ARfD

Acute exposure: Fenhexamid / Oats



Intake in % of the ARfD

Acute exposure: Fenhexamid / Rye



Intake in % of the ARfD



Fenitrothion			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.005	ARfD (mg/kg bw):	0.013
Source of ADI:	EFSA	Source of ARfD:	EFSA
Year of evaluation:	2006	Year of evaluation:	2006

**Chronic risk assessment**

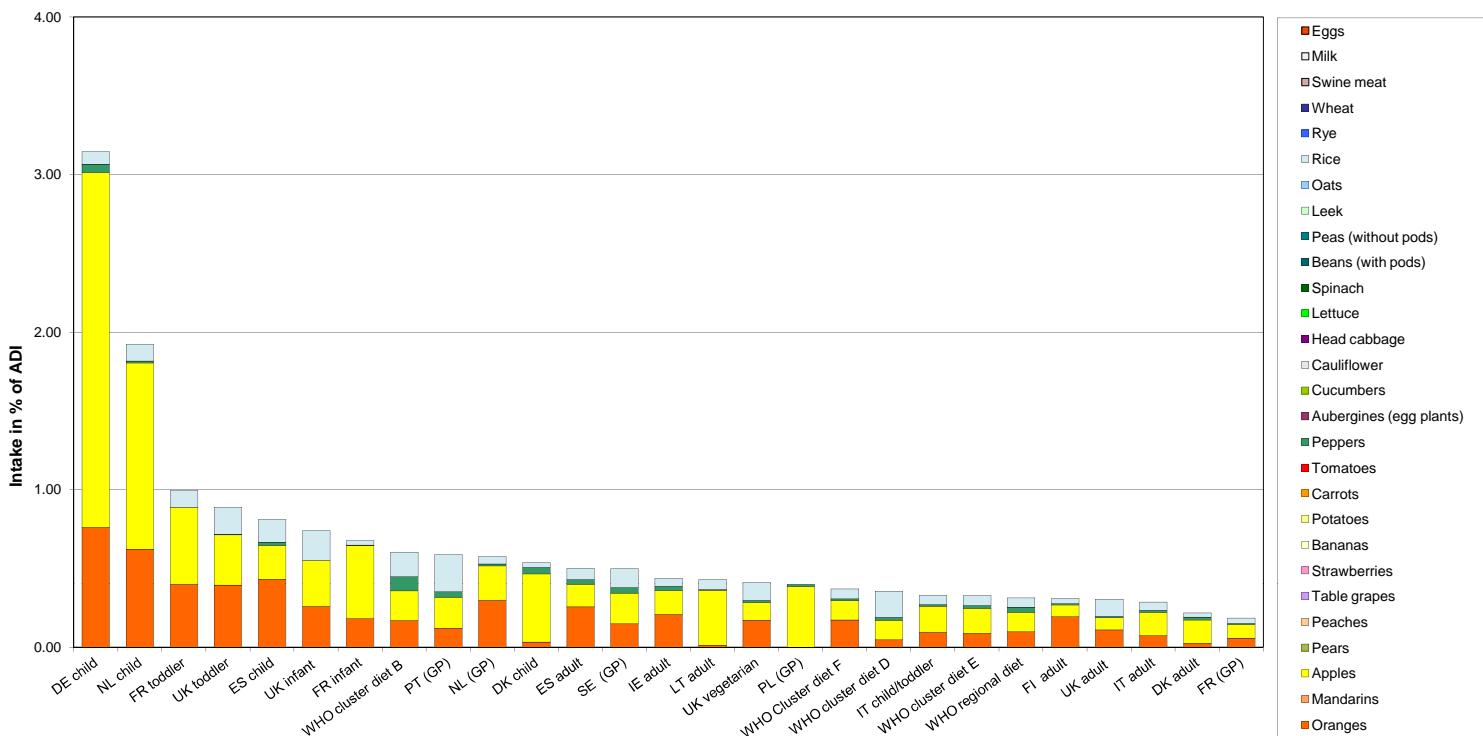
		Exposure (range) in % of ADI minimum - maximum					
		3					
		No of diets exceeding ADI: ---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
3.15	DE child	2.25	Apples	0.76	Oranges	0.08	Rice
1.92	NL child	1.18	Apples	0.62	Oranges	0.11	Rice
1.00	FR toddler	0.49	Apples	0.40	Oranges	0.11	Rice
0.89	UK toddler	0.40	Oranges	0.32	Apples	0.17	Rice
0.81	ES child	0.43	Oranges	0.21	Apples	0.14	Rice
0.74	UK infant	0.29	Apples	0.26	Oranges	0.19	Rice
0.68	FR infant	0.47	Apples	0.18	Oranges	0.03	Rice
0.61	WHO cluster diet B	0.19	Apples	0.17	Oranges	0.16	Rice
0.59	PT (GP)	0.23	Rice	0.20	Apples	0.12	Oranges
0.58	NL (GP)	0.30	Oranges	0.22	Apples	0.05	Rice
0.54	DK child	0.43	Apples	0.04	Peppers	0.03	Oranges
0.50	ES adult	0.26	Oranges	0.14	Apples	0.07	Rice
0.50	SE (GP)	0.20	Apples	0.15	Oranges	0.12	Rice
0.44	IE adult	0.21	Oranges	0.15	Apples	0.05	Rice
0.43	LT adult	0.35	Apples	0.06	Rice	0.01	Oranges
0.41	UK vegetarian	0.17	Oranges	0.11	Rice	0.11	Apples
0.40	PL (GP)	0.38	Apples	0.01	Peppers	0.00	Oranges
0.37	WHO Cluster diet F	0.17	Oranges	0.12	Apples	0.06	Rice
0.36	WHO cluster diet D	0.17	Rice	0.12	Apples	0.05	Oranges
0.33	IT child/toddler	0.17	Apples	0.10	Oranges	0.06	Rice
0.33	WHO cluster diet E	0.16	Apples	0.09	Oranges	0.06	Rice
0.31	WHO regional diet	0.12	Apples	0.10	Oranges	0.06	Rice
0.31	FI adult	0.19	Oranges	0.08	Apples	0.03	Rice
0.31	UK adult	0.11	Oranges	0.11	Rice	0.08	Apples
0.29	IT adult	0.15	Apples	0.07	Oranges	0.05	Rice
0.22	DK adult	0.15	Apples	0.03	Oranges	0.03	Rice
0.19	FR (GP)	0.09	Apples	0.06	Oranges	0.03	Rice

**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.01	3089	0.16	0.03	0.02		15.83	UK infant	
2010	Peaches	0.01	1515							
2010	Strawberries	0.01	2329							
2010	Tomatoes	0.01	2588							
2010	Head cabbage	0.01	1211							
2010	Lettuce	0.01	2394							
2010	Leek	0.01	996							
2010	Oats		265							
2010	Rye		471							
2010	Swine Meat									
2010	Milk									

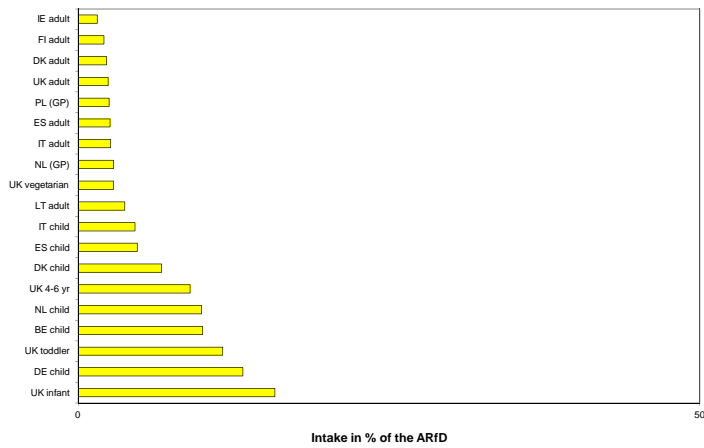
a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Fenitrothion**

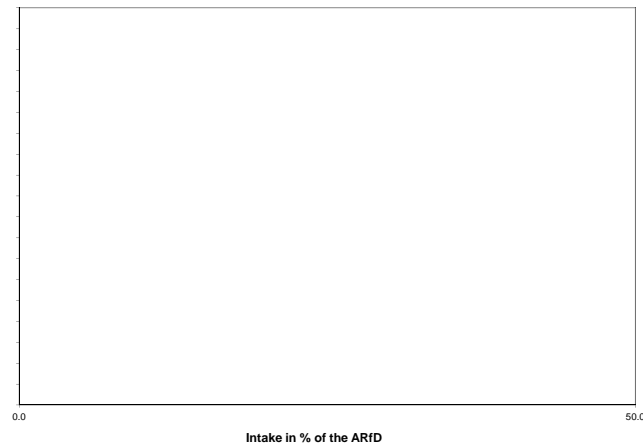


**Fenitrothion**

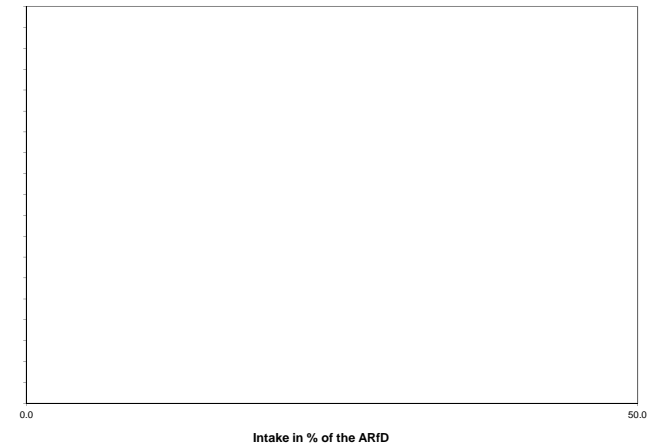
Acute exposure: Fenitrothion / Apples



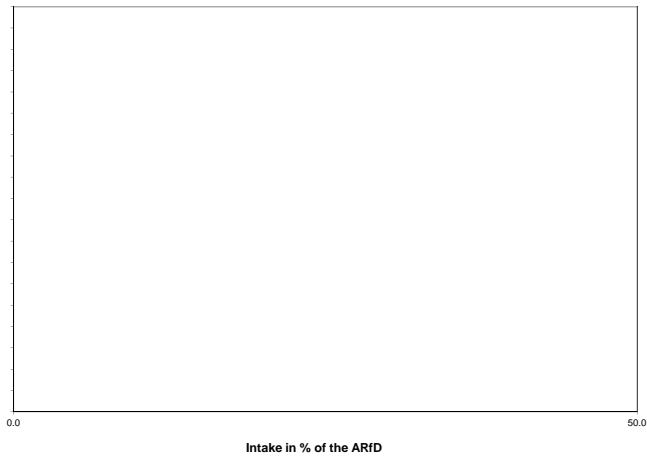
Acute exposure: Fenitrothion / Peaches



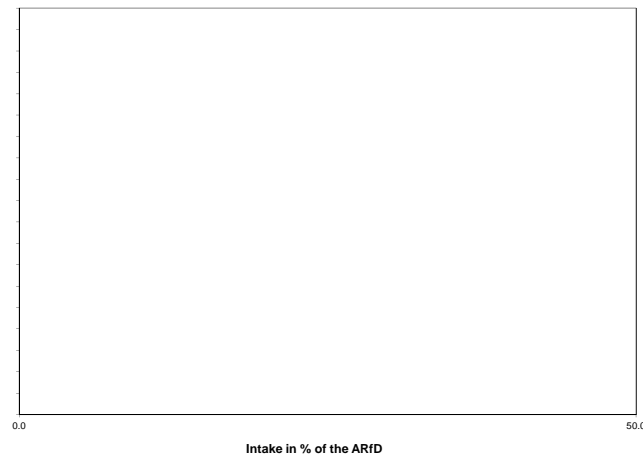
Acute exposure: Fenitrothion / Strawberries



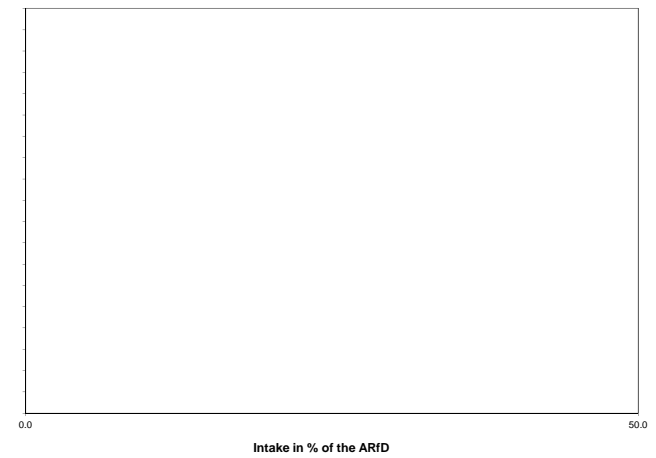
Acute exposure: Fenitrothion / Tomatoes



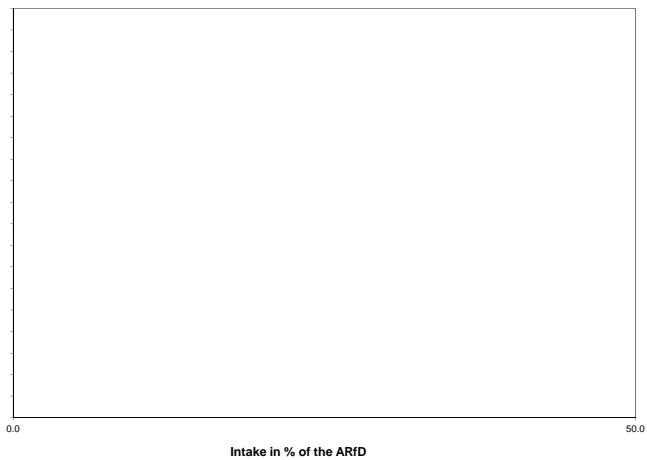
Acute exposure: Fenitrothion / Head cabbage



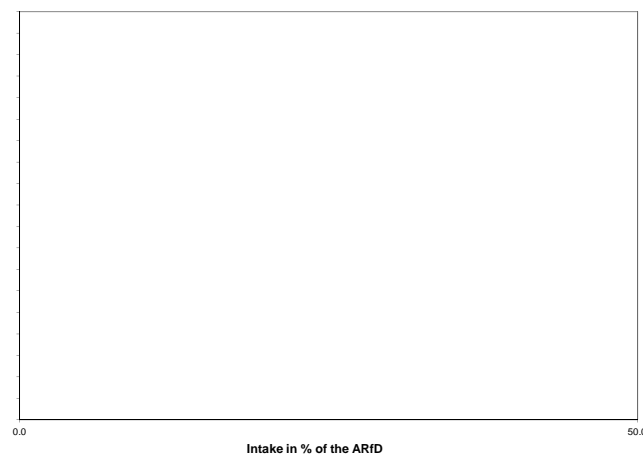
Acute exposure: Fenitrothion / Lettuce



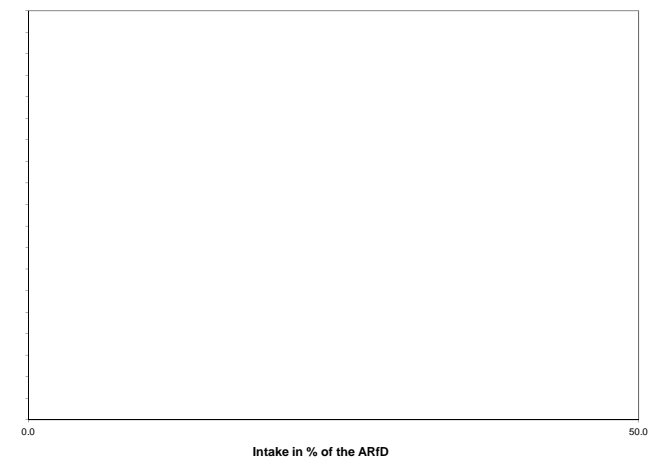
Acute exposure: Fenitrothion / Leek



Acute exposure: Fenitrothion / Oats



Acute exposure: Fenitrothion / Rye



## Fenoxycarb

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.053	ARfD (mg/kg bw):	2
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2011	Year of evaluation:	2011

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.41	DE child	0.33	Apples	0.03	Table grapes	0.02	Pears
0.24	NL child	0.18	Apples	0.02	Mandarins	0.02	Table grapes
0.11	FR toddler	0.07	Apples	0.01	Spinach	0.01	Pears
0.10	DK child	0.06	Apples	0.02	Pears	0.00	Table grapes
0.10	FR infant	0.07	Apples	0.01	Pears	0.01	Spinach
0.09	IE adult	0.02	Apples	0.02	Pears	0.02	Mandarins
0.08	PL (GP)	0.06	Apples	0.01	Pears	0.01	Table grapes
0.07	WHO cluster diet B	0.03	Apples	0.01	Pears	0.01	Peaches
0.07	UK toddler	0.05	Apples	0.01	Mandarins	0.01	Table grapes
0.06	PT (GP)	0.03	Apples	0.01	Pears	0.01	Peaches
0.06	ES child	0.03	Apples	0.01	Pears	0.01	Peaches
0.06	SE (GP)	0.03	Apples	0.01	Mandarins	0.01	Pears
0.06	LT adult	0.05	Apples	0.01	Pears	0.00	Mandarins
0.06	IT child/toddler	0.02	Apples	0.01	Pears	0.01	Peaches
0.06	NL (GP)	0.03	Apples	0.01	Table grapes	0.01	Mandarins
0.05	UK infant	0.04	Apples	0.01	Pears	0.00	Peaches
0.05	IT adult	0.02	Apples	0.01	Peaches	0.01	Pears
0.04	ES adult	0.02	Apples	0.01	Pears	0.01	Peaches
0.04	WHO cluster diet E	0.02	Apples	0.01	Pears	0.00	Mandarins
0.04	WHO regional diet	0.02	Apples	0.01	Pears	0.01	Peaches
0.04	DK adult	0.02	Apples	0.01	Pears	0.00	Peaches
0.03	WHO Cluster diet F	0.02	Apples	0.01	Mandarins	0.00	Pears
0.03	WHO cluster diet D	0.02	Apples	0.01	Table grapes	0.00	Pears
0.03	FR (GP)	0.01	Apples	0.01	Mandarins	0.00	Pears
0.02	UK vegetarian	0.02	Apples	0.00	Pears	0.00	Table grapes
0.02	UK adult	0.01	Apples	0.00	Pears	0.00	Mandarins
0.02	FI adult	0.01	Apples	0.00	Mandarins	0.00	Pears

## Acute risk assessment

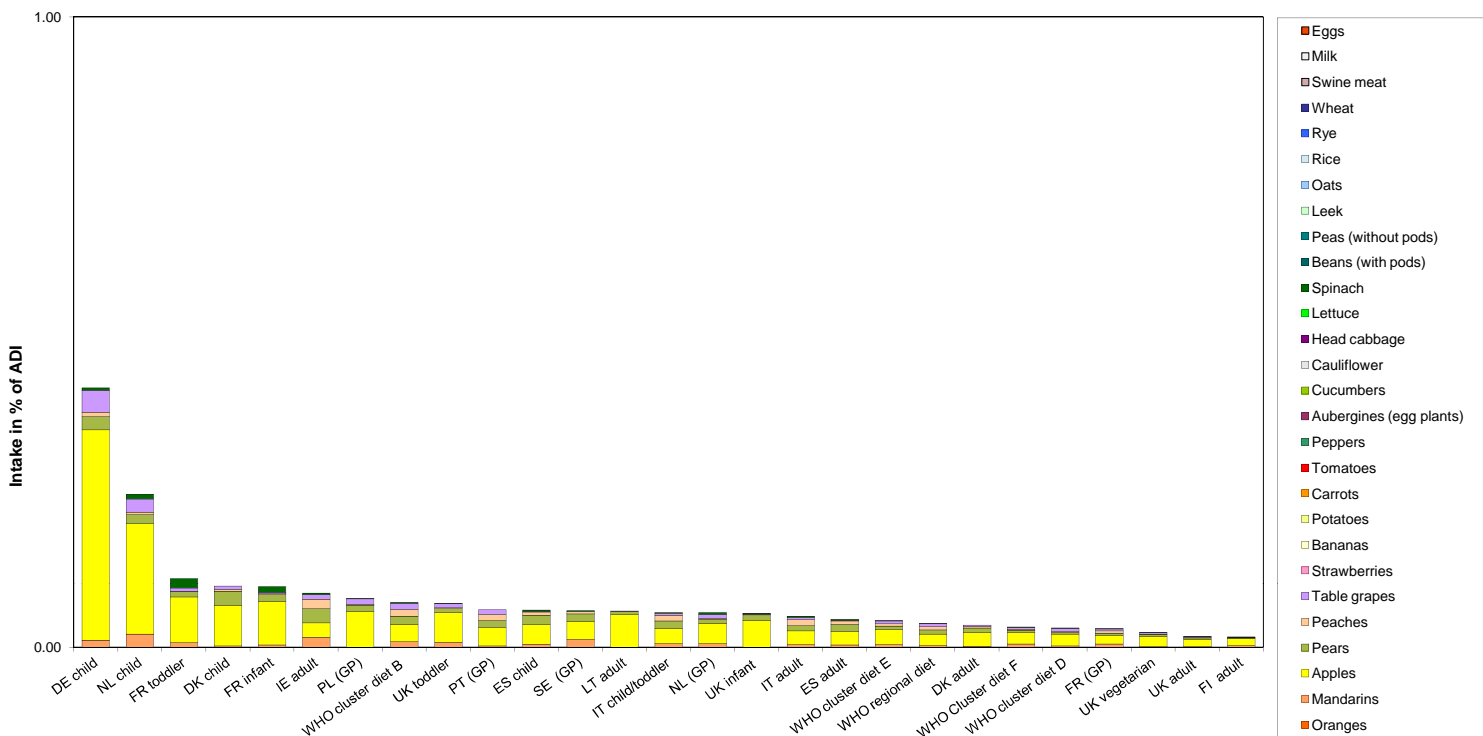
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	1	2455	2.32		0.12		0.60	UK infant	
2010	Peaches	1	1228	0.49		0.09		0.28	DE child	
2010	Strawberries	0.05	1964							
2010	Tomatoes	0.05	1914							
2010	Head cabbage	0.05	1000							
2010	Lettuce	0.05	2006							
2010	Leek	0.05	837							
2010	Oats	0.05	148							
2010	Rye	0.05	352							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

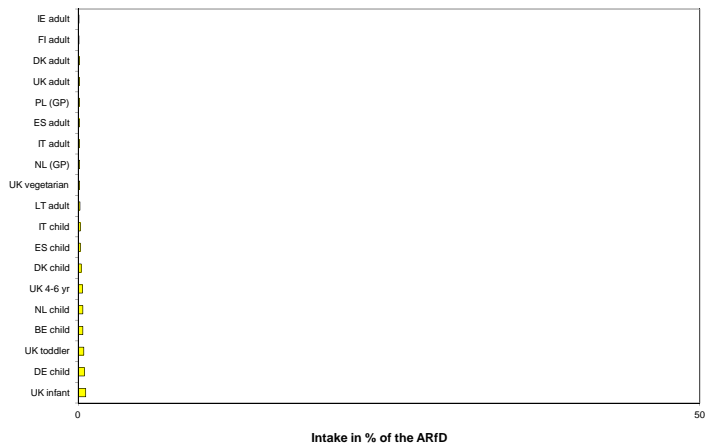
c) TRL: toxicological threshold level

## Chronic risk assessment: Fenoxycarb

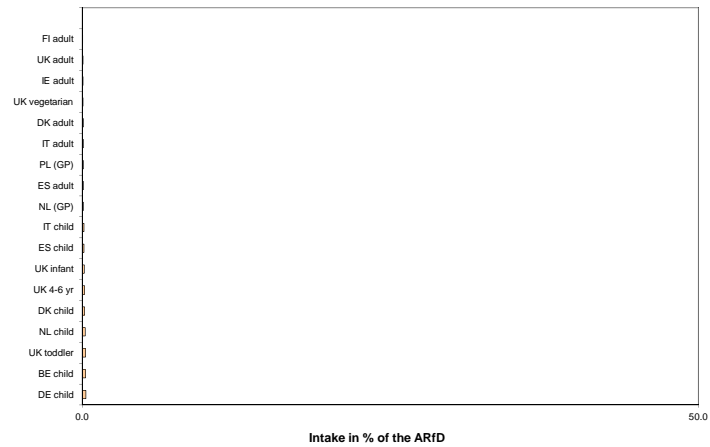


## Fenoxycarb

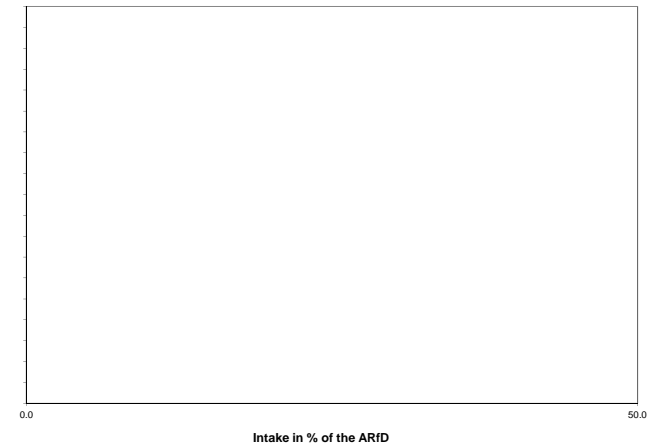
Acute exposure: Fenoxycarb / Apples



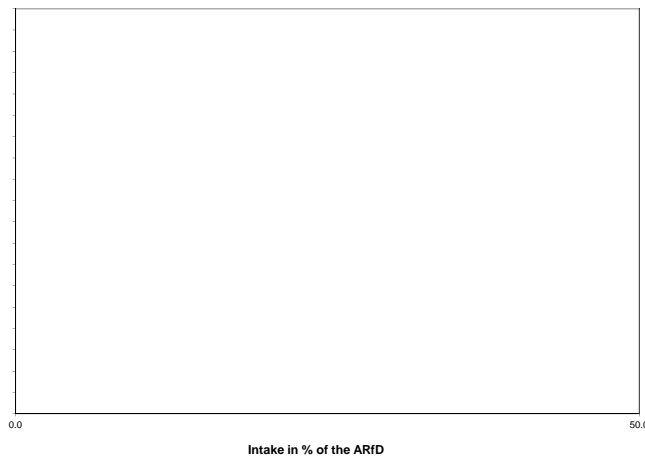
Acute exposure: Fenoxycarb / Peaches



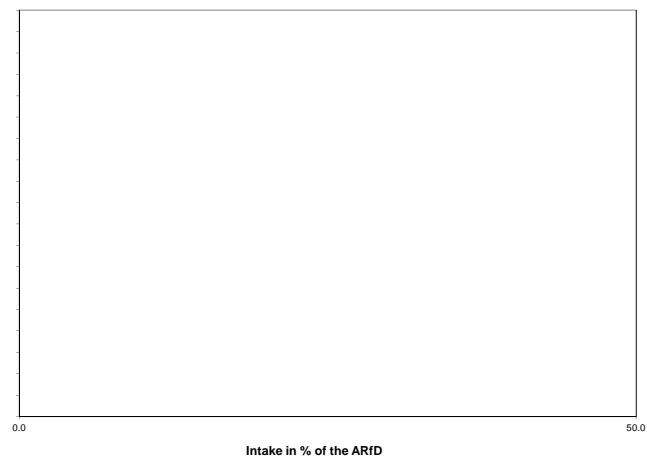
Acute exposure: Fenoxycarb / Strawberries



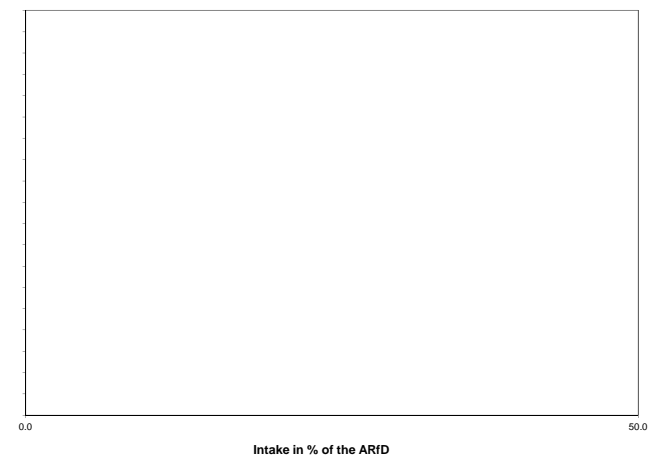
Acute exposure: Fenoxycarb / Tomatoes



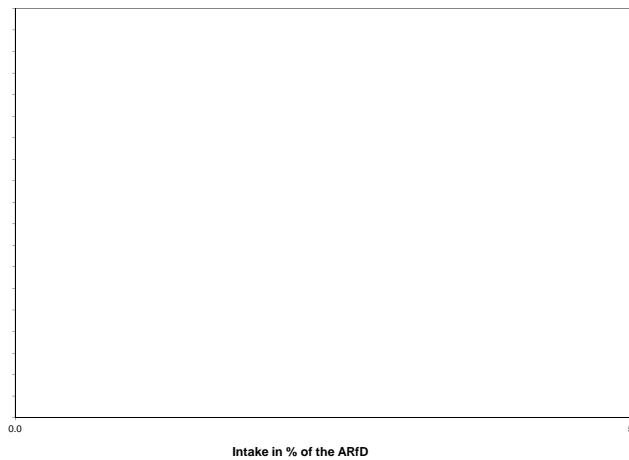
Acute exposure: Fenoxycarb / Head cabbage



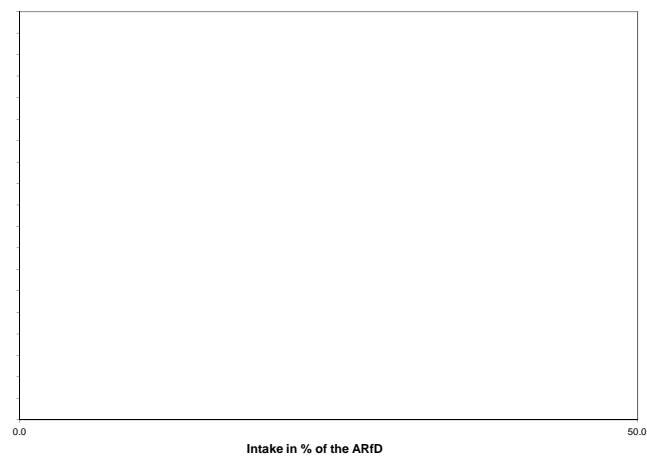
Acute exposure: Fenoxycarb / Lettuce



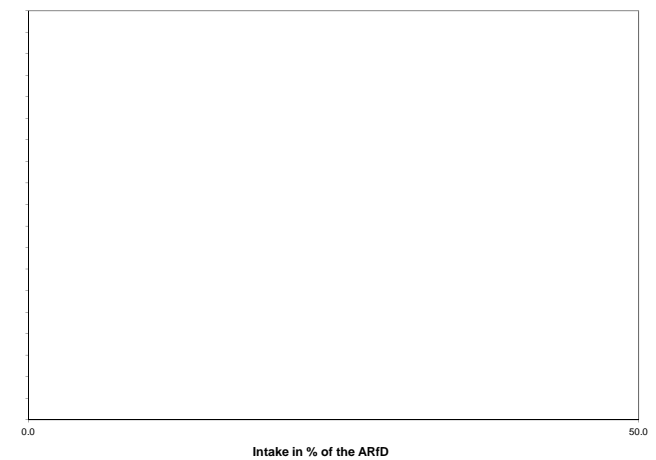
Acute exposure: Fenoxycarb / Leek



Acute exposure: Fenoxycarb / Oats



Acute exposure: Fenoxycarb / Rye



## Fenpropathrin

Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:	Yes	Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.03	ARfD (mg/kg bw):	0.03
Source of ADI:	JMPR	Source of ARfD:	
Year of evaluation:	1993	Year of evaluation:	

Active substance was not assessed for ARfD. ADI is used as surrogate.

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
1

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.66	DE child	0.38	Apples	0.20	Oranges	0.04	Table grapes
0.42	NL child	0.20	Apples	0.16	Oranges	0.02	Table grapes
0.26	FR toddler	0.10	Oranges	0.08	Apples	0.04	Beans (with pods)
0.18	FR infant	0.08	Apples	0.05	Oranges	0.03	Beans (with pods)
0.18	UK toddler	0.10	Oranges	0.05	Apples	0.01	Strawberries
0.17	ES child	0.11	Oranges	0.04	Apples	0.01	Beans (with pods)
0.14	WHO cluster diet B	0.04	Oranges	0.03	Apples	0.02	Peppers
0.14	NL (GP)	0.08	Oranges	0.04	Apples	0.01	Beans (with pods)
0.14	IE adult	0.05	Oranges	0.03	Apples	0.02	Peaches
0.13	UK infant	0.07	Oranges	0.05	Apples	0.01	Strawberries
0.12	ES adult	0.07	Oranges	0.02	Apples	0.01	Beans (with pods)
0.10	DK child	0.07	Apples	0.01	Oranges	0.01	Peppers
0.10	SE (GP)	0.04	Oranges	0.03	Apples	0.01	Strawberries
0.09	PT (GP)	0.03	Apples	0.03	Oranges	0.01	Peaches
0.08	IT child/toddler	0.03	Apples	0.02	Oranges	0.01	Peaches
0.08	PL (GP)	0.06	Apples	0.01	Table grapes	0.00	Peppers
0.08	WHO Cluster diet F	0.05	Oranges	0.02	Apples	0.00	Table grapes
0.08	WHO cluster diet E	0.03	Apples	0.02	Oranges	0.01	Beans (with pods)
0.08	UK vegetarian	0.05	Oranges	0.02	Apples	0.00	Strawberries
0.08	WHO regional diet	0.03	Oranges	0.02	Apples	0.01	Beans (with pods)
0.07	IT adult	0.02	Apples	0.02	Oranges	0.01	Peaches
0.07	FI adult	0.05	Oranges	0.01	Apples	0.00	Strawberries
0.07	LT adult	0.06	Apples	0.00	Oranges	0.00	Strawberries
0.05	UK adult	0.03	Oranges	0.01	Apples	0.00	Strawberries
0.05	FR (GP)	0.01	Oranges	0.01	Apples	0.00	Beans (with pods)
0.05	WHO cluster diet D	0.02	Apples	0.01	Oranges	0.01	Table grapes
0.04	DK adult	0.02	Apples	0.01	Oranges	0.00	Peppers

## Acute risk assessment

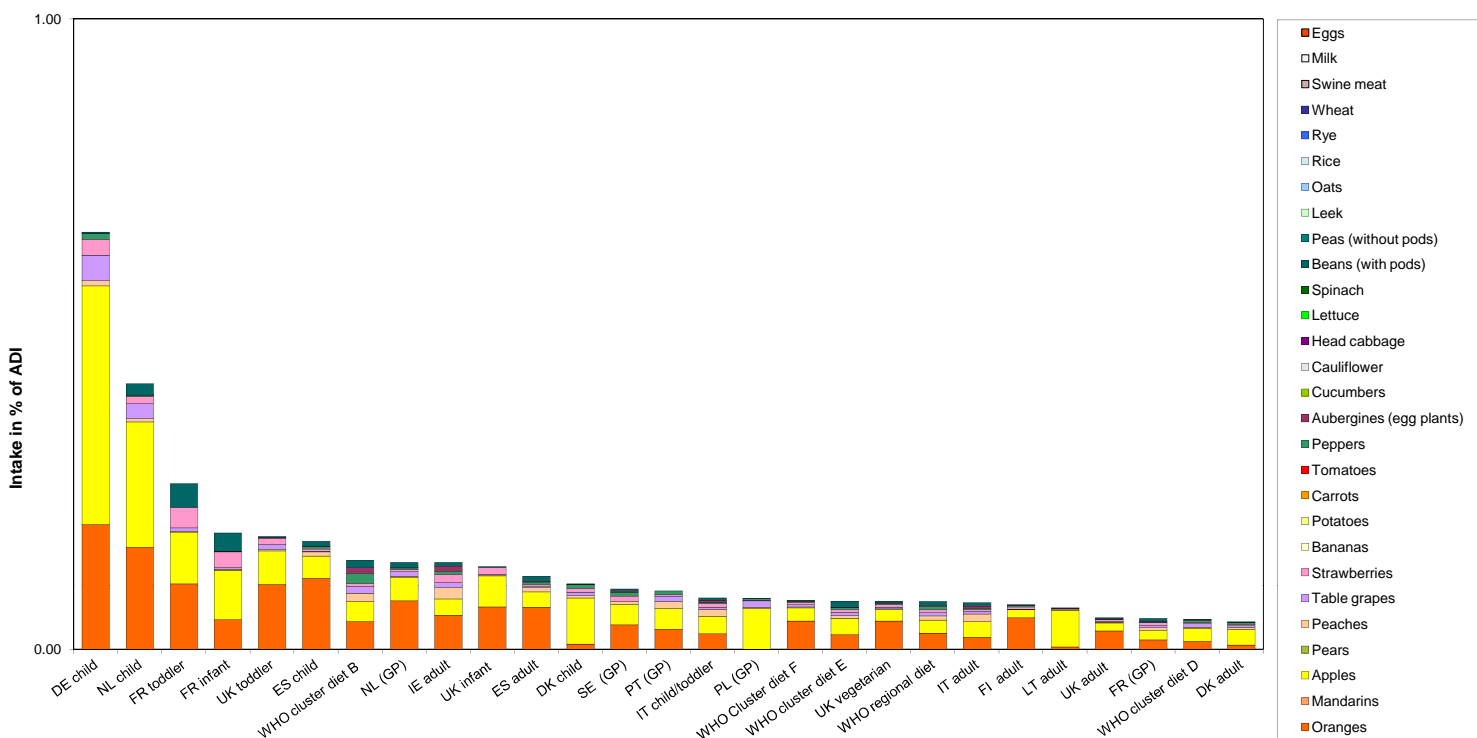
Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.01	2722	0.04	0.04	0.10		32.66	UK infant	
2010	Peaches	0.01	1373		0.07	0.09		17.21	DE child	
2010	Strawberries	2	2139	0.23		0.07		3.64	DE child	
2010	Tomatoes	0.01	2242							
2010	Head cabbage	0.01	1090							
2010	Lettuce	0.01	2217							
2010	Leek	0.01	879							
2010	Oats	0.01	166							
2010	Rye	0.01	420							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

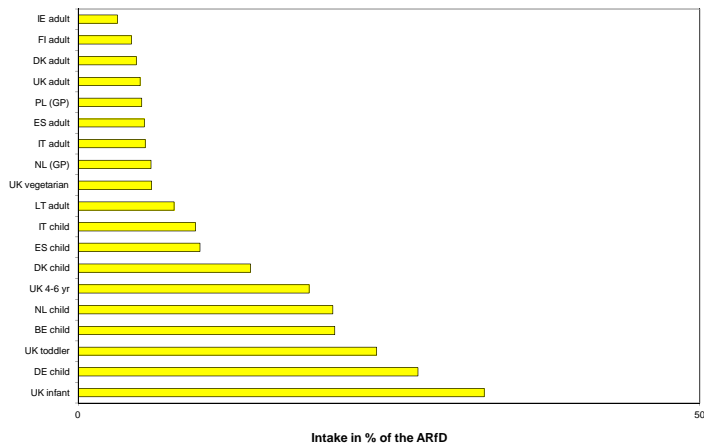
c) TRL: toxicological threshold level

## Chronic risk assessment: Fenpropathrin

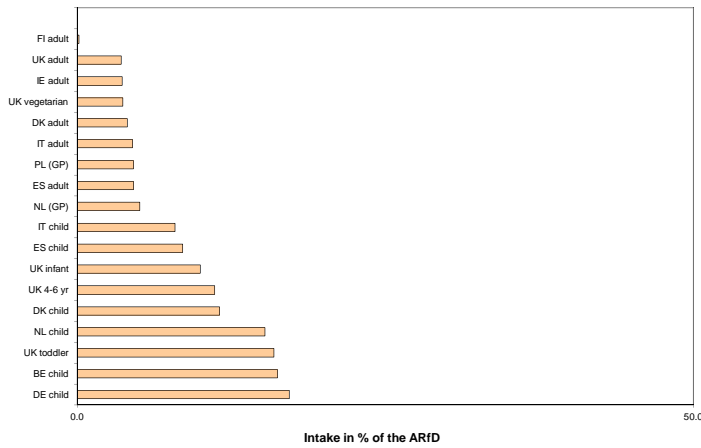


**Fenpropathrin**

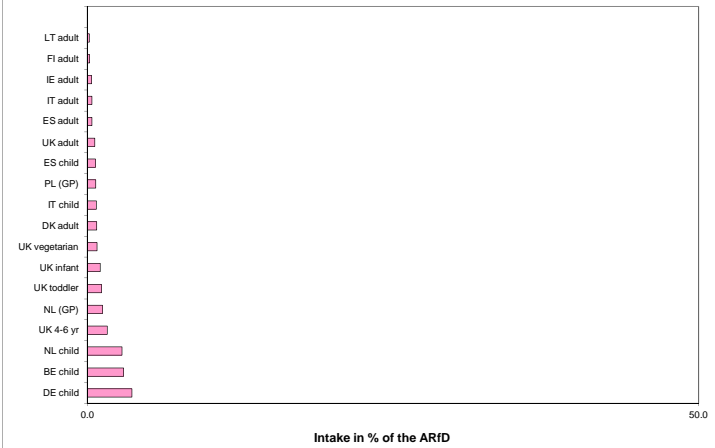
Acute exposure: Fenpropathrin / Apples



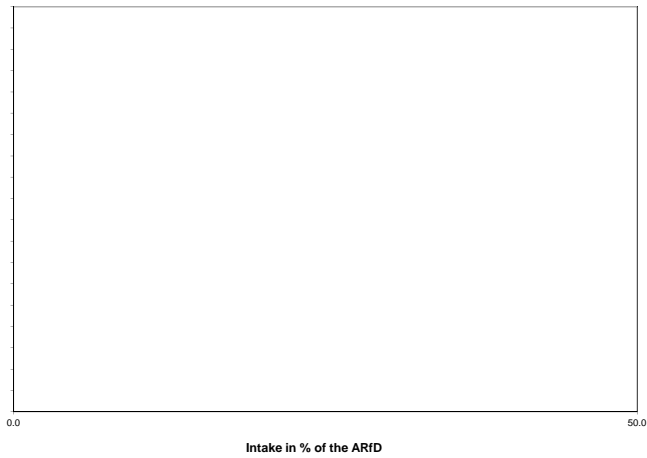
Acute exposure: Fenpropathrin / Peaches



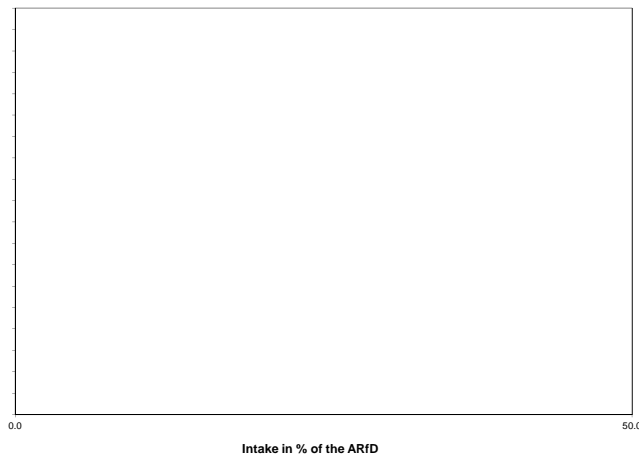
Acute exposure: Fenpropathrin / Strawberries



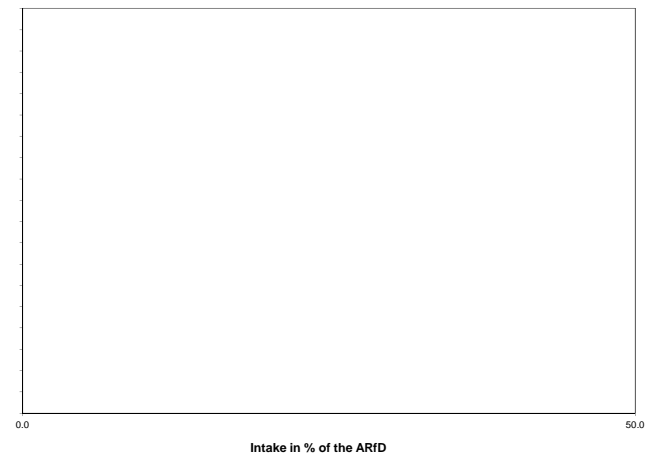
Acute exposure: Fenpropathrin / Tomatoes



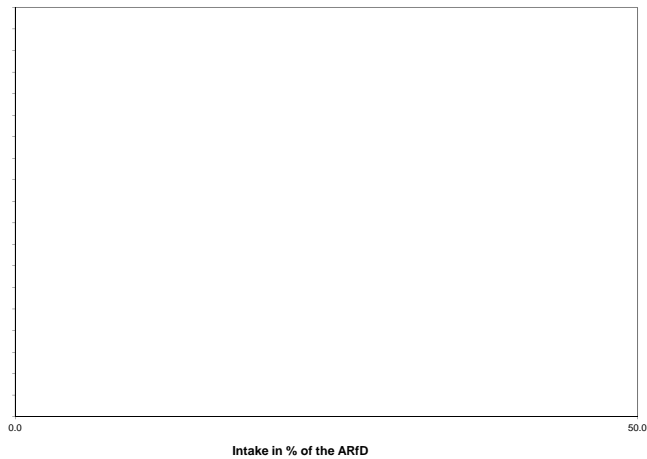
Acute exposure: Fenpropathrin / Head cabbage



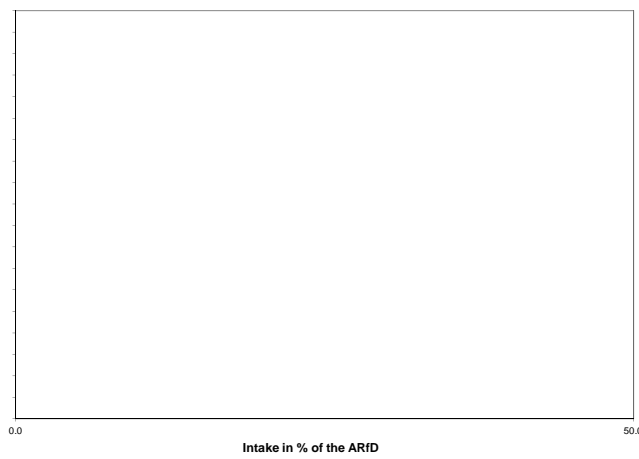
Acute exposure: Fenpropathrin / Lettuce



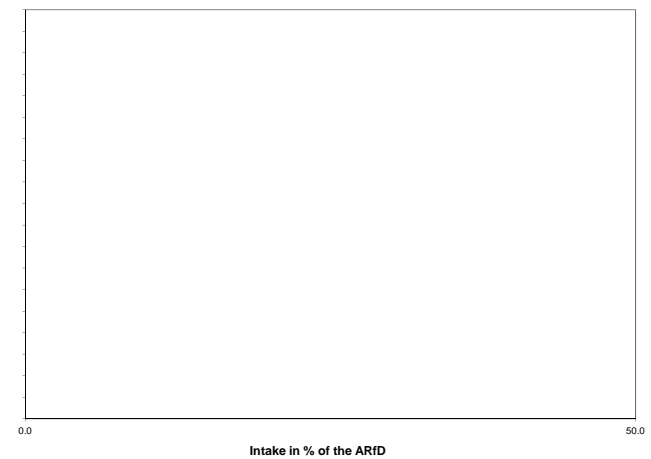
Acute exposure: Fenpropathrin / Leek



Acute exposure: Fenpropathrin / Oats



Acute exposure: Fenpropathrin / Rye



## Fenpropimorph

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.003	ARfD (mg/kg bw):	0.03
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2008	Year of evaluation:	2008

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
1 9

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
8.92	DE child	4.78	Apples	1.80	Wheat	1.04	Potatoes
8.18	NL child	2.51	Apples	2.39	Potatoes	2.08	Wheat
6.44	FR toddler	2.06	Potatoes	1.15	Wheat	1.04	Apples
5.55	WHO cluster diet B	3.75	Wheat	1.09	Potatoes	0.40	Apples
5.34	DK child	2.42	Wheat	0.99	Potatoes	0.92	Apples
4.91	WHO cluster diet D	2.85	Wheat	1.65	Potatoes	0.26	Apples
4.81	FR infant	1.68	Potatoes	0.99	Apples	0.96	Carrots
4.69	PT (GP)	2.16	Potatoes	1.72	Wheat	0.42	Apples
4.67	SE (GP)	1.69	Potatoes	1.41	Wheat	0.74	Bananas
4.53	UK toddler	1.72	Wheat	1.42	Potatoes	0.68	Apples
4.25	UK infant	1.32	Potatoes	1.15	Wheat	0.62	Apples
4.01	WHO cluster diet E	1.73	Wheat	1.56	Potatoes	0.34	Apples
3.99	IT child/toddler	2.92	Wheat	0.36	Potatoes	0.35	Apples
3.69	ES child	1.95	Wheat	0.75	Potatoes	0.45	Apples
3.66	WHO Cluster diet F	1.58	Wheat	1.38	Potatoes	0.26	Apples
3.54	WHO regional diet	1.63	Potatoes	1.30	Wheat	0.26	Apples
2.96	IE adult	1.01	Wheat	0.93	Potatoes	0.33	Apples
2.85	NL (GP)	1.11	Potatoes	0.91	Wheat	0.47	Apples
2.59	LT adult	1.29	Potatoes	0.74	Apples	0.46	Wheat
2.57	IT adult	1.82	Wheat	0.31	Apples	0.24	Potatoes
2.41	PL (GP)	1.39	Potatoes	0.81	Apples	0.11	Carrots
2.38	FR (GP)	1.44	Wheat	0.46	Potatoes	0.19	Apples
2.13	DK adult	0.88	Wheat	0.59	Potatoes	0.31	Apples
1.98	UK vegetarian	0.90	Wheat	0.56	Potatoes	0.23	Apples
1.97	ES adult	1.03	Wheat	0.38	Potatoes	0.30	Apples
1.71	UK adult	0.74	Wheat	0.57	Potatoes	0.16	Apples
1.29	FI adult	0.50	Potatoes	0.43	Wheat	0.16	Apples

## Acute risk assessment

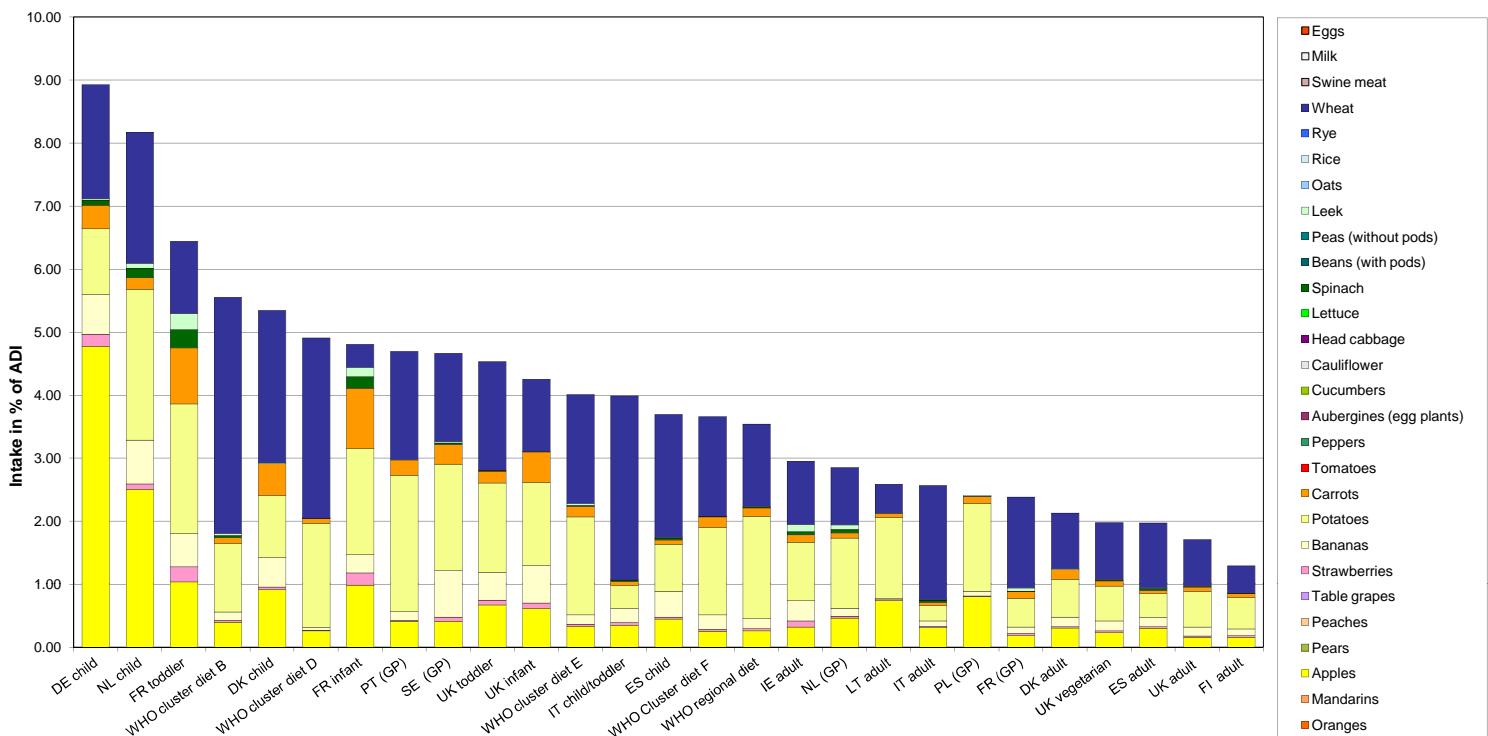
Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	2434	0.08		0.03		9.80	UK infant	
2010	Peaches	0.05	1171							
2010	Strawberries	1	1955	0.10		0.05		2.55	DE child	
2010	Tomatoes	0.05	1942							
2010	Head cabbage	0.05	1012							
2010	Lettuce	0.05	2037	0.05		0.01		0.45	DE child	
2010	Leek	1	741	2.70		0.09		17.10	BE child	
2010	Oats	0.5	225							
2010	Rye	0.5	352							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

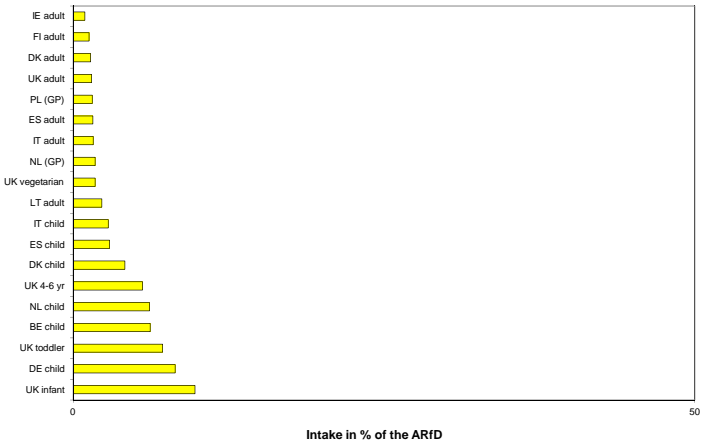
c) TRL: toxicological threshold level

## Chronic risk assessment: Fenpropimorph

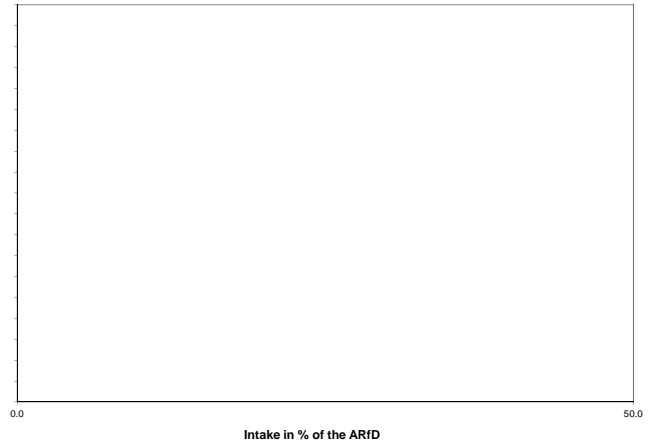


**Fenpropimorph**

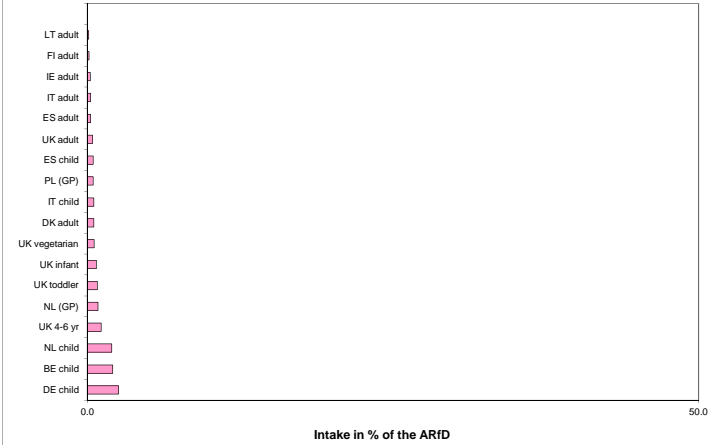
Acute exposure: Fenpropimorph / Apples



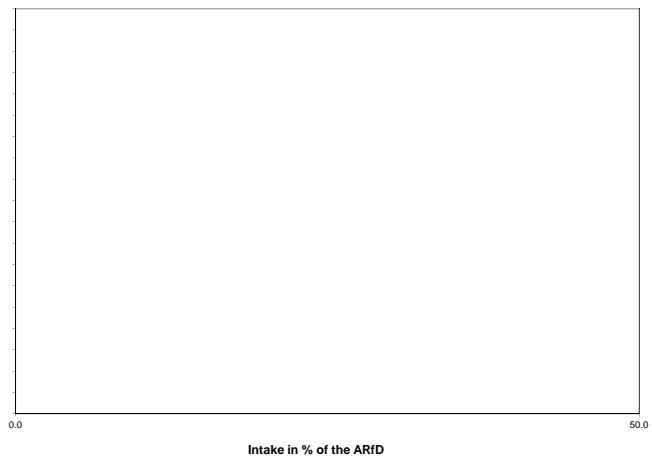
Acute exposure: Fenpropimorph / Peaches



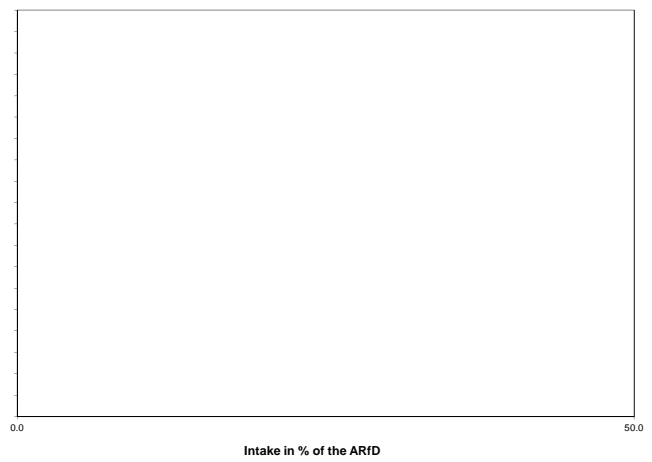
Acute exposure: Fenpropimorph / Strawberries



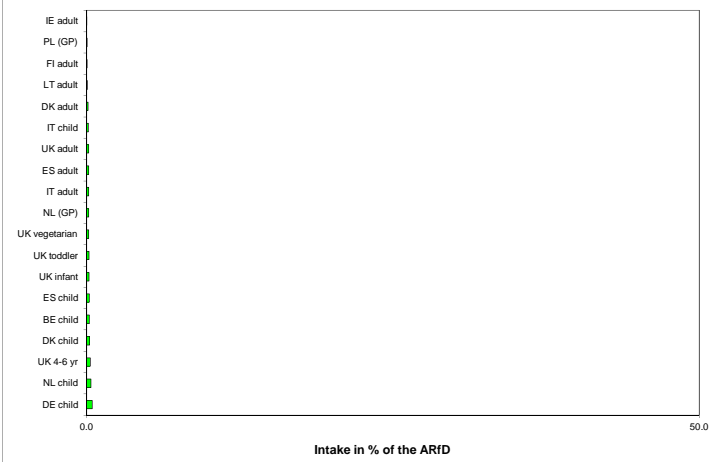
Acute exposure: Fenpropimorph / Tomatoes



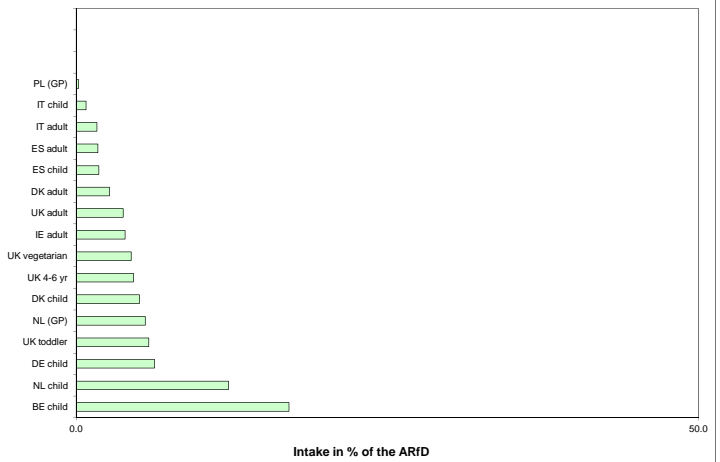
Acute exposure: Fenpropimorph / Head cabbage



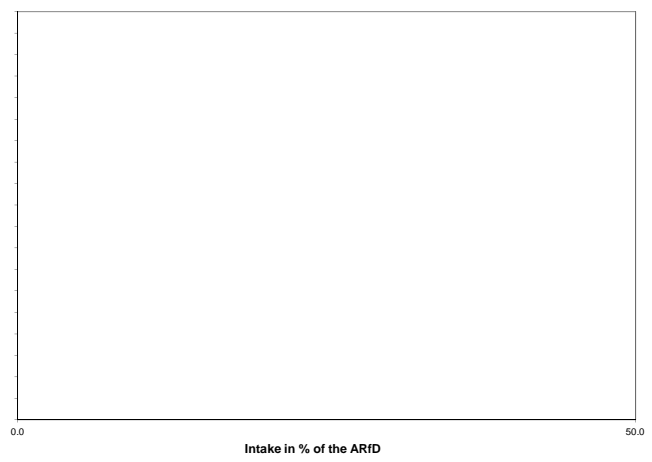
Acute exposure: Fenpropimorph / Lettuce



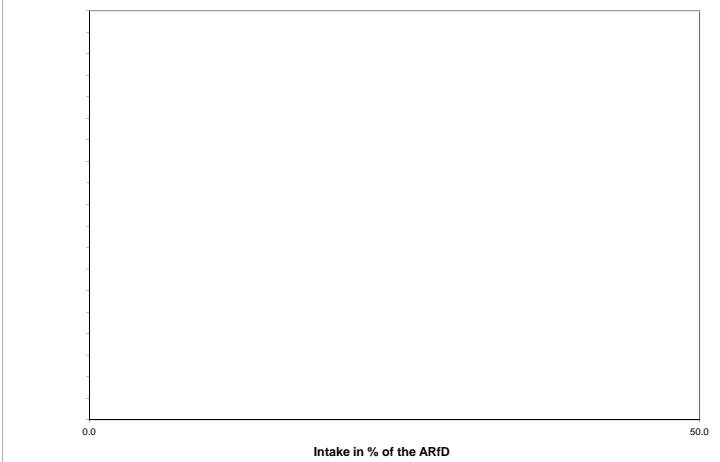
Acute exposure: Fenpropimorph / Leek



Acute exposure: Fenpropimorph / Oats



Acute exposure: Fenpropimorph / Rye





## Fenthion

Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P and A
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.007	ARfD (mg/kg bw):	0.01
Source of ADI:	JMPR	Source of ARfD:	JMPR
Year of evaluation:	2000	Year of evaluation:	2000

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
2

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
1.55	NL child	0.87	Apples	0.54	Oranges	0.11	Mandarins
0.75	FR toddler	0.36	Apples	0.35	Oranges	0.04	Mandarins
0.63	UK toddler	0.34	Oranges	0.23	Apples	0.04	Mandarins
0.58	ES child	0.38	Oranges	0.16	Apples	0.03	Mandarins
0.53	FR infant	0.34	Apples	0.16	Oranges	0.02	Mandarins
0.46	NL (GP)	0.26	Oranges	0.16	Apples	0.03	Mandarins
0.45	IE adult	0.18	Oranges	0.11	Apples	0.09	Mandarins
0.45	UK infant	0.23	Oranges	0.22	Apples	0.01	Peaches
0.39	WHO cluster diet B	0.15	Oranges	0.14	Apples	0.05	Peaches
0.38	ES adult	0.22	Oranges	0.11	Apples	0.03	Peaches
0.38	DK child	0.32	Apples	0.03	Oranges	0.01	Peaches
0.36	SE (GP)	0.14	Apples	0.13	Oranges	0.07	Mandarins
0.31	PT (GP)	0.14	Apples	0.11	Oranges	0.05	Peaches
0.30	PL (GP)	0.28	Apples	0.01	Peaches	0.01	Mandarins
0.28	IT child/toddler	0.12	Apples	0.08	Oranges	0.04	Peaches
0.28	WHO Cluster diet F	0.15	Oranges	0.09	Apples	0.03	Mandarins
0.27	LT adult	0.26	Apples	0.01	Oranges	0.00	Mandarins
0.25	IT adult	0.11	Apples	0.06	Oranges	0.05	Peaches
0.24	UK vegetarian	0.15	Oranges	0.08	Apples	0.01	Mandarins
0.24	FI adult	0.17	Oranges	0.06	Apples	0.02	Mandarins
0.24	WHO cluster diet E	0.12	Apples	0.08	Oranges	0.03	Mandarins
0.22	WHO regional diet	0.09	Apples	0.09	Oranges	0.03	Peaches
0.17	UK adult	0.10	Oranges	0.06	Apples	0.01	Mandarins
0.16	FR (GP)	0.07	Apples	0.05	Oranges	0.03	Mandarins
0.16	DK adult	0.11	Apples	0.02	Oranges	0.01	Peaches
0.15	WHO cluster diet D	0.09	Apples	0.04	Oranges	0.01	Mandarins

## Acute risk assessment

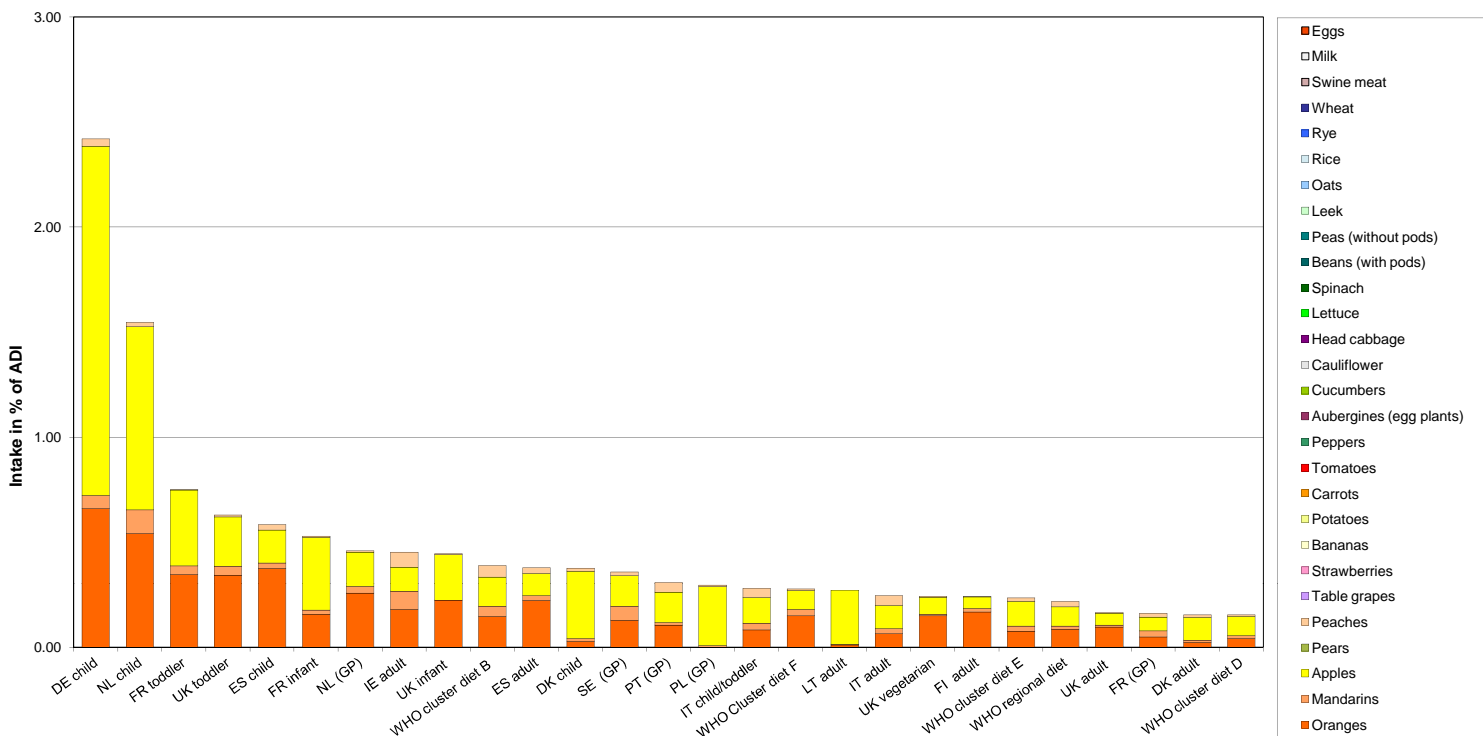
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.01	2148		0.05	0.11	1	107.76	UK infant	
2010	Peaches	0.01	1022		0.10	0.06		33.23	DE child	
2010	Strawberries	0.01	1776							
2010	Tomatoes	0.01	1730							
2010	Head cabbage	0.01	880							
2010	Lettuce	0.01	1678							
2010	Leek	0.01	628							
2010	Oats	0.01	111							
2010	Rye	0.01	350							
2010	Swine Meat	0.05	236							
2010	Milk	0.01	333							

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

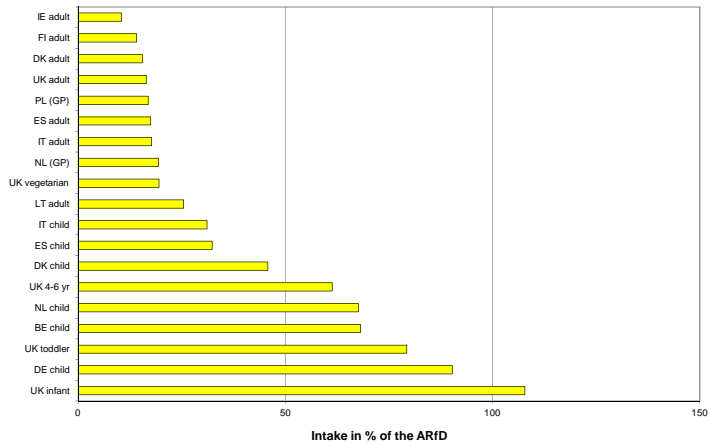
<sup>c)</sup> TRL: toxicological threshold level

## Chronic risk assessment: Fenthion

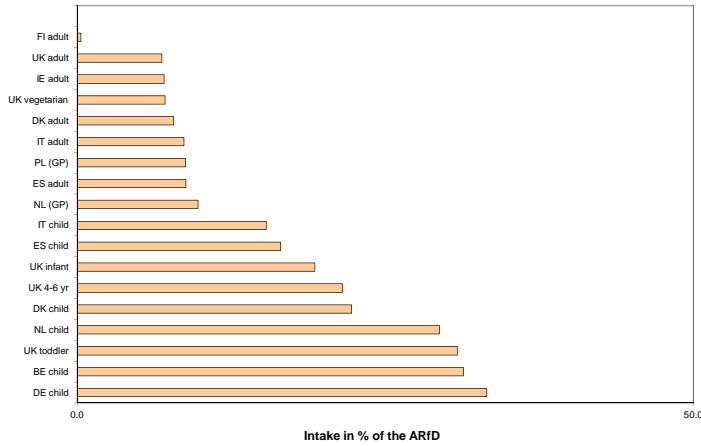


**Fenthion**

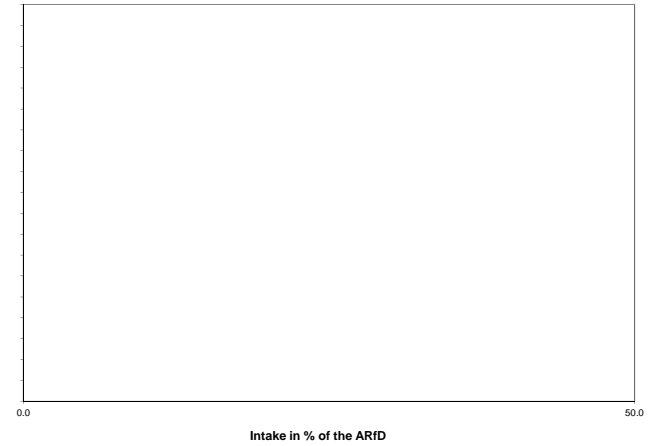
Acute exposure: Fenthion / Apples



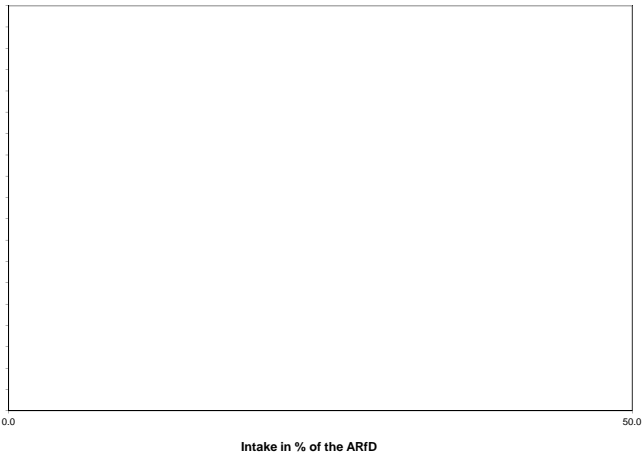
Acute exposure: Fenthion / Peaches



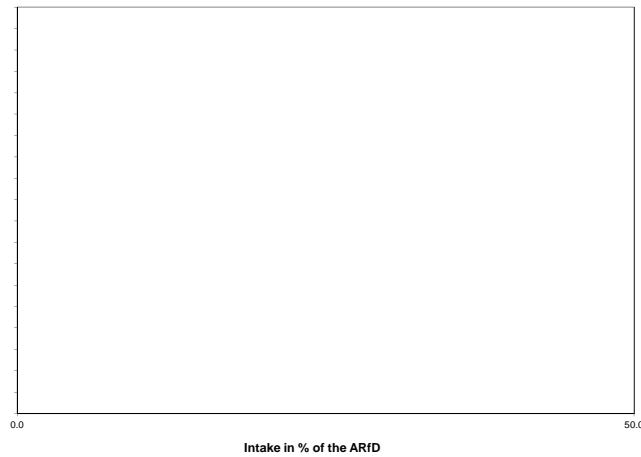
Acute exposure: Fenthion / Strawberries



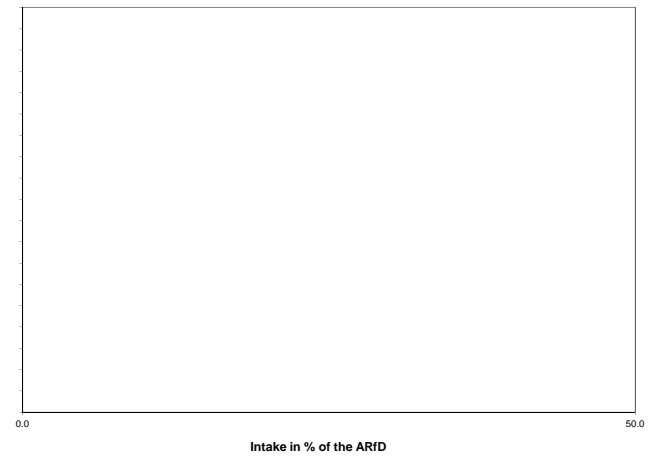
Acute exposure: Fenthion / Tomatoes



Acute exposure: Fenthion / Head cabbage



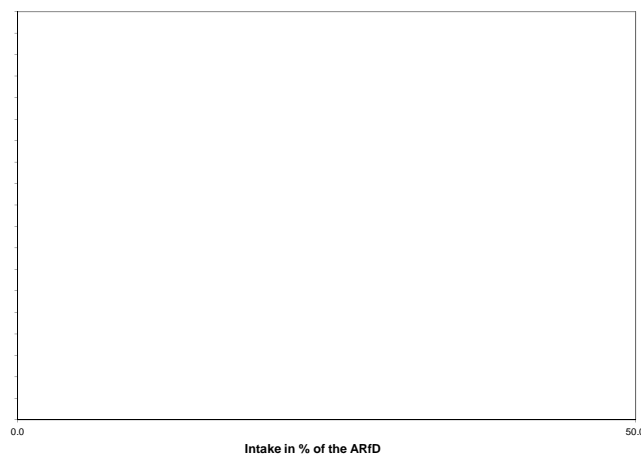
Acute exposure: Fenthion / Lettuce



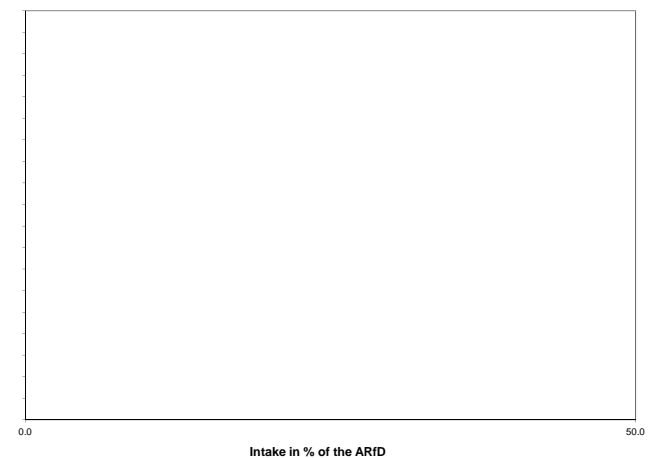
Acute exposure: Fenthion / Leek



Acute exposure: Fenthion / Oats



Acute exposure: Fenthion / Rye



## Esfenvalerate

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P and A
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.02	ARfD (mg/kg bw):	0.05
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2000	Year of evaluation:	2000

For fenvalerate the same ADI was established (DE, 1991). For fenvalerate no ARfD was derived.

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
1

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
1.04	NL child	0.53	Apples	0.35	Wheat	0.06	Table grapes
0.84	WHO cluster diet B	0.62	Wheat	0.08	Apples	0.03	Peppers
0.69	DK child	0.40	Wheat	0.20	Apples	0.06	Pears
0.61	IT child/toddler	0.49	Wheat	0.07	Apples	0.03	Pears
0.58	WHO cluster diet D	0.48	Wheat	0.06	Apples	0.01	Table grapes
0.53	FR toddler	0.22	Apples	0.19	Wheat	0.07	Beans (with pods)
0.49	ES child	0.32	Wheat	0.10	Apples	0.04	Pears
0.48	UK toddler	0.29	Wheat	0.14	Apples	0.02	Table grapes
0.44	PT (GP)	0.29	Wheat	0.09	Apples	0.03	Pears
0.43	WHO cluster diet E	0.29	Wheat	0.07	Apples	0.02	Head cabbage
0.42	SE (GP)	0.23	Wheat	0.09	Apples	0.05	Head cabbage
0.42	IT adult	0.30	Wheat	0.07	Apples	0.02	Pears
0.36	WHO Cluster diet F	0.26	Wheat	0.06	Apples	0.02	Head cabbage
0.36	FR infant	0.21	Apples	0.06	Wheat	0.05	Beans (with pods)
0.36	UK infant	0.19	Wheat	0.13	Apples	0.02	Pears
0.35	WHO regional diet	0.22	Wheat	0.06	Apples	0.03	Head cabbage
0.34	IE adult	0.17	Wheat	0.07	Apples	0.06	Pears
0.32	NL (GP)	0.15	Wheat	0.10	Apples	0.02	Table grapes
0.31	FR (GP)	0.24	Wheat	0.04	Apples	0.01	Pears
0.29	ES adult	0.17	Wheat	0.06	Apples	0.03	Pears
0.28	LT adult	0.16	Apples	0.08	Wheat	0.03	Head cabbage
0.26	PL (GP)	0.17	Apples	0.03	Head cabbage	0.03	Table grapes
0.25	DK adult	0.15	Wheat	0.07	Apples	0.02	Pears
0.23	UK vegetarian	0.15	Wheat	0.05	Apples	0.01	Head cabbage
0.18	UK adult	0.12	Wheat	0.03	Apples	0.01	Head cabbage
0.12	FI adult	0.07	Wheat	0.03	Apples	0.01	Head cabbage

## Acute risk assessment

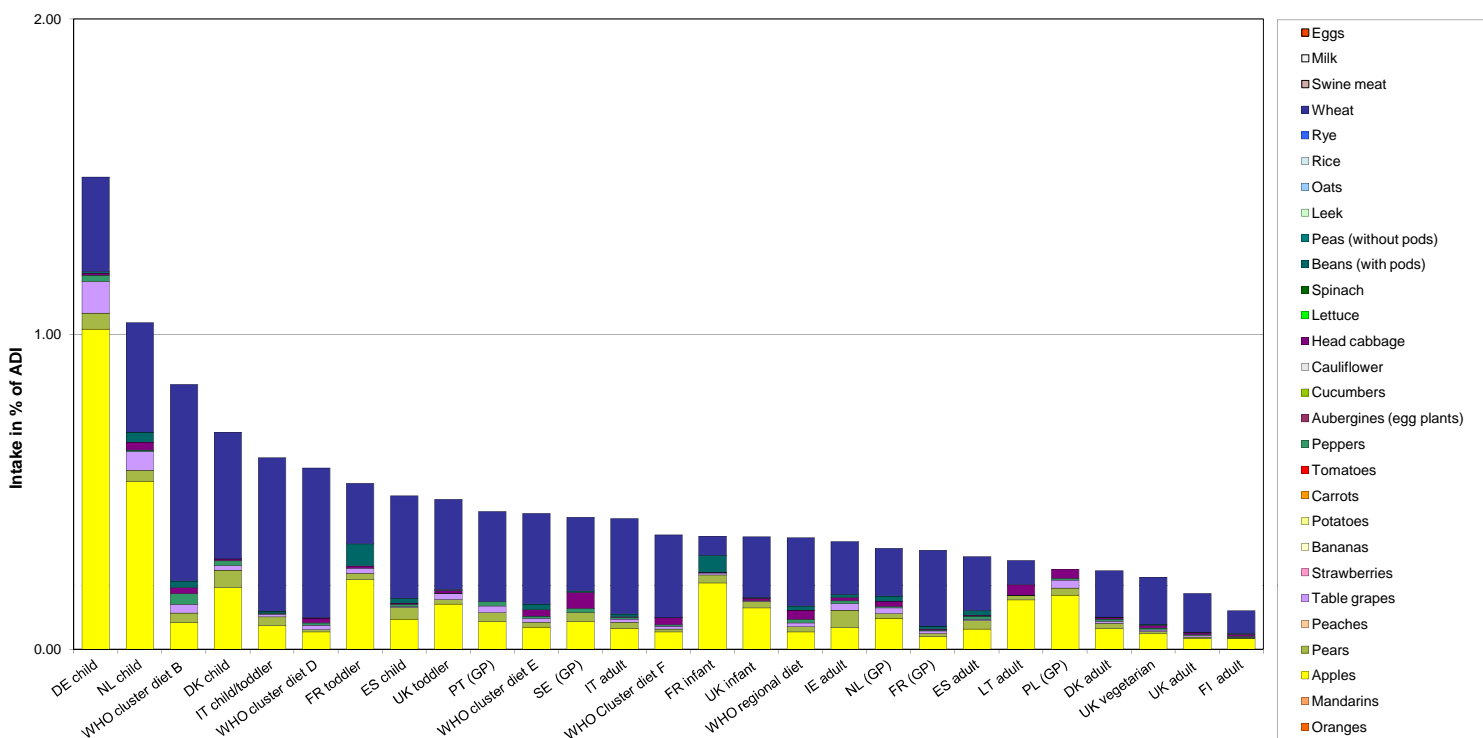
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.1	525	0.29		0.03		3.09	DE child	
2010	Peaches		341							
2010	Strawberries	0.02	412							
2010	Tomatoes		396							
2010	Head cabbage		207							
2010	Lettuce		472							
2010	Leek		225							
2010	Oats		86							
2010	Rye		71							
2010	Swine Meat		157							
2010	Milk		54							

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

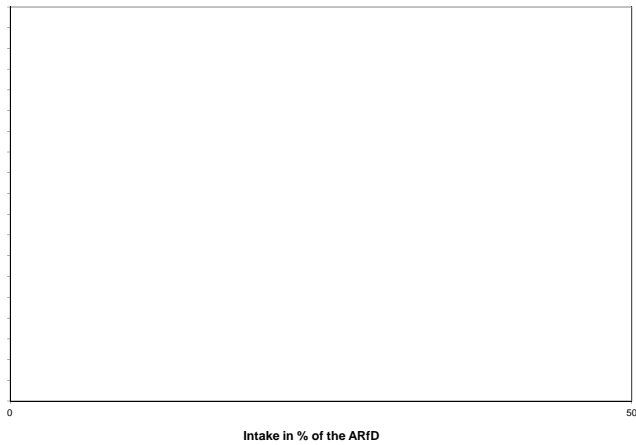
<sup>c)</sup> TRL: toxicological threshold level

## Chronic risk assessment: Esfenvalerate

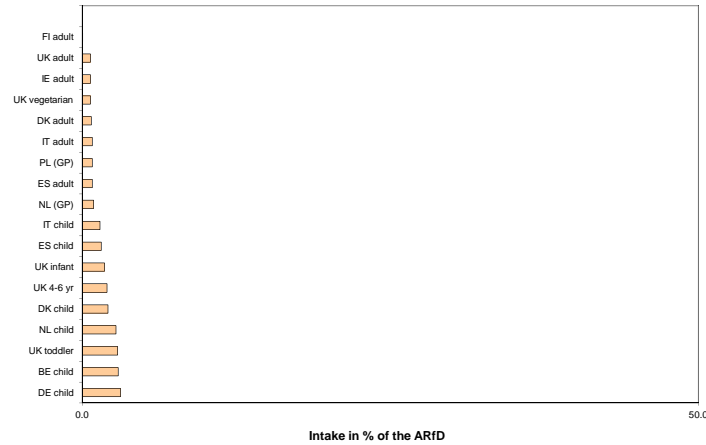


**Esfenvalerate**

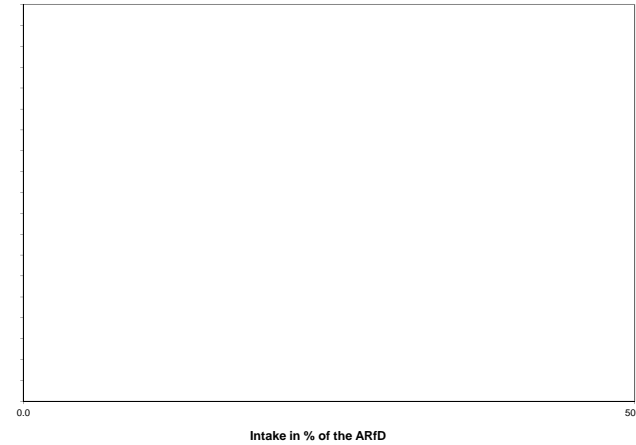
Acute exposure: Esfenvalerate / Apples



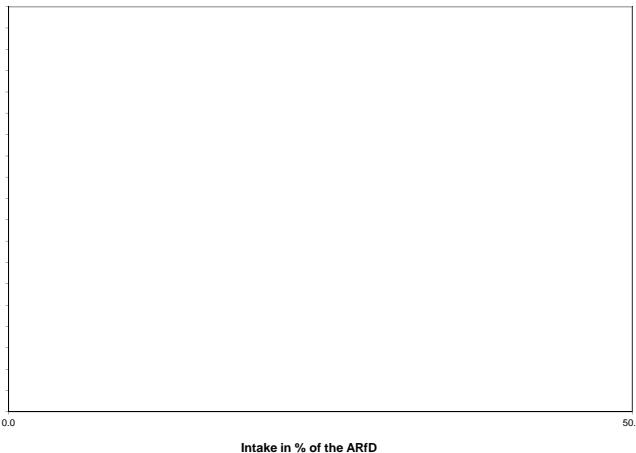
Acute exposure: Esfenvalerate / Peaches



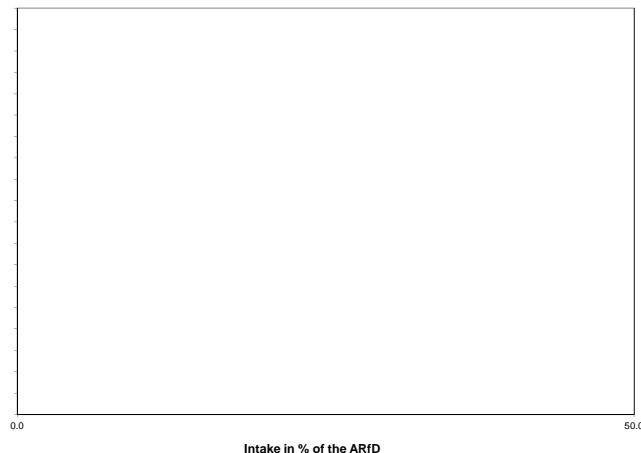
Acute exposure: Esfenvalerate / Strawberries



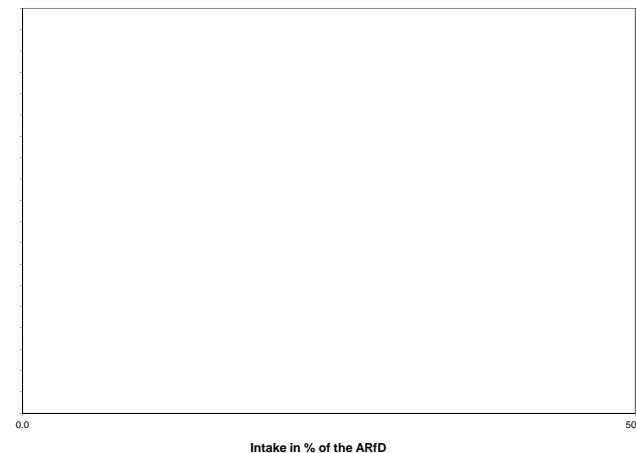
Acute exposure: Esfenvalerate / Tomatoes



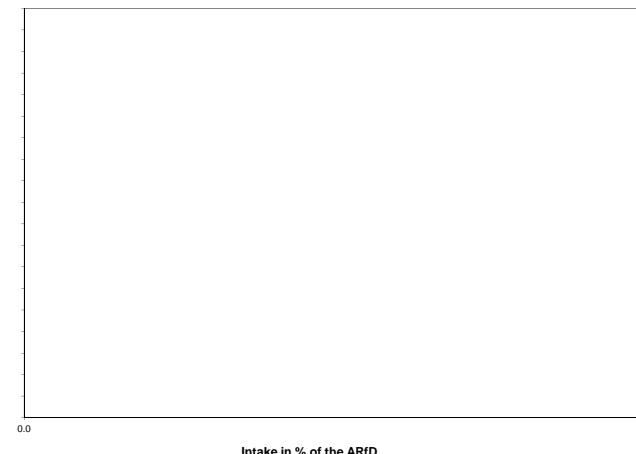
Acute exposure: Esfenvalerate / Head cabbage



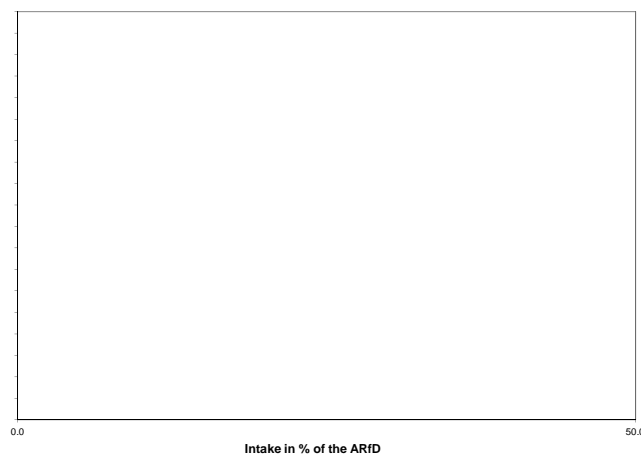
Acute exposure: Esfenvalerate / Lettuce



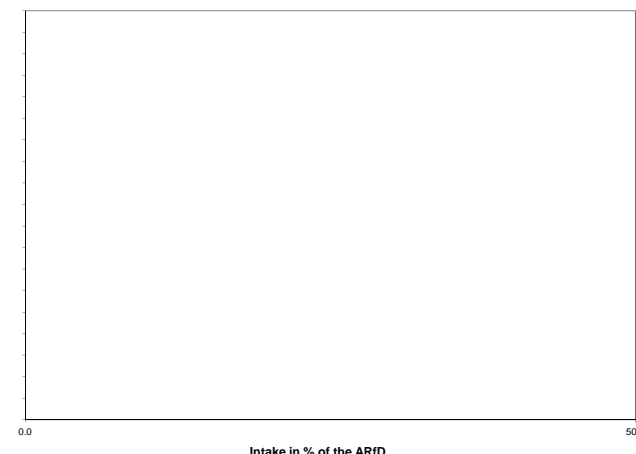
Acute exposure: Esfenvalerate / Leek



Acute exposure: Esfenvalerate / Oats



Acute exposure: Esfenvalerate / Rye



## Fipronil

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.0002	ARfD (mg/kg bw):	0.009
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2007	Year of evaluation:	2007

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
5 32

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)		2nd contributor to MS diet (in % of ADI)		3rd contributor to MS diet (in % of ADI)	
		Commodity / group of commodities	Commodity / group of commodities	Commodity / group of commodities	Commodity / group of commodities		
32.32	NL child	22.16	Potatoes	6.07	Oranges	2.49	Rice
27.73	PT (GP)	20.05	Potatoes	5.55	Rice	1.19	Oranges
25.87	FR toddler	19.04	Potatoes	3.89	Oranges	2.54	Rice
21.98	DE child	9.64	Potatoes	7.41	Oranges	2.44	Table grapes
21.57	UK toddler	13.13	Potatoes	4.07	Rice	3.85	Oranges
20.35	SE (GP)	15.66	Potatoes	2.84	Rice	1.45	Oranges
20.23	WHO cluster diet D	15.26	Potatoes	3.91	Rice	0.47	Oranges
19.27	UK infant	12.23	Potatoes	4.47	Rice	2.53	Oranges
18.14	FR infant	15.55	Potatoes	1.77	Oranges	0.64	Rice
18.10	WHO regional diet	15.08	Potatoes	1.39	Rice	0.97	Oranges
17.28	WHO cluster diet E	14.41	Potatoes	1.49	Rice	0.87	Oranges
17.18	WHO cluster diet B	10.07	Potatoes	3.72	Rice	1.66	Oranges
16.36	WHO Cluster diet F	12.82	Potatoes	1.69	Oranges	1.49	Rice
14.90	NL (GP)	10.30	Potatoes	2.89	Oranges	1.13	Rice
14.86	ES child	6.92	Potatoes	4.22	Oranges	3.42	Rice
13.72	PL (GP)	12.91	Potatoes	0.61	Table grapes	0.16	Peppers
13.65	LT adult	11.93	Potatoes	1.51	Rice	0.14	Oranges
12.63	IE adult	8.61	Potatoes	2.03	Oranges	1.20	Rice
11.03	DK child	9.14	Potatoes	0.74	Rice	0.47	Peppers
9.86	UK vegetarian	5.15	Potatoes	2.70	Rice	1.69	Oranges
9.12	UK adult	5.25	Potatoes	2.59	Rice	1.09	Oranges
8.13	ES adult	3.49	Potatoes	2.51	Oranges	1.71	Rice
7.41	FI adult	4.61	Potatoes	1.89	Oranges	0.77	Rice
6.73	DK adult	5.48	Potatoes	0.61	Rice	0.26	Oranges
6.00	IT child/toddler	3.37	Potatoes	1.36	Rice	0.94	Oranges
5.87	FR (GP)	4.22	Potatoes	0.80	Rice	0.56	Oranges
4.65	IT adult	2.26	Potatoes	1.27	Rice	0.73	Oranges

## Acute risk assessment

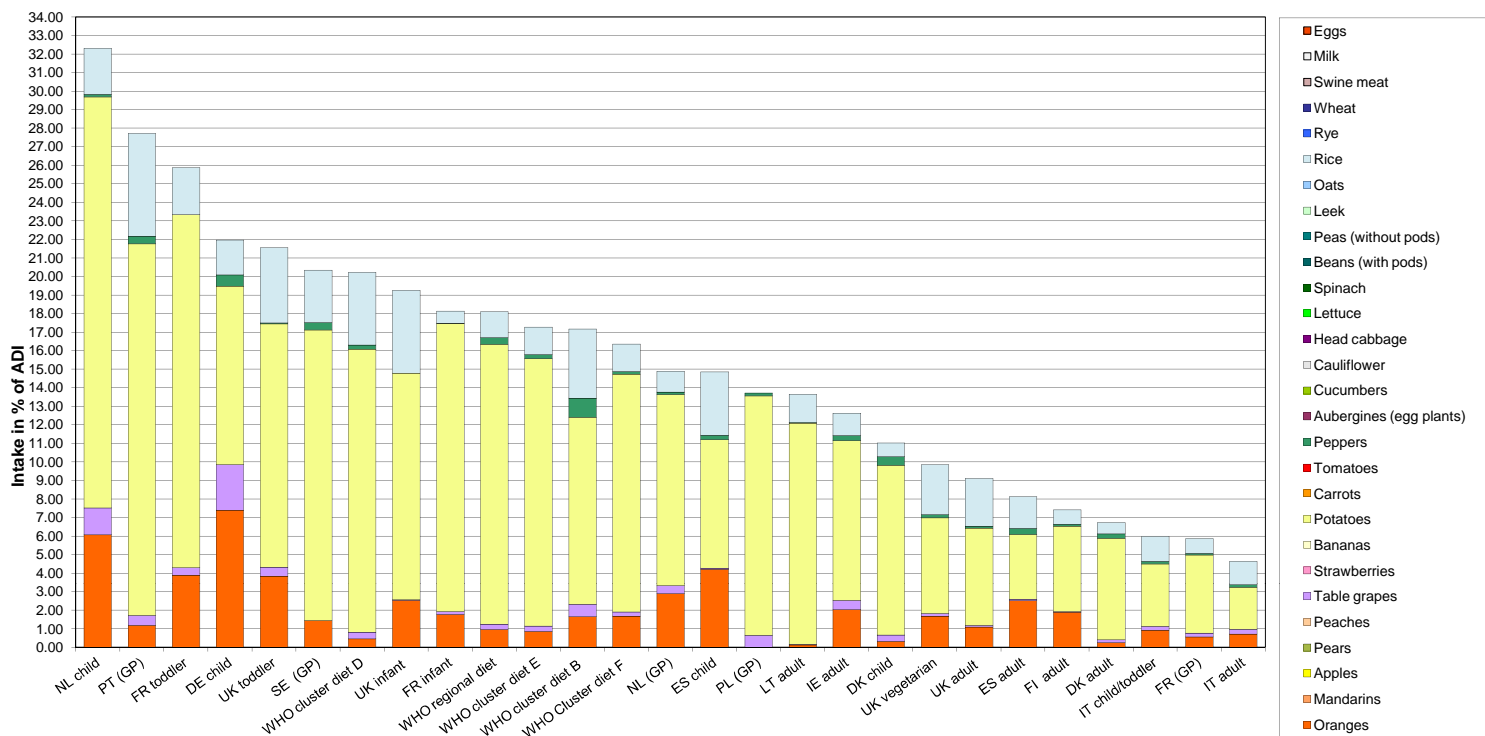
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.005	1776							
2010	Peaches	0.005	721							
2010	Strawberries	0.005	1291							
2010	Tomatoes	0.005	1272							
2010	Head cabbage	0.02	702							
2010	Lettuce	0.005	1337							
2010	Leek	0.01	477							
2010	Oats		91							
2010	Rye		280							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

<sup>c)</sup> TRL: toxicological threshold level

## Chronic risk assessment: Fipronil



**Fipronil**

Acute exposure: Fipronil / Apples



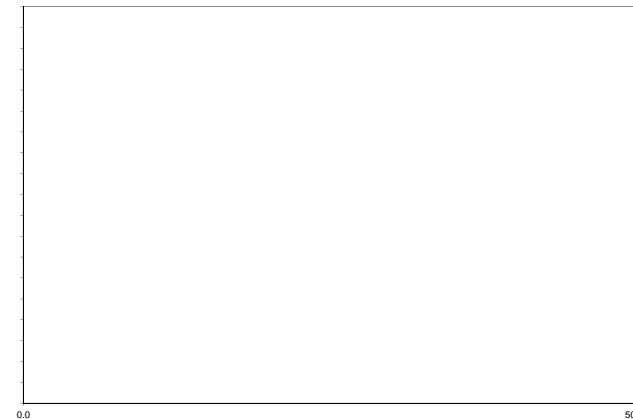
Intake in % of the ARfD

Acute exposure: Fipronil / Peaches



Intake in % of the ARfD

Acute exposure: Fipronil / Strawberries



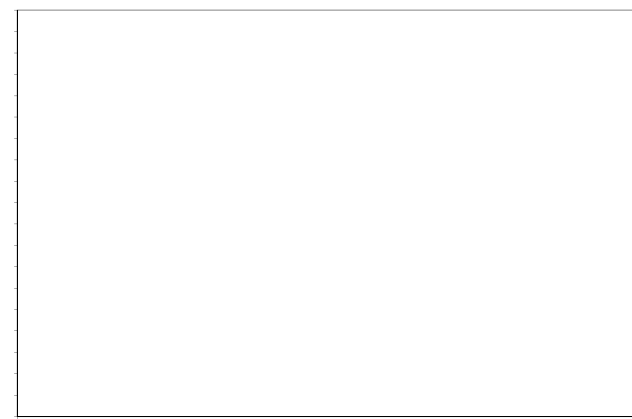
Intake in % of the ARfD

Acute exposure: Fipronil / Tomatoes



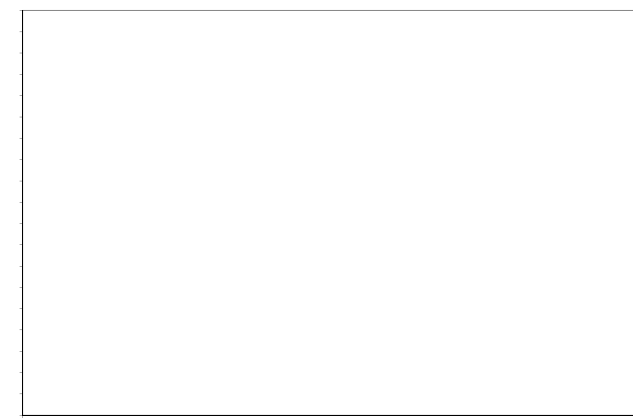
Intake in % of the ARfD

Acute exposure: Fipronil / Head cabbage



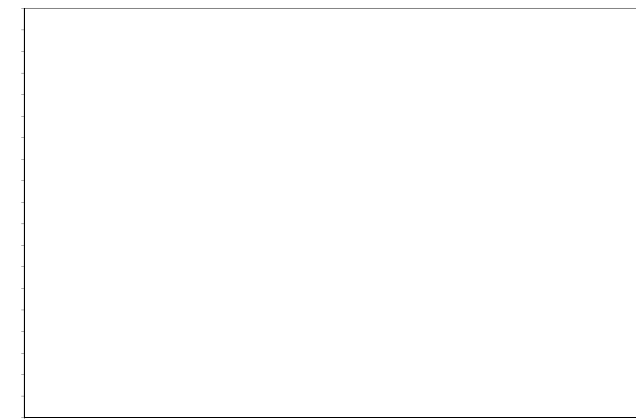
Intake in % of the ARfD

Acute exposure: Fipronil / Lettuce



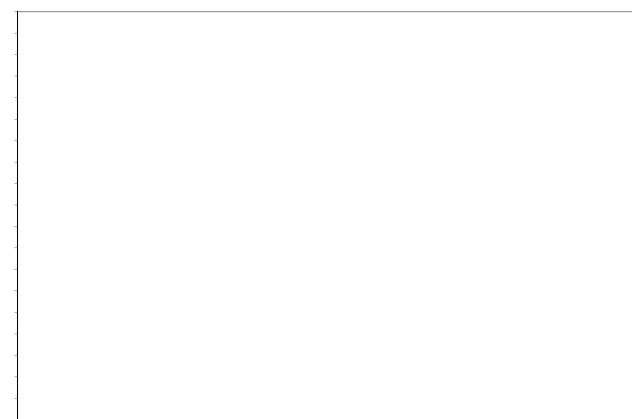
Intake in % of the ARfD

Acute exposure: Fipronil / Leek



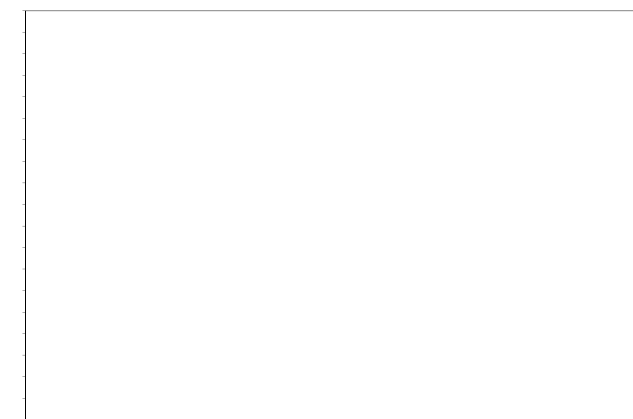
Intake in % of the ARfD

Acute exposure: Fipronil / Oats



Intake in % of the ARfD

Acute exposure: Fipronil / Rye



Intake in % of the ARfD

## Fluazifop-P-butyl

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:	Yes	Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.01	ARfD (mg/kg bw):	0.017
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2011	Year of evaluation:	2011

ADI and ARfD for fluazifop-P are expressed as fluazifop acid.

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
1

No of diets exceeding ADI: ---

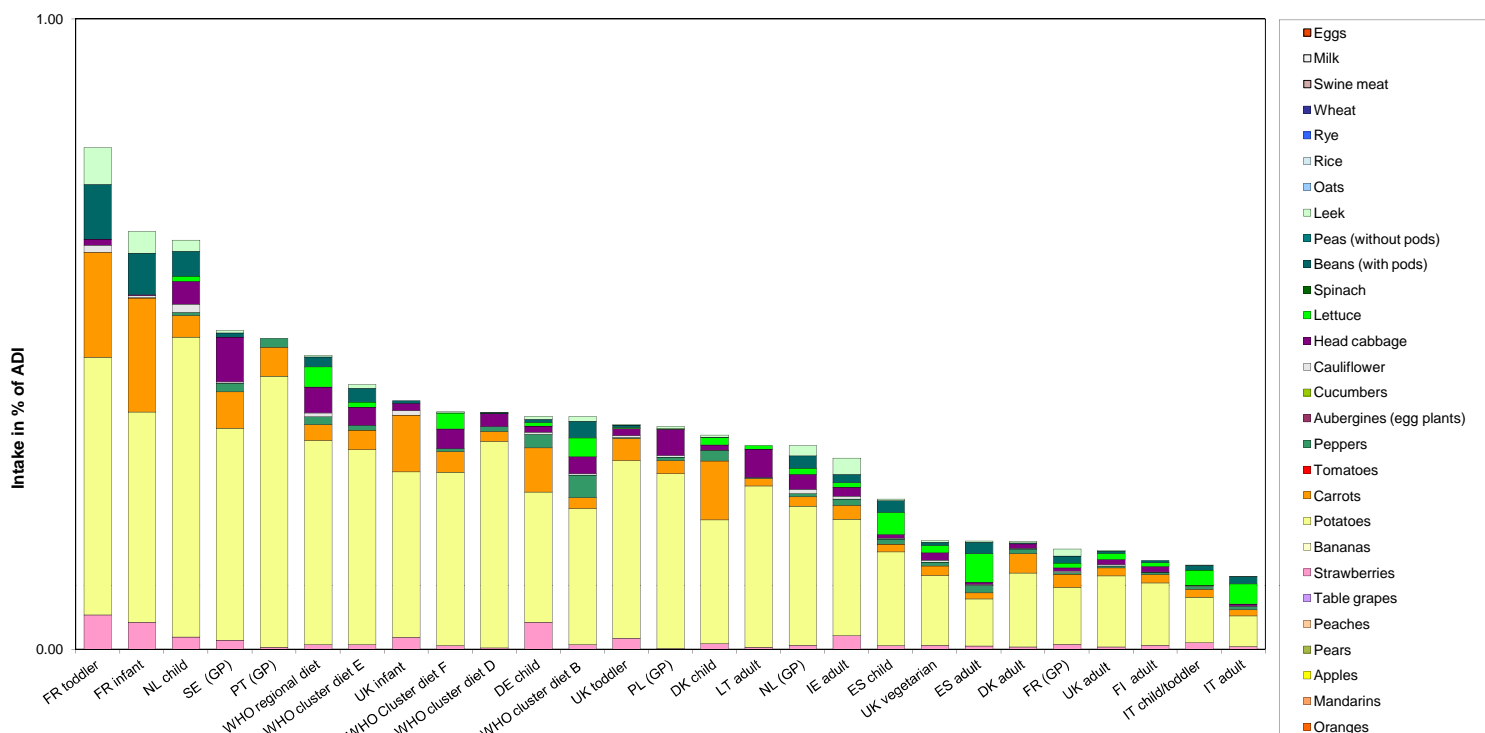
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)		2nd contributor to MS diet (in % of ADI)		3rd contributor to MS diet (in % of ADI)	
		Commodity / group of commodities	Commodity / group of commodities	Commodity / group of commodities	Commodity / group of commodities		
0.80	FR toddler	0.41	Potatoes	0.17	Carrots	0.09	Beans (with pods)
0.66	FR infant	0.33	Potatoes	0.18	Carrots	0.07	Beans (with pods)
0.65	NL child	0.48	Potatoes	0.04	Beans (with pods)	0.04	Head cabbage
0.51	SE (GP)	0.34	Potatoes	0.07	Head cabbage	0.06	Carrots
0.49	PT (GP)	0.43	Potatoes	0.05	Carrots	0.01	Peppers
0.47	WHO regional diet	0.32	Potatoes	0.04	Head cabbage	0.03	Lettuce
0.42	WHO cluster diet E	0.31	Potatoes	0.03	Carrots	0.03	Head cabbage
0.39	UK infant	0.26	Potatoes	0.09	Carrots	0.02	Strawberries
0.38	WHO Cluster diet F	0.28	Potatoes	0.03	Carrots	0.03	Head cabbage
0.38	WHO cluster diet D	0.33	Potatoes	0.02	Head cabbage	0.02	Carrots
0.37	DE child	0.21	Potatoes	0.07	Carrots	0.04	Strawberries
0.37	WHO cluster diet B	0.22	Potatoes	0.04	Peppers	0.03	Lettuce
0.36	UK toddler	0.28	Potatoes	0.04	Carrots	0.02	Strawberries
0.35	PL (GP)	0.28	Potatoes	0.04	Head cabbage	0.02	Carrots
0.34	DK child	0.20	Potatoes	0.09	Carrots	0.02	Peppers
0.32	LT adult	0.26	Potatoes	0.05	Head cabbage	0.01	Carrots
0.32	NL (GP)	0.22	Potatoes	0.02	Head cabbage	0.02	Beans (with pods)
0.30	IE adult	0.18	Potatoes	0.03	Leek	0.02	Carrots
0.24	ES child	0.15	Potatoes	0.04	Lettuce	0.02	Beans (with pods)
0.17	UK vegetarian	0.11	Potatoes	0.02	Carrots	0.01	Lettuce
0.17	ES adult	0.07	Potatoes	0.04	Lettuce	0.02	Beans (with pods)
0.17	DK adult	0.12	Potatoes	0.03	Carrots	0.01	Peppers
0.16	FR (GP)	0.09	Potatoes	0.02	Carrots	0.01	Leek
0.16	UK adult	0.11	Potatoes	0.01	Carrots	0.01	Lettuce
0.14	FI adult	0.10	Potatoes	0.01	Carrots	0.01	Head cabbage
0.13	IT child/toddler	0.07	Potatoes	0.02	Lettuce	0.01	Carrots
0.12	IT adult	0.05	Potatoes	0.03	Lettuce	0.01	Beans (with pods)

## Acute risk assessment

Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.2	921							
2010	Peaches	0.2	439							
2010	Strawberries	0.2	638	0.78		0.01		1.01	DE child	
2010	Tomatoes	0.3	677							
2010	Head cabbage	0.3	369	1.36		0.26		78.95	NL child	
2010	Lettuce	0.2	718	0.14		0.00		0.63	DE child	
2010	Leek	0.2	330	0.61		0.04		13.18	BE child	
2010	Oats	0.1	76							
2010	Rye	0.1	193							
2010	Swine Meat									
2010	Milk									

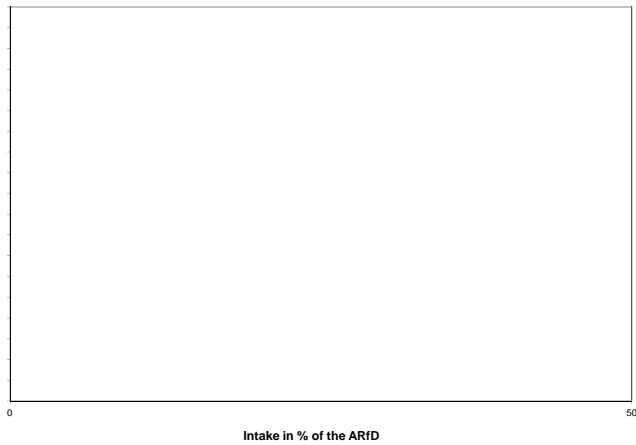
<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.<sup>b)</sup> MRL in place on 01/01/2010<sup>c)</sup> TRL: toxicological threshold level

## Chronic risk assessment: Fluazifop-P-butyl

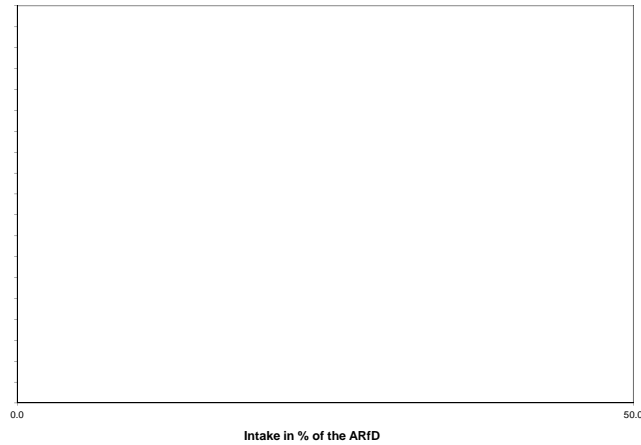


**Fluazifop-P-butyl**

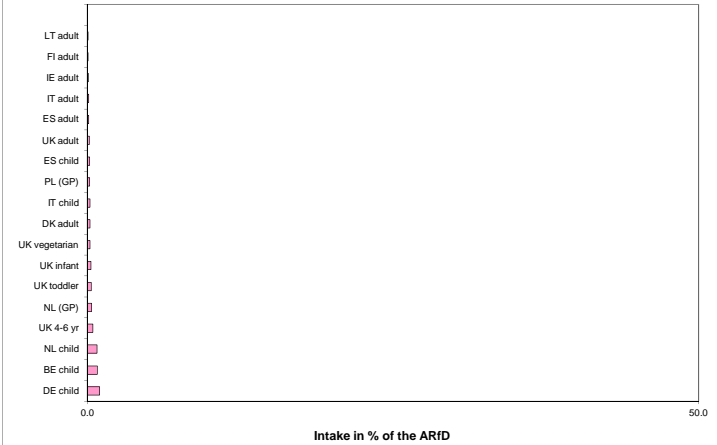
Acute exposure: Fluazifop-P-butyl / Apples



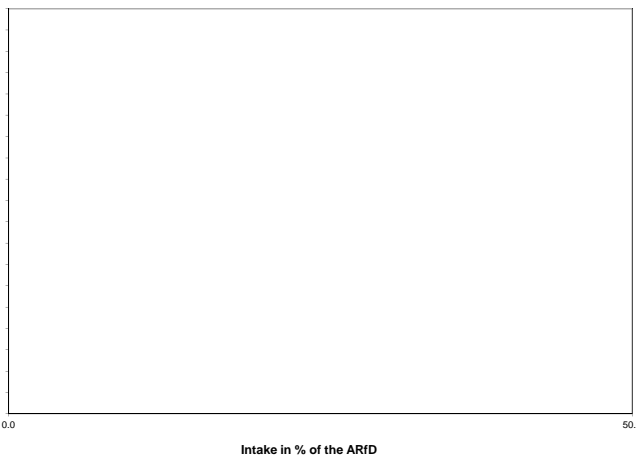
Acute exposure: Fluazifop-P-butyl / Peaches



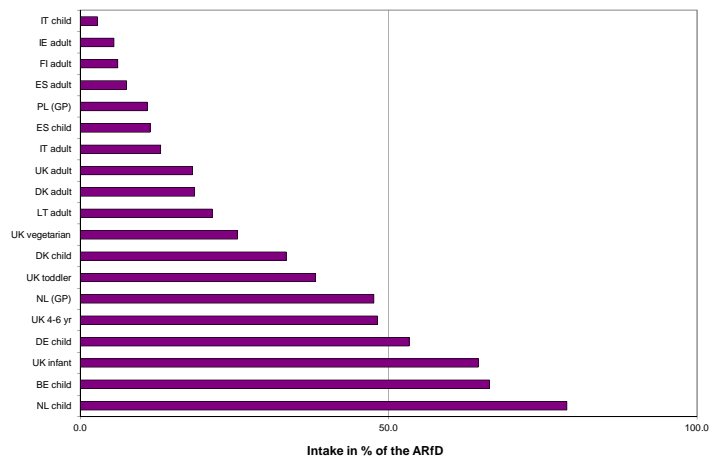
Acute exposure: Fluazifop-P-butyl / Strawberries



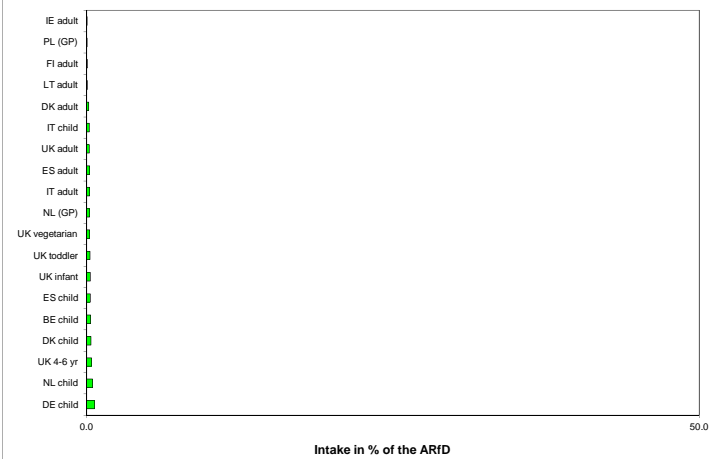
Acute exposure: Fluazifop-P-butyl / Tomatoes



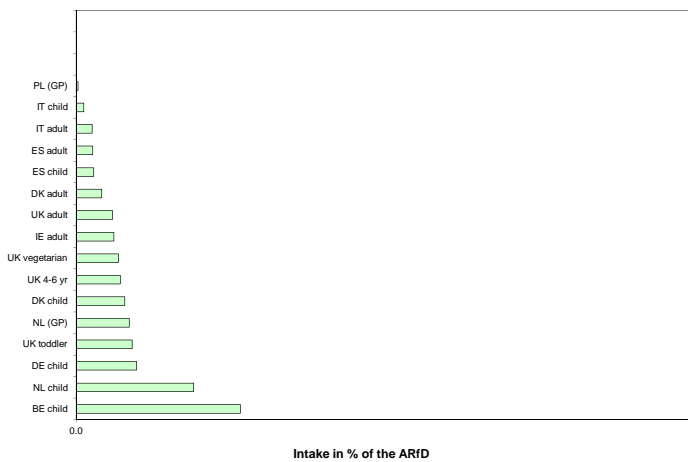
Acute exposure: Fluazifop-P-butyl / Head cabbage



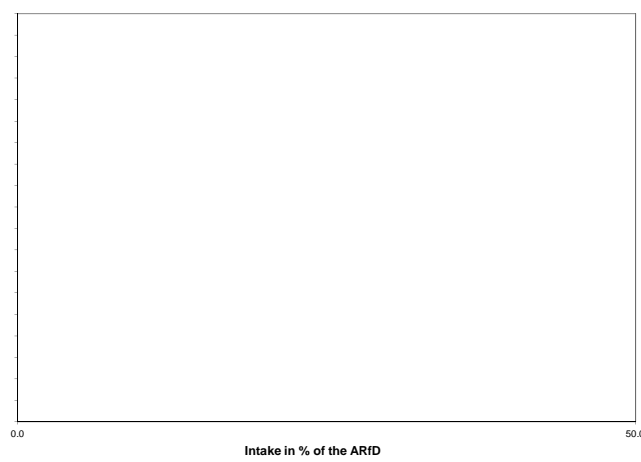
Acute exposure: Fluazifop-P-butyl / Lettuce



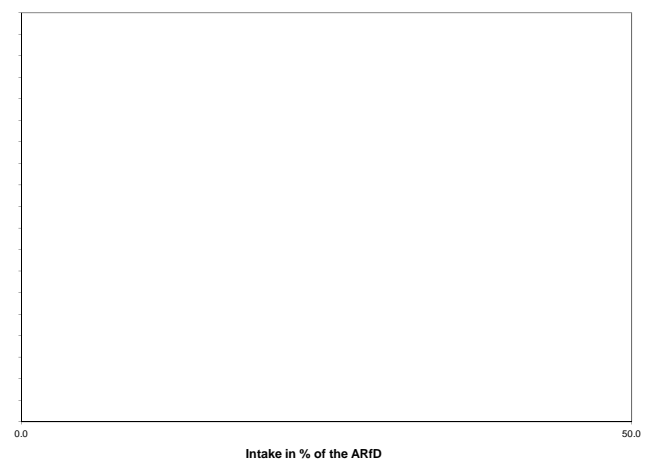
Acute exposure: Fluazifop-P-butyl / Leek



Acute exposure: Fluazifop-P-butyl / Oats



Acute exposure: Fluazifop-P-butyl / Rye





## Fludioxonil

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.37</b>	ARfD (mg/kg bw):	<b>n.n.</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2007</b>	Year of evaluation:	<b>2007</b>

### Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum

**No of diets exceeding ADI:** ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.14	DE child	0.07	Apples	0.02	Wheat	0.01	Oranges
0.10	NL child	0.04	Apples	0.02	Wheat	0.01	Oranges
0.08	WHO cluster diet B	0.03	Wheat	0.01	Tomatoes	0.01	Lettuce
0.07	FR toddler	0.01	Apples	0.01	Wheat	0.01	Carrots
0.07	DK child	0.02	Wheat	0.01	Apples	0.01	Cucumbers
0.06	ES child	0.02	Wheat	0.01	Lettuce	0.01	Oranges
0.06	IT child/toddler	0.03	Wheat	0.01	Lettuce	0.01	Tomatoes
0.05	UK toddler	0.01	Wheat	0.01	Apples	0.01	Oranges
0.05	FR infant	0.01	Apples	0.01	Carrots	0.01	Strawberries
0.05	IT adult	0.02	Wheat	0.01	Lettuce	0.00	Tomatoes
0.05	ES adult	0.02	Lettuce	0.01	Wheat	0.00	Apples
0.04	SE (GP)	0.01	Wheat	0.01	Bananas	0.01	Apples
0.04	IE adult	0.01	Wheat	0.00	Apples	0.00	Pears
0.04	WHO regional diet	0.01	Lettuce	0.01	Wheat	0.00	Tomatoes
0.04	WHO Cluster diet F	0.01	Wheat	0.01	Lettuce	0.00	Apples
0.04	WHO cluster diet D	0.02	Wheat	0.00	Tomatoes	0.00	Apples
0.04	UK infant	0.01	Wheat	0.01	Apples	0.01	Bananas
0.04	PT (GP)	0.01	Wheat	0.01	Apples	0.00	Tomatoes
0.04	WHO cluster diet E	0.02	Wheat	0.00	Apples	0.00	Lettuce
0.03	NL (GP)	0.01	Wheat	0.01	Apples	0.00	Oranges
0.03	FR (GP)	0.01	Wheat	0.00	Lettuce	0.00	Apples
0.03	UK vegetarian	0.01	Wheat	0.00	Lettuce	0.00	Apples
0.02	LT adult	0.01	Apples	0.00	Wheat	0.00	Tomatoes
0.02	PL (GP)	0.01	Apples	0.00	Tomatoes	0.00	Table grapes
0.02	DK adult	0.01	Wheat	0.00	Apples	0.00	Tomatoes
0.02	UK adult	0.01	Wheat	0.00	Lettuce	0.00	Apples
0.02	FI adult	0.00	Wheat	0.00	Oranges	0.00	Lettuce

### Acute risk assessment

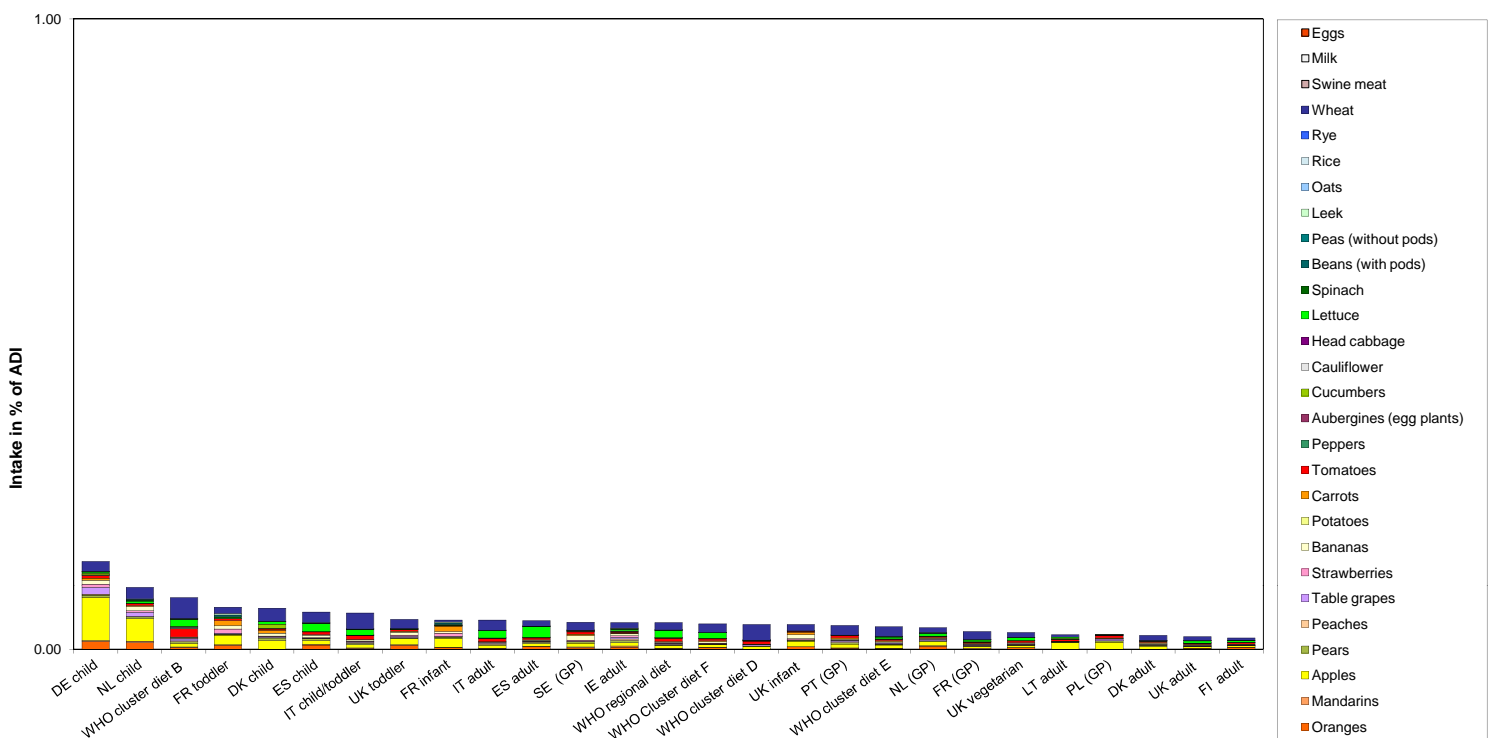
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	5	2853	6.87		2.20				
2010	Peaches	7	1344	4.69		1.20				
2010	Strawberries	3	2218	35.17		1.00				
2010	Tomatoes	1	2262	5.35		0.33				
2010	Head cabbage	0.05	1154							
2010	Lettuce	10	2242	8.61	0.09	28.26				
2010	Leek	0.05	890	0.34		0.02				
2010	Oats	0.05	247							
2010	Rye	0.05	376							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Fludioxonil



**Fludioxonil**

Acute exposure: Fludioxonil / Apples



Intake in % of the ARfD

Acute exposure: Fludioxonil / Peaches



Intake in % of the ARfD

Acute exposure: Fludioxonil / Strawberries



Intake in % of the ARfD

Acute exposure: Fludioxonil / Tomatoes



Intake in % of the ARfD

Acute exposure: Fludioxonil / Head cabbage



Intake in % of the ARfD

Acute exposure: Fludioxonil / Lettuce



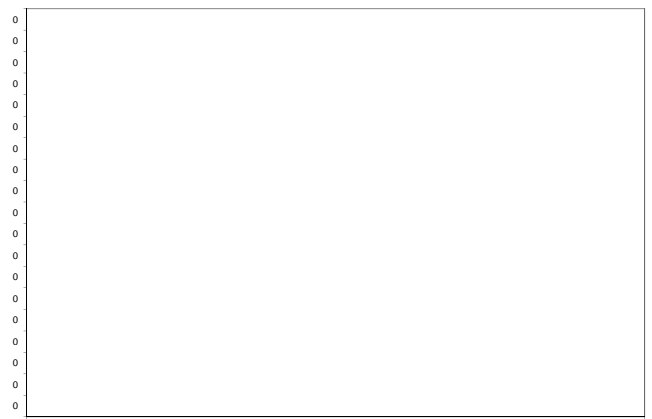
Intake in % of the ARfD

Acute exposure: Fludioxonil / Leek



Intake in % of the ARfD

Acute exposure: Fludioxonil / Oats



Intake in % of the ARfD

Acute exposure: Fludioxonil / Rye



Intake in % of the ARfD

Flufenoxuron			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.01	ARfD (mg/kg bw):	n.n.
Source of ADI:	EFSA	Source of ARfD:	EFSA
Year of evaluation:	2011	Year of evaluation:	2011

**Chronic risk assessment**

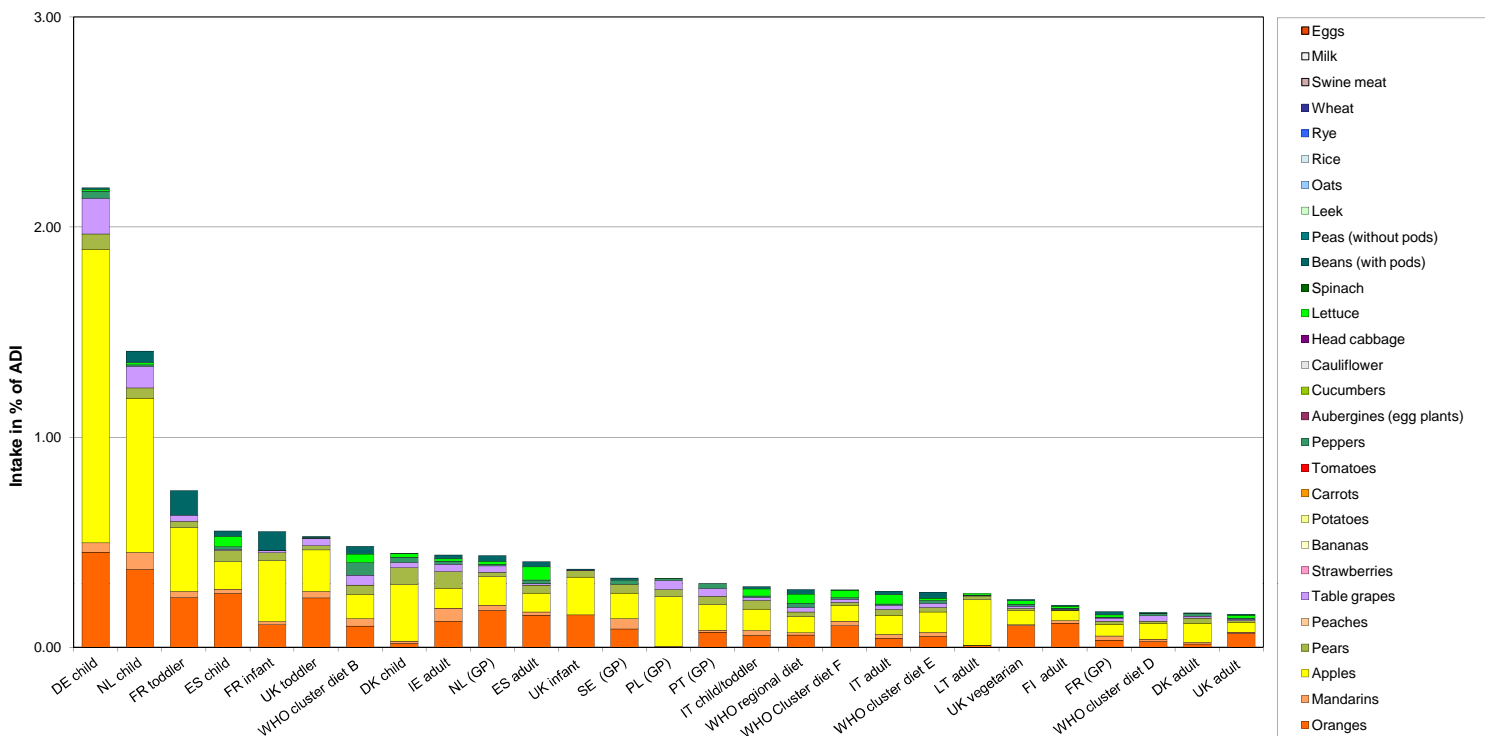
		Exposure (range) in % of ADI minimum - maximum					
		2					
No of diets exceeding ADI:		---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
2.19	DE child	1.40	Apples	0.45	Oranges	0.17	Table grapes
1.41	NL child	0.73	Apples	0.37	Oranges	0.10	Table grapes
0.75	FR toddler	0.30	Apples	0.24	Oranges	0.12	Beans (with pods)
0.55	ES child	0.26	Oranges	0.13	Apples	0.05	Pears
0.55	FR infant	0.29	Apples	0.11	Oranges	0.09	Beans (with pods)
0.53	UK toddler	0.24	Oranges	0.20	Apples	0.03	Table grapes
0.48	WHO cluster diet B	0.12	Apples	0.10	Oranges	0.06	Peppers
0.45	DK child	0.27	Apples	0.08	Pears	0.03	Peppers
0.44	IE adult	0.12	Oranges	0.10	Apples	0.08	Pears
0.44	NL (GP)	0.18	Oranges	0.14	Apples	0.03	Table grapes
0.41	ES adult	0.15	Oranges	0.09	Apples	0.06	Lettuce
0.37	UK infant	0.18	Apples	0.15	Oranges	0.03	Pears
0.33	SE (GP)	0.12	Apples	0.09	Oranges	0.05	Mandarins
0.33	PL (GP)	0.24	Apples	0.04	Table grapes	0.03	Pears
0.30	PT (GP)	0.12	Apples	0.07	Oranges	0.04	Pears
0.29	IT child/toddler	0.10	Apples	0.06	Oranges	0.04	Pears
0.28	WHO regional diet	0.08	Apples	0.06	Oranges	0.04	Lettuce
0.27	WHO Cluster diet F	0.10	Oranges	0.08	Apples	0.04	Lettuce
0.27	IT adult	0.09	Apples	0.04	Oranges	0.04	Lettuce
0.26	WHO cluster diet E	0.10	Apples	0.05	Oranges	0.03	Beans (with pods)
0.26	LT adult	0.22	Apples	0.02	Pears	0.01	Oranges
0.23	UK vegetarian	0.10	Oranges	0.07	Apples	0.02	Lettuce
0.20	FI adult	0.12	Oranges	0.05	Apples	0.01	Mandarins
0.17	FR (GP)	0.06	Apples	0.03	Oranges	0.02	Mandarins
0.17	WHO cluster diet D	0.08	Apples	0.03	Oranges	0.03	Table grapes
0.16	DK adult	0.09	Apples	0.02	Pears	0.02	Oranges
0.16	UK adult	0.07	Oranges	0.05	Apples	0.01	Lettuce

**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.5	2299	2.00		0.10				
2010	Peaches	0.5	1145							
2010	Strawberries	0.05	1855							
2010	Tomatoes	0.5	1762							
2010	Head cabbage	0.05	944							
2010	Lettuce	1	1794	0.17		0.05				
2010	Leek	0.05	744							
2010	Oats	0.05	144							
2010	Rye	0.05	347							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Flufenoxuron**



**Flufenoxuron**

Acute exposure: Flufenoxuron / Apples



Intake in % of the ARfD

Acute exposure: Flufenoxuron / Peaches



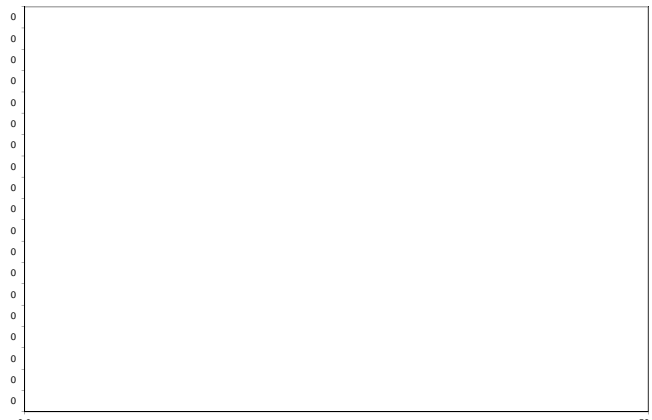
Intake in % of the ARfD

Acute exposure: Flufenoxuron / Strawberries



Intake in % of the ARfD

Acute exposure: Flufenoxuron / Tomatoes



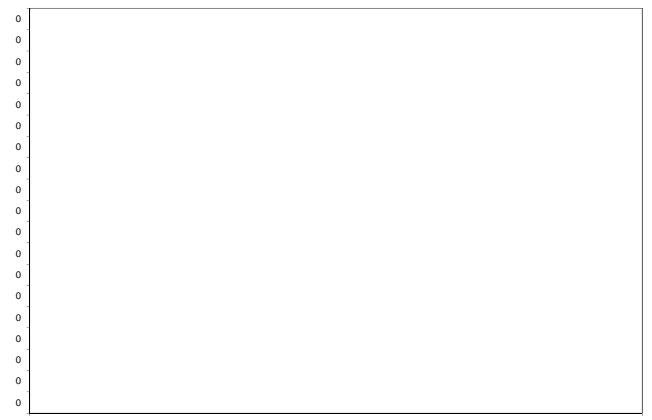
Intake in % of the ARfD

Acute exposure: Flufenoxuron / Head cabbage



Intake in % of the ARfD

Acute exposure: Flufenoxuron / Lettuce



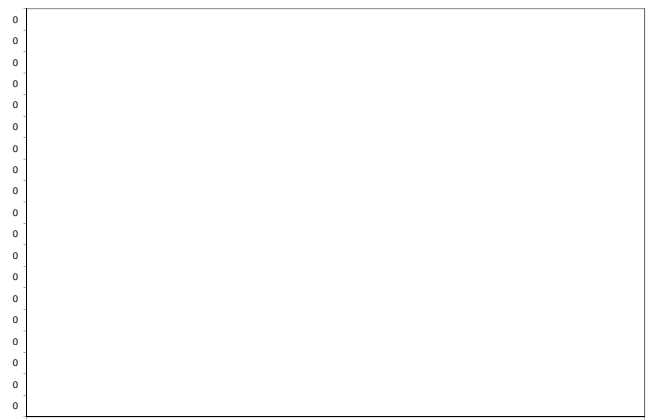
Intake in % of the ARfD

Acute exposure: Flufenoxuron / Leek



Intake in % of the ARfD

Acute exposure: Flufenoxuron / Oats



Intake in % of the ARfD

Acute exposure: Flufenoxuron / Rye



Intake in % of the ARfD

## Fluquinconazole

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:	Yes	Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.002	ARfD (mg/kg bw):	0.02
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2011	Year of evaluation:	2011

### Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
8

**No of diets exceeding ADI:** ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
4.41	NL child	3.93	Apples	0.48	Table grapes		FRUIT (FRESH OR FROZEN)
1.76	FR toddler	1.63	Apples	0.13	Table grapes		FRUIT (FRESH OR FROZEN)
1.60	FR infant	1.55	Apples	0.05	Table grapes		FRUIT (FRESH OR FROZEN)
1.56	DK child	1.44	Apples	0.12	Table grapes		FRUIT (FRESH OR FROZEN)
1.47	PL (GP)	1.27	Apples	0.20	Table grapes		FRUIT (FRESH OR FROZEN)
1.21	UK toddler	1.06	Apples	0.16	Table grapes		FRUIT (FRESH OR FROZEN)
1.17	LT adult	1.16	Apples	0.01	Table grapes		FRUIT (FRESH OR FROZEN)
0.98	UK infant	0.97	Apples	0.01	Table grapes		FRUIT (FRESH OR FROZEN)
0.88	NL (GP)	0.73	Apples	0.15	Table grapes		FRUIT (FRESH OR FROZEN)
0.85	WHO cluster diet B	0.63	Apples	0.22	Table grapes		FRUIT (FRESH OR FROZEN)
0.83	PT (GP)	0.65	Apples	0.18	Table grapes		FRUIT (FRESH OR FROZEN)
0.73	ES child	0.71	Apples	0.02	Table grapes		FRUIT (FRESH OR FROZEN)
0.67	IE adult	0.51	Apples	0.16	Table grapes		FRUIT (FRESH OR FROZEN)
0.65	SE (GP)	0.65	Apples		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.62	WHO cluster diet E	0.52	Apples	0.10	Table grapes		FRUIT (FRESH OR FROZEN)
0.62	IT child/toddler	0.55	Apples	0.07	Table grapes		FRUIT (FRESH OR FROZEN)
0.58	IT adult	0.49	Apples	0.08	Table grapes		FRUIT (FRESH OR FROZEN)
0.54	DK adult	0.49	Apples	0.05	Table grapes		FRUIT (FRESH OR FROZEN)
0.53	WHO cluster diet D	0.41	Apples	0.12	Table grapes		FRUIT (FRESH OR FROZEN)
0.51	WHO regional diet	0.41	Apples	0.10	Table grapes		FRUIT (FRESH OR FROZEN)
0.50	ES adult	0.48	Apples	0.03	Table grapes		FRUIT (FRESH OR FROZEN)
0.48	WHO Cluster diet F	0.41	Apples	0.07	Table grapes		FRUIT (FRESH OR FROZEN)
0.42	UK vegetarian	0.37	Apples	0.05	Table grapes		FRUIT (FRESH OR FROZEN)
0.36	FR (GP)	0.29	Apples	0.07	Table grapes		FRUIT (FRESH OR FROZEN)
0.29	UK adult	0.25	Apples	0.03	Table grapes		FRUIT (FRESH OR FROZEN)
0.26	FI adult	0.25	Apples	0.01	Table grapes		FRUIT (FRESH OR FROZEN)

### Acute risk assessment

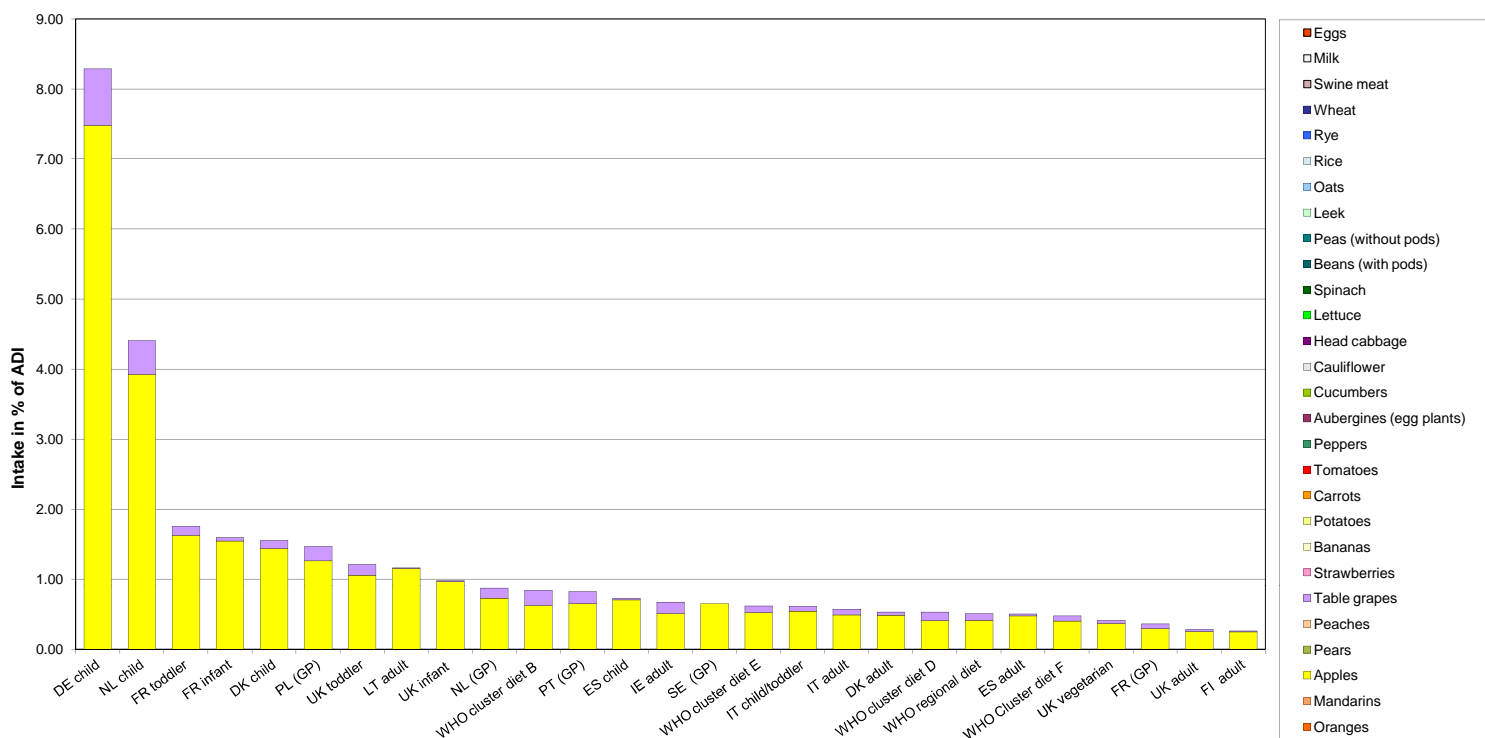
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.1	2604	0.65		0.02		9.80	UK infant	
2010	Peaches	0.1	1206							
2010	Strawberries	0.05	1924							
2010	Tomatoes	0.05	1978							
2010	Head cabbage	0.05	1036							
2010	Lettuce	0.05	2007							
2010	Leek	0.05	784							
2010	Oats	0.05	223							
2010	Rye	0.1	364							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

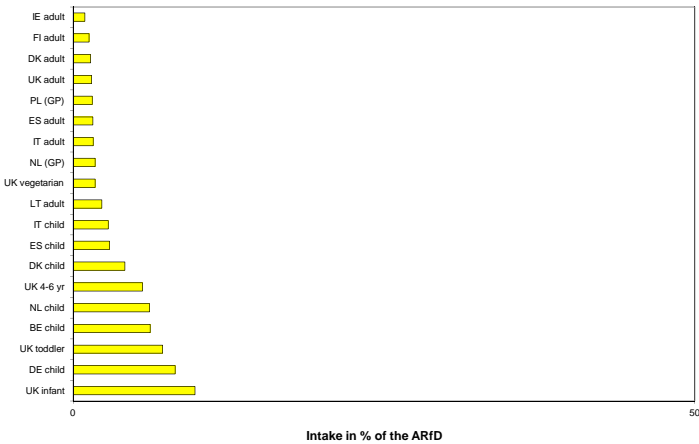
<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Fluquinconazole

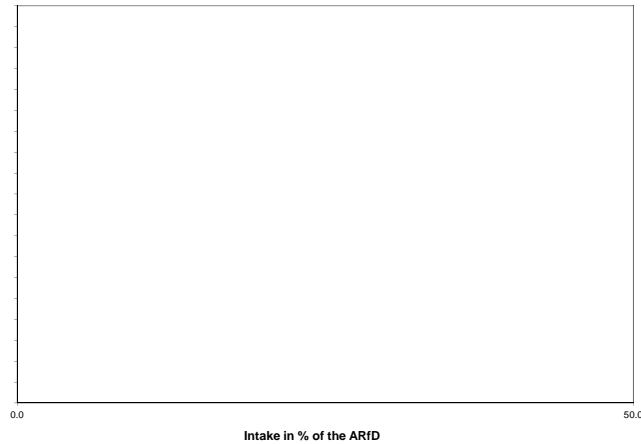


**Fluquinconazole**

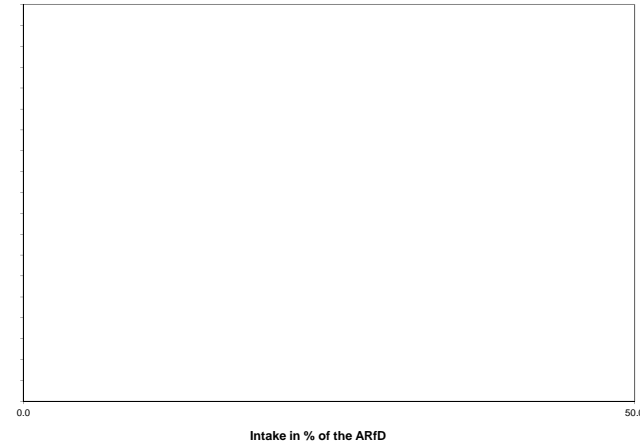
Acute exposure: Fluquinconazole / Apples



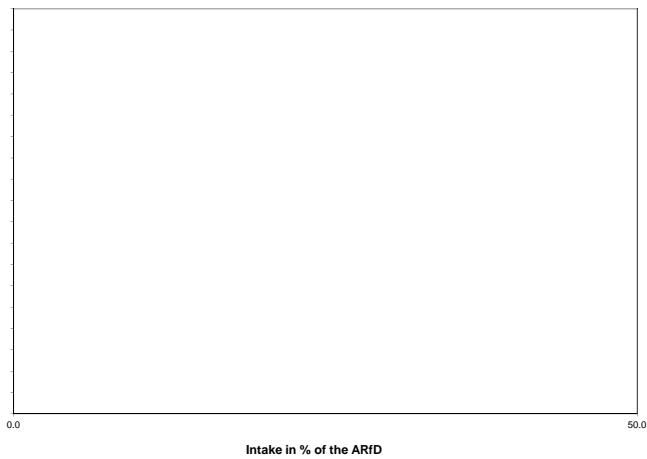
Acute exposure: Fluquinconazole / Peaches



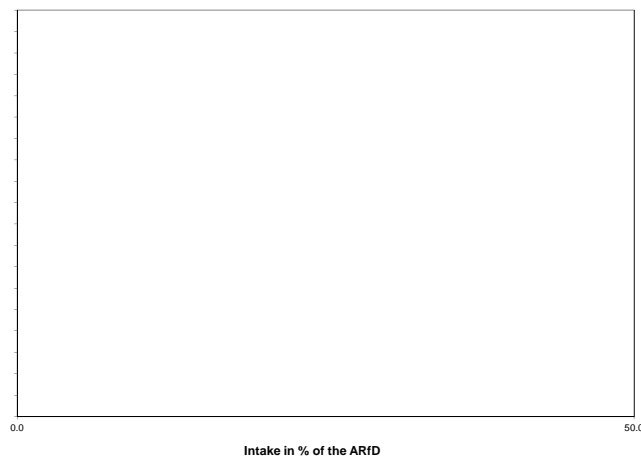
Acute exposure: Fluquinconazole / Strawberries



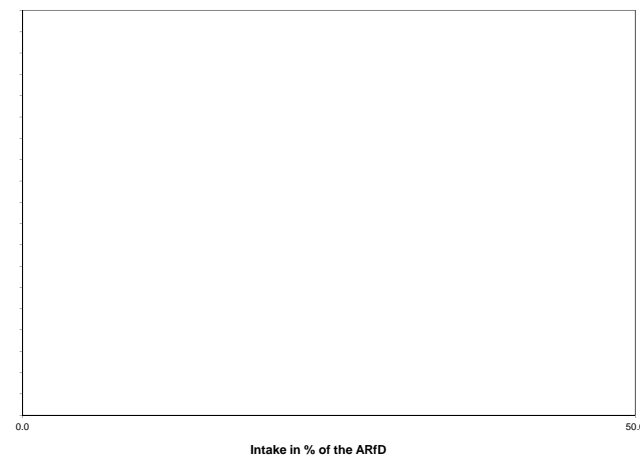
Acute exposure: Fluquinconazole / Tomatoes



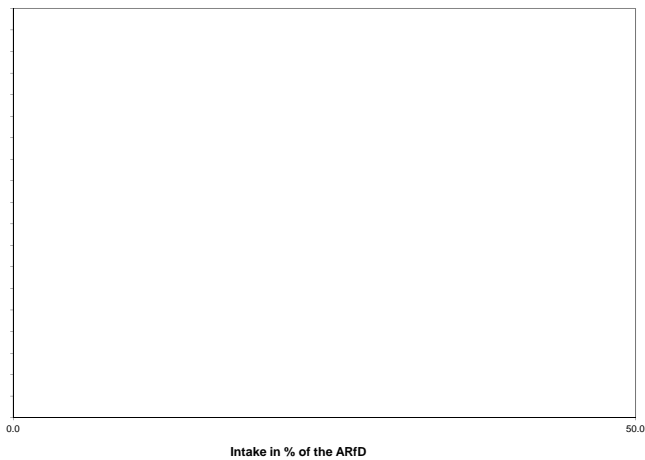
Acute exposure: Fluquinconazole / Head cabbage



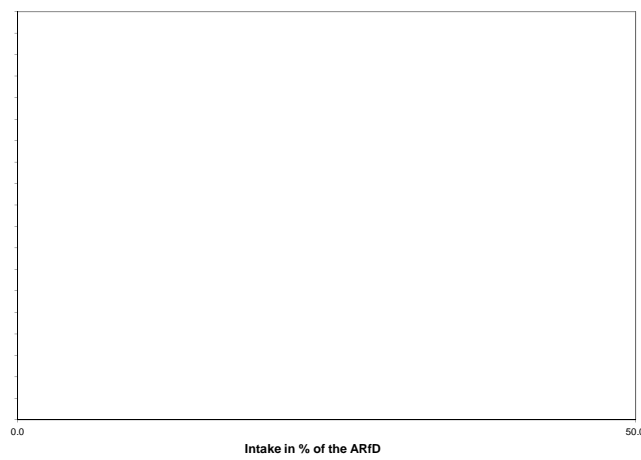
Acute exposure: Fluquinconazole / Lettuce



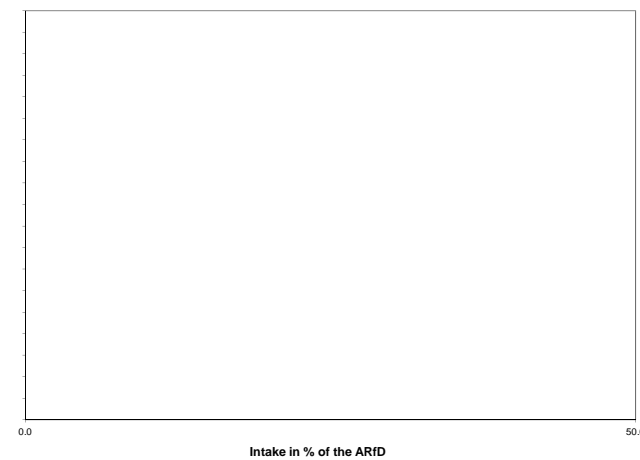
Acute exposure: Fluquinconazole / Leek



Acute exposure: Fluquinconazole / Oats



Acute exposure: Fluquinconazole / Rye



## Flusilazole

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.002	ARfD (mg/kg bw):	0.005
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2007	Year of evaluation:	2007

## Chronic risk assessment

Highest calculated exposure in % of ADI		MS Diet		Exposure (range) in % of ADI minimum - maximum		No of diets exceeding ADI:					
				1		8					
				---							
Highest contributor to MS diet (in % of ADI)		Commodity / group of commodities		2nd contributor to MS diet (in % of ADI)		Commodity / group of commodities		3rd contributor to MS diet (in % of ADI)		Commodity / group of commodities	
7.81	DE child	6.06	Apples	0.69	Table grapes	0.48	Tomatoes				
4.40	NL child	3.18	Apples	0.41	Table grapes	0.31	Tomatoes				
2.93	WHO cluster diet B	1.53	Tomatoes	0.51	Apples	0.26	Peppers				
2.68	FR toddler	1.32	Apples	0.55	Beans (with pods)	0.38	Tomatoes				
2.08	FR infant	1.26	Apples	0.42	Beans (with pods)	0.25	Strawberries				
1.76	DK child	1.17	Apples	0.26	Tomatoes	0.12	Peppers				
1.72	PL (GP)	1.03	Apples	0.44	Tomatoes	0.17	Table grapes				
1.55	IT child/toddler	0.71	Tomatoes	0.45	Apples	0.20	Peaches				
1.46	UK toddler	0.86	Apples	0.29	Tomatoes	0.13	Table grapes				
1.45	PT (GP)	0.53	Apples	0.44	Tomatoes	0.20	Peaches				
1.41	ES child	0.57	Apples	0.49	Tomatoes	0.12	Beans (with pods)				
1.40	IT adult	0.58	Tomatoes	0.40	Apples	0.22	Peaches				
1.36	IE adult	0.41	Apples	0.33	Peaches	0.20	Tomatoes				
1.32	WHO regional diet	0.54	Tomatoes	0.33	Apples	0.12	Peaches				
1.28	LT adult	0.94	Apples	0.31	Tomatoes	0.02	Strawberries				
1.21	SE (GP)	0.53	Apples	0.38	Tomatoes	0.10	Peppers				
1.16	NL (GP)	0.59	Apples	0.21	Tomatoes	0.13	Beans (with pods)				
1.15	ES adult	0.39	Tomatoes	0.39	Apples	0.12	Peaches				
1.14	UK infant	0.78	Apples	0.18	Tomatoes	0.11	Strawberries				
1.09	WHO cluster diet E	0.43	Apples	0.26	Tomatoes	0.14	Beans (with pods)				
1.05	WHO cluster diet D	0.50	Tomatoes	0.33	Apples	0.10	Table grapes				
0.83	WHO Cluster diet F	0.34	Tomatoes	0.33	Apples	0.06	Table grapes				
0.78	DK adult	0.39	Apples	0.20	Tomatoes	0.06	Peaches				
0.78	UK vegetarian	0.31	Tomatoes	0.30	Apples	0.04	Peppers				
0.73	FR (GP)	0.24	Apples	0.21	Tomatoes	0.08	Peaches				
0.53	UK adult	0.22	Tomatoes	0.21	Apples	0.03	Table grapes				
0.51	FI adult	0.21	Tomatoes	0.20	Apples	0.04	Strawberries				

## Acute risk assessment

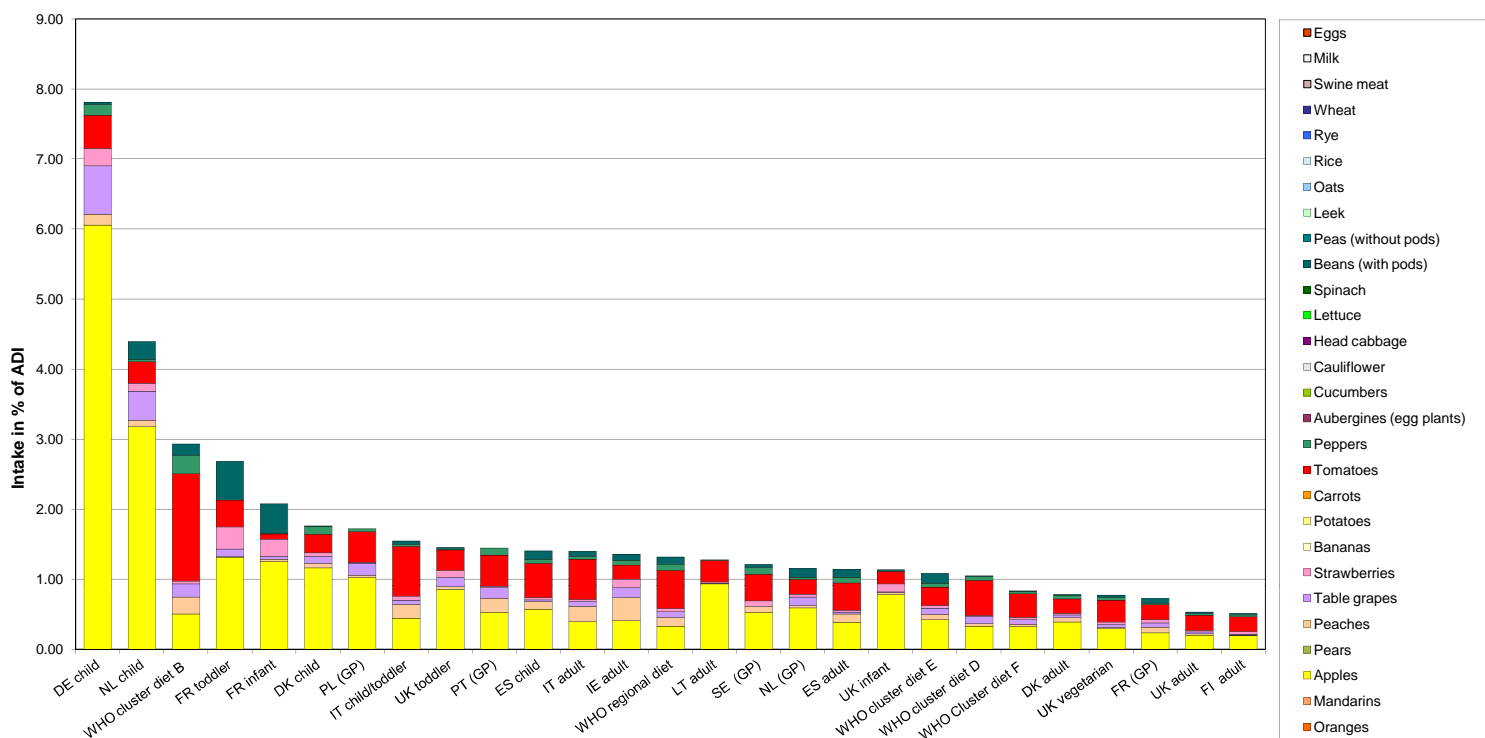
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.02	2731	0.22		0.02		29.39	UK infant	
2010	Peaches	0.05	1314	0.15		0.01		7.12	DE child	
2010	Strawberries	0.02	2086	0.05		0.00		1.25	DE child	
2010	Tomatoes	0.02	2181	0.05		0.01		11.63	BE child	
2010	Head cabbage	0.02	1072							
2010	Lettuce	0.02	2202							
2010	Leek	0.02	805							
2010	Oats	0.2	249	0.80		0.03		2.39	DE child	
2010	Rye	0.1	352							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

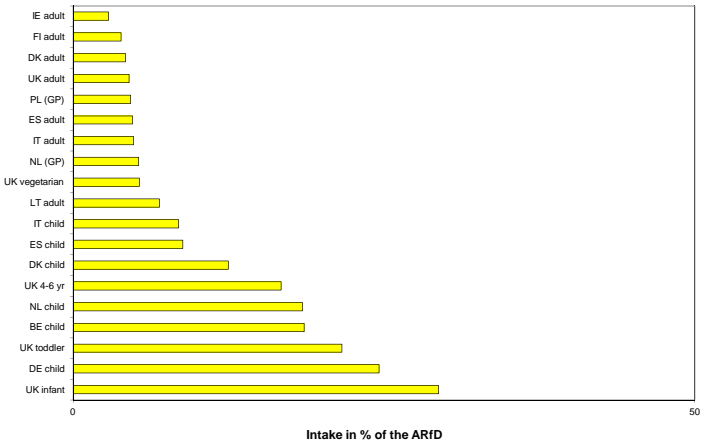
<sup>c)</sup> TRL: toxicological threshold level

## Chronic risk assessment: Flusilazole

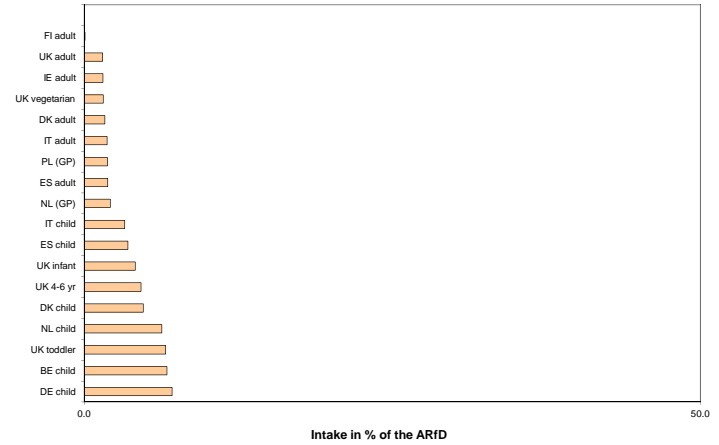


**Flusilazole**

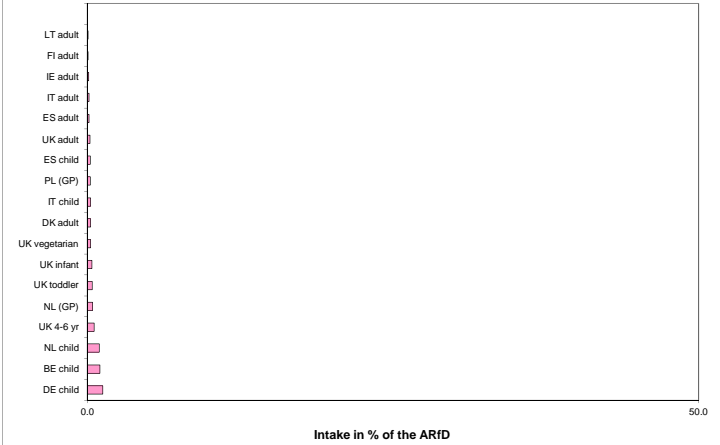
Acute exposure: Flusilazole / Apples



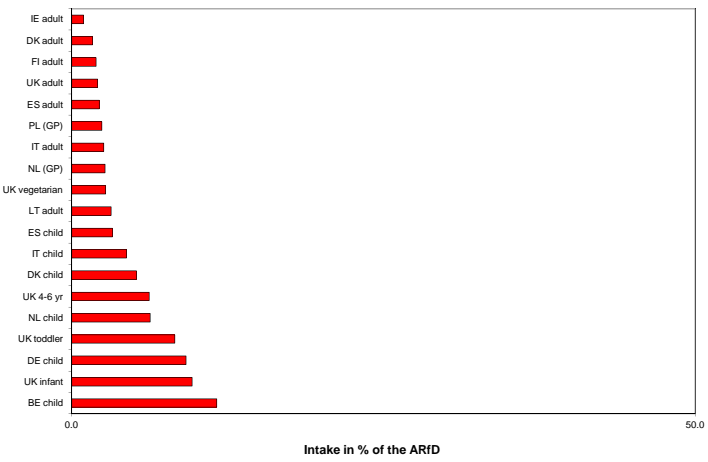
Acute exposure: Flusilazole / Peaches



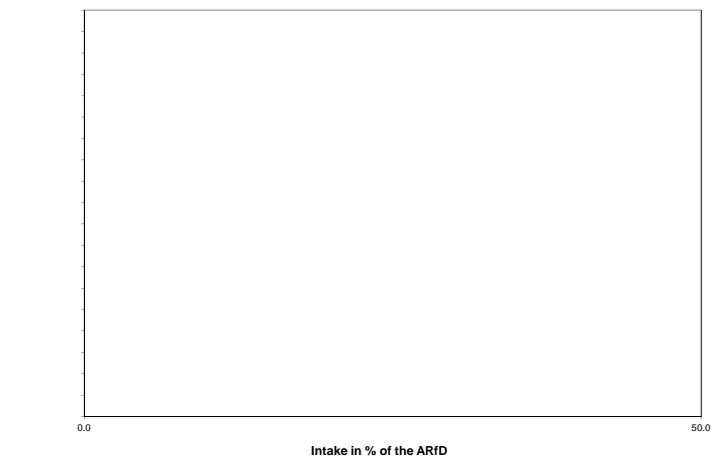
Acute exposure: Flusilazole / Strawberries



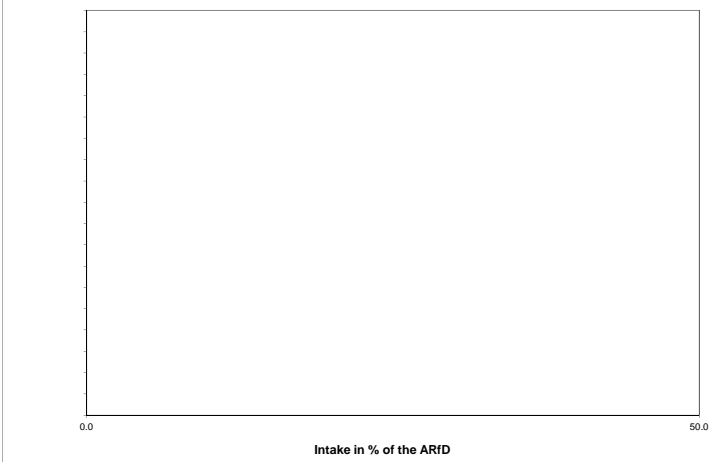
Acute exposure: Flusilazole / Tomatoes



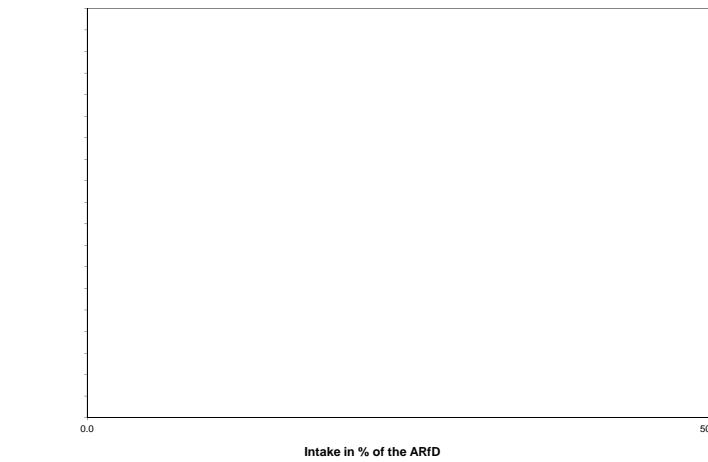
Acute exposure: Flusilazole / Head cabbage



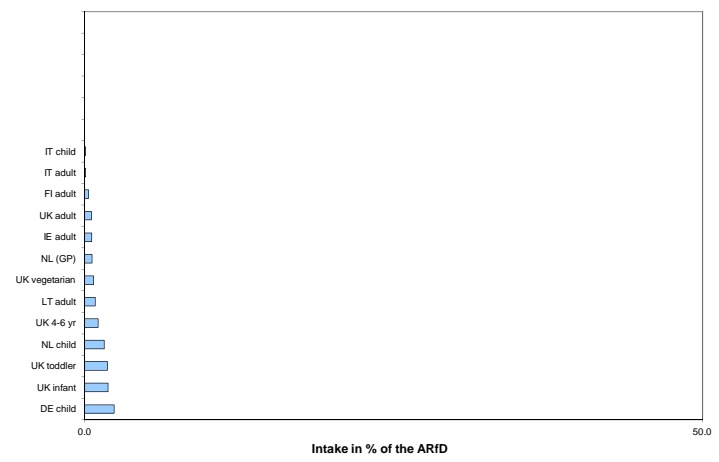
Acute exposure: Flusilazole / Lettuce



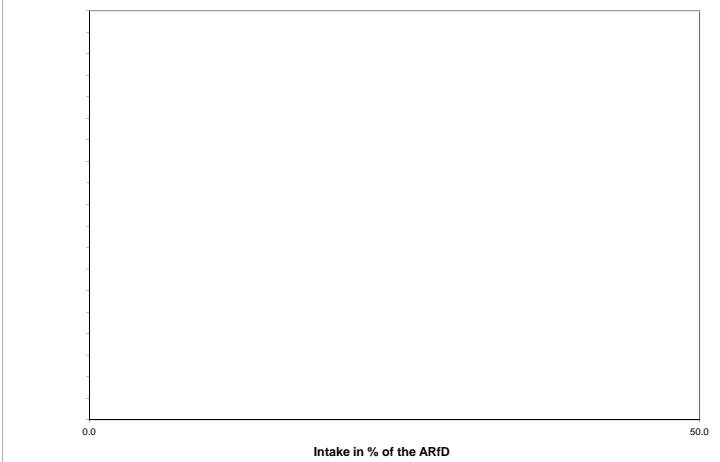
Acute exposure: Flusilazole / Leek



Acute exposure: Flusilazole / Oats



Acute exposure: Flusilazole / Rye





## Flutriafol

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:	<b>Yes</b>	Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.01</b>	ARfD (mg/kg bw):	<b>0.05</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2011</b>	Year of evaluation:	<b>2011</b>

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum						
		2						
<b>No of diets exceeding ADI: ---</b>								
	Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
	1.81	DE child	1.32	Apples	0.14	Carrots	0.12	Tomatoes
	1.05	NL child	0.69	Apples	0.09	Mandarins	0.08	Tomatoes
	0.93	FR toddler	0.33	Carrots	0.29	Apples	0.11	Beans (with pods)
	0.81	FR infant	0.35	Carrots	0.27	Apples	0.09	Beans (with pods)
	0.77	DK child	0.25	Apples	0.21	Cucumbers	0.18	Carrots
	0.71	WHO cluster diet B	0.38	Tomatoes	0.11	Apples	0.08	Peppers
	0.47	SE (GP)	0.11	Apples	0.11	Carrots	0.09	Tomatoes
	0.42	UK infant	0.18	Carrots	0.17	Apples	0.05	Tomatoes
	0.41	UK toddler	0.19	Apples	0.07	Tomatoes	0.07	Carrots
	0.40	PL (GP)	0.22	Apples	0.11	Tomatoes	0.04	Carrots
	0.36	PT (GP)	0.11	Apples	0.11	Tomatoes	0.09	Carrots
	0.36	LT adult	0.20	Apples	0.08	Tomatoes	0.05	Cucumbers
	0.36	IT child/toddler	0.18	Tomatoes	0.10	Apples	0.03	Mandarins
	0.35	ES child	0.13	Apples	0.12	Tomatoes	0.02	Beans (with pods)
	0.34	WHO regional diet	0.14	Tomatoes	0.07	Apples	0.05	Carrots
	0.33	IE adult	0.09	Apples	0.07	Mandarins	0.05	Tomatoes
	0.31	WHO cluster diet E	0.09	Apples	0.07	Tomatoes	0.06	Carrots
	0.31	IT adult	0.14	Tomatoes	0.09	Apples	0.02	Mandarins
	0.30	NL (GP)	0.13	Apples	0.05	Tomatoes	0.03	Carrots
	0.29	WHO cluster diet D	0.13	Tomatoes	0.07	Apples	0.03	Carrots
	0.28	ES adult	0.10	Tomatoes	0.08	Apples	0.02	Peppers
	0.28	WHO Cluster diet F	0.08	Tomatoes	0.07	Apples	0.06	Carrots
	0.26	DK adult	0.09	Apples	0.06	Carrots	0.05	Tomatoes
	0.22	UK vegetarian	0.08	Tomatoes	0.06	Apples	0.03	Carrots
	0.21	FR (GP)	0.05	Tomatoes	0.05	Apples	0.04	Carrots
	0.19	FI adult	0.05	Tomatoes	0.04	Apples	0.03	Cucumbers
	0.15	UK adult	0.05	Tomatoes	0.04	Apples	0.02	Carrots

### Acute risk assessment

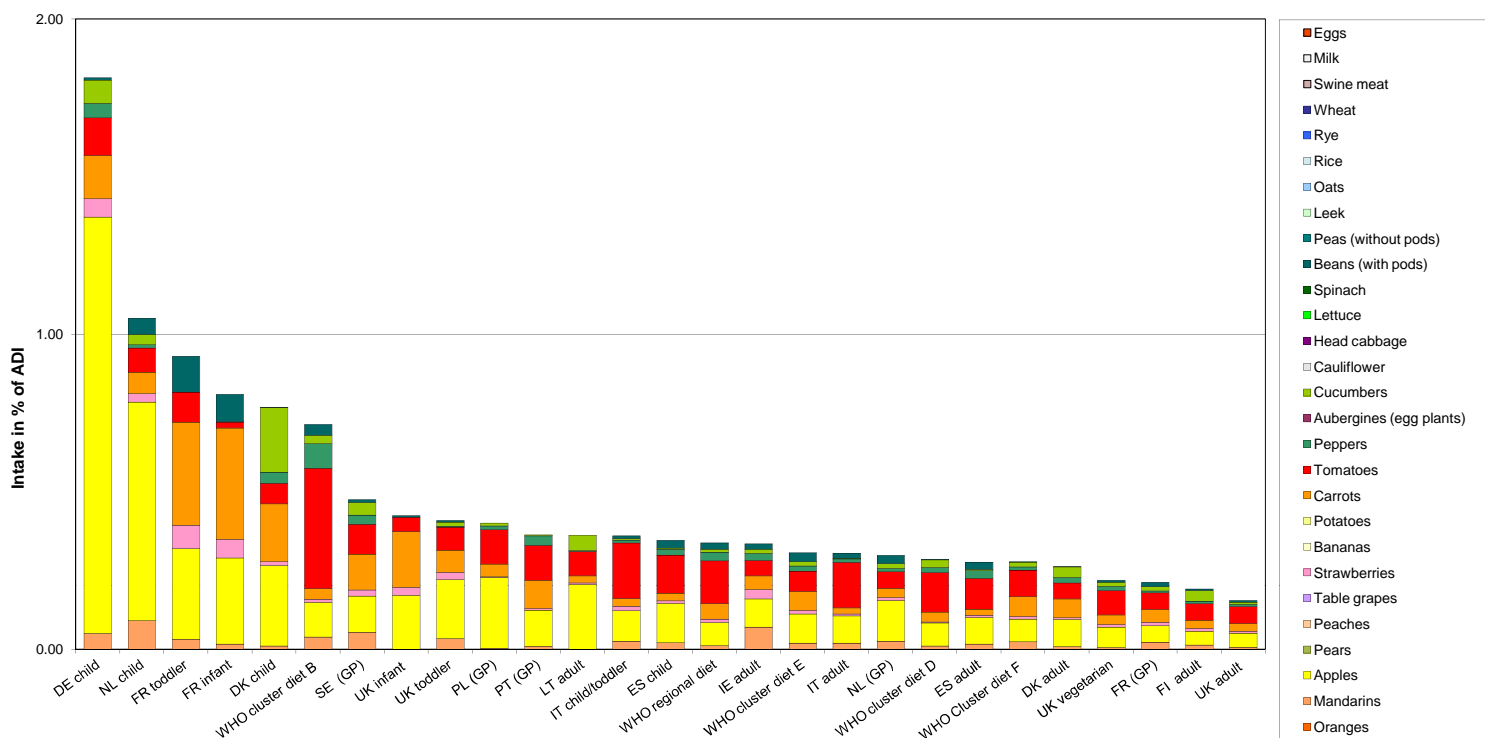
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	1950	0.10		0.03		5.88	UK infant	
2010	Peaches	0.05	981							
2010	Strawberries	0.5	1610	0.50		0.45		14.16	DE child	
2010	Tomatoes	0.3	1508	0.27		0.06		6.40	BE child	
2010	Head cabbage	0.05	899							
2010	Lettuce	0.05	1656							
2010	Leek	0.05	711							
2010	Oats	0.5	219							
2010	Rye	0.5	332							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Flutriafol



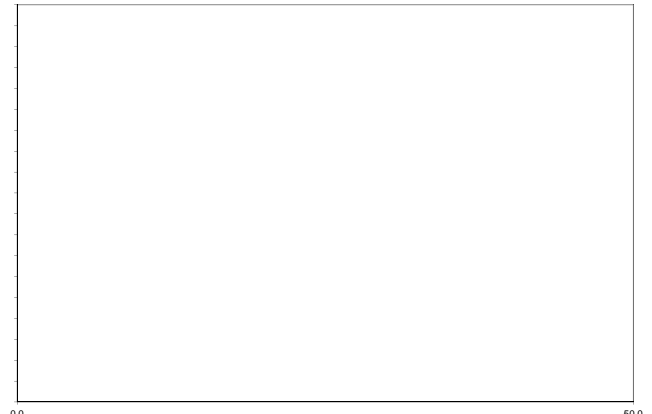
**Flutriafol**

Acute exposure: Flutriafol / Apples



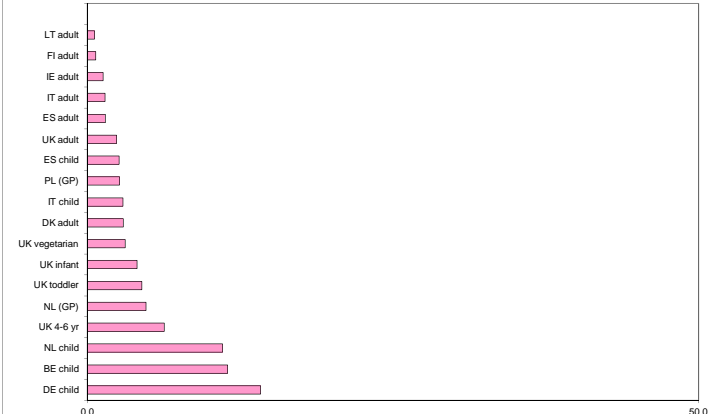
Intake in % of the ARfD

Acute exposure: Flutriafol / Peaches



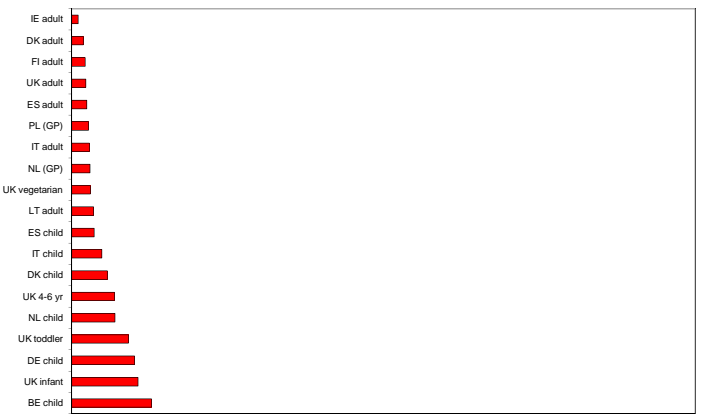
Intake in % of the ARfD

Acute exposure: Flutriafol / Strawberries



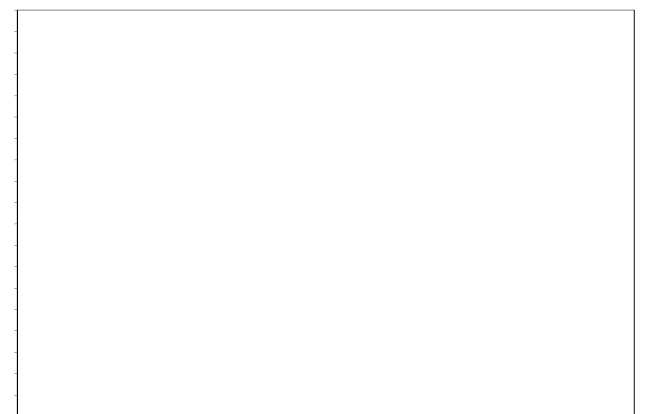
Intake in % of the ARfD

Acute exposure: Flutriafol / Tomatoes



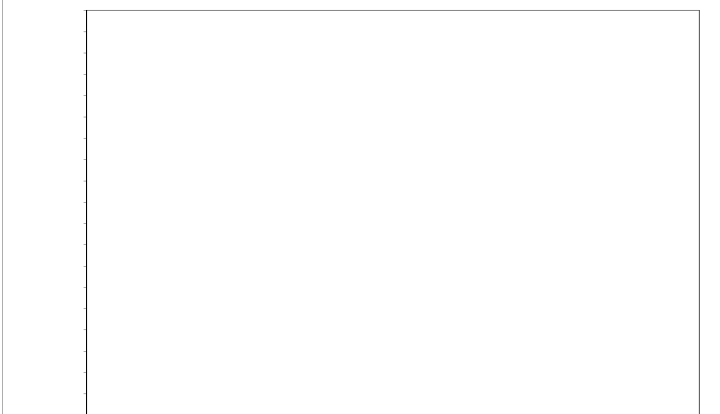
Intake in % of the ARfD

Acute exposure: Flutriafol / Head cabbage



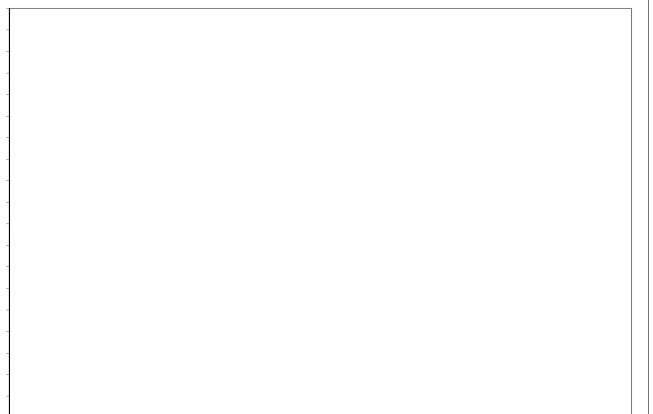
Intake in % of the ARfD

Acute exposure: Flutriafol / Lettuce



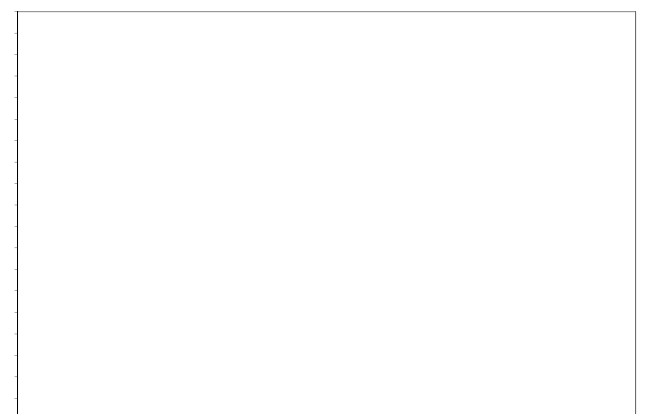
Intake in % of the ARfD

Acute exposure: Flutriafol / Leek



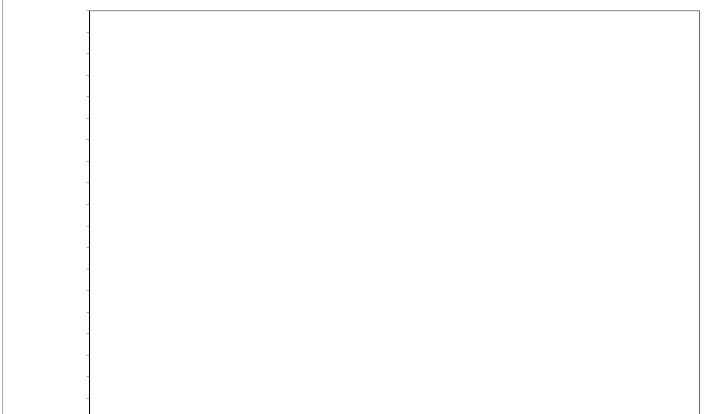
Intake in % of the ARfD

Acute exposure: Flutriafol / Oats



Intake in % of the ARfD

Acute exposure: Flutriafol / Rye



Intake in % of the ARfD

## Folpet

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0,1	ARfD (mg/kg bw):	0,2
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2007	Year of evaluation:	2008

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum

1

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0,81	DE child	0,72	Apples	0,03	Pears	0,02	Strawberries
0,44	NL child	0,38	Apples	0,02	Pears	0,01	Spinach
0,24	FR toddler	0,16	Apples	0,02	Carrots	0,02	Strawberries
0,23	FR infant	0,15	Apples	0,03	Carrots	0,02	Strawberries
0,20	DK child	0,14	Apples	0,04	Pears	0,01	Carrots
0,15	PL (GP)	0,12	Apples	0,02	Pears	0,00	Table grapes
0,13	UK infant	0,09	Apples	0,01	Pears	0,01	Carrots
0,13	UK toddler	0,10	Apples	0,01	Pears	0,01	Strawberries
0,13	LT adult	0,11	Apples	0,01	Pears	0,00	Lettuce
0,12	ES child	0,07	Apples	0,02	Pears	0,02	Lettuce
0,11	WHO cluster diet B	0,06	Apples	0,02	Pears	0,02	Lettuce
0,11	IE adult	0,05	Apples	0,04	Pears	0,01	Strawberries
0,10	SE (GP)	0,06	Apples	0,02	Pears	0,01	Carrots
0,10	NL (GP)	0,07	Apples	0,01	Pears	0,01	Lettuce
0,10	ES adult	0,05	Apples	0,02	Lettuce	0,02	Pears
0,09	IT child/toddler	0,05	Apples	0,02	Pears	0,01	Lettuce
0,09	PT (GP)	0,06	Apples	0,02	Pears	0,01	Carrots
0,09	IT adult	0,05	Apples	0,02	Lettuce	0,01	Pears
0,08	WHO regional diet	0,04	Apples	0,02	Lettuce	0,01	Pears
0,08	WHO cluster diet E	0,05	Apples	0,01	Pears	0,00	Carrots
0,07	WHO Cluster diet F	0,04	Apples	0,01	Lettuce	0,01	Pears
0,07	DK adult	0,05	Apples	0,01	Pears	0,00	Carrots
0,05	UK vegetarian	0,04	Apples	0,01	Lettuce	0,00	Pears
0,05	WHO cluster diet D	0,04	Apples	0,00	Pears	0,00	Carrots
0,05	FR (GP)	0,03	Apples	0,01	Pears	0,00	Lettuce
0,04	UK adult	0,02	Apples	0,01	Lettuce	0,00	Pears
0,03	FI adult	0,02	Apples	0,00	Lettuce	0,00	Strawberries

## Acute risk assessment

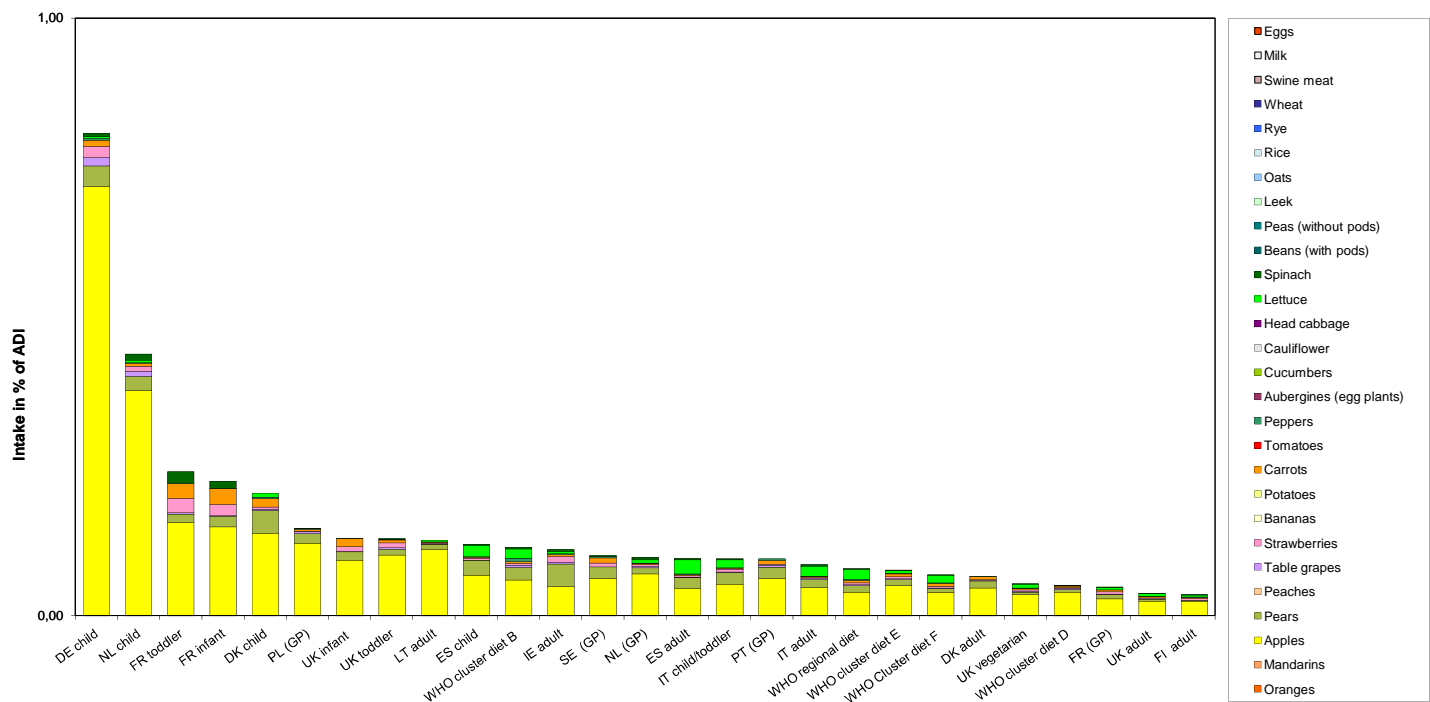
Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL a)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	3	1506	24,24		2,72	3	133,23	UK infant	
2010	Peaches	0,02	1359							
2010	Strawberries	3	1437	1,53	0,07	3,70		28,84	DE child	
2010	Tomatoes	2	1049							
2010	Head cabbage	0,02	1162							
2010	Lettuce	2	2276	1,63	0,44	17,00	6	228,68	DE child	
2010	Leek	0,02	872							
2010	Oats	0,02	172							
2010	Rye	0,02	419							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

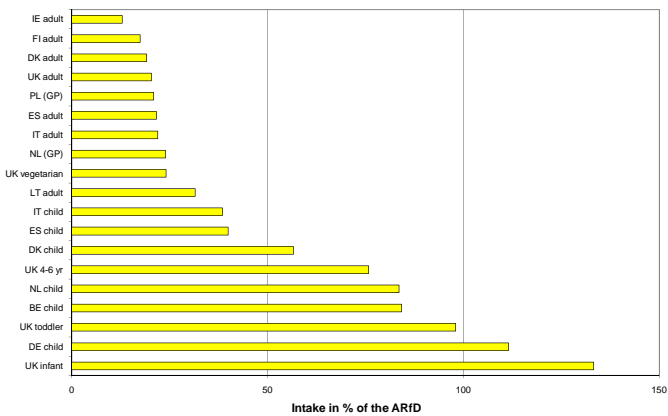
c) TRL: toxicological threshold level

## Chronic risk assessment: Folpet

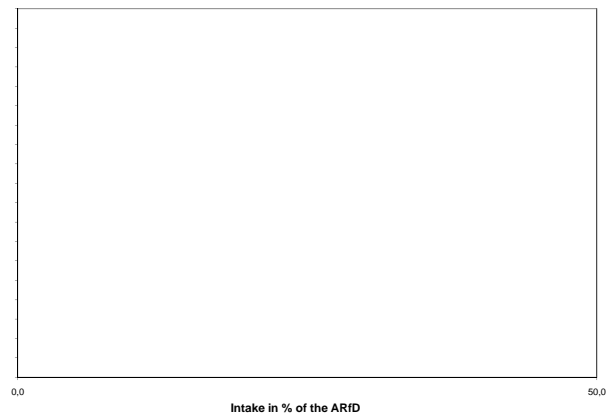


## Folpet

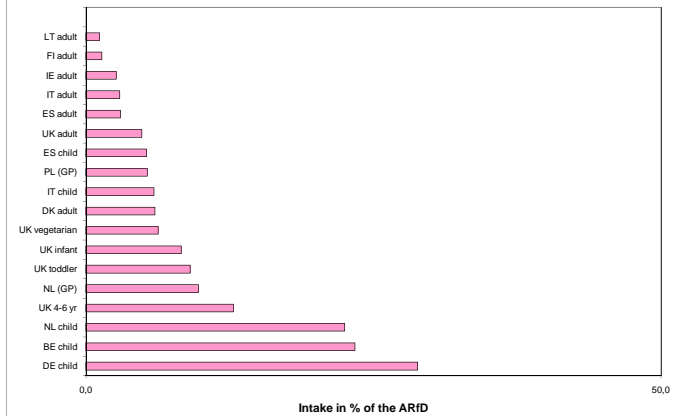
Acute exposure: Folpet / Apples



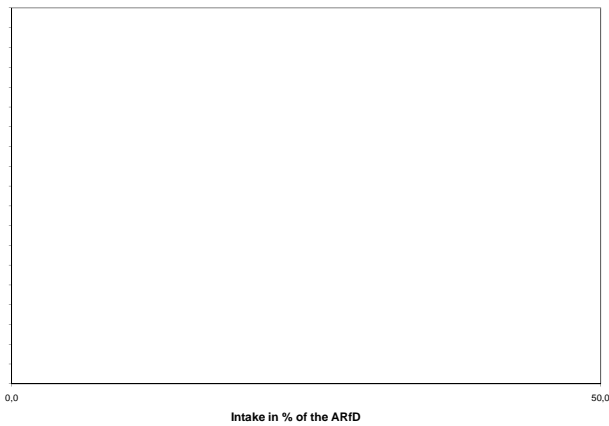
Acute exposure: Folpet / Peaches



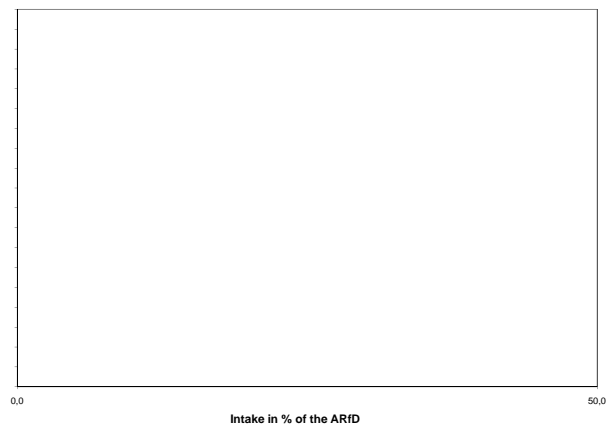
Acute exposure: Folpet / Strawberries



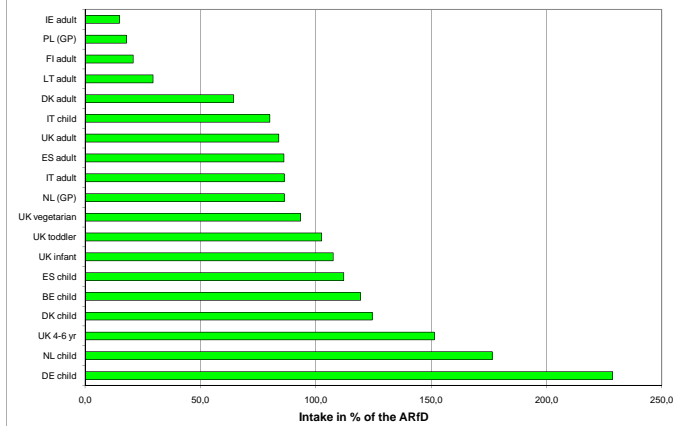
Acute exposure: Folpet / Tomatoes



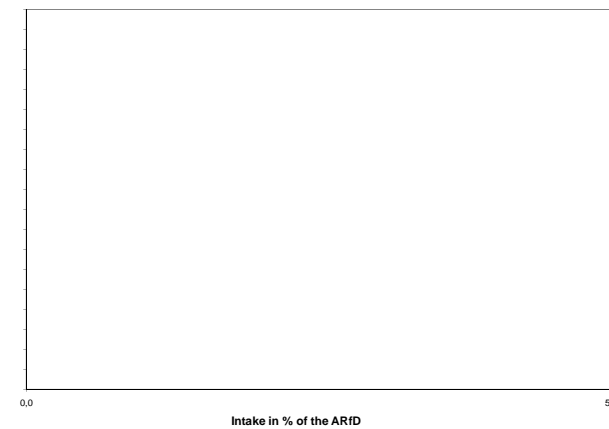
Acute exposure: Folpet / Head cabbage



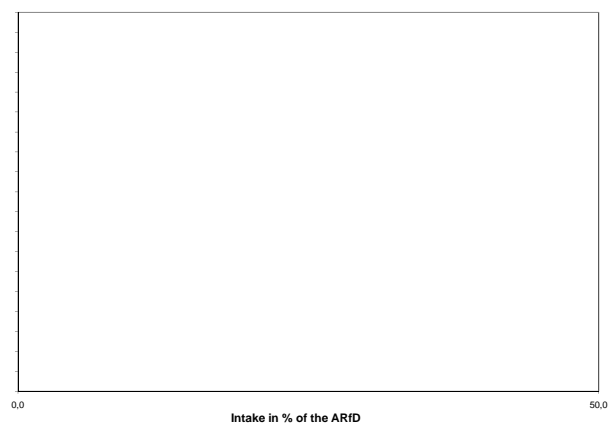
Acute exposure: Folpet / Lettuce



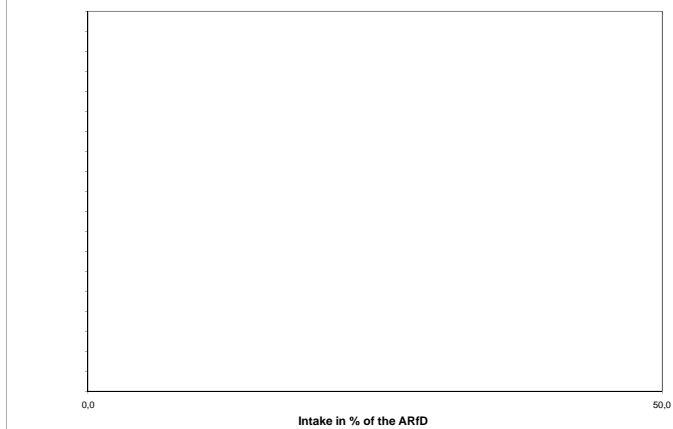
Acute exposure: Folpet / Leek



Acute exposure: Folpet / Oats



Acute exposure: Folpet / Rye



## Formetanate

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.004</b>	ARfD (mg/kg bw):	<b>0.005</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2007</b>	Year of evaluation:	<b>2007</b>

### Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
3

**No of diets exceeding ADI:** ---

	Highest calculated exposure in % of ADI		Highest contributor to MS diet (in % of ADI)		2nd contributor to MS diet (in % of ADI)		3rd contributor to MS diet (in % of ADI)	
	MS Diet	Commodity / group of commodities	MS Diet	Commodity / group of commodities	MS Diet	Commodity / group of commodities	MS Diet	Commodity / group of commodities
3.09	NL child	Potatoes	1.83	Potatoes	0.92	Oranges	0.26	Table grapes
2.60	DE child	Oranges	1.12	Oranges	0.79	Potatoes	0.43	Table grapes
2.23	FR toddler	Potatoes	1.57	Potatoes	0.59	Oranges	0.07	Table grapes
2.01	PT (GP)	Potatoes	1.65	Potatoes	0.18	Oranges	0.09	Table grapes
1.78	UK toddler	Potatoes	1.08	Potatoes	0.58	Oranges	0.08	Table grapes
1.68	SE (GP)	Potatoes	1.29	Potatoes	0.22	Oranges	0.08	Cucumbers
1.58	FR infant	Potatoes	1.28	Potatoes	0.27	Oranges	0.03	Table grapes
1.53	WHO regional diet	Potatoes	1.24	Potatoes	0.15	Oranges	0.07	Peppers
1.50	WHO cluster diet B	Potatoes	0.83	Potatoes	0.25	Oranges	0.19	Peppers
1.49	WHO cluster diet D	Potatoes	1.26	Potatoes	0.07	Oranges	0.06	Table grapes
1.44	WHO cluster diet E	Potatoes	1.19	Potatoes	0.13	Oranges	0.05	Table grapes
1.42	NL (GP)	Potatoes	0.85	Potatoes	0.44	Oranges	0.08	Table grapes
1.41	WHO Cluster diet F	Potatoes	1.06	Potatoes	0.26	Oranges	0.04	Table grapes
1.40	UK infant	Potatoes	1.01	Potatoes	0.38	Oranges	0.01	Table grapes
1.36	DK child	Potatoes	0.75	Potatoes	0.42	Cucumbers	0.08	Peppers
1.27	ES child	Oranges	0.64	Oranges	0.57	Potatoes	0.04	Peppers
1.24	IE adult	Potatoes	0.71	Potatoes	0.31	Oranges	0.09	Table grapes
1.23	PL (GP)	Potatoes	1.06	Potatoes	0.11	Table grapes	0.03	Peppers
1.12	LT adult	Potatoes	0.98	Potatoes	0.10	Cucumbers	0.02	Oranges
0.77	UK vegetarian	Potatoes	0.42	Potatoes	0.25	Oranges	0.03	Peppers
0.76	FI adult	Potatoes	0.38	Potatoes	0.28	Oranges	0.07	Cucumbers
0.76	ES adult	Oranges	0.38	Oranges	0.29	Potatoes	0.06	Peppers
0.65	UK adult	Potatoes	0.43	Potatoes	0.17	Oranges	0.02	Table grapes
0.63	DK adult	Potatoes	0.45	Potatoes	0.07	Cucumbers	0.04	Peppers
0.52	FR (GP)	Potatoes	0.35	Potatoes	0.08	Oranges	0.04	Table grapes
0.51	IT child/toddler	Potatoes	0.28	Potatoes	0.14	Oranges	0.04	Table grapes
0.40	IT adult	Potatoes	0.19	Potatoes	0.11	Oranges	0.04	Table grapes

### Acute risk assessment

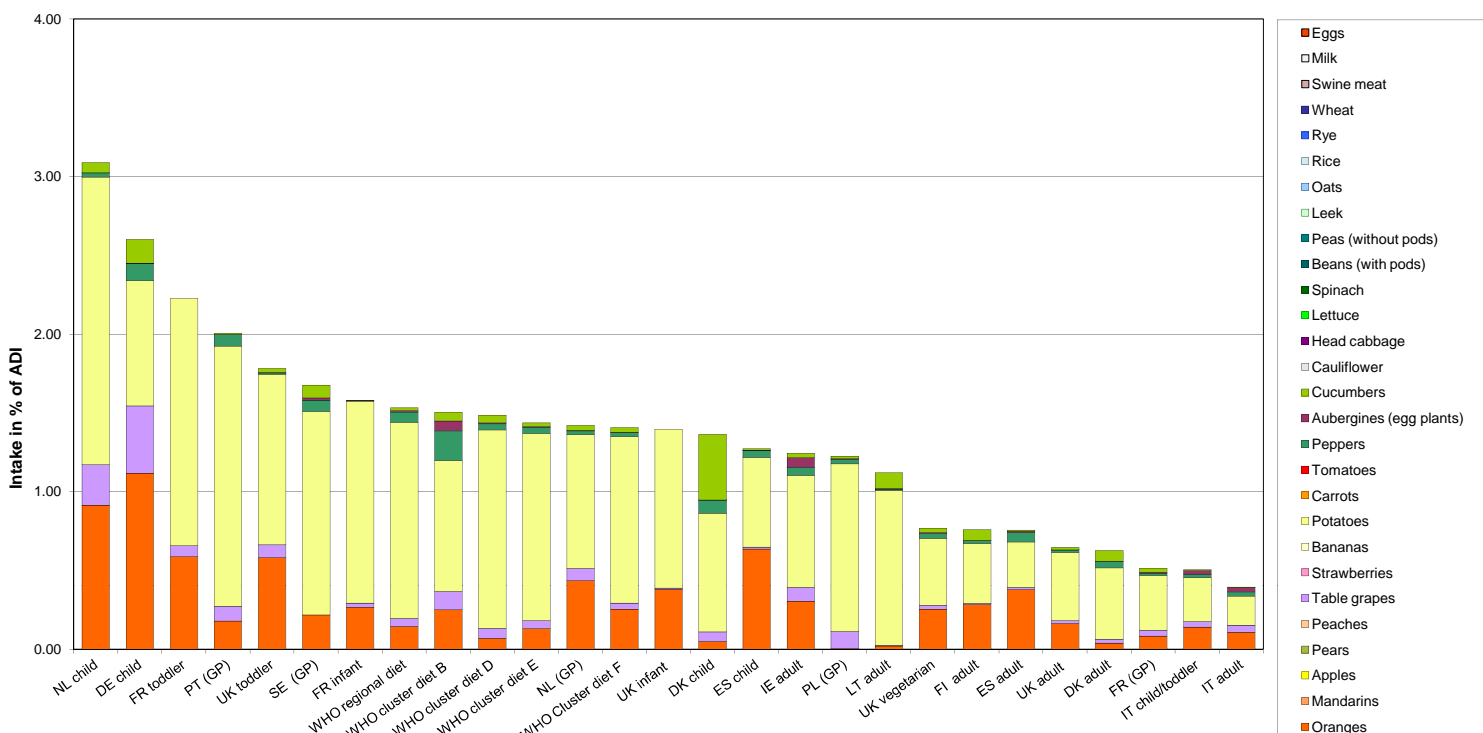
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	1139							
2010	Peaches	0.05	578							
2010	Strawberries	0.3	1010	0.10		0.26		81.07	DE child	
2010	Tomatoes	0.2	980							
2010	Head cabbage	0.05	588							
2010	Lettuce	0.05	904							
2010	Leek	0.05	451							
2010	Oats	0.05	102							
2010	Rye	0.05	222							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

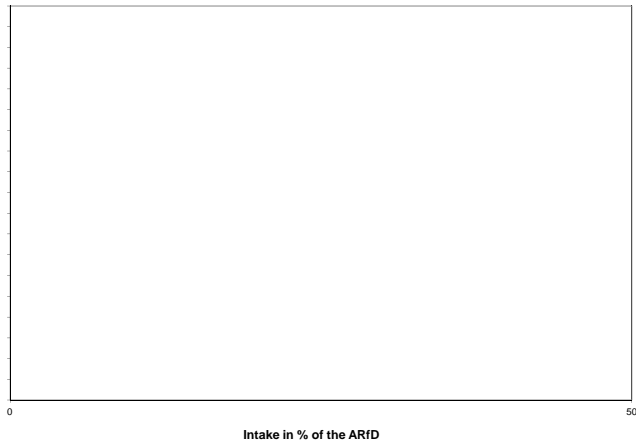
<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Formetanate

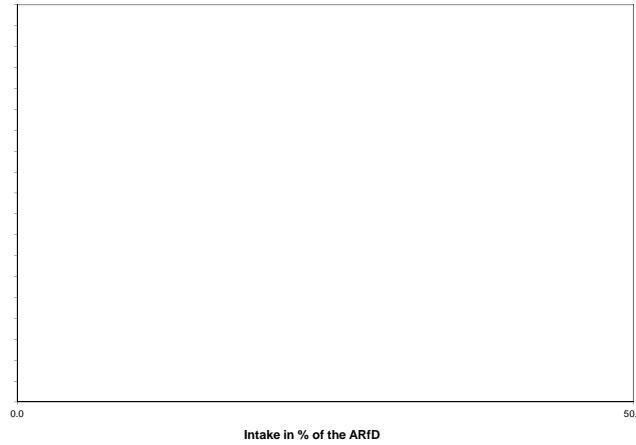


**Formetanate**

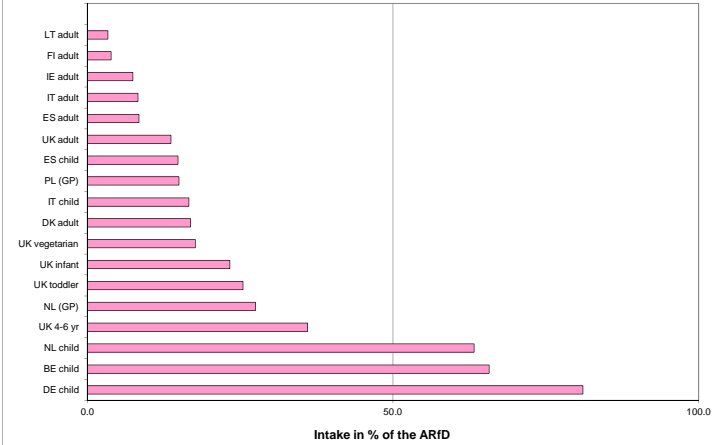
Acute exposure: Formetanate / Apples



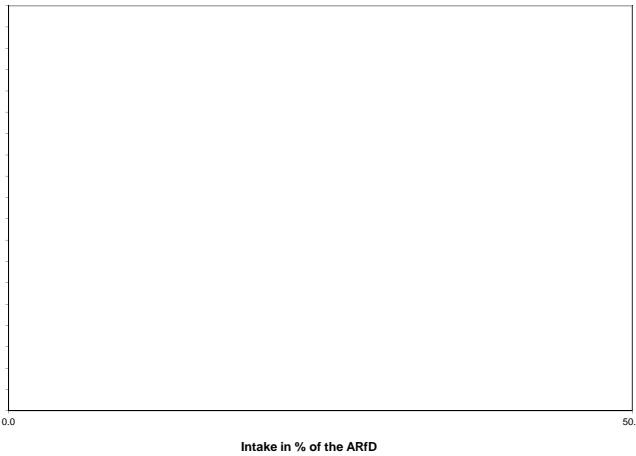
Acute exposure: Formetanate / Peaches



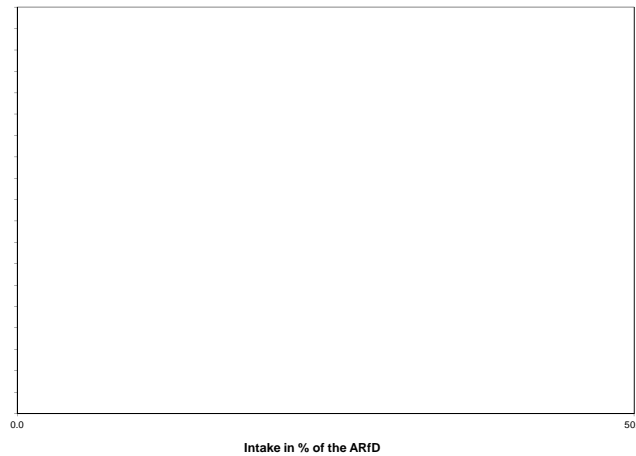
Acute exposure: Formetanate / Strawberries



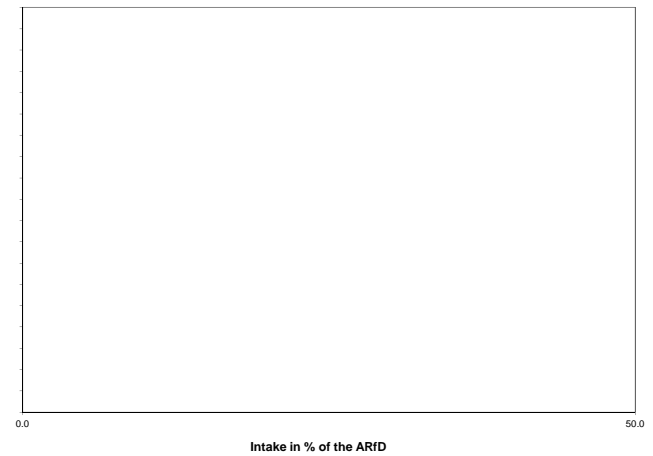
Acute exposure: Formetanate / Tomatoes



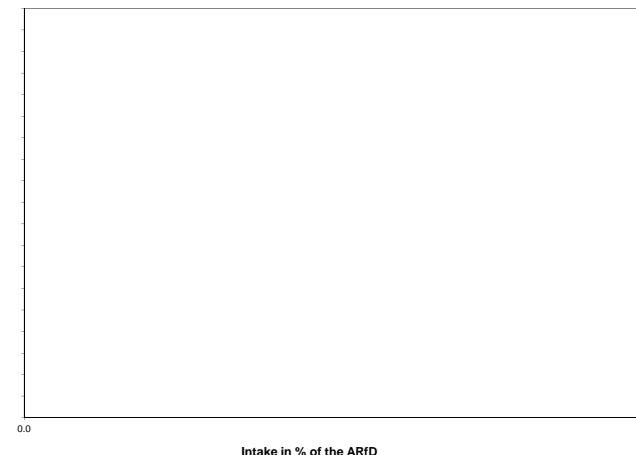
Acute exposure: Formetanate / Head cabbage



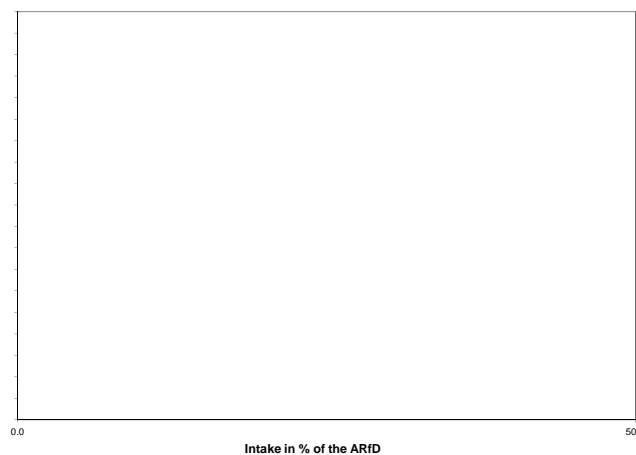
Acute exposure: Formetanate / Lettuce



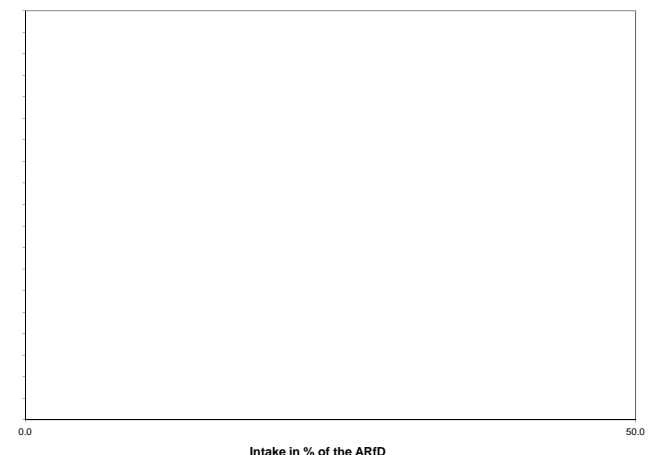
Acute exposure: Formetanate / Leek



Acute exposure: Formetanate / Oats



Acute exposure: Formetanate / Rye



## Fosthiazate

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:	Yes	Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.004	ARfD (mg/kg bw):	0.005
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2003	Year of evaluation:	2003

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum

1

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)		2nd contributor to MS diet (in % of ADI)		3rd contributor to MS diet (in % of ADI)	
		Commodity / group of commodities	Commodity / group of commodities	Commodity / group of commodities	Commodity / group of commodities		
1.38	NL child	1.32	Potatoes	0.06	Cucumbers		FRUIT (FRESH OR FROZEN)
1.20	PT (GP)	1.19	Potatoes	0.01	Cucumbers		FRUIT (FRESH OR FROZEN)
1.13	FR toddler	1.13	Potatoes		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
1.01	SE (GP)	0.93	Potatoes	0.07	Cucumbers		FRUIT (FRESH OR FROZEN)
0.95	WHO cluster diet D	0.91	Potatoes	0.04	Cucumbers		FRUIT (FRESH OR FROZEN)
0.93	FR infant	0.93	Potatoes		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.92	DK child	0.54	Potatoes	0.38	Cucumbers		FRUIT (FRESH OR FROZEN)
0.92	WHO regional diet	0.90	Potatoes	0.02	Cucumbers		FRUIT (FRESH OR FROZEN)
0.88	WHO cluster diet E	0.86	Potatoes	0.02	Cucumbers		FRUIT (FRESH OR FROZEN)
0.81	UK toddler	0.78	Potatoes	0.03	Cucumbers		FRUIT (FRESH OR FROZEN)
0.80	LT adult	0.71	Potatoes	0.09	Cucumbers		FRUIT (FRESH OR FROZEN)
0.79	WHO Cluster diet F	0.76	Potatoes	0.03	Cucumbers		FRUIT (FRESH OR FROZEN)
0.79	PL (GP)	0.77	Potatoes	0.02	Cucumbers		FRUIT (FRESH OR FROZEN)
0.73	UK infant	0.73	Potatoes		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.71	DE child	0.57	Potatoes	0.14	Cucumbers		FRUIT (FRESH OR FROZEN)
0.65	WHO cluster diet B	0.60	Potatoes	0.05	Cucumbers		FRUIT (FRESH OR FROZEN)
0.64	NL (GP)	0.61	Potatoes	0.03	Cucumbers		FRUIT (FRESH OR FROZEN)
0.54	IE adult	0.51	Potatoes	0.02	Cucumbers		FRUIT (FRESH OR FROZEN)
0.42	ES child	0.41	Potatoes	0.01	Cucumbers		FRUIT (FRESH OR FROZEN)
0.39	DK adult	0.33	Potatoes	0.06	Cucumbers		FRUIT (FRESH OR FROZEN)
0.34	FI adult	0.27	Potatoes	0.06	Cucumbers		FRUIT (FRESH OR FROZEN)
0.33	UK vegetarian	0.31	Potatoes	0.02	Cucumbers		FRUIT (FRESH OR FROZEN)
0.33	UK adult	0.31	Potatoes	0.01	Cucumbers		FRUIT (FRESH OR FROZEN)
0.28	FR (GP)	0.25	Potatoes	0.02	Cucumbers		FRUIT (FRESH OR FROZEN)
0.22	ES adult	0.21	Potatoes	0.01	Cucumbers		FRUIT (FRESH OR FROZEN)
0.21	IT child/toddler	0.20	Potatoes	0.01	Cucumbers		FRUIT (FRESH OR FROZEN)
0.14	IT adult	0.13	Potatoes	0.01	Cucumbers		FRUIT (FRESH OR FROZEN)

## Acute risk assessment

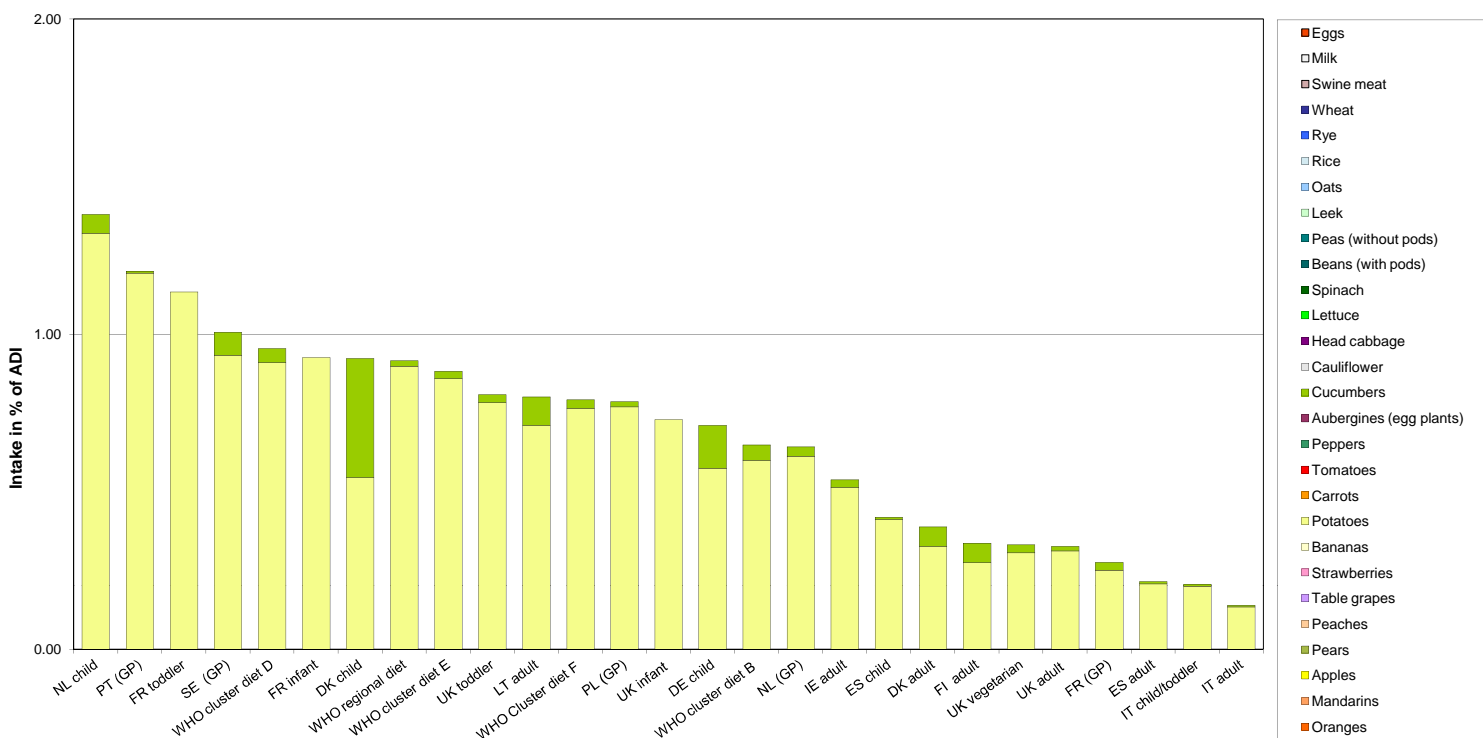
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.02	1733							
2010	Peaches	0.02	891							
2010	Strawberries	0.02	1420							
2010	Tomatoes	0.02	1382							
2010	Head cabbage	0.02	709							
2010	Lettuce	0.02	1427							
2010	Leek	0.02	602							
2010	Oats	0.02	99							
2010	Rye	0.02	304							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

c) TRL: toxicological threshold level

## Chronic risk assessment: Fosthiazate



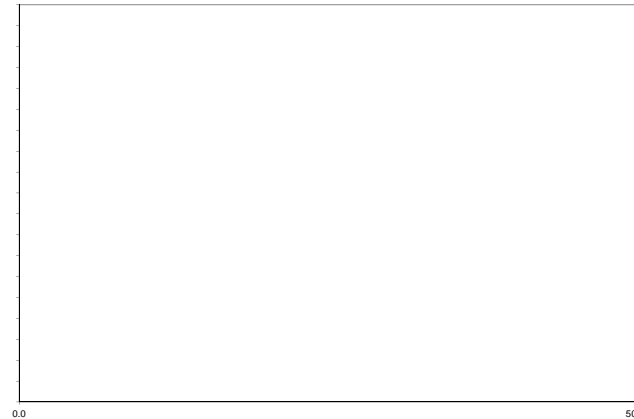
**Fosthiazate**

Acute exposure: Fosthiazate / Apples



Intake in % of the ARfD

Acute exposure: Fosthiazate / Peaches



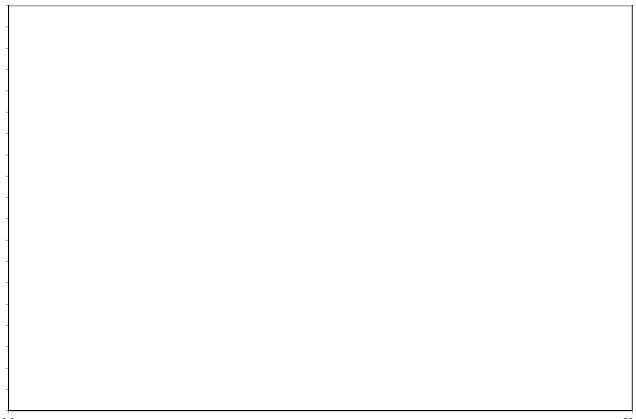
Intake in % of the ARfD

Acute exposure: Fosthiazate / Strawberries



Intake in % of the ARfD

Acute exposure: Fosthiazate / Tomatoes



Intake in % of the ARfD

Acute exposure: Fosthiazate / Head cabbage



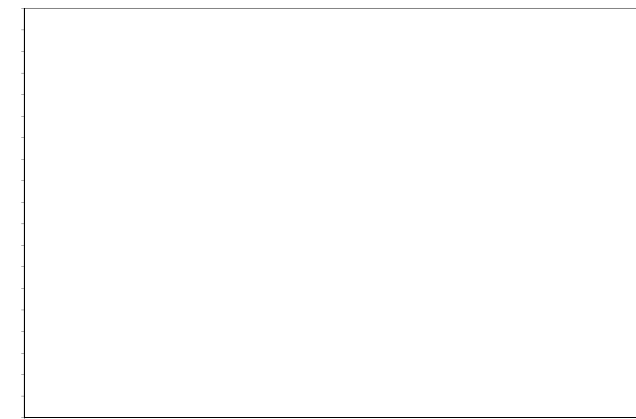
Intake in % of the ARfD

Acute exposure: Fosthiazate / Lettuce



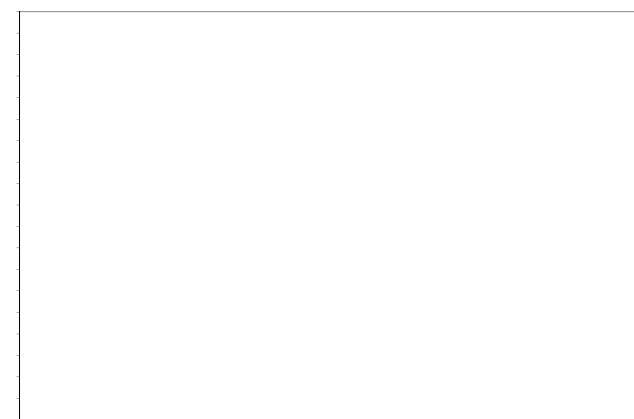
Intake in % of the ARfD

Acute exposure: Fosthiazate / Leek



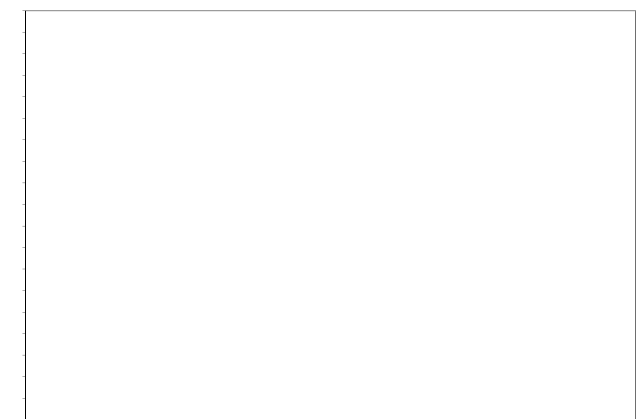
Intake in % of the ARfD

Acute exposure: Fosthiazate / Oats



Intake in % of the ARfD

Acute exposure: Fosthiazate / Rye



Intake in % of the ARfD



## Glyphosate

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:	<b>obligatory for rye and oats</b>	Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.3</b>	ARfD (mg/kg bw):	<b>n.n.</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2001</b>	Year of evaluation:	<b>2001</b>

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum			
		No of diets exceeding ADI:		---	
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.46	DK child	0.25	Wheat	0.18	Rye
0.39	WHO cluster diet B	0.39	Wheat	0.00	Rye
0.32	WHO cluster diet D	0.29	Wheat	0.02	Rye
0.30	IT child/toddler	0.30	Wheat	0.00	Oats
0.23	DE child	0.19	Wheat	0.03	Rye
0.23	NL child	0.21	Wheat	0.01	Rye
0.20	WHO Cluster diet F	0.16	Wheat	0.03	Rye
0.20	WHO cluster diet E	0.18	Wheat	0.02	Rye
0.20	ES child	0.20	Wheat		FRUIT (FRESH OR FROZEN)
0.19	IT adult	0.19	Wheat	0.00	Oats
0.18	PT (GP)	0.18	Wheat	0.01	Rye
0.18	UK toddler	0.18	Wheat	0.00	Oats
0.16	SE (GP)	0.14	Wheat	0.01	Rye
0.15	FR (GP)	0.15	Wheat		FRUIT (FRESH OR FROZEN)
0.14	WHO regional diet	0.13	Wheat	0.00	Oats
0.13	UK infant	0.12	Wheat	0.02	Oats
0.13	DK adult	0.09	Wheat	0.03	Rye
0.12	IE adult	0.10	Wheat	0.01	Oats
0.12	FR toddler	0.12	Wheat		FRUIT (FRESH OR FROZEN)
0.11	ES adult	0.11	Wheat		FRUIT (FRESH OR FROZEN)
0.10	NL (GP)	0.09	Wheat	0.00	Rye
0.10	LT adult	0.05	Wheat	0.04	Rye
0.10	UK vegetarian	0.09	Wheat	0.00	Oats
0.08	FI adult	0.04	Wheat	0.03	Rye
0.08	UK adult	0.08	Wheat	0.00	Oats
0.04	FR infant	0.04	Wheat		FRUIT (FRESH OR FROZEN)
	PL (GP)		FRUIT (FRESH)		FRUIT (FRESH OR FROZEN)

### Acute risk assessment

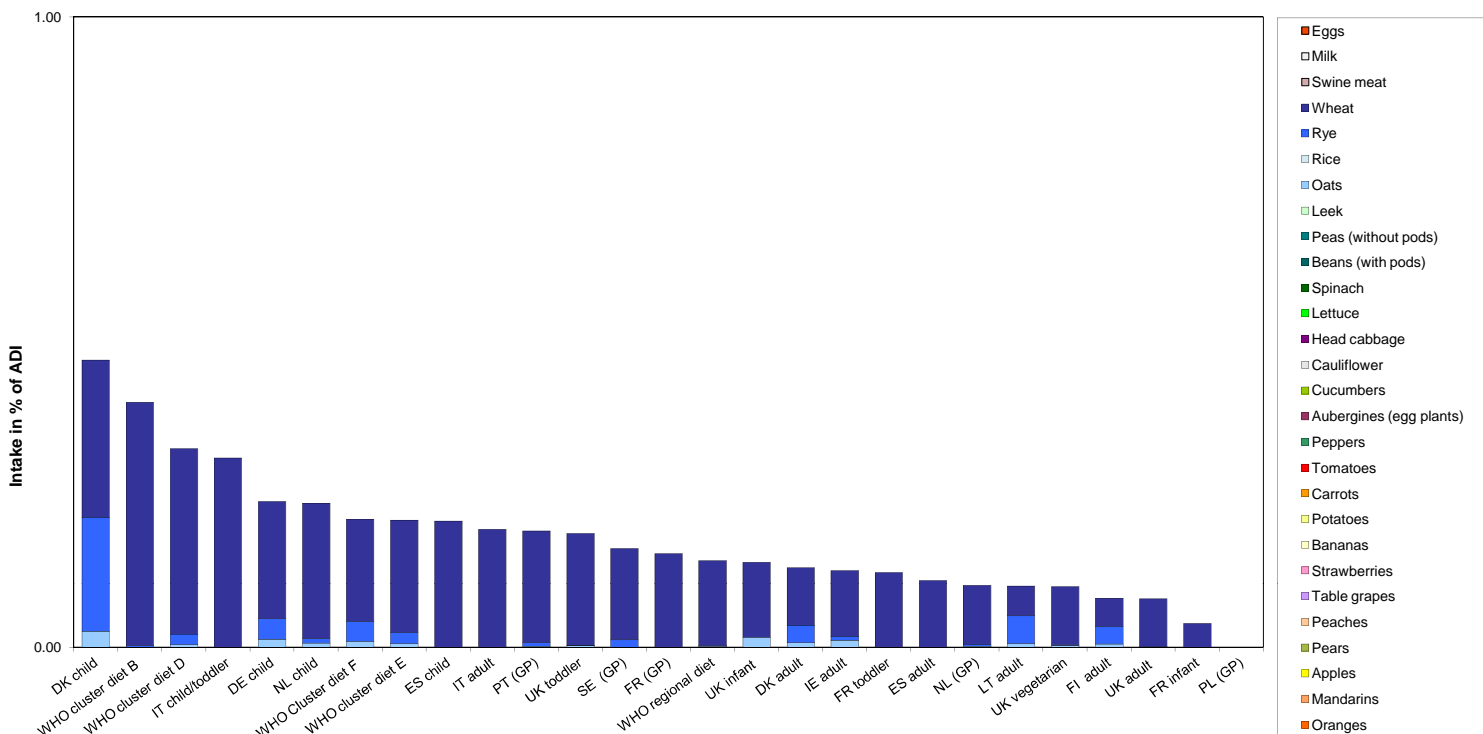
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples									
2010	Peaches									
2010	Strawberries									
2010	Tomatoes									
2010	Head cabbage									
2010	Lettuce									
2010	Leek									
2010	Oats	20	127	23.62		2.10				
2010	Rye	10	139	2.16		0.36				
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Glyphosate



## Glyphosate

Acute exposure: Glyphosate / Apples



Intake in % of the ARfD

Acute exposure: Glyphosate / Peaches



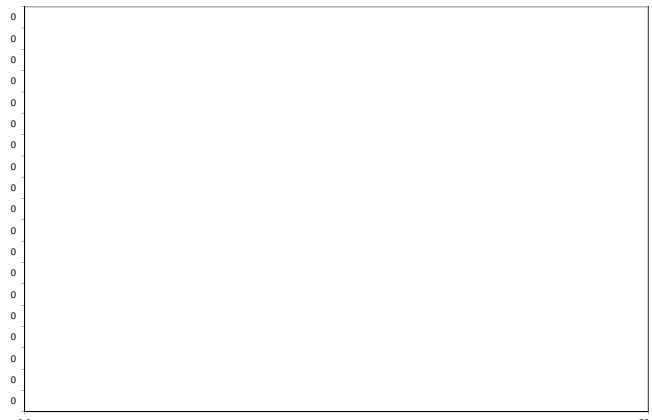
Intake in % of the ARfD

Acute exposure: Glyphosate / Strawberries



Intake in % of the ARfD

Acute exposure: Glyphosate / Tomatoes



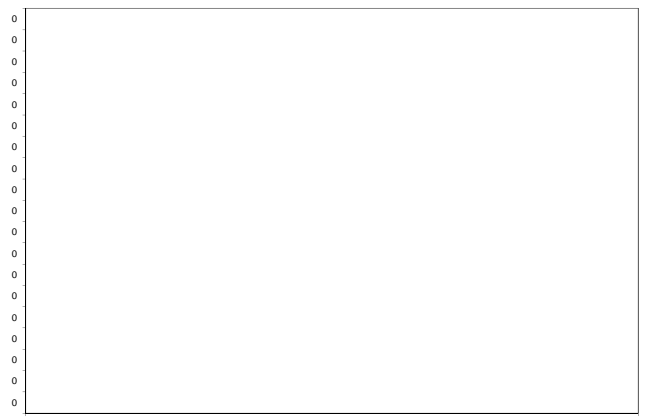
Intake in % of the ARfD

Acute exposure: Glyphosate / Head cabbage



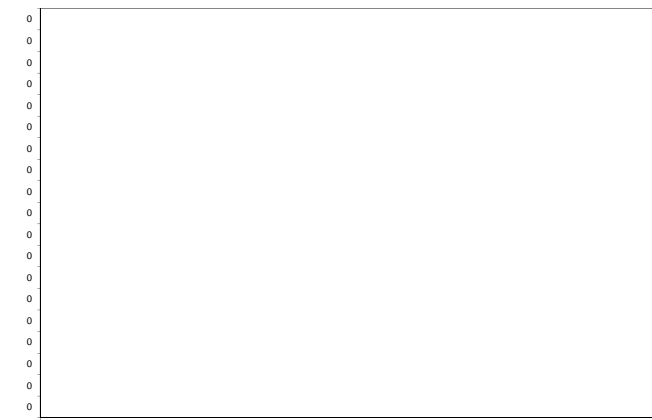
Intake in % of the ARfD

Acute exposure: Glyphosate / Lettuce



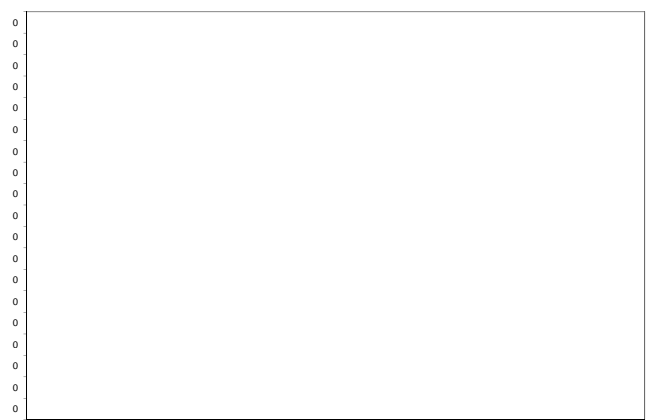
Intake in % of the ARfD

Acute exposure: Glyphosate / Leek



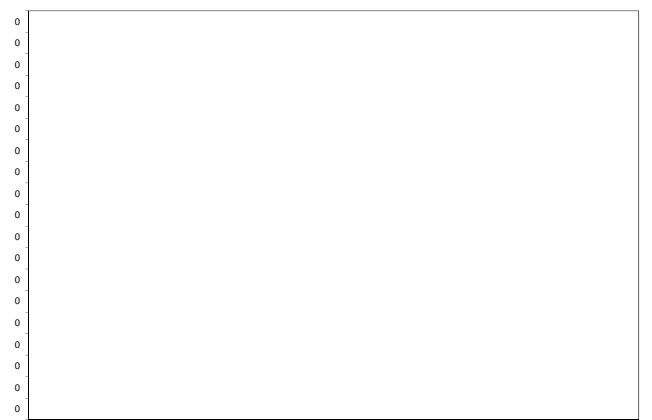
Intake in % of the ARfD

Acute exposure: Glyphosate / Oats



Intake in % of the ARfD

Acute exposure: Glyphosate / Rye



Intake in % of the ARfD

Haloxypop			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:	Yes	Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.00065	ARfD (mg/kg bw):	0.075
Source of ADI:	EFSA	Source of ARfD:	EFSA
Year of evaluation:	2006	Year of evaluation:	2006

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum

1

No of diets exceeding ADI:

---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.41	DE child	0.41	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.32	DK child	0.32	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.27	PT (GP)	0.27	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.27	SE (GP)	0.27	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.25	WHO regional diet	0.25	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.22	ES adult	0.22	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.19	IE adult	0.19	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.16	ES child	0.16	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.15	DK adult	0.15	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.15	WHO cluster diet D	0.15	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.15	WHO cluster diet E	0.15	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.12	UK vegetarian	0.12	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.11	PL (GP)	0.11	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.10	IT adult	0.10	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.10	NL child	0.10	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.09	WHO Cluster diet F	0.09	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.09	NL (GP)	0.09	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.09	IT child/toddler	0.09	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.07	FI adult	0.07	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.06	UK adult	0.06	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.05	FR (GP)	0.05	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.03	UK toddler	0.03	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.03	LT adult	0.03	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.02	FR infant	0.02	Peppers		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	FR toddler		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	FR toddler		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)

## Acute risk assessment

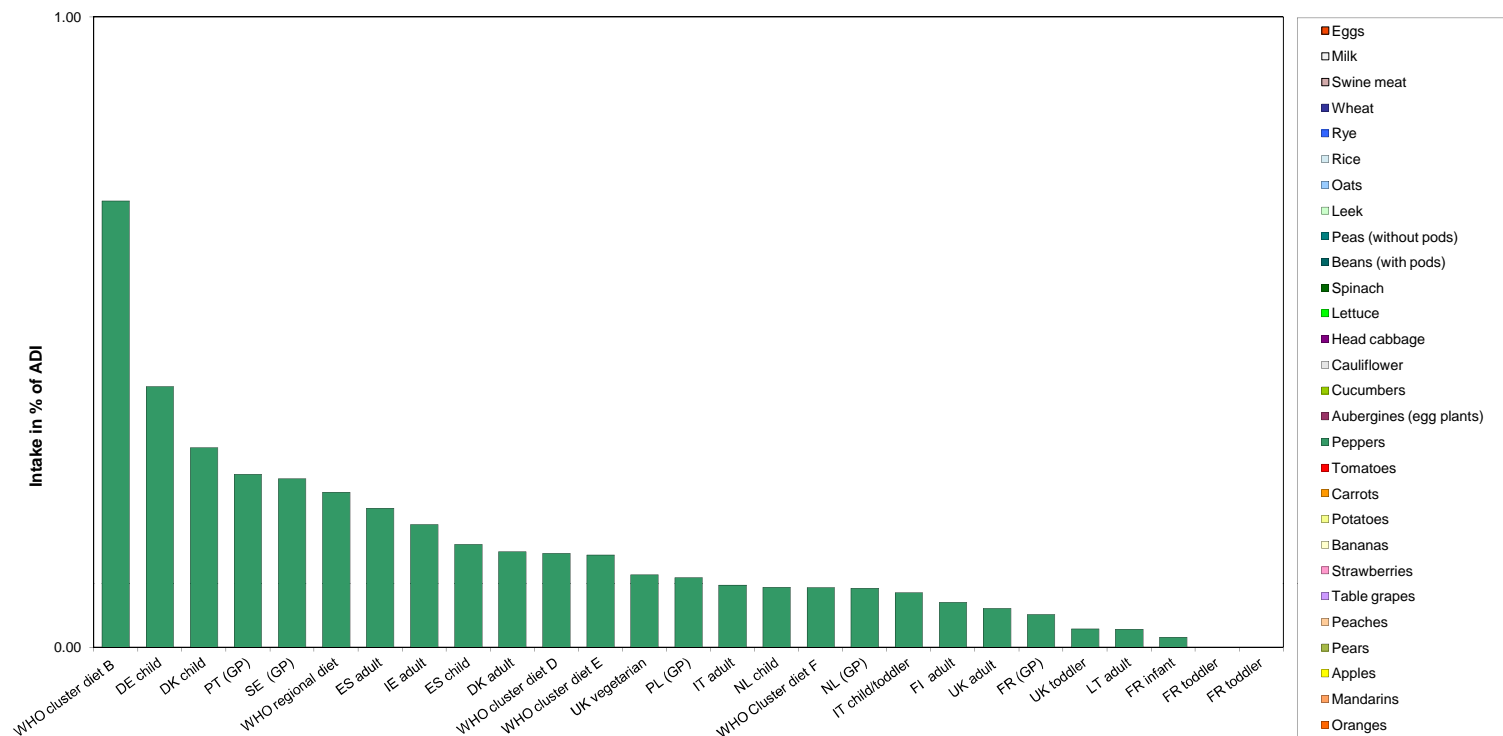
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	844							
2010	Peaches	0.05	358							
2010	Strawberries	0.05	515	0.19		0.00		0.06	DE child	
2010	Tomatoes	0.05	566							
2010	Head cabbage	0.05	408							
2010	Lettuce	0.1	667	0.45		0.02		0.84	DE child	
2010	Leek	0.1	296	0.68		0.06		4.33	BE child	
2010	Oats	0.1	102							
2010	Rye	0.1	181							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

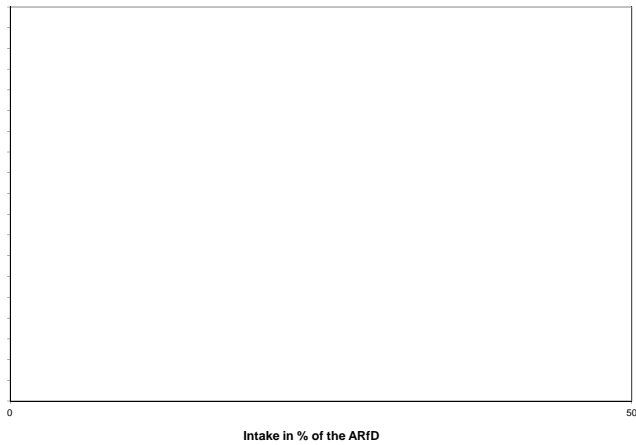
<sup>c)</sup> TRL: toxicological threshold level

## Chronic risk assessment: Haloxypop

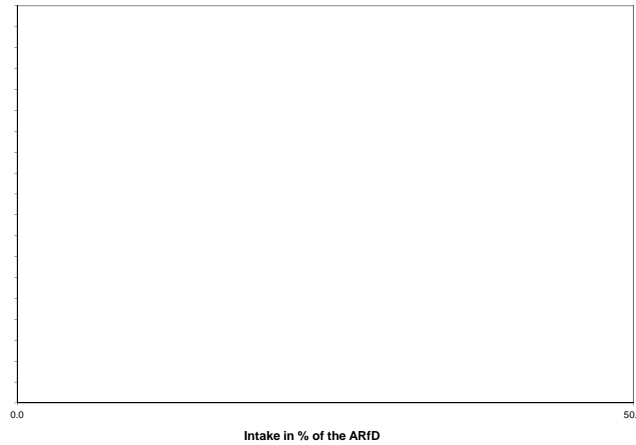


**Haloxyfop**

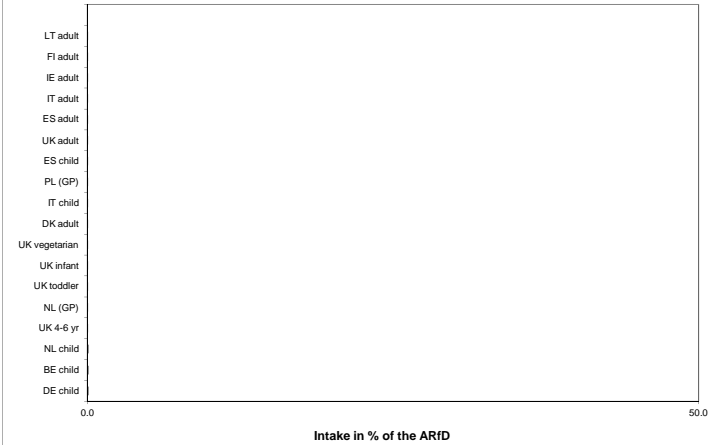
Acute exposure: Haloxyfop / Apples



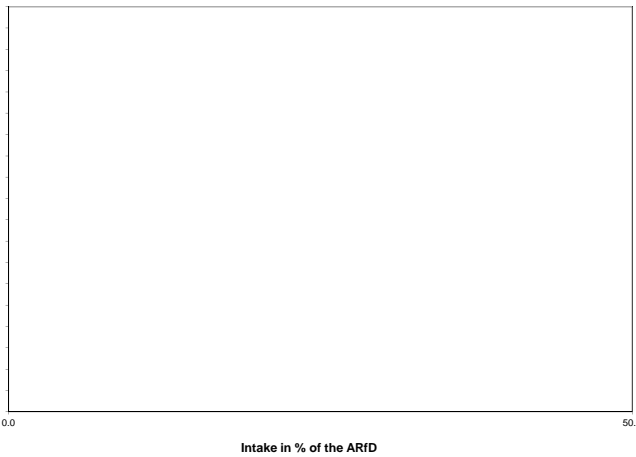
Acute exposure: Haloxyfop / Peaches



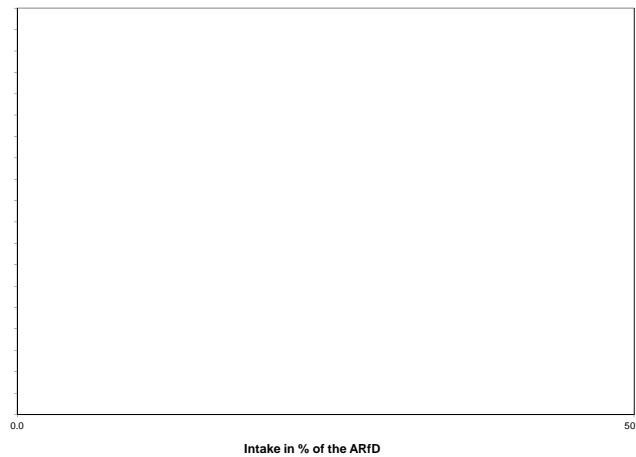
Acute exposure: Haloxyfop / Strawberries



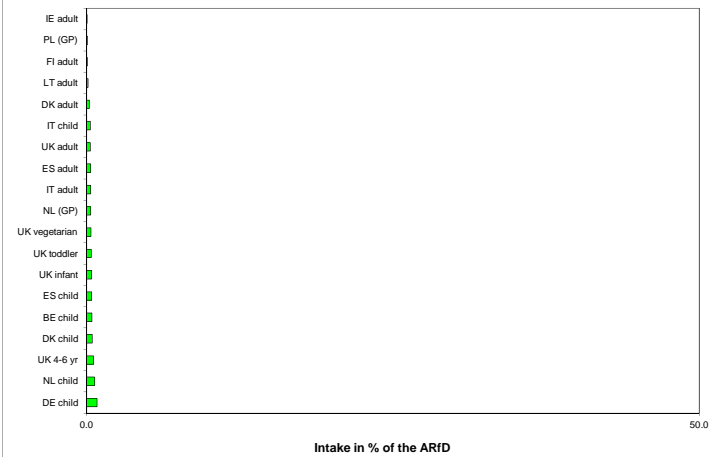
Acute exposure: Haloxyfop / Tomatoes



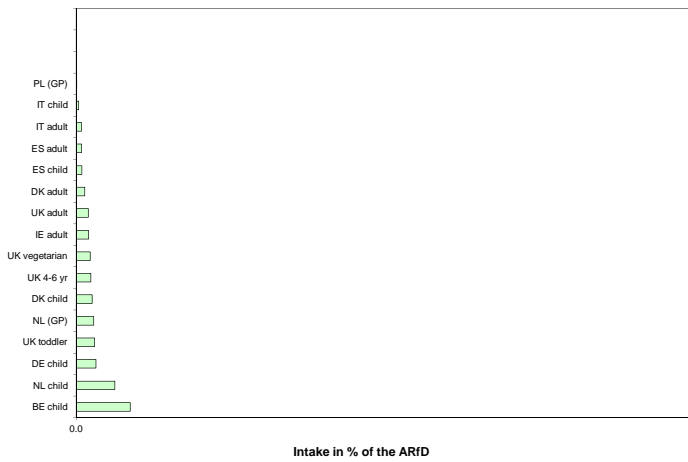
Acute exposure: Haloxyfop / Head cabbage



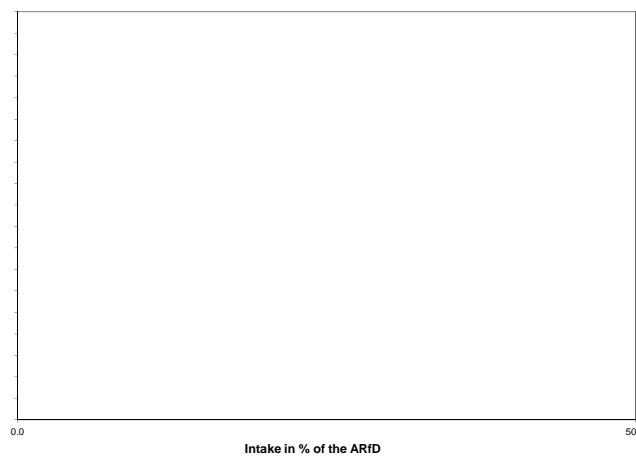
Acute exposure: Haloxyfop / Lettuce



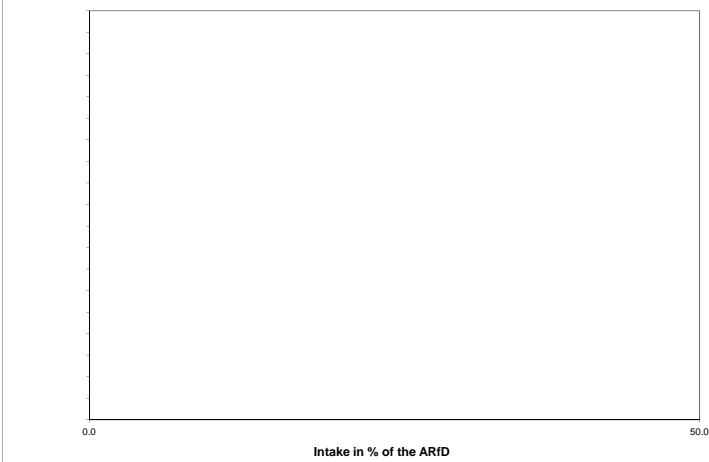
Acute exposure: Haloxyfop / Leek



Acute exposure: Haloxyfop / Oats



Acute exposure: Haloxyfop / Rye





**HCH alpha isomer**

Acute exposure: HCH alpha isomer / Apples



Intake in % of the ARfD

Acute exposure: HCH alpha isomer / Peaches



Intake in % of the ARfD

Acute exposure: HCH alpha isomer / Strawberries



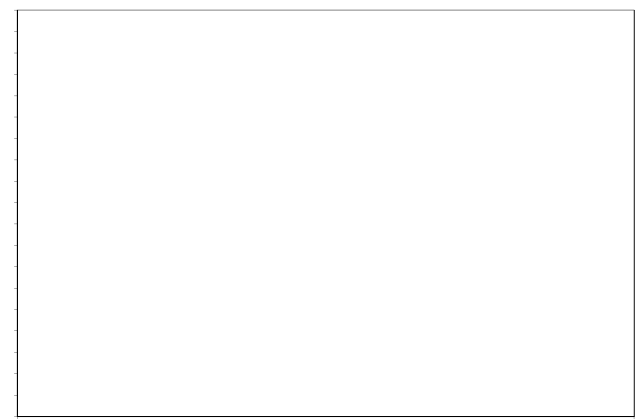
Intake in % of the ARfD

Acute exposure: HCH alpha isomer / Tomatoes



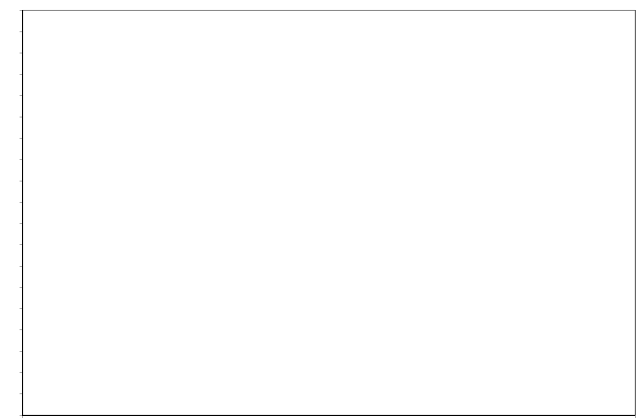
Intake in % of the ARfD

Acute exposure: HCH alpha isomer / Head cabbage



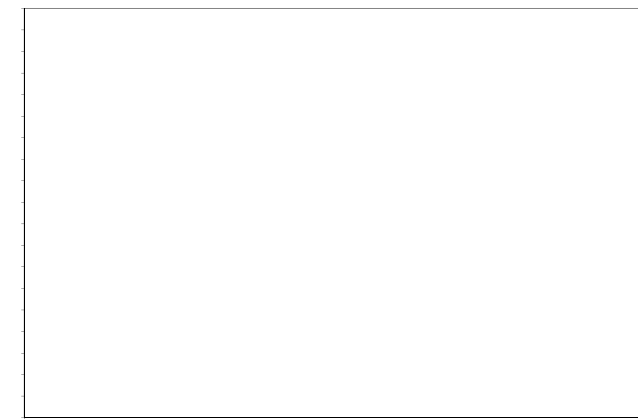
Intake in % of the ARfD

Acute exposure: HCH alpha isomer / Lettuce



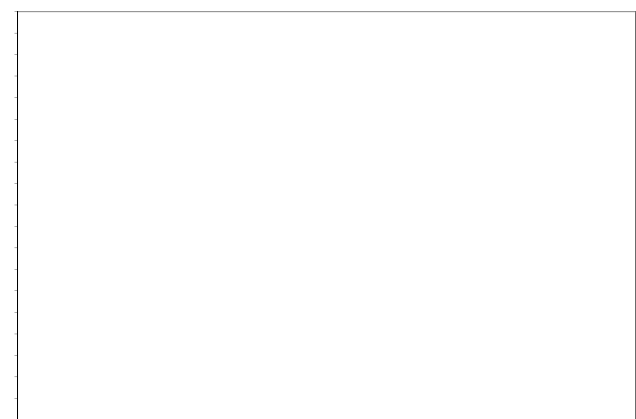
Intake in % of the ARfD

Acute exposure: HCH alpha isomer / Leek



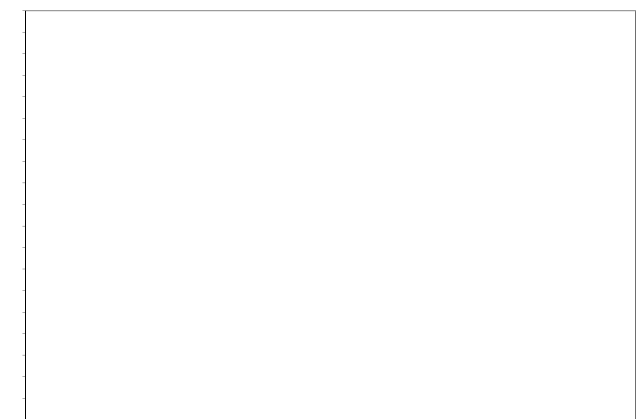
Intake in % of the ARfD

Acute exposure: HCH alpha isomer / Oats



Intake in % of the ARfD

Acute exposure: HCH alpha isomer / Rye



Intake in % of the ARfD

HCH beta isomer			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	A
Toxicological end points			
ADI (mg/kg bw/day):		ARfD (mg/kg bw):	
Source of ADI:	JMPR	Source of ARfD:	
Year of evaluation:	1973	Year of evaluation:	

No ADI was derived by JMPR. Active substance was not assessed regarding the setting of an ARfD.

**Chronic risk assessment**

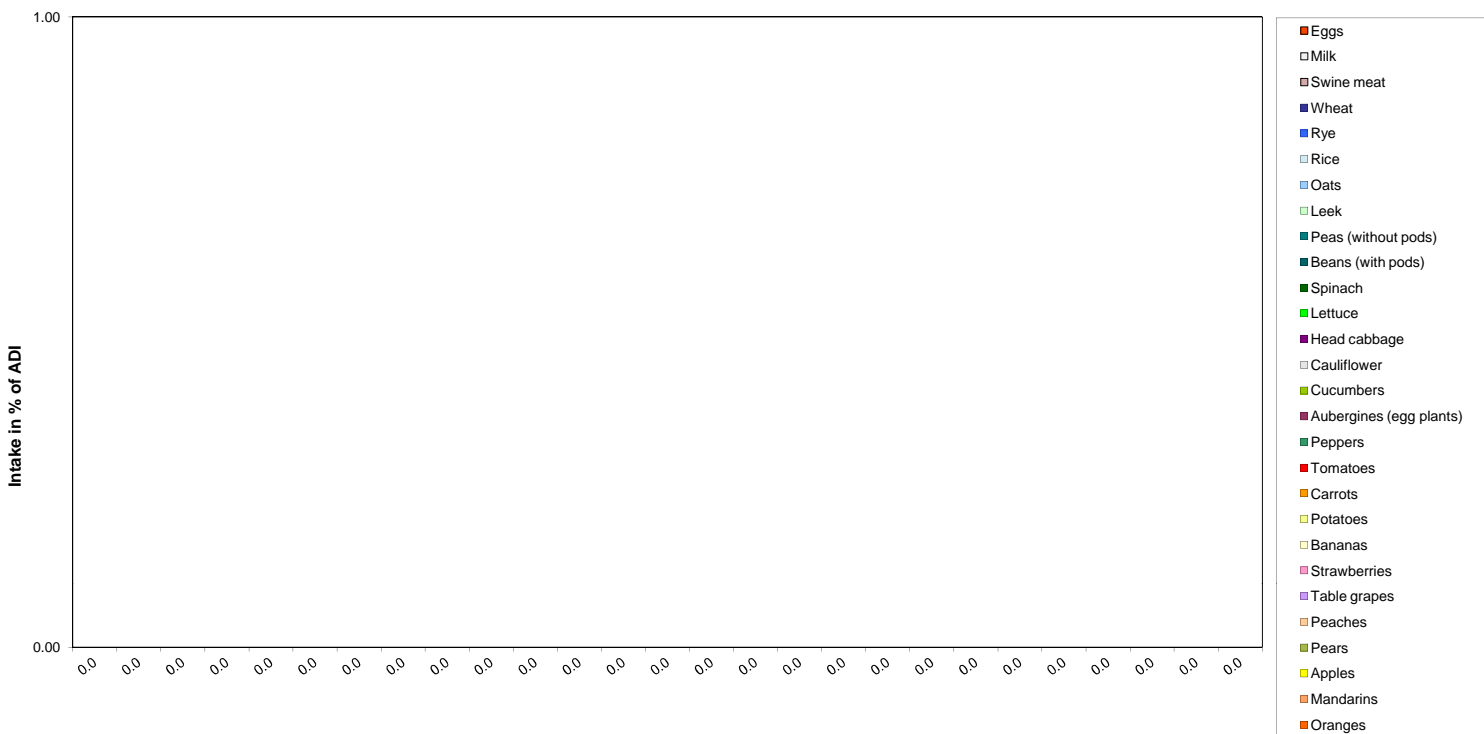
Highest calculated exposure in % of ADI		MS Diet		Highest contributor to MS diet (in % of ADI)		Commodity / group of commodities		2nd contributor to MS diet (in % of ADI)		Commodity / group of commodities		3rd contributor to MS diet (in % of ADI)		Commodity / group of commodities	
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**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples									
2010	Peaches									
2010	Strawberries									
2010	Tomatoes									
2010	Head cabbage									
2010	Lettuce									
2010	Leek									
2010	Oats									
2010	Rye									
2010	Swine Meat	0.1	605							
2010	Milk	0.003	805	0.75		0.00				

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: HCH beta isomer**



**HCH beta isomer**

Acute exposure: HCH beta isomer / Apples



Intake in % of the ARfD

Acute exposure: HCH beta isomer / Peaches



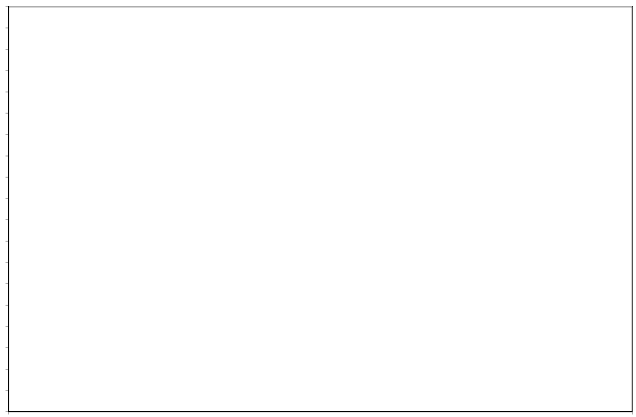
Intake in % of the ARfD

Acute exposure: HCH beta isomer / Strawberries



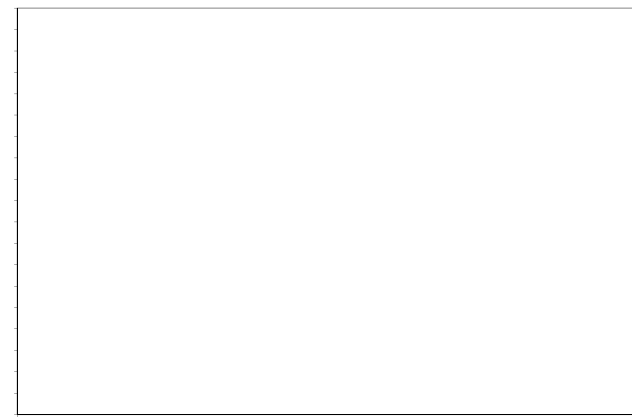
Intake in % of the ARfD

Acute exposure: HCH beta isomer / Tomatoes



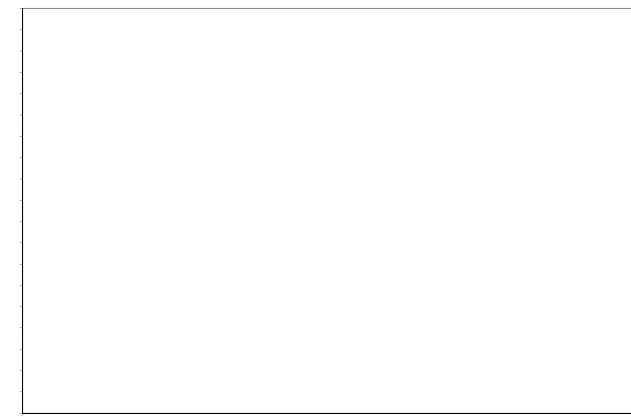
Intake in % of the ARfD

Acute exposure: HCH beta isomer / Head cabbage



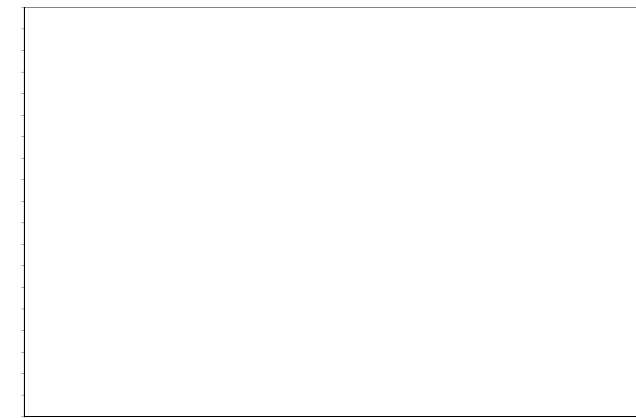
Intake in % of the ARfD

Acute exposure: HCH beta isomer / Lettuce



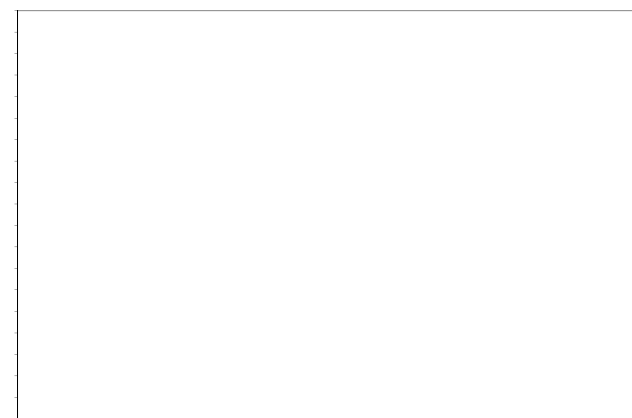
Intake in % of the ARfD

Acute exposure: HCH beta isomer / Leek



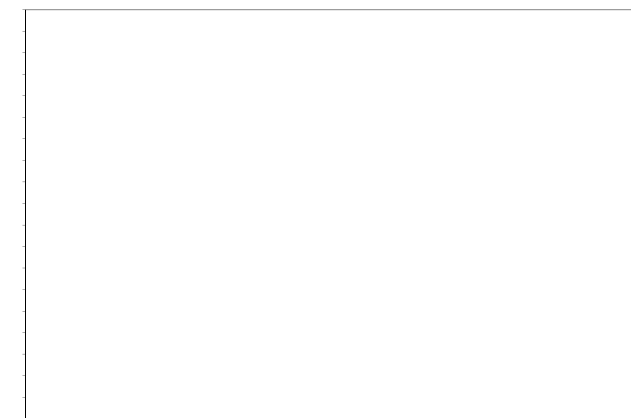
Intake in % of the ARfD

Acute exposure: HCH beta isomer / Oats



Intake in % of the ARfD

Acute exposure: HCH beta isomer / Rye



Intake in % of the ARfD



Heptachlor			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	A
Toxicological end points			
ADI (mg/kg bw/day):	0.0001	ARfD (mg/kg bw):	0.0001
Source of ADI:	JMPR	Source of ARfD:	
Year of evaluation:	1994	Year of evaluation:	

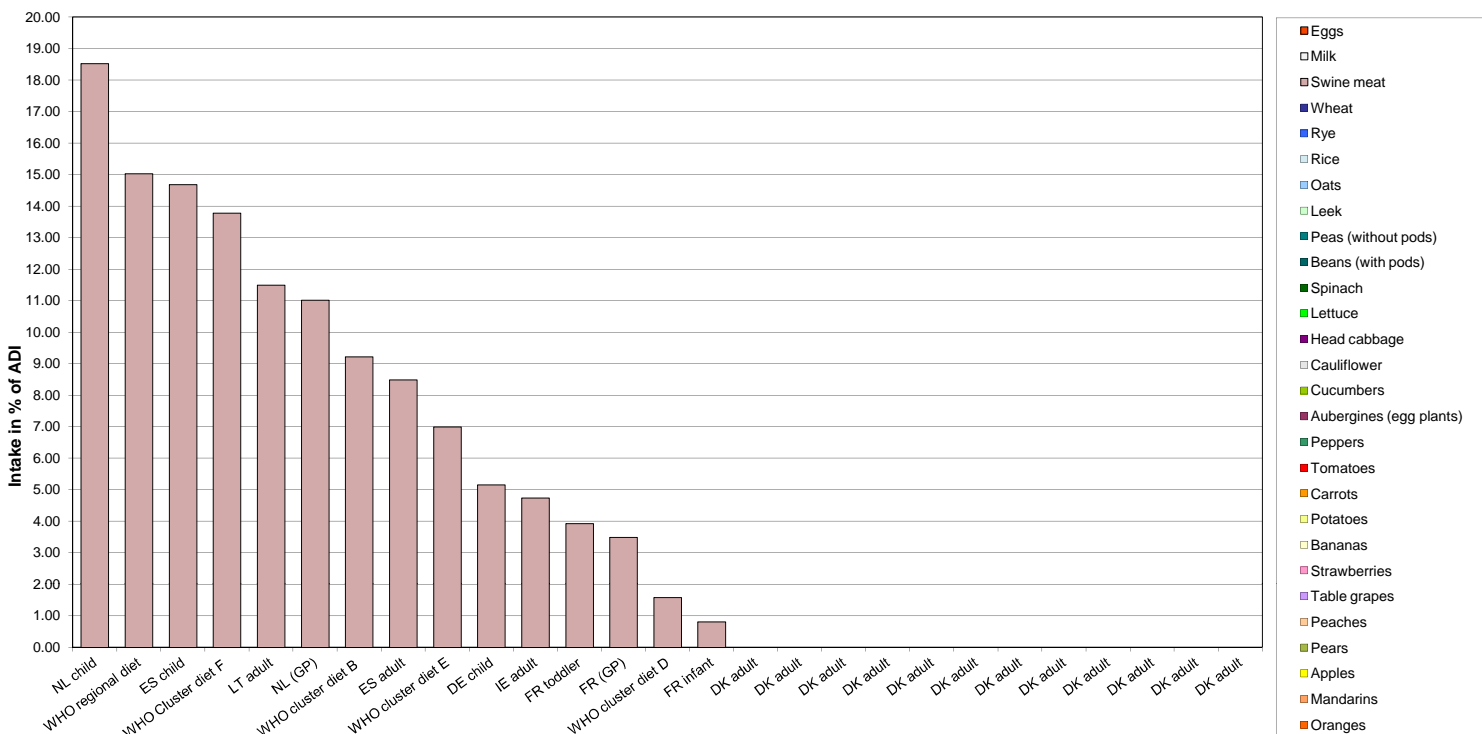
Active substance was not assessed regarding the setting of an ARfD. ADI is used as a surrogate.

Chronic risk assessment							
		Exposure (range) in % of ADI minimum - maximum					
		19					
No of diets exceeding ADI:		---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
18.52	NL child	18.52	Swine meat		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
15.03	WHO regional diet	15.03	Swine meat		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
14.69	ES child	14.69	Swine meat		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
13.78	WHO Cluster diet F	13.78	Swine meat		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
11.49	LT adult	11.49	Swine meat		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
11.02	NL (GP)	11.02	Swine meat		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
9.22	WHO cluster diet B	9.22	Swine meat		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
8.49	ES adult	8.49	Swine meat		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
7.00	WHO cluster diet E	7.00	Swine meat		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
5.16	DE child	5.16	Swine meat		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
4.74	IE adult	4.74	Swine meat		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
3.93	FR toddler	3.93	Swine meat		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
3.49	FR (GP)	3.49	Swine meat		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
1.59	WHO cluster diet D	1.59	Swine meat		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
0.81	FR infant	0.81	Swine meat		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	DK adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	DK adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	DK adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	DK adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	DK adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	DK adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	DK adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	DK adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	DK adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	DK adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	DK adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	DK adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	DK adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)

Acute risk assessment										
Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples									
2010	Peaches									
2010	Strawberries									
2010	Tomatoes									
2010	Head cabbage									
2010	Lettuce									
2010	Leek									
2010	Oats									
2010	Rye									
2010	Swine Meat	0.2	481	0.42		0.00		5.70	DE child	
2010	Milk	0.004	555							

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

### Chronic risk assessment: Heptachlor



**Heptachlor**

Acute exposure: Heptachlor / Apples



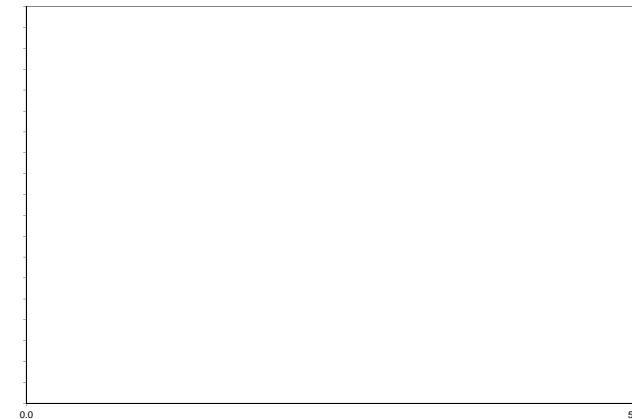
Intake in % of the ARfD

Acute exposure: Heptachlor / Peaches



Intake in % of the ARfD

Acute exposure: Heptachlor / Strawberries



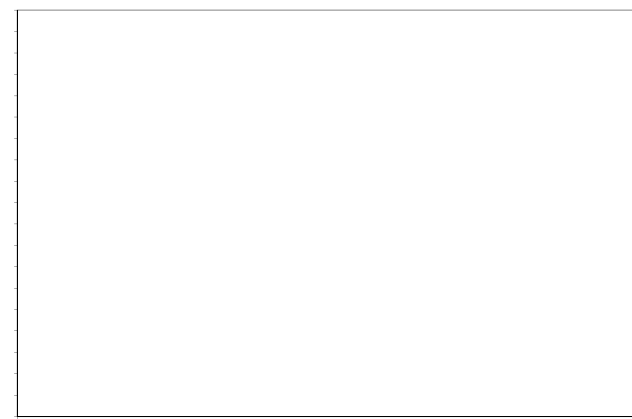
Intake in % of the ARfD

Acute exposure: Heptachlor / Tomatoes



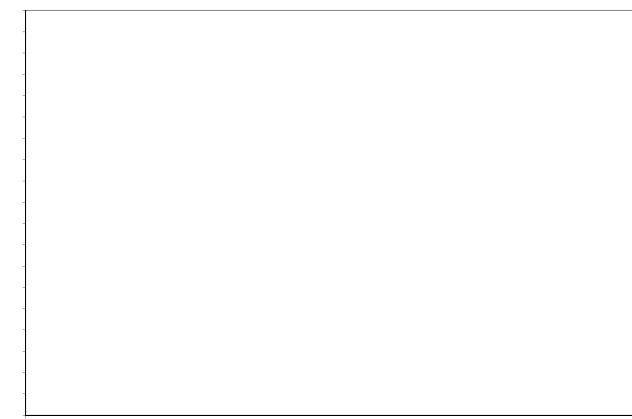
Intake in % of the ARfD

Acute exposure: Heptachlor / Head cabbage



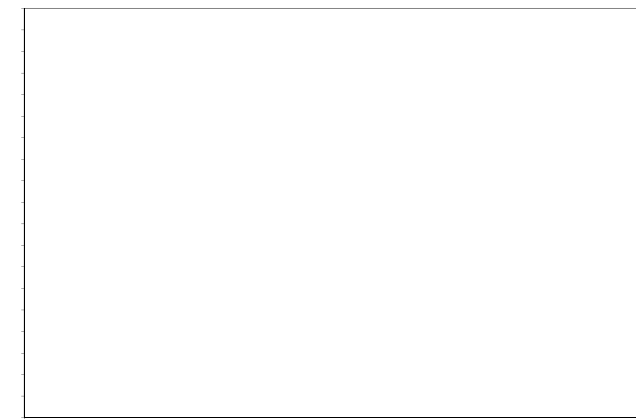
Intake in % of the ARfD

Acute exposure: Heptachlor / Lettuce



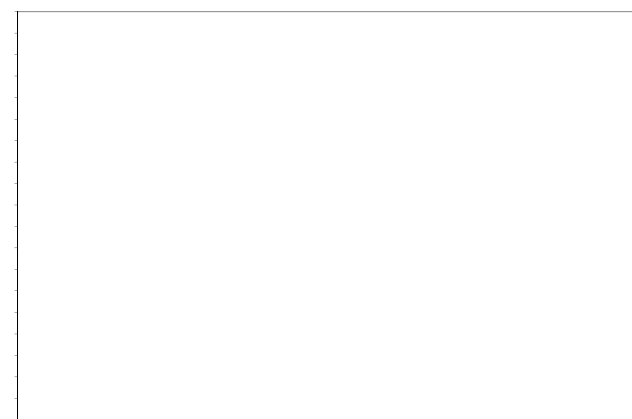
Intake in % of the ARfD

Acute exposure: Heptachlor / Leek



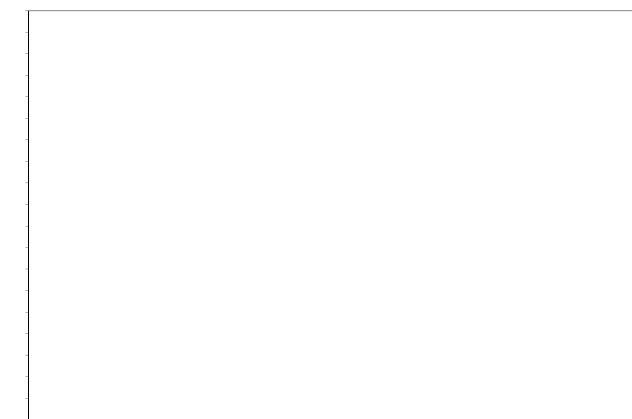
Intake in % of the ARfD

Acute exposure: Heptachlor / Oats



Intake in % of the ARfD

Acute exposure: Heptachlor / Rye



Intake in % of the ARfD

Hexachlorobenzene			
Status of the active substance:	<b>Excluded</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>A</b>
Toxicological end points			
ADI (mg/kg bw/day):		ARfD (mg/kg bw):	
Source of ADI:	<b>JMPR</b>	Source of ARfD:	
Year of evaluation:	<b>1978</b>	Year of evaluation:	

ADI withdrawn in 1978. Active substance was not assessed regarding the setting of an ARfD.

**Chronic risk assessment**

Exposure (range) in % of ADI minimum - maximum		#DIV/0!		#DIV/0!		#DIV/0!									
No of diets exceeding ADI:				---											
Highest calculated exposure in % of ADI		MS Diet		Highest contributor to MS diet (in % of ADI)		Commodity / group of commodities		2nd contributor to MS diet (in % of ADI)		Commodity / group of commodities		3rd contributor to MS diet (in % of ADI)		Commodity / group of commodities	
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**Acute risk assessment**

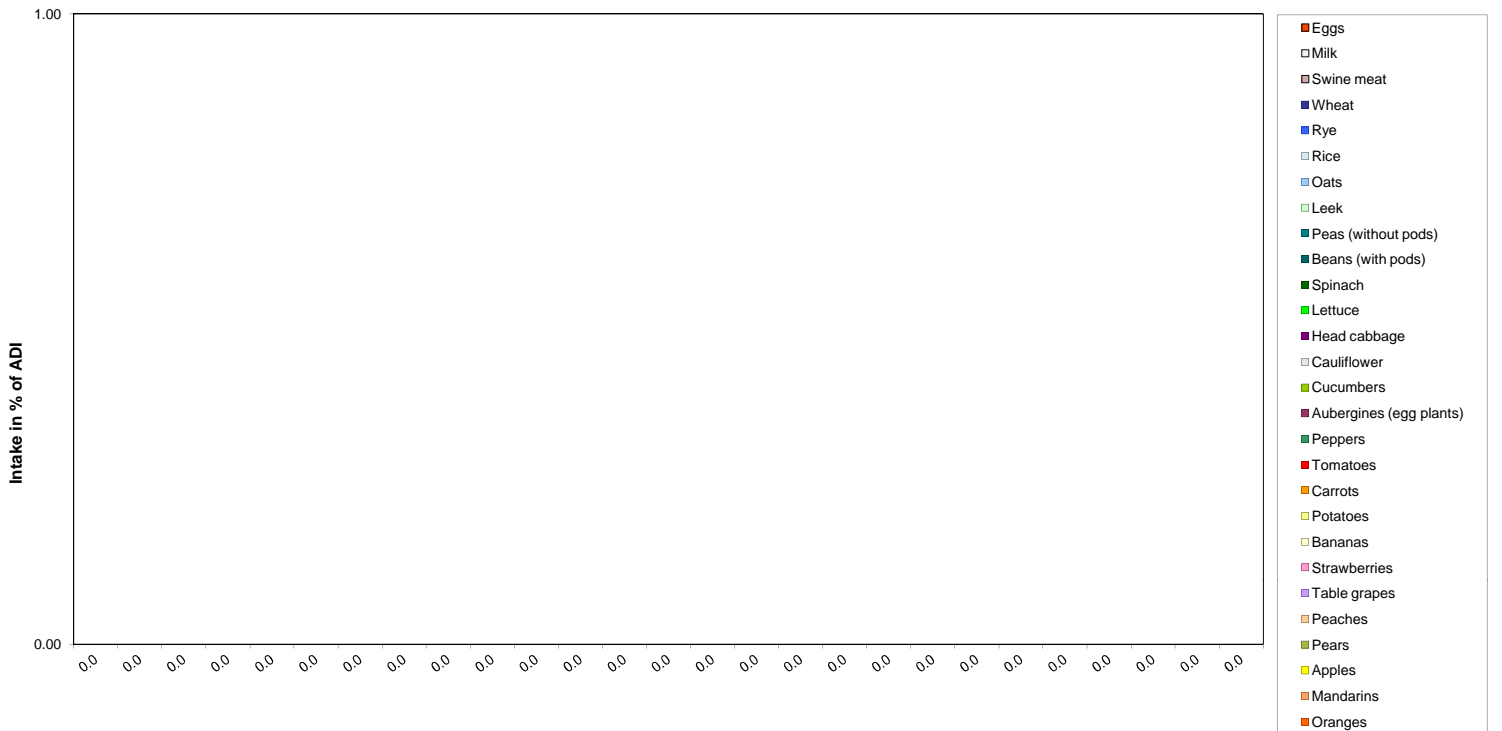
Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples									
2010	Peaches									
2010	Strawberries									
2010	Tomatoes									
2010	Head cabbage									
2010	Lettuce									
2010	Leek									
2010	Oats									
2010	Rye									
2010	Swine Meat	0.2	471	0.85		0.00				
2010	Milk	0.01	844	10.31		0.01				

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

c) TRL: toxicological threshold level

**Chronic risk assessment: Hexachlorobenzene**



**Hexachlorobenzene**

Acute exposure: Hexachlorobenzene / Apples



Intake in % of the ARfD

Acute exposure: Hexachlorobenzene / Peaches



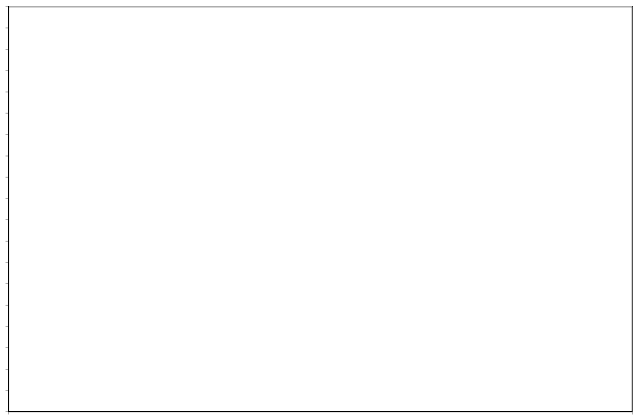
Intake in % of the ARfD

Acute exposure: Hexachlorobenzene / Strawberries



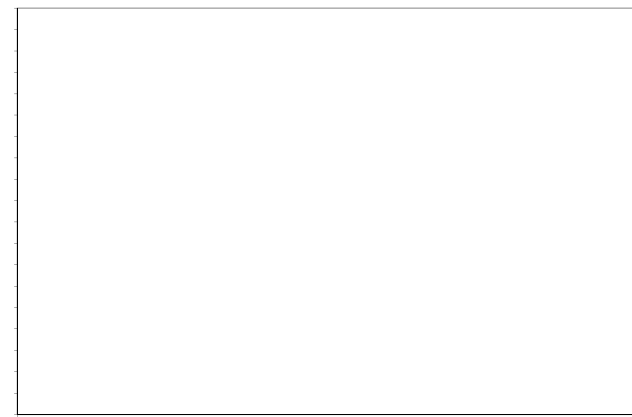
Intake in % of the ARfD

Acute exposure: Hexachlorobenzene / Tomatoes



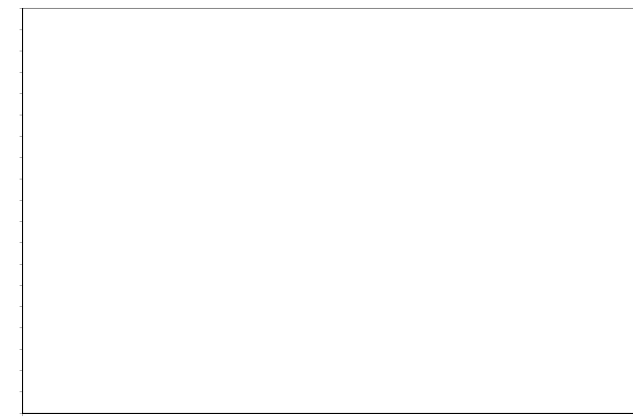
Intake in % of the ARfD

Acute exposure: Hexachlorobenzene / Head cabbage



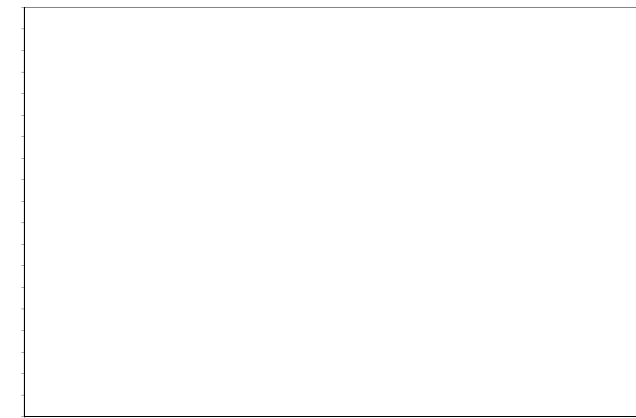
Intake in % of the ARfD

Acute exposure: Hexachlorobenzene / Lettuce



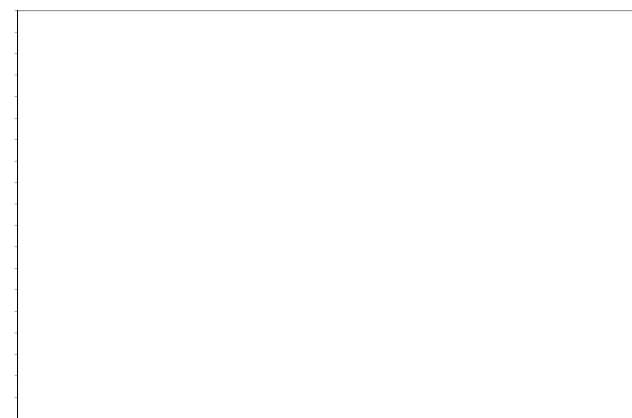
Intake in % of the ARfD

Acute exposure: Hexachlorobenzene / Leek



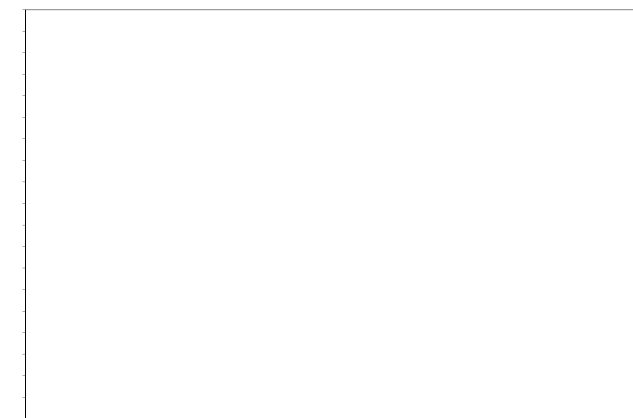
Intake in % of the ARfD

Acute exposure: Hexachlorobenzene / Oats



Intake in % of the ARfD

Acute exposure: Hexachlorobenzene / Rye



Intake in % of the ARfD

Hexaconazole			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.005	ARfD (mg/kg bw):	0.005
Source of ADI:	JMPR	Source of ARfD:	
Year of evaluation:	1990	Year of evaluation:	

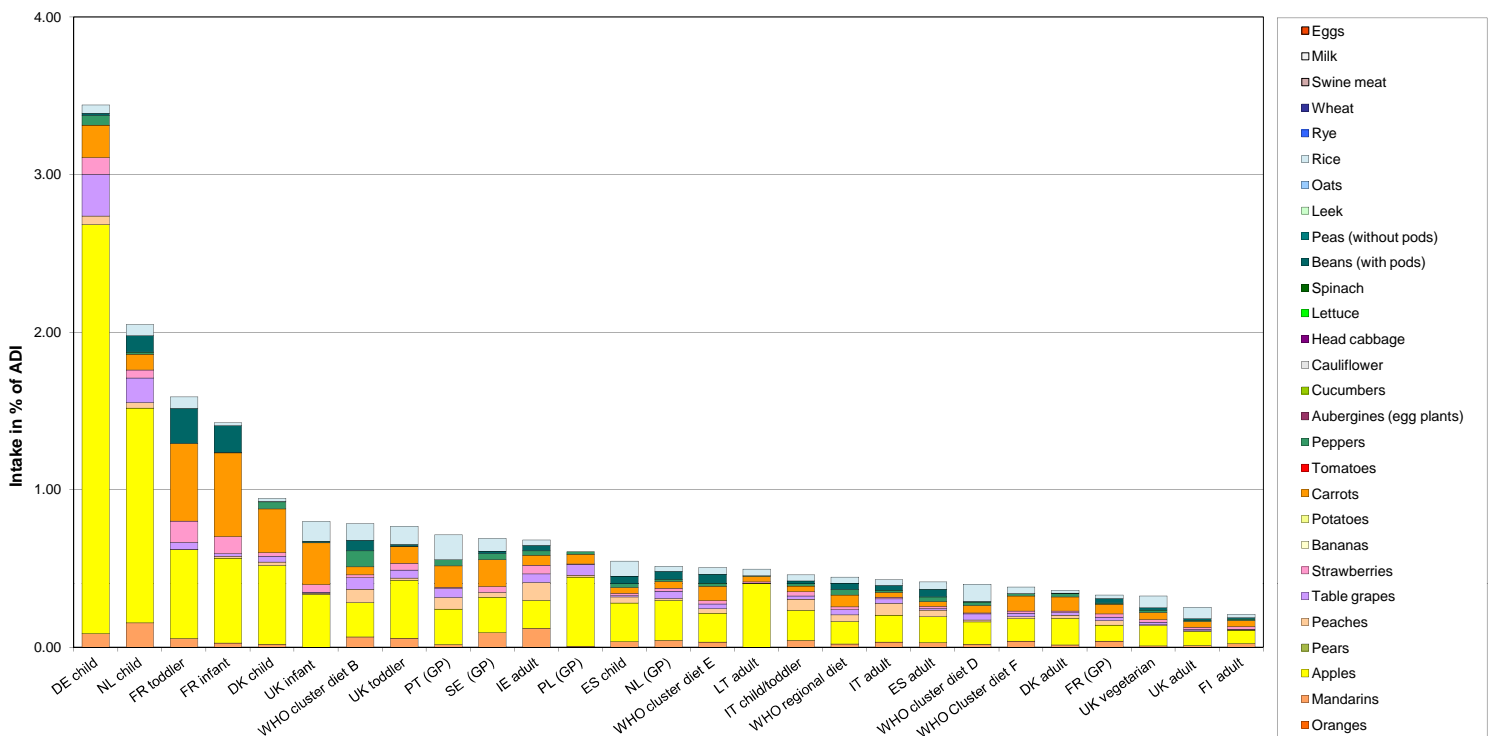
Active substance was not assessed regarding the setting of an ARfD. ADI is used as a surrogate.

Chronic risk assessment							
		Exposure (range) in % of ADI minimum - maximum					
		3					
No of diets exceeding ADI:		---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
3.44	DE child	2.60	Apples	0.26	Table grapes	0.21	Carrots
2.05	NL child	1.36	Apples	0.16	Table grapes	0.16	Mandarins
1.59	FR toddler	0.56	Apples	0.49	Carrots	0.22	Beans (with pods)
1.43	FR infant	0.54	Apples	0.53	Carrots	0.17	Beans (with pods)
0.95	DK child	0.50	Apples	0.28	Carrots	0.05	Peppers
0.80	UK infant	0.34	Apples	0.27	Carrots	0.13	Rice
0.79	WHO cluster diet B	0.22	Apples	0.11	Rice	0.10	Peppers
0.77	UK toddler	0.37	Apples	0.12	Rice	0.10	Carrots
0.71	PT (GP)	0.23	Apples	0.16	Rice	0.13	Carrots
0.69	SE (GP)	0.23	Apples	0.17	Carrots	0.09	Mandarins
0.68	IE adult	0.18	Apples	0.12	Mandarins	0.12	Peaches
0.61	PL (GP)	0.44	Apples	0.07	Table grapes	0.06	Carrots
0.55	ES child	0.25	Apples	0.10	Rice	0.05	Beans (with pods)
0.51	NL (GP)	0.25	Apples	0.05	Beans (with pods)	0.05	Table grapes
0.51	WHO cluster diet E	0.18	Apples	0.09	Carrots	0.06	Beans (with pods)
0.50	LT adult	0.40	Apples	0.04	Rice	0.03	Carrots
0.46	IT child/toddler	0.19	Apples	0.07	Peaches	0.04	Mandarins
0.45	WHO regional diet	0.14	Apples	0.07	Carrots	0.04	Peaches
0.43	IT adult	0.17	Apples	0.08	Peaches	0.04	Rice
0.42	ES adult	0.17	Apples	0.05	Rice	0.05	Beans (with pods)
0.40	WHO cluster diet D	0.14	Apples	0.11	Rice	0.05	Carrots
0.38	WHO Cluster diet F	0.14	Apples	0.10	Carrots	0.04	Rice
0.36	DK adult	0.17	Apples	0.09	Carrots	0.02	Peppers
0.33	FR (GP)	0.10	Apples	0.06	Carrots	0.04	Mandarins
0.33	UK vegetarian	0.13	Apples	0.08	Rice	0.05	Carrots
0.25	UK adult	0.09	Apples	0.07	Rice	0.04	Carrots
0.21	FI adult	0.09	Apples	0.04	Carrots	0.02	Mandarins

Acute risk assessment										
Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.1	2635	0.08		0.05		97.97	UK infant	
2010	Peaches	0.02	1363		0.07	0.02		28.48	DE child	
2010	Strawberries	0.2	2058	0.10		0.05		16.53	DE child	
2010	Tomatoes	0.1	2076							
2010	Head cabbage	0.02	1076							
2010	Lettuce	0.02	2123							
2010	Leek	0.02	888							
2010	Oats	0.02	253							
2010	Rye	0.02	386							
2010	Swine Meat									
2010	Milk									

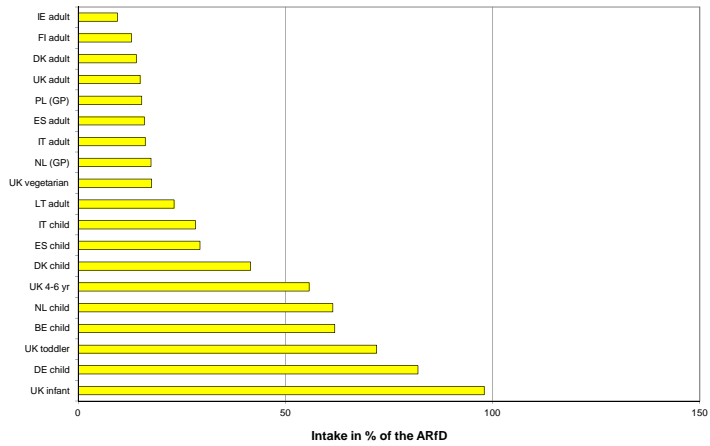
a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

Chronic risk assessment: Hexaconazole

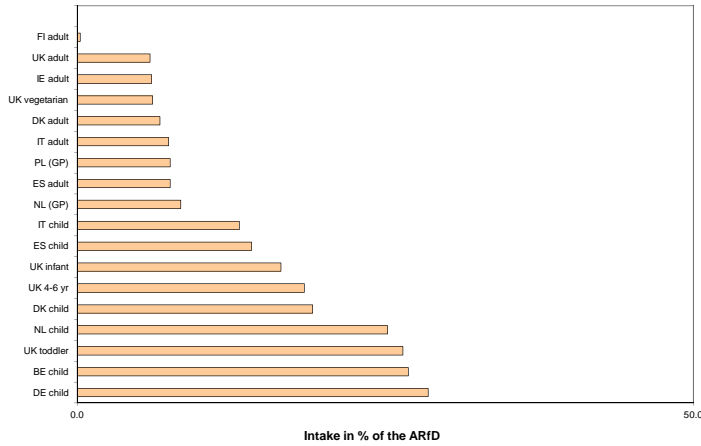


**Hexaconazole**

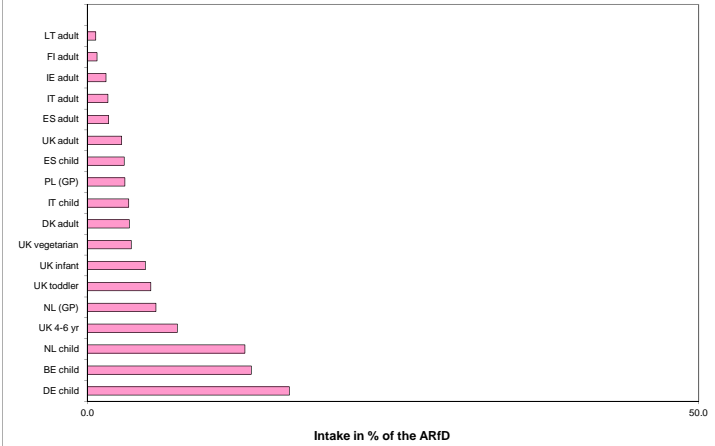
Acute exposure: Hexaconazole / Apples



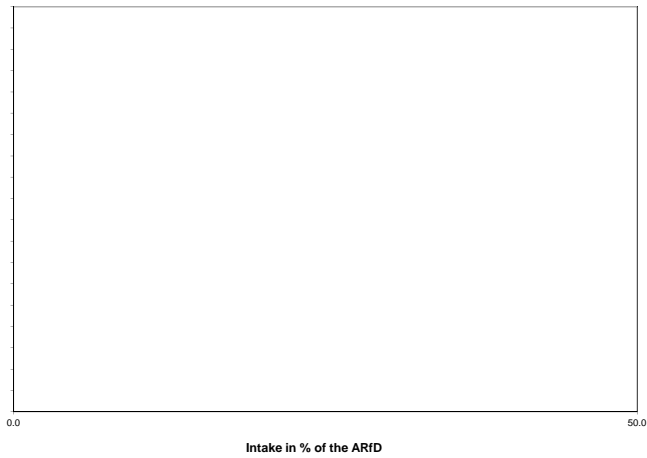
Acute exposure: Hexaconazole / Peaches



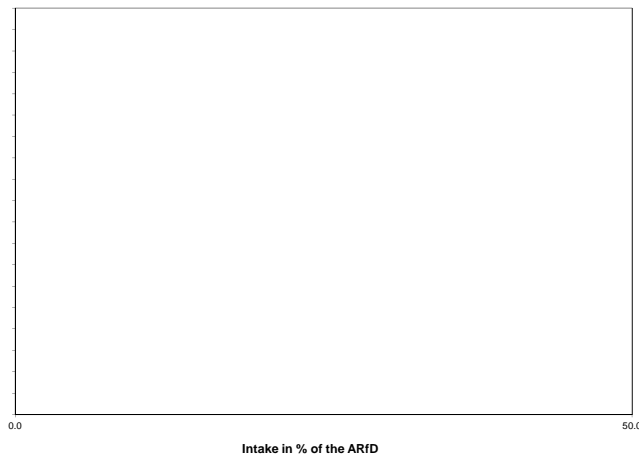
Acute exposure: Hexaconazole / Strawberries



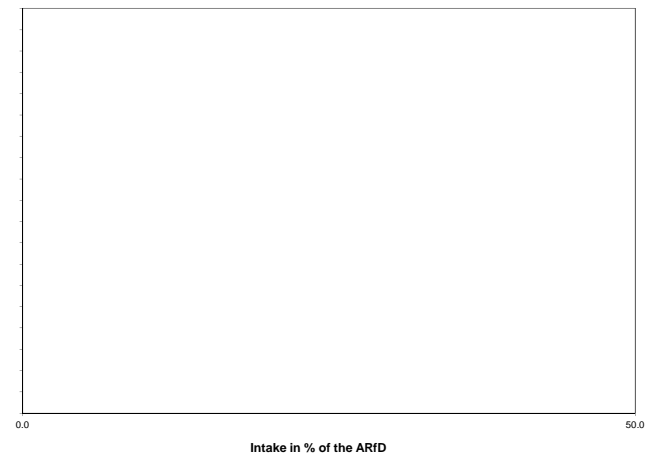
Acute exposure: Hexaconazole / Tomatoes



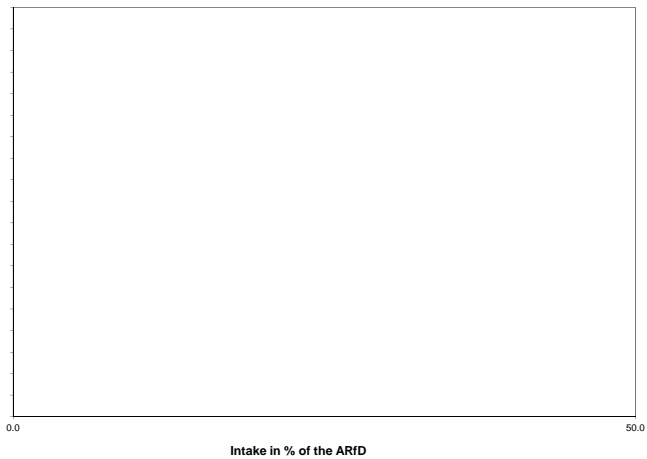
Acute exposure: Hexaconazole / Head cabbage



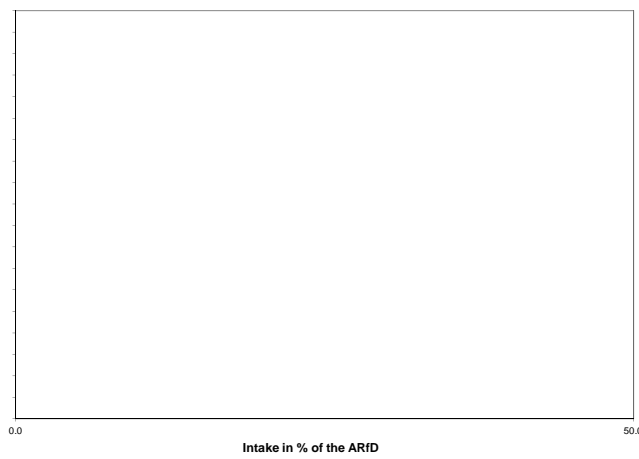
Acute exposure: Hexaconazole / Lettuce



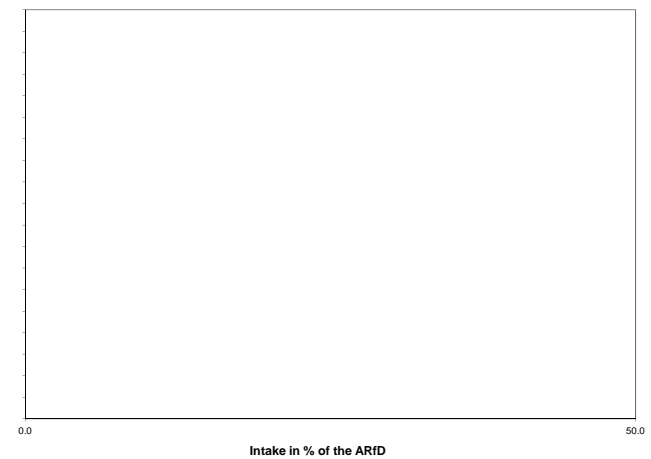
Acute exposure: Hexaconazole / Leek



Acute exposure: Hexaconazole / Oats



Acute exposure: Hexaconazole / Rye



Hexythiazox			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.03	ARfD (mg/kg bw):	n.n.
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2011	Year of evaluation:	2011

### Chronic risk assessment

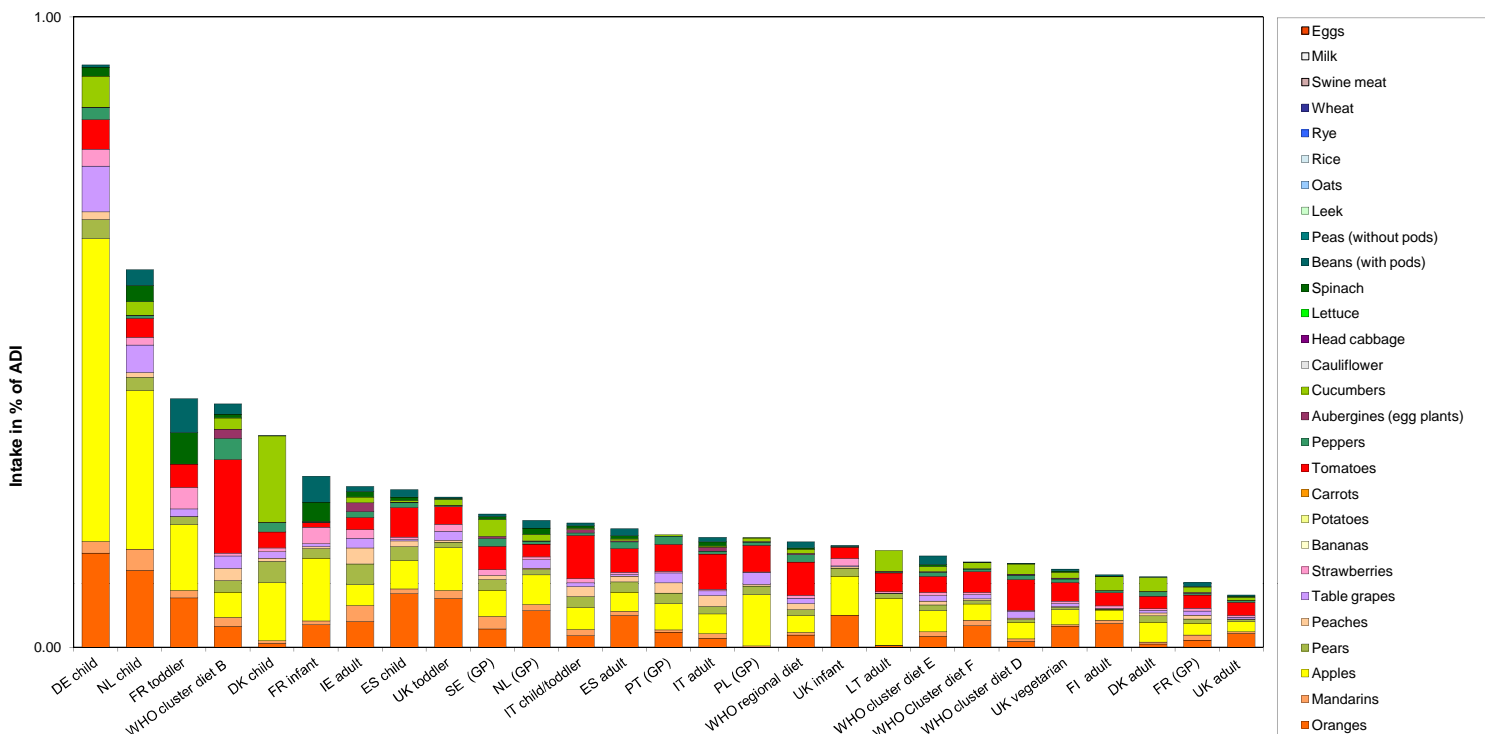
		Exposure (range) in % of ADI minimum - maximum					
		1					
		No of diets exceeding ADI: ---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.92	DE child	0.48	Apples	0.15	Oranges	0.07	Table grapes
0.60	NL child	0.25	Apples	0.12	Oranges	0.04	Table grapes
0.39	FR toddler	0.10	Apples	0.08	Oranges	0.05	Beans (with pods)
0.39	WHO cluster diet B	0.15	Tomatoes	0.04	Apples	0.03	Oranges
0.34	DK child	0.14	Cucumbers	0.09	Apples	0.03	Pears
0.27	FR infant	0.10	Apples	0.04	Beans (with pods)	0.04	Oranges
0.26	IE adult	0.04	Oranges	0.03	Pears	0.03	Apples
0.25	ES child	0.09	Oranges	0.05	Tomatoes	0.05	Apples
0.24	UK toddler	0.08	Oranges	0.07	Apples	0.03	Tomatoes
0.21	SE (GP)	0.04	Apples	0.04	Tomatoes	0.03	Oranges
0.20	NL (GP)	0.06	Oranges	0.05	Apples	0.02	Tomatoes
0.20	IT child/toddler	0.07	Tomatoes	0.04	Apples	0.02	Oranges
0.19	ES adult	0.05	Oranges	0.04	Tomatoes	0.03	Apples
0.18	PT (GP)	0.04	Tomatoes	0.04	Apples	0.02	Oranges
0.17	IT adult	0.06	Tomatoes	0.03	Apples	0.02	Peaches
0.17	PL (GP)	0.08	Apples	0.04	Tomatoes	0.02	Table grapes
0.17	WHO regional diet	0.05	Tomatoes	0.03	Apples	0.02	Oranges
0.16	UK infant	0.06	Apples	0.05	Oranges	0.02	Tomatoes
0.15	LT adult	0.07	Apples	0.03	Cucumbers	0.03	Tomatoes
0.15	WHO cluster diet E	0.03	Apples	0.03	Tomatoes	0.02	Oranges
0.14	WHO Cluster diet F	0.03	Oranges	0.03	Tomatoes	0.03	Apples
0.13	WHO cluster diet D	0.05	Tomatoes	0.03	Apples	0.02	Cucumbers
0.12	UK vegetarian	0.03	Oranges	0.03	Tomatoes	0.02	Apples
0.12	FI adult	0.04	Oranges	0.02	Cucumbers	0.02	Tomatoes
0.11	DK adult	0.03	Apples	0.02	Cucumbers	0.02	Tomatoes
0.10	FR (GP)	0.02	Tomatoes	0.02	Apples	0.01	Oranges
0.08	UK adult	0.02	Oranges	0.02	Tomatoes	0.02	Apples

### Acute risk assessment

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	1	2555	0.31		0.06				
2010	Peaches	1	1289	0.23		0.06				
2010	Strawberries	0.5	2044	1.47		0.22				
2010	Tomatoes	0.5	1985	0.45		0.21				
2010	Head cabbage	2	1028							
2010	Lettuce	0.5	2057							
2010	Leek	0.5	825							
2010	Oats	0.5	164							
2010	Rye	0.5	377							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

### Chronic risk assessment: Hexythiazox



**Hexythiazox**

Acute exposure: Hexythiazox / Apples



Intake in % of the ARfD

Acute exposure: Hexythiazox / Peaches



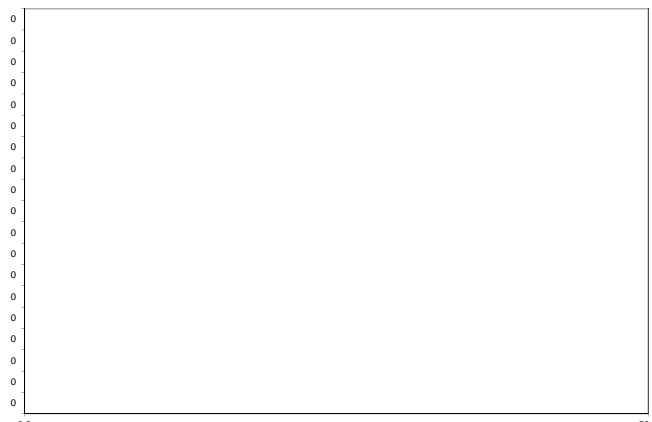
Intake in % of the ARfD

Acute exposure: Hexythiazox / Strawberries



Intake in % of the ARfD

Acute exposure: Hexythiazox / Tomatoes



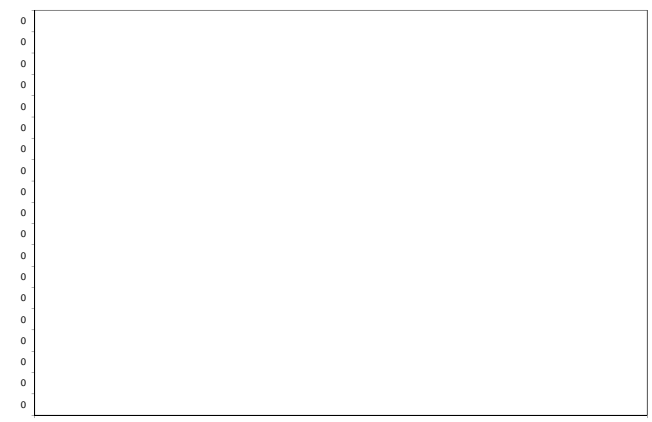
Intake in % of the ARfD

Acute exposure: Hexythiazox / Head cabbage



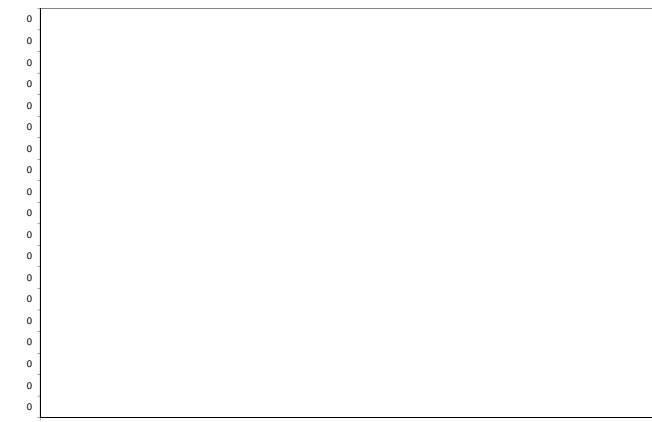
Intake in % of the ARfD

Acute exposure: Hexythiazox / Lettuce



Intake in % of the ARfD

Acute exposure: Hexythiazox / Leek



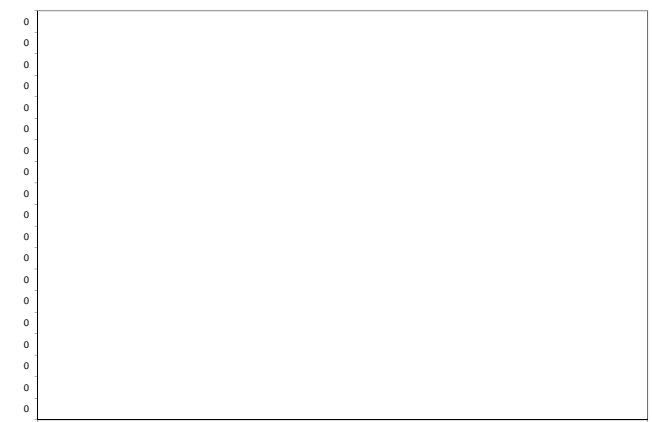
Intake in % of the ARfD

Acute exposure: Hexythiazox / Oats



Intake in % of the ARfD

Acute exposure: Hexythiazox / Rye



Intake in % of the ARfD



## Imazalil

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.025	ARfD (mg/kg bw):	0.05
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2011	Year of evaluation:	2011

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
1 --- 18

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)		2nd contributor to MS diet (in % of ADI)		3rd contributor to MS diet (in % of ADI)	
		Commodity / group of commodities	Commodity / group of commodities	Commodity / group of commodities	Commodity / group of commodities		
17.99	DE child	14.19	Oranges	1.61	Mandarins	0.93	Apples
16.42	NL child	11.62	Oranges	2.93	Mandarins	0.72	Bananas
9.91	FR toddler	7.45	Oranges	1.04	Mandarins	0.55	Bananas
9.60	ES child	8.08	Oranges	0.66	Mandarins	0.43	Bananas
9.44	UK toddler	7.38	Oranges	1.11	Mandarins	0.46	Bananas
6.99	IE adult	3.89	Oranges	2.26	Mandarins	0.33	Bananas
6.91	NL (GP)	5.54	Oranges	0.84	Mandarins	0.17	Potatoes
5.96	UK infant	4.84	Oranges	0.62	Bananas	0.20	Potatoes
5.90	SE (GP)	2.78	Oranges	1.74	Mandarins	0.77	Bananas
5.84	ES adult	4.81	Oranges	0.56	Mandarins	0.15	Bananas
5.25	WHO cluster diet B	3.18	Oranges	1.26	Mandarins	0.19	Tomatoes
4.99	FR infant	3.39	Oranges	0.54	Mandarins	0.30	Bananas
4.67	WHO Cluster diet F	3.24	Oranges	0.77	Mandarins	0.24	Bananas
4.35	FI adult	3.61	Oranges	0.44	Mandarins	0.11	Bananas
3.81	UK vegetarian	3.23	Oranges	0.18	Mandarins	0.16	Bananas
3.38	PT (GP)	2.28	Oranges	0.33	Potatoes	0.33	Mandarins
3.21	IT child/toddler	1.79	Oranges	0.83	Mandarins	0.23	Bananas
2.93	WHO regional diet	1.85	Oranges	0.40	Mandarins	0.25	Potatoes
2.92	WHO cluster diet E	1.66	Oranges	0.65	Mandarins	0.24	Potatoes
2.66	UK adult	2.09	Oranges	0.22	Mandarins	0.15	Bananas
2.42	IT adult	1.39	Oranges	0.64	Mandarins	0.09	Bananas
2.22	DK child	0.63	Oranges	0.48	Bananas	0.36	Mandarins
2.15	FR (GP)	1.07	Oranges	0.75	Mandarins	0.11	Bananas
1.75	WHO cluster diet D	0.89	Oranges	0.36	Mandarins	0.25	Potatoes
1.25	DK adult	0.50	Oranges	0.30	Mandarins	0.16	Bananas
0.84	PL (GP)	0.21	Potatoes	0.16	Apples	0.14	Mandarins
0.83	LT adult	0.27	Oranges	0.20	Potatoes	0.14	Apples

## Acute risk assessment

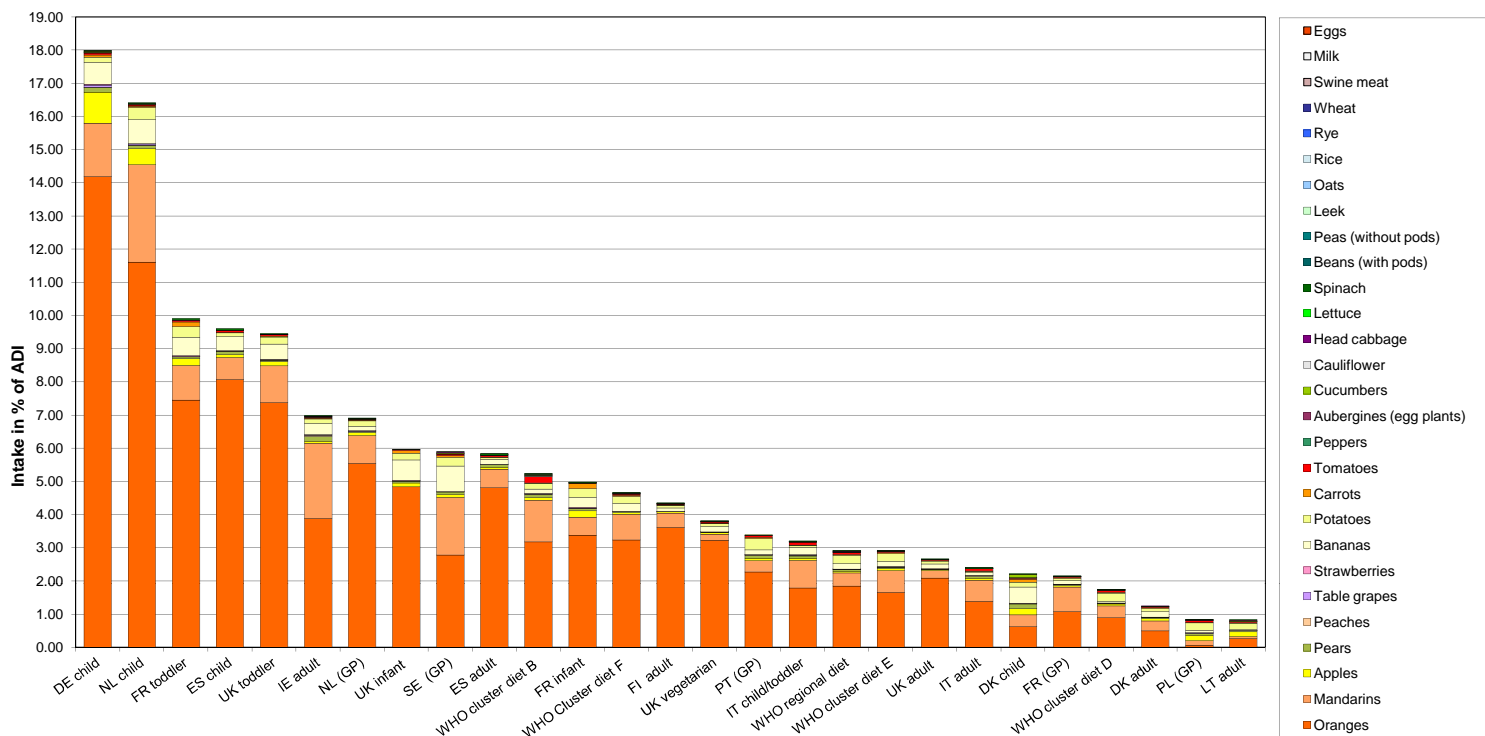
Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	2	3009	1.36		1.13	6	221.40	UK infant	
2010	Peaches	0.02	1440	0.49	0.07	0.07		7.83	DE child	
2010	Strawberries	0.02	2254	0.31		0.02		0.72	DE child	
2010	Tomatoes	0.5	2469	0.36		1.40	1	162.81	BE child	
2010	Head cabbage	0.02	1235	0.16		0.01		1.48	NL child	
2010	Lettuce	0.02	2268	0.22		0.02		1.08	DE child	
2010	Leek	0.02	953							
2010	Oats	0.05	259							
2010	Rye	0.05	452							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

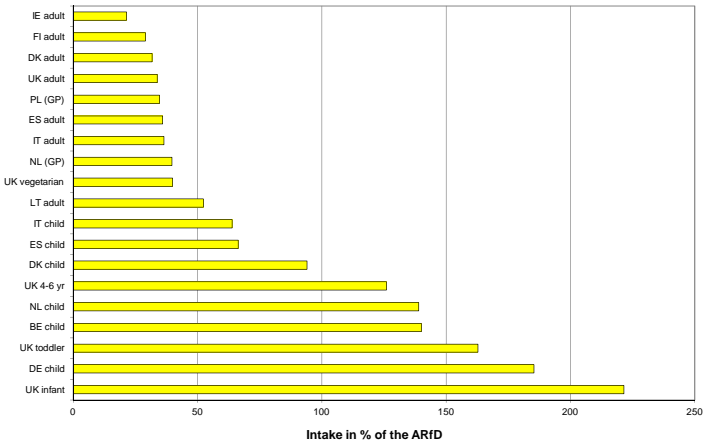
c) TRL: toxicological threshold level

## Chronic risk assessment: Imazalil

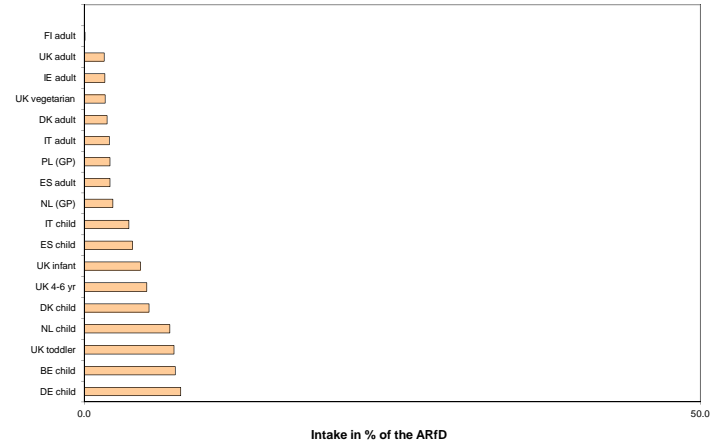


**Imazalil**

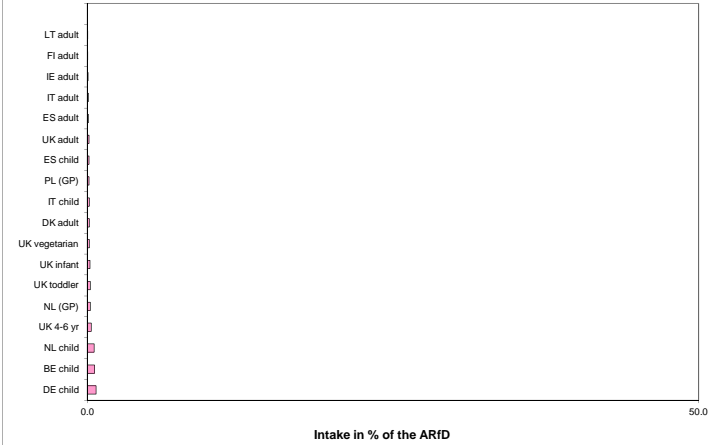
**Acute exposure: Imazalil / Apples**



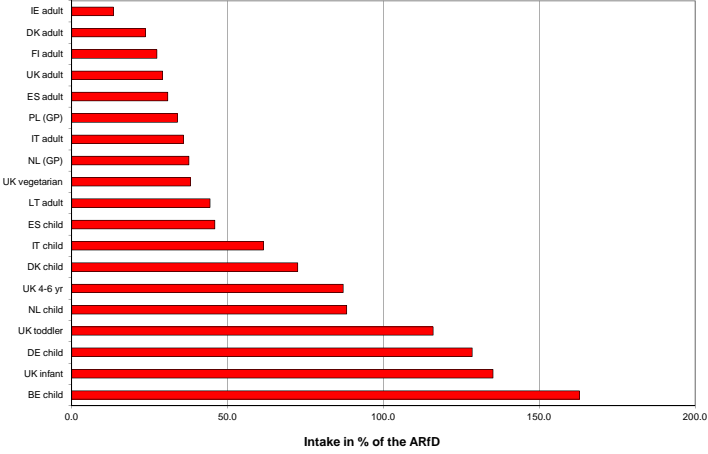
**Acute exposure: Imazalil / Peaches**



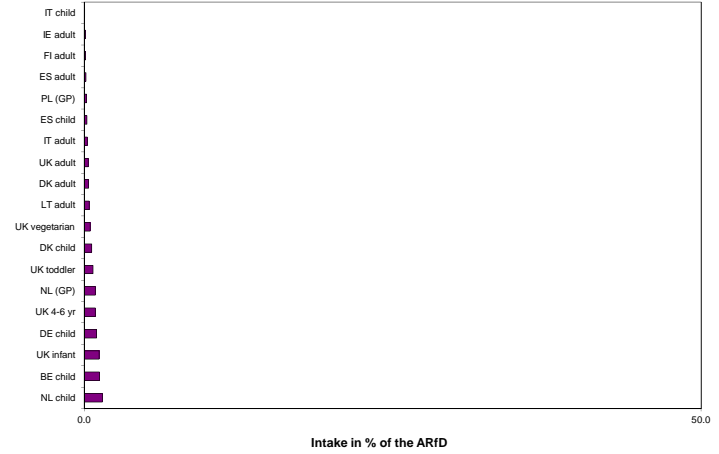
**Acute exposure: Imazalil / Strawberries**



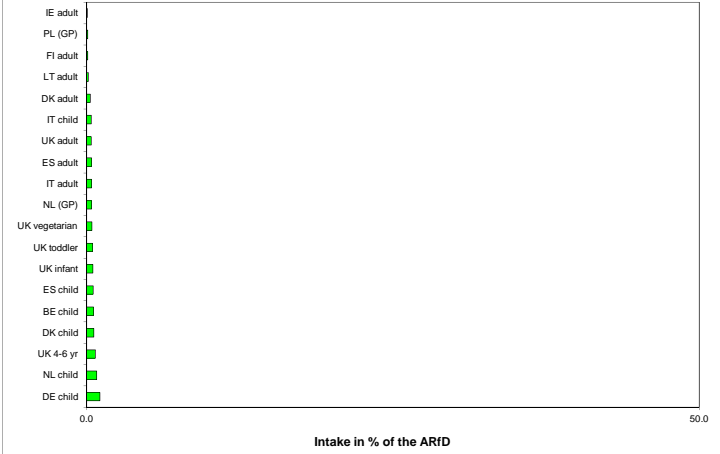
**Acute exposure: Imazalil / Tomatoes**



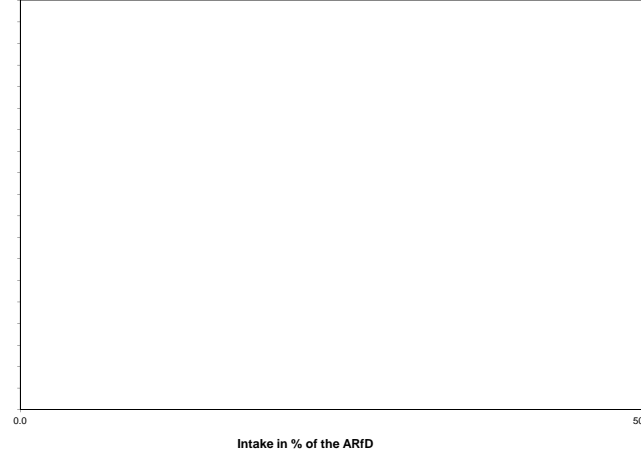
**Acute exposure: Imazalil / Head cabbage**



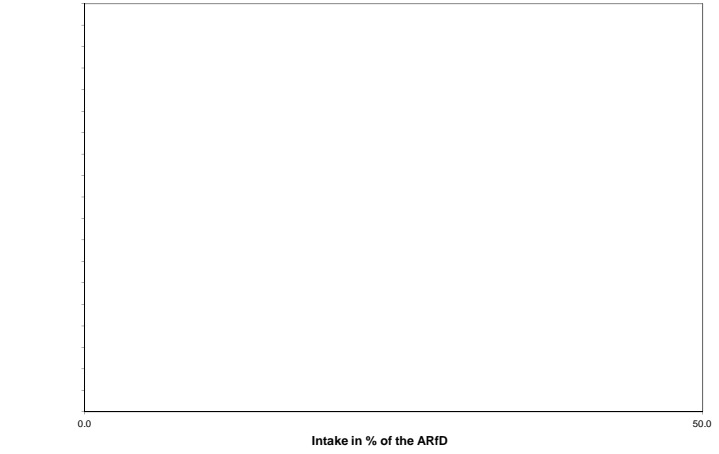
**Acute exposure: Imazalil / Lettuce**



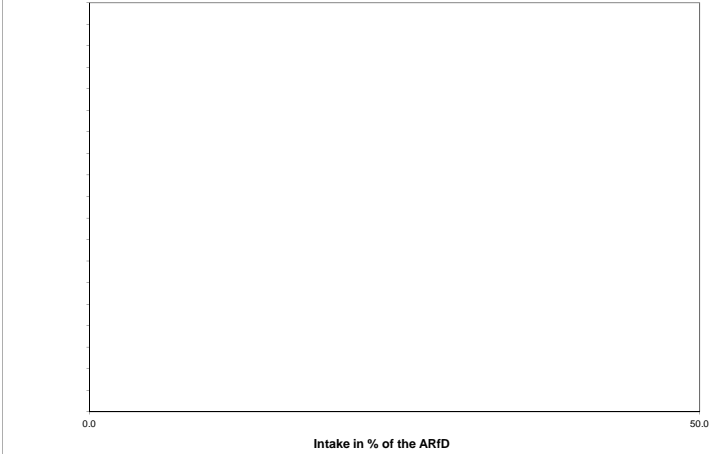
**Acute exposure: Imazalil / Leek**



**Acute exposure: Imazalil / Oats**



**Acute exposure: Imazalil / Rye**



## Imidacloprid

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.06</b>	ARfD (mg/kg bw):	<b>0.08</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2008</b>	Year of evaluation:	<b>2008</b>

### Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
1

**No of diets exceeding ADI:** ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.58	NL child	0.12	Apples	0.12	Potatoes	0.10	Wheat
0.45	WHO cluster diet B	0.18	Wheat	0.07	Tomatoes	0.06	Potatoes
0.42	FR toddler	0.11	Potatoes	0.06	Wheat	0.05	Apples
0.36	DK child	0.12	Wheat	0.05	Potatoes	0.05	Apples
0.32	UK toddler	0.08	Wheat	0.07	Potatoes	0.04	Oranges
0.32	PT (GP)	0.11	Potatoes	0.08	Wheat	0.02	Apples
0.31	SE (GP)	0.09	Potatoes	0.07	Wheat	0.03	Bananas
0.31	WHO cluster diet D	0.14	Wheat	0.08	Potatoes	0.02	Tomatoes
0.30	ES child	0.09	Wheat	0.05	Oranges	0.04	Potatoes
0.29	FR infant	0.09	Potatoes	0.05	Carrots	0.05	Apples
0.28	IT child/toddler	0.14	Wheat	0.03	Tomatoes	0.02	Potatoes
0.27	UK infant	0.07	Potatoes	0.06	Wheat	0.03	Apples
0.26	WHO regional diet	0.08	Potatoes	0.06	Wheat	0.02	Tomatoes
0.26	WHO cluster diet E	0.08	Wheat	0.08	Potatoes	0.02	Apples
0.25	IE adult	0.05	Wheat	0.05	Potatoes	0.02	Oranges
0.25	WHO Cluster diet F	0.08	Wheat	0.07	Potatoes	0.02	Oranges
0.22	NL (GP)	0.06	Potatoes	0.04	Wheat	0.03	Oranges
0.20	IT adult	0.09	Wheat	0.03	Tomatoes	0.02	Apples
0.19	ES adult	0.05	Wheat	0.03	Oranges	0.02	Potatoes
0.18	PL (GP)	0.07	Potatoes	0.04	Apples	0.02	Tomatoes
0.17	LT adult	0.07	Potatoes	0.04	Apples	0.02	Wheat
0.16	FR (GP)	0.07	Wheat	0.02	Potatoes	0.01	Tomatoes
0.16	UK vegetarian	0.04	Wheat	0.03	Potatoes	0.02	Oranges
0.14	DK adult	0.04	Wheat	0.03	Potatoes	0.02	Apples
0.13	UK adult	0.04	Wheat	0.03	Potatoes	0.01	Oranges
0.11	FI adult	0.03	Potatoes	0.02	Wheat	0.02	Oranges

### Acute risk assessment

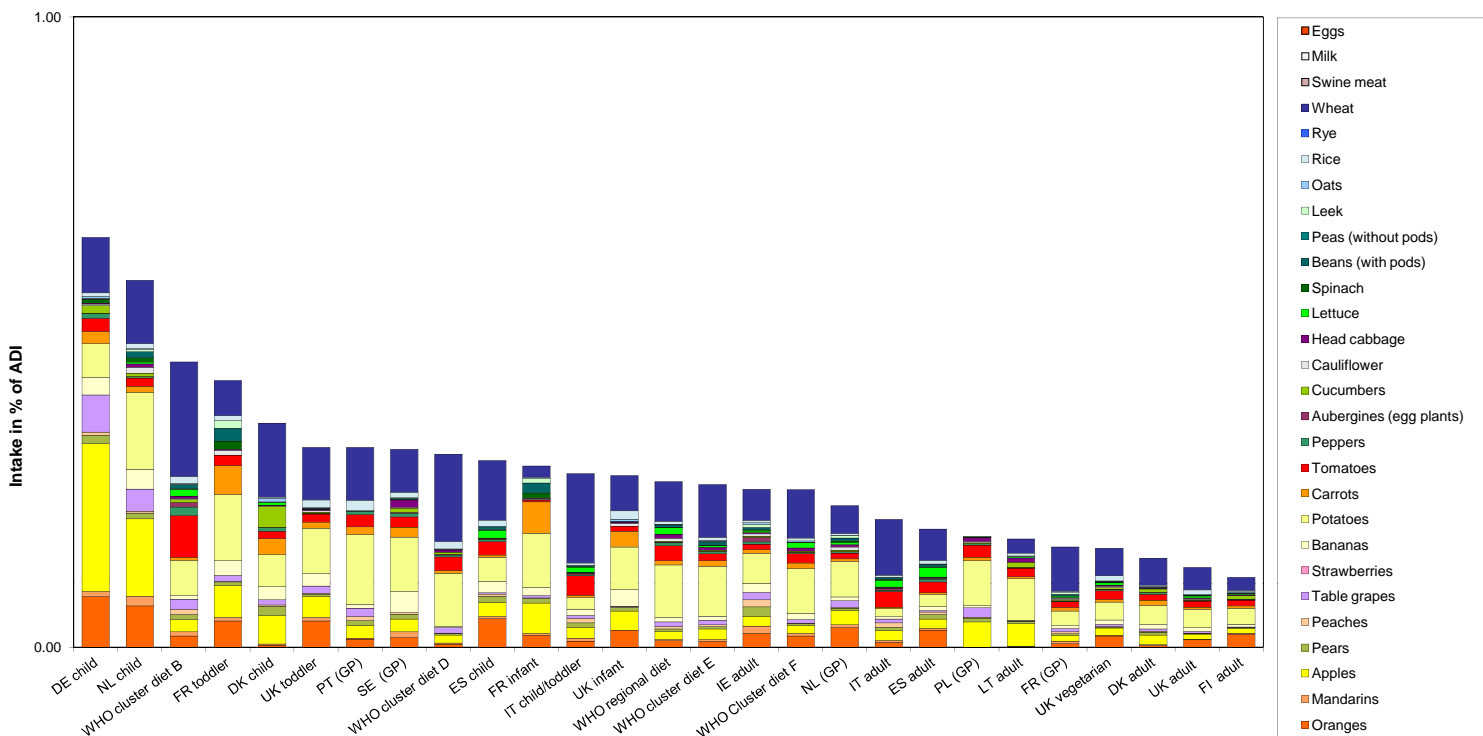
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.5	2738	0.55		0.07		8.57	UK infant	
2010	Peaches	0.5	1299	7.39		0.17		12.61	DE child	
2010	Strawberries	0.1	2046	0.24		0.12		2.34	DE child	
2010	Tomatoes	0.5	2073	2.94	0.05	0.55		39.98	BE child	
2010	Head cabbage	0.5	1104	1.54		0.12		7.89	NL child	
2010	Lettuce	2	2046	12.51		0.90		30.27	DE child	
2010	Leek	0.05	850	0.12		0.00		0.07	BE child	
2010	Oats	0.1	156	0.64		0.03		0.14	DE child	
2010	Rye	0.1	349							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

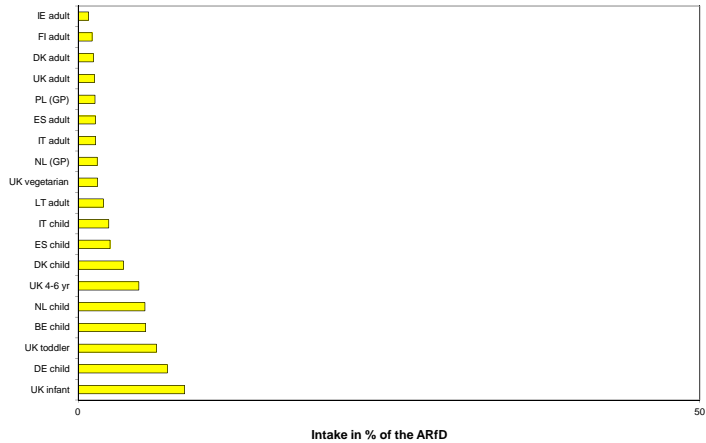
<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Imidacloprid

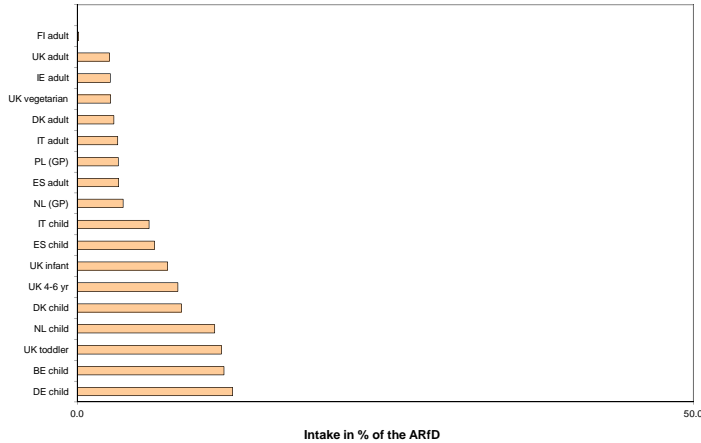


**Imidacloprid**

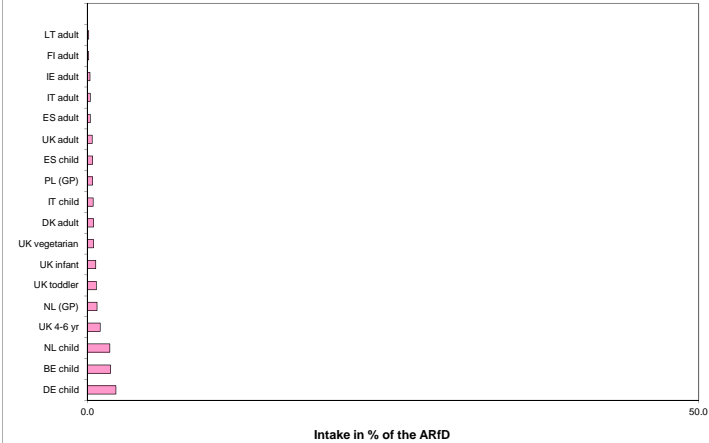
Acute exposure: Imidacloprid / Apples



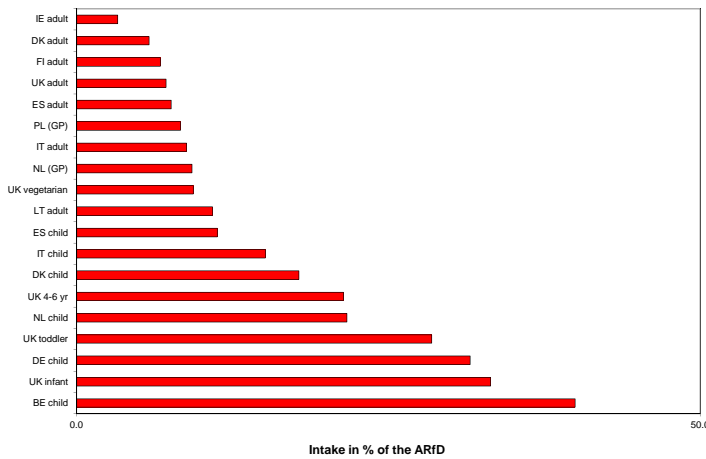
Acute exposure: Imidacloprid / Peaches



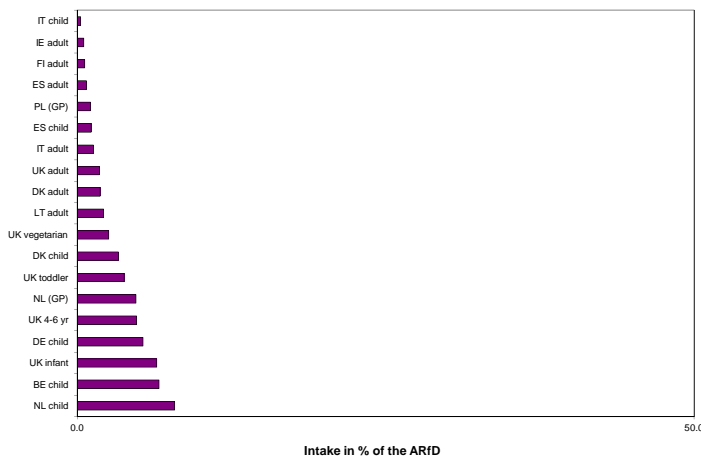
Acute exposure: Imidacloprid / Strawberries



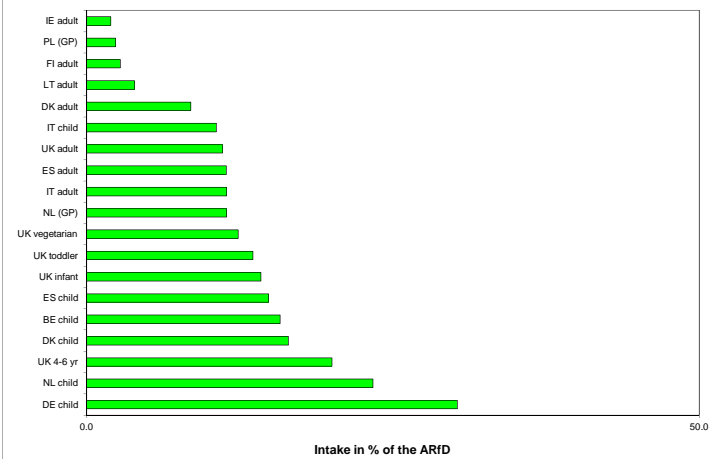
Acute exposure: Imidacloprid / Tomatoes



Acute exposure: Imidacloprid / Head cabbage



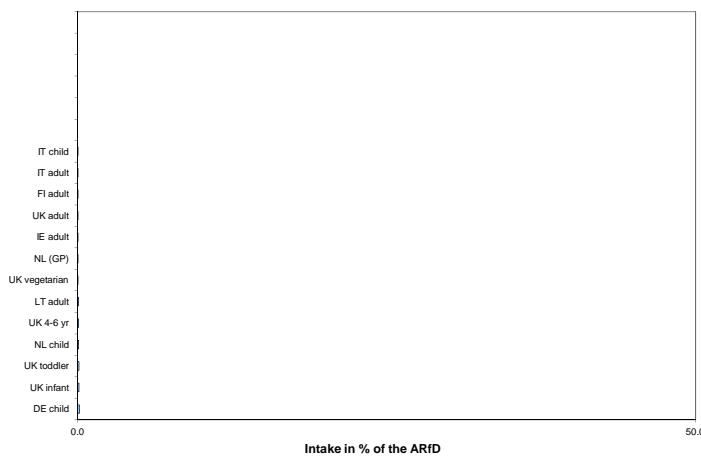
Acute exposure: Imidacloprid / Lettuce



Acute exposure: Imidacloprid / Leek



Acute exposure: Imidacloprid / Oats



Acute exposure: Imidacloprid / Rye



## Indoxacarb

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.006	ARfD (mg/kg bw):	0.125
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2005	Year of evaluation:	2005

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
4

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
3.86	DE child	2.30	Apples	0.38	Bananas	0.28	Table grapes
2.74	NL child	1.21	Apples	0.42	Bananas	0.17	Table grapes
1.91	FR toddler	0.50	Apples	0.32	Bananas	0.28	Spinach
1.70	WHO cluster diet B	0.71	Tomatoes	0.19	Apples	0.11	Peppers
1.53	DK child	0.44	Apples	0.33	Cucumbers	0.28	Bananas
1.34	SE (GP)	0.45	Bananas	0.20	Apples	0.18	Tomatoes
1.29	FR infant	0.48	Apples	0.18	Bananas	0.18	Spinach
1.15	IE adult	0.19	Bananas	0.16	Apples	0.14	Pears
1.11	ES child	0.25	Bananas	0.23	Tomatoes	0.22	Apples
1.01	UK toddler	0.33	Apples	0.27	Bananas	0.14	Tomatoes
0.99	IT child/toddler	0.33	Tomatoes	0.17	Apples	0.13	Bananas
0.95	WHO regional diet	0.25	Tomatoes	0.13	Apples	0.10	Lettuce
0.93	PL (GP)	0.39	Apples	0.20	Tomatoes	0.08	Head cabbage
0.93	UK infant	0.36	Bananas	0.30	Apples	0.08	Tomatoes
0.85	IT adult	0.27	Tomatoes	0.15	Apples	0.10	Lettuce
0.84	ES adult	0.18	Tomatoes	0.15	Apples	0.14	Lettuce
0.84	NL (GP)	0.23	Apples	0.10	Tomatoes	0.08	Bananas
0.76	PT (GP)	0.21	Tomatoes	0.20	Apples	0.08	Bananas
0.75	LT adult	0.36	Apples	0.14	Tomatoes	0.09	Head cabbage
0.71	WHO cluster diet E	0.16	Apples	0.12	Tomatoes	0.09	Bananas
0.71	WHO Cluster diet F	0.16	Tomatoes	0.14	Bananas	0.13	Apples
0.59	WHO cluster diet D	0.23	Tomatoes	0.13	Apples	0.04	Table grapes
0.56	UK vegetarian	0.14	Tomatoes	0.11	Apples	0.09	Bananas
0.54	DK adult	0.15	Apples	0.10	Tomatoes	0.09	Bananas
0.51	FR (GP)	0.10	Tomatoes	0.09	Apples	0.06	Bananas
0.41	UK adult	0.10	Tomatoes	0.09	Bananas	0.08	Apples
0.40	FI adult	0.10	Tomatoes	0.08	Apples	0.06	Bananas

## Acute risk assessment

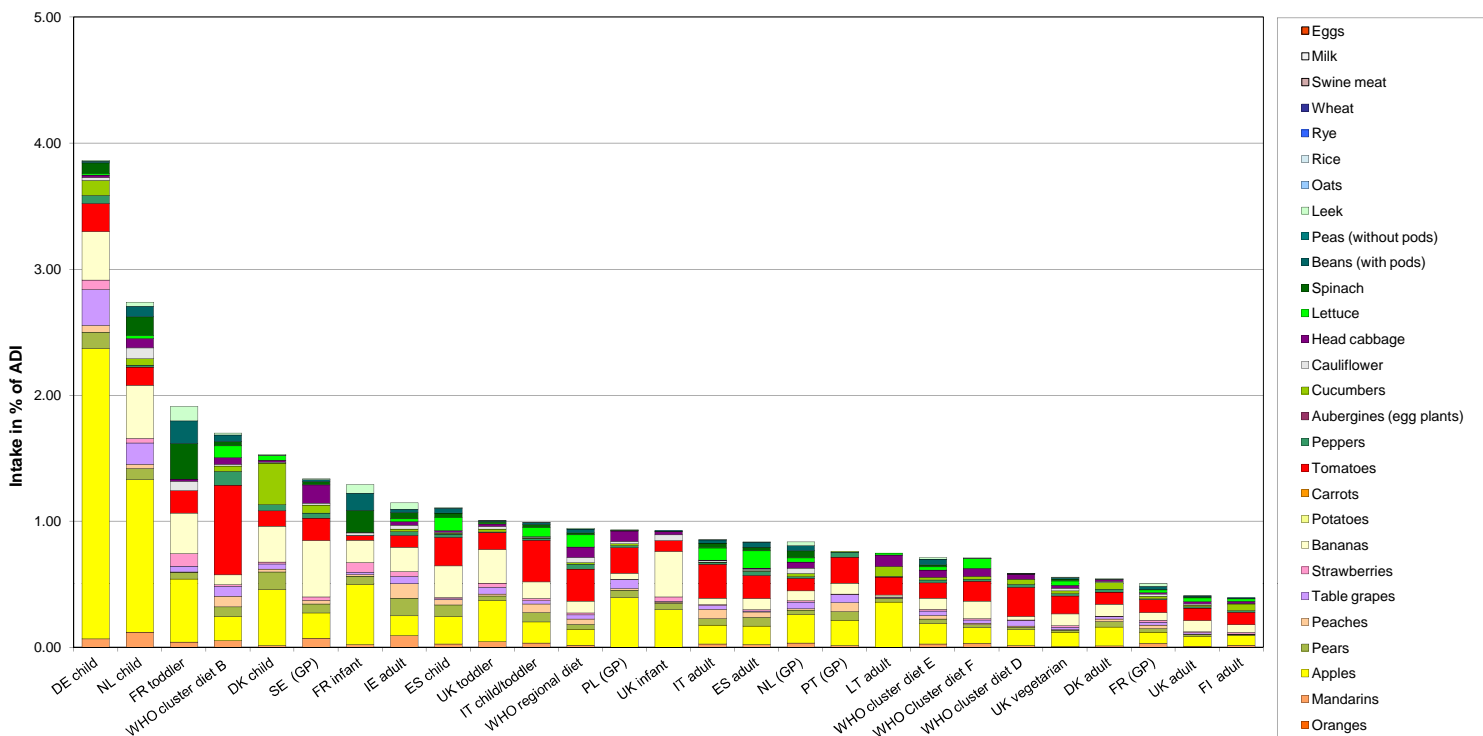
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.5	2661	5.56		0.17		13.64	UK infant	
2010	Peaches	0.3	1286	1.09		0.13		6.17	DE child	
2010	Strawberries	0.02	1990	0.15		0.01		0.12	DE child	
2010	Tomatoes	0.5	1981	5.10		0.15		6.98	BE child	
2010	Head cabbage	3	1037	0.48		0.16		6.74	NL child	
2010	Lettuce	2	2007	1.94		0.81		17.43	DE child	
2010	Leek	0.02	826		0.12	0.06		2.74	BE child	
2010	Oats	0.02	154							
2010	Rye	0.02	389							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

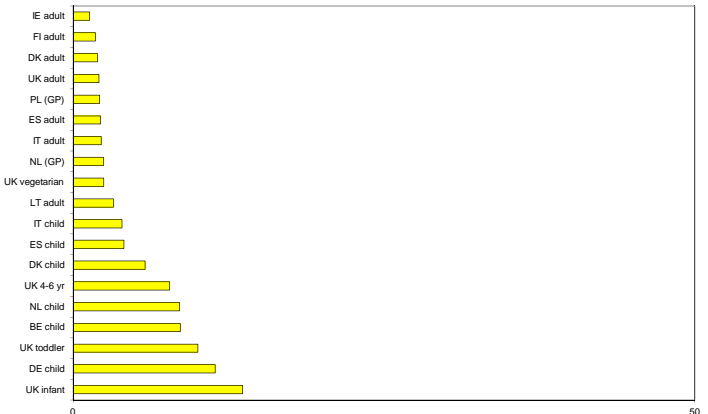
<sup>c)</sup> TRL: toxicological threshold level

## Chronic risk assessment: Indoxacarb



**Indoxacarb**

Acute exposure: Indoxacarb / Apples



Intake in % of the ARfD

Acute exposure: Indoxacarb / Peaches



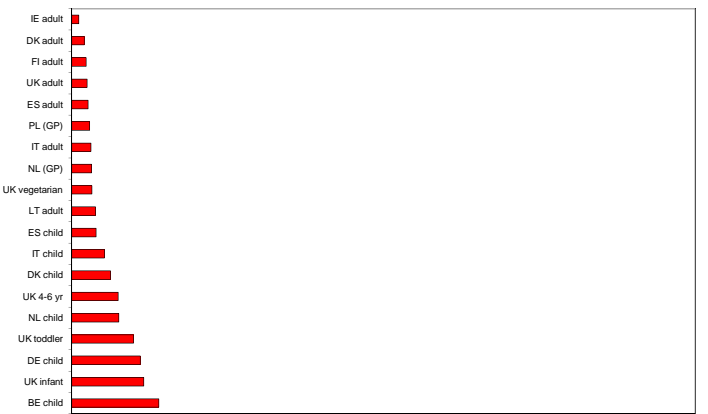
Intake in % of the ARfD

Acute exposure: Indoxacarb / Strawberries



Intake in % of the ARfD

Acute exposure: Indoxacarb / Tomatoes



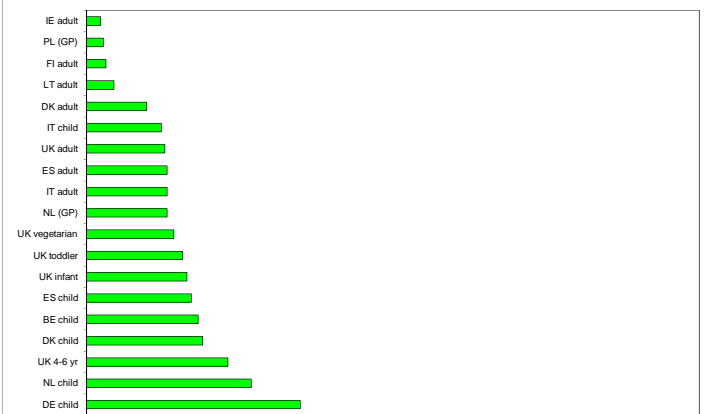
Intake in % of the ARfD

Acute exposure: Indoxacarb / Head cabbage



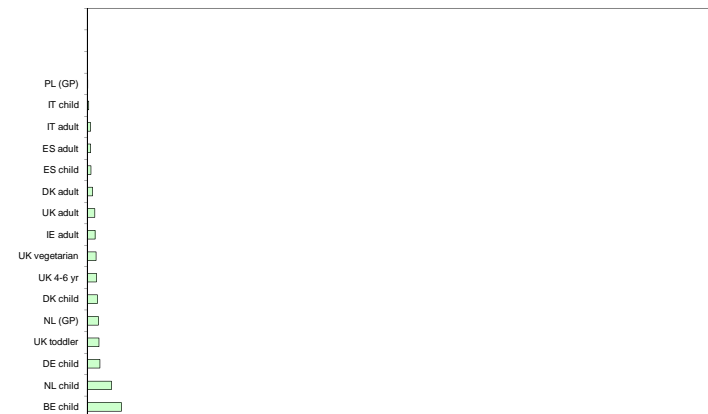
Intake in % of the ARfD

Acute exposure: Indoxacarb / Lettuce



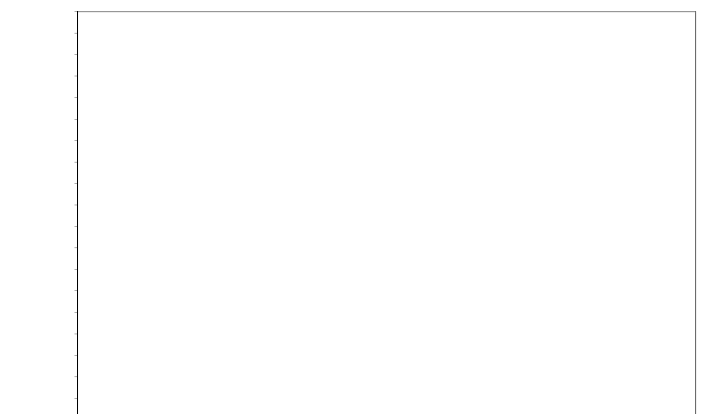
Intake in % of the ARfD

Acute exposure: Indoxacarb / Leek



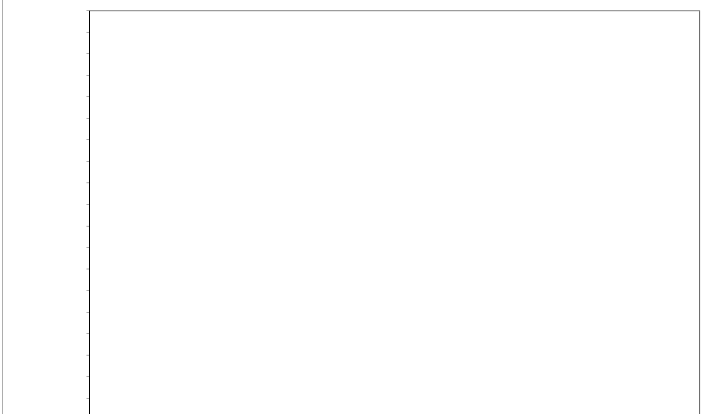
Intake in % of the ARfD

Acute exposure: Indoxacarb / Oats



Intake in % of the ARfD

Acute exposure: Indoxacarb / Rye



Intake in % of the ARfD

Iprodione			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.06	ARfD (mg/kg bw):	n.n.
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2002	Year of evaluation:	2002

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
3

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
1.47	NL child	1.04	Apples	0.09	Table grapes	0.07	Oranges
0.81	FR toddler	0.43	Apples	0.12	Carrots	0.04	Oranges
0.74	DK child	0.38	Apples	0.10	Cucumbers	0.07	Carrots
0.71	WHO cluster diet B	0.17	Apples	0.15	Lettuce	0.13	Tomatoes
0.70	FR infant	0.41	Apples	0.13	Carrots	0.03	Beans (with pods)
0.56	ES child	0.19	Apples	0.18	Lettuce	0.05	Oranges
0.52	ES adult	0.23	Lettuce	0.13	Apples	0.04	Peaches
0.49	PL (GP)	0.34	Apples	0.04	Table grapes	0.04	Tomatoes
0.49	IE adult	0.13	Apples	0.10	Peaches	0.04	Pears
0.48	IT adult	0.16	Lettuce	0.13	Apples	0.07	Peaches
0.48	UK toddler	0.28	Apples	0.04	Oranges	0.03	Table grapes
0.48	IT child/toddler	0.15	Apples	0.13	Lettuce	0.06	Peaches
0.47	WHO regional diet	0.16	Lettuce	0.11	Apples	0.05	Tomatoes
0.43	UK infant	0.26	Apples	0.06	Carrots	0.03	Oranges
0.43	LT adult	0.31	Apples	0.03	Lettuce	0.03	Tomatoes
0.41	NL (GP)	0.19	Apples	0.05	Lettuce	0.03	Oranges
0.40	SE (GP)	0.17	Apples	0.04	Carrots	0.03	Tomatoes
0.39	PT (GP)	0.17	Apples	0.06	Peaches	0.04	Tomatoes
0.37	WHO Cluster diet F	0.13	Lettuce	0.11	Apples	0.03	Tomatoes
0.34	WHO cluster diet E	0.14	Apples	0.04	Lettuce	0.02	Peaches
0.26	UK vegetarian	0.10	Apples	0.06	Lettuce	0.03	Tomatoes
0.24	DK adult	0.13	Apples	0.02	Carrots	0.02	Peaches
0.24	WHO cluster diet D	0.11	Apples	0.04	Tomatoes	0.02	Table grapes
0.24	FR (GP)	0.08	Apples	0.04	Lettuce	0.03	Peaches
0.19	UK adult	0.07	Apples	0.05	Lettuce	0.02	Tomatoes
0.19	FI adult	0.07	Apples	0.03	Lettuce	0.02	Oranges

## Acute risk assessment

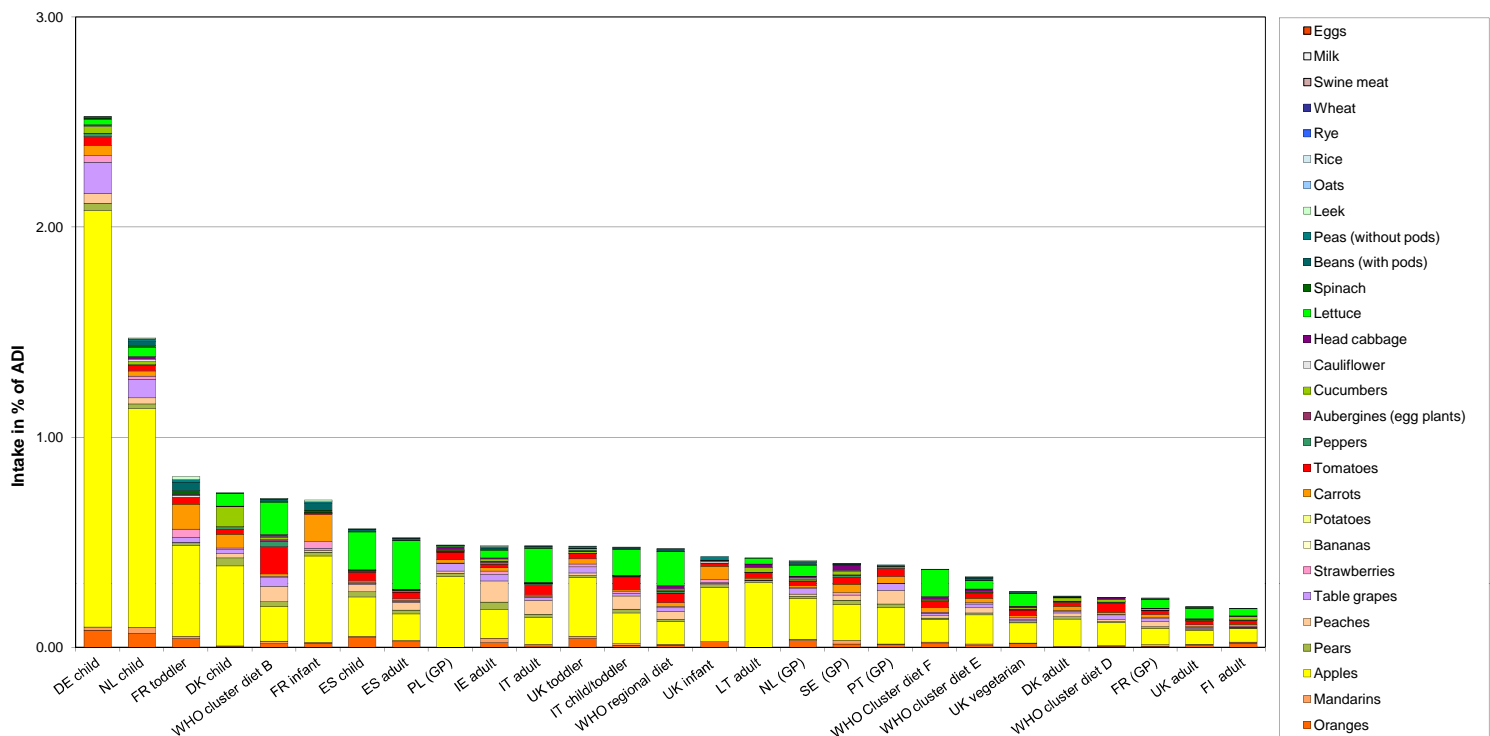
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	5	3171	4.70		1.50				
2010	Peaches	3	1499	14.94	0.07	5.20				
2010	Strawberries	15	2328	5.28		3.65				
2010	Tomatoes	5	2564	4.76		1.30				
2010	Head cabbage	5	1246	2.09		1.79				
2010	Lettuce	10	2370	17.85	0.25	25.00				
2010	Leek	0.02	983		0.20	0.06				
2010	Oats	0.5	254							
2010	Rye	0.02	437							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

<sup>c)</sup> TRL: toxicological threshold level

## Chronic risk assessment: Iprodione



**Iprodione**

Acute exposure: Iprodione / Apples



Intake in % of the ARfD

Acute exposure: Iprodione / Peaches



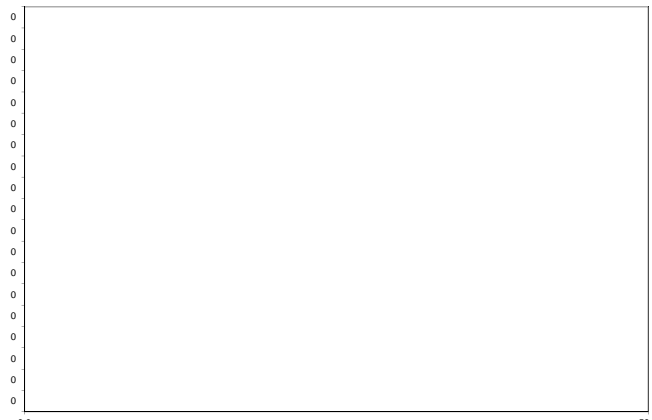
Intake in % of the ARfD

Acute exposure: Iprodione / Strawberries



Intake in % of the ARfD

Acute exposure: Iprodione / Tomatoes



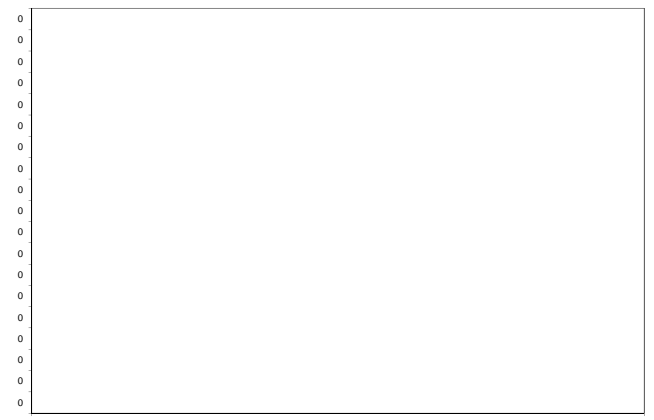
Intake in % of the ARfD

Acute exposure: Iprodione / Head cabbage



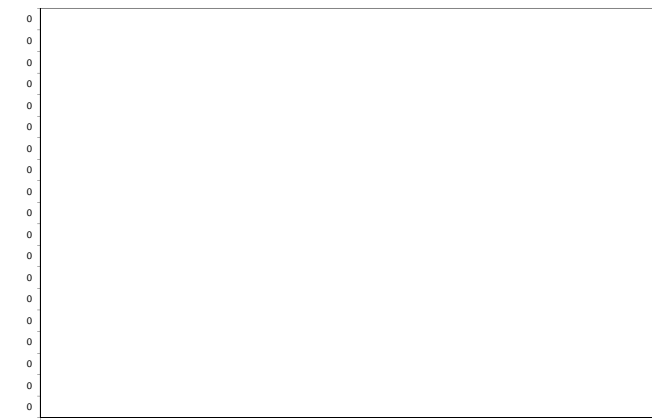
Intake in % of the ARfD

Acute exposure: Iprodione / Lettuce



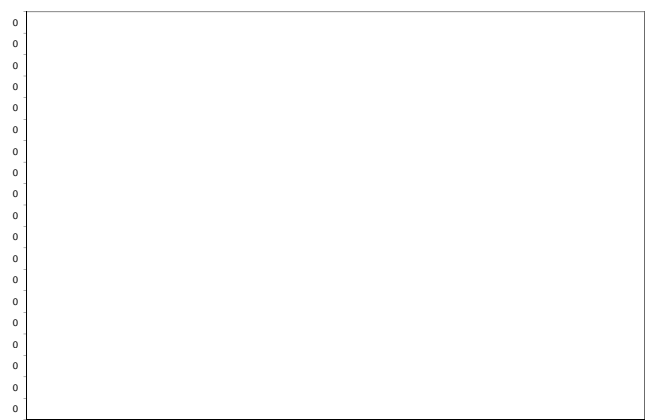
Intake in % of the ARfD

Acute exposure: Iprodione / Leek



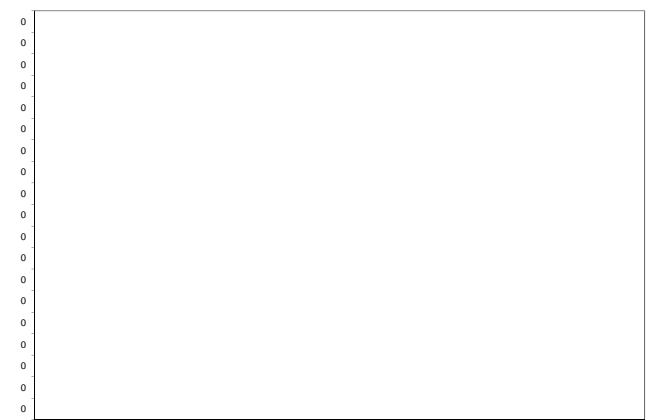
Intake in % of the ARfD

Acute exposure: Iprodione / Oats



Intake in % of the ARfD

Acute exposure: Iprodione / Rye



Intake in % of the ARfD



Iprovalicarb			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.015	ARfD (mg/kg bw):	n.n.
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2002	Year of evaluation:	2002

**Chronic risk assessment**

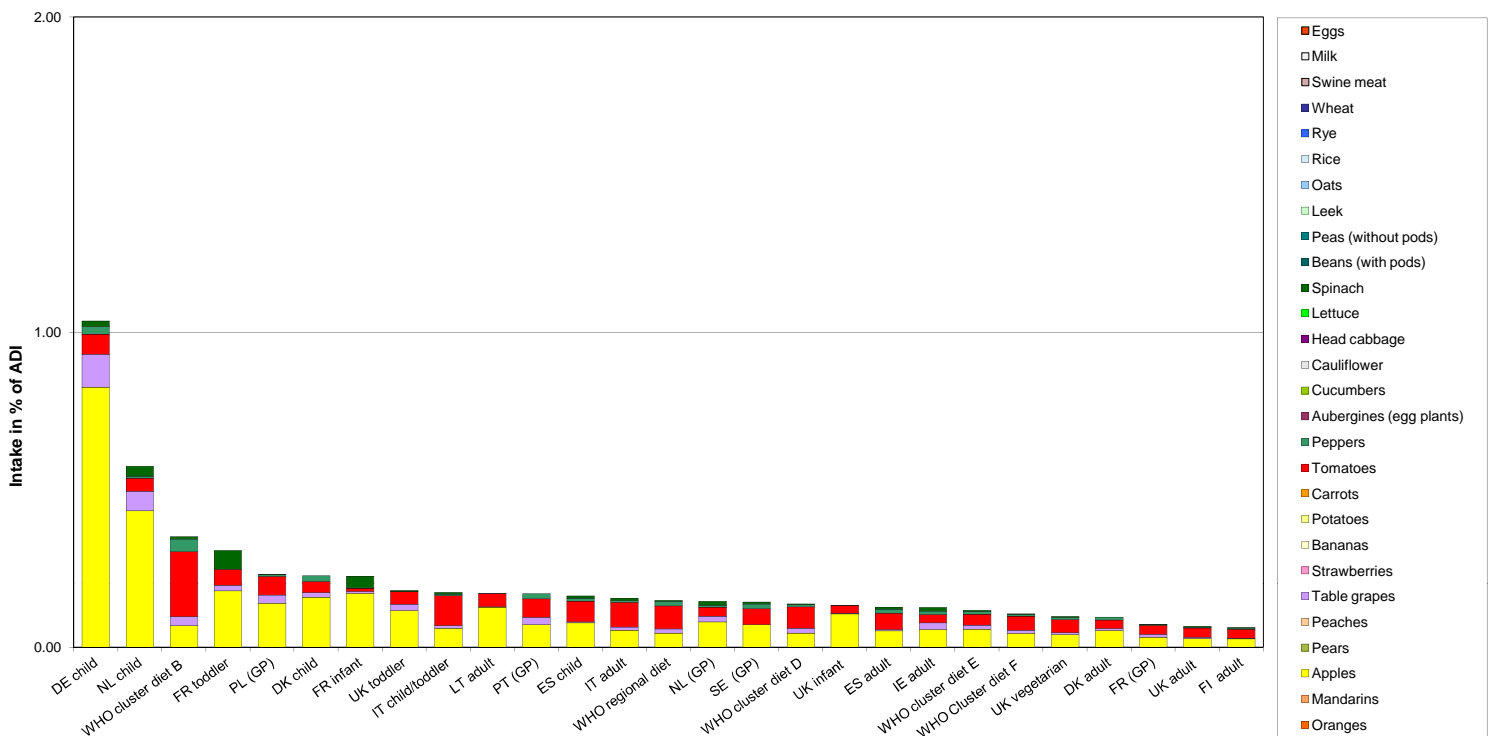
		Exposure (range) in % of ADI minimum - maximum					
		1					
		No of diets exceeding ADI: ---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
1.04	DE child	0.83	Apples	0.10	Table grapes	0.06	Tomatoes
0.57	NL child	0.43	Apples	0.06	Table grapes	0.04	Tomatoes
0.35	WHO cluster diet B	0.21	Tomatoes	0.07	Apples	0.04	Peppers
0.31	FR toddler	0.18	Apples	0.06	Spinach	0.05	Tomatoes
0.23	PL (GP)	0.14	Apples	0.06	Tomatoes	0.03	Table grapes
0.23	DK child	0.16	Apples	0.04	Tomatoes	0.02	Peppers
0.23	FR infant	0.17	Apples	0.04	Spinach	0.01	Tomatoes
0.18	UK toddler	0.12	Apples	0.04	Tomatoes	0.02	Table grapes
0.17	IT child/toddler	0.10	Tomatoes	0.06	Apples	0.01	Table grapes
0.17	LT adult	0.13	Apples	0.04	Tomatoes	0.00	Peppers
0.17	PT (GP)	0.07	Apples	0.06	Tomatoes	0.02	Table grapes
0.16	ES child	0.08	Apples	0.07	Tomatoes	0.01	Peppers
0.16	IT adult	0.08	Tomatoes	0.05	Apples	0.01	Table grapes
0.15	WHO regional diet	0.07	Tomatoes	0.05	Apples	0.01	Peppers
0.15	NL (GP)	0.08	Apples	0.03	Tomatoes	0.02	Table grapes
0.14	SE (GP)	0.07	Apples	0.05	Tomatoes	0.02	Peppers
0.14	WHO cluster diet D	0.07	Tomatoes	0.05	Apples	0.02	Table grapes
0.13	UK infant	0.11	Apples	0.02	Tomatoes	0.00	Table grapes
0.13	ES adult	0.05	Apples	0.05	Tomatoes	0.01	Peppers
0.13	IE adult	0.06	Apples	0.03	Tomatoes	0.02	Table grapes
0.12	WHO cluster diet E	0.06	Apples	0.04	Tomatoes	0.01	Table grapes
0.11	WHO Cluster diet F	0.05	Tomatoes	0.04	Apples	0.01	Table grapes
0.10	UK vegetarian	0.04	Tomatoes	0.04	Apples	0.01	Peppers
0.10	DK adult	0.05	Apples	0.03	Tomatoes	0.01	Peppers
0.07	FR (GP)	0.03	Apples	0.03	Tomatoes	0.01	Table grapes
0.07	UK adult	0.03	Tomatoes	0.03	Apples	0.00	Table grapes
0.06	FI adult	0.03	Tomatoes	0.03	Apples	0.00	Peppers

**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	2800	0.04		0.05				
2010	Peaches	0.05	1342							
2010	Strawberries	0.05	2109							
2010	Tomatoes	1	2143	0.14		0.02				
2010	Head cabbage	0.05	1098							
2010	Lettuce	1	2151							
2010	Leek	0.05	841							
2010	Oats	0.05	155							
2010	Rye	0.05	363							
2010	Swine Meat									
2010	Milk									

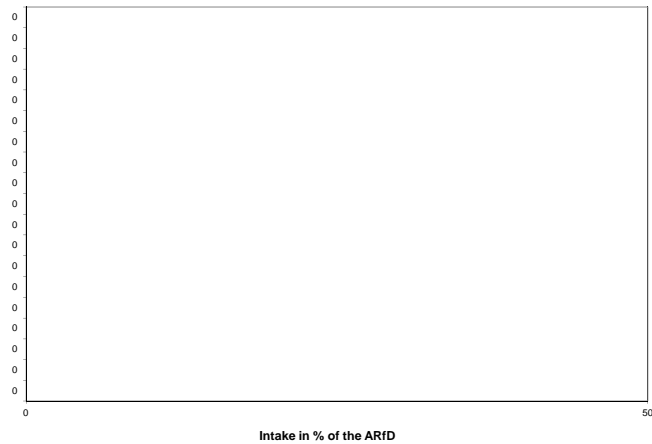
a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Iprovalicarb**

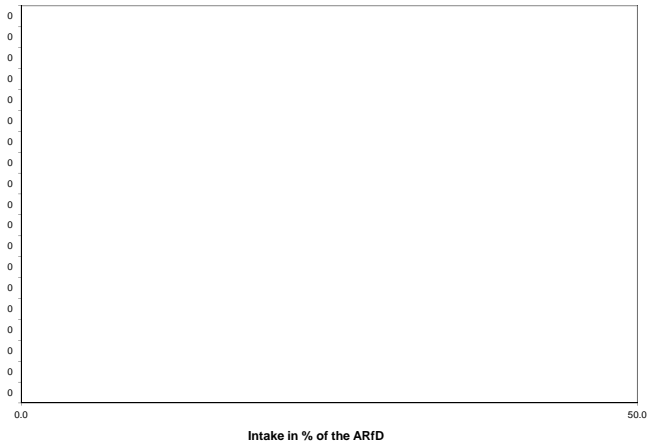


**Iprovalicarb**

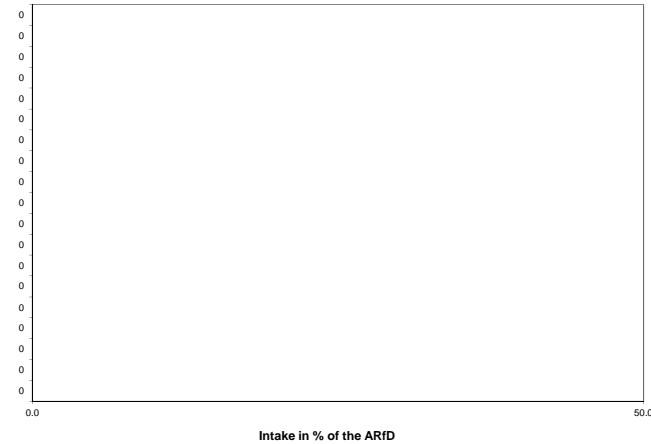
Acute exposure: Iprovalicarb / Apples



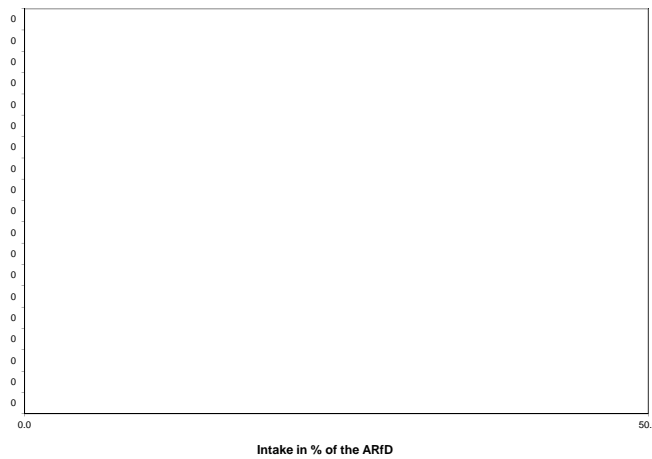
Acute exposure: Iprovalicarb / Peaches



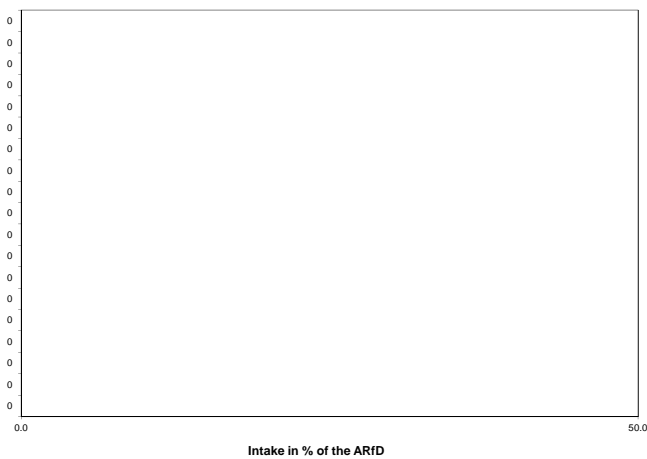
Acute exposure: Iprovalicarb / Strawberries



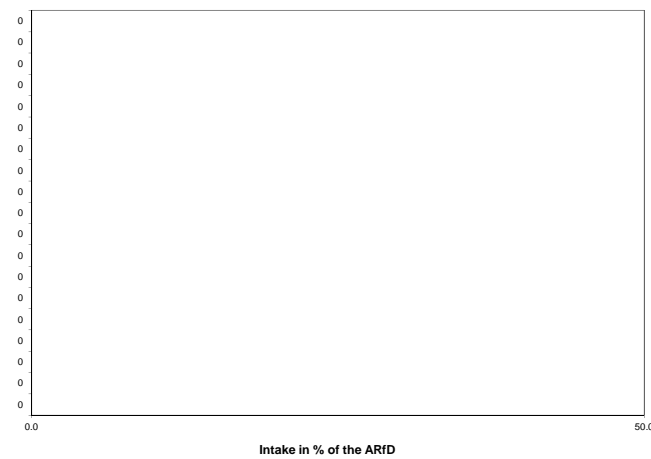
Acute exposure: Iprovalicarb / Tomatoes



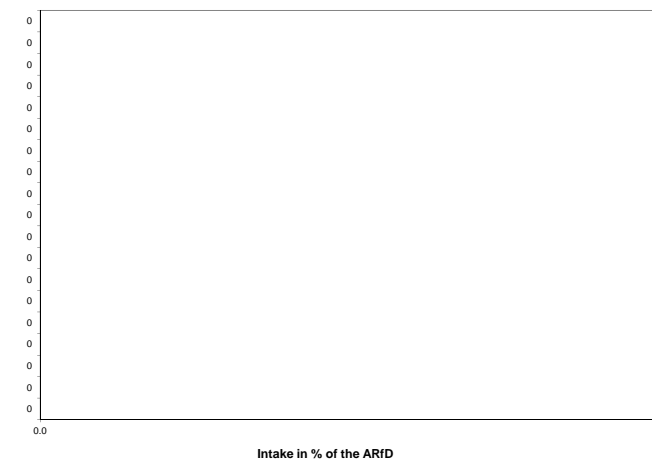
Acute exposure: Iprovalicarb / Head cabbage



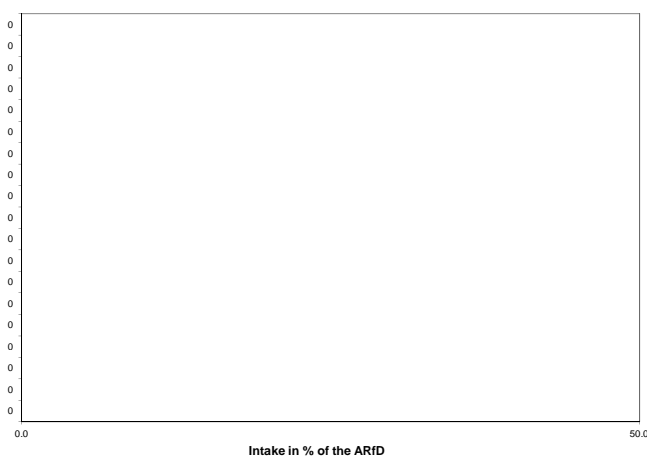
Acute exposure: Iprovalicarb / Lettuce



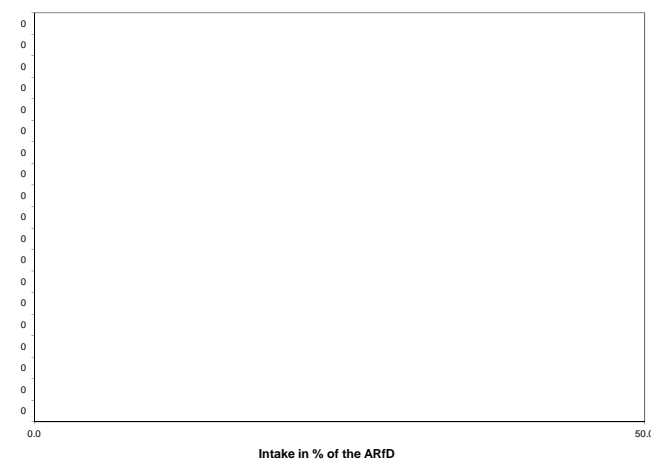
Acute exposure: Iprovalicarb / Leek



Acute exposure: Iprovalicarb / Oats



Acute exposure: Iprovalicarb / Rye



## Kresoxim-methyl

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.4	ARfD (mg/kg bw):	n.n.
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2011	Year of evaluation:	2011

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.07	DE child	0.04	Apples	0.01	Wheat	0.01	Table grapes
0.05	WHO cluster diet B	0.03	Wheat	0.01	Tomatoes	0.00	Apples
0.05	NL child	0.02	Apples	0.01	Wheat	0.00	Table grapes
0.04	DK child	0.02	Wheat	0.01	Apples	0.01	Cucumbers
0.03	IT child/toddler	0.02	Wheat	0.00	Tomatoes	0.00	Apples
0.03	FR toddler	0.01	Apples	0.01	Wheat	0.00	Beans (with pods)
0.03	WHO cluster diet D	0.02	Wheat	0.00	Tomatoes	0.00	Apples
0.02	ES child	0.01	Wheat	0.00	Apples	0.00	Tomatoes
0.02	IT adult	0.01	Wheat	0.00	Tomatoes	0.00	Apples
0.02	UK toddler	0.01	Wheat	0.01	Apples	0.00	Tomatoes
0.02	PT (GP)	0.01	Wheat	0.00	Apples	0.00	Tomatoes
0.02	WHO cluster diet E	0.01	Wheat	0.00	Apples	0.00	Tomatoes
0.02	SE (GP)	0.01	Wheat	0.00	Apples	0.00	Tomatoes
0.02	WHO regional diet	0.01	Wheat	0.00	Tomatoes	0.00	Apples
0.02	IE adult	0.01	Wheat	0.00	Apples	0.00	Pears
0.02	WHO Cluster diet F	0.01	Wheat	0.00	Tomatoes	0.00	Apples
0.02	FR infant	0.01	Apples	0.00	Wheat	0.00	Beans (with pods)
0.02	ES adult	0.01	Wheat	0.00	Tomatoes	0.00	Apples
0.02	UK infant	0.01	Wheat	0.00	Apples	0.00	Tomatoes
0.02	FR (GP)	0.01	Wheat	0.00	Apples	0.00	Tomatoes
0.02	NL (GP)	0.01	Wheat	0.00	Apples	0.00	Tomatoes
0.01	LT adult	0.01	Apples	0.00	Wheat	0.00	Tomatoes
0.01	DK adult	0.01	Wheat	0.00	Apples	0.00	Tomatoes
0.01	UK vegetarian	0.01	Wheat	0.00	Tomatoes	0.00	Apples
0.01	PL (GP)	0.01	Apples	0.00	Tomatoes	0.00	Table grapes
0.01	UK adult	0.01	Wheat	0.00	Tomatoes	0.00	Apples
0.01	FI adult	0.00	Wheat	0.00	Tomatoes	0.00	Apples

## Acute risk assessment

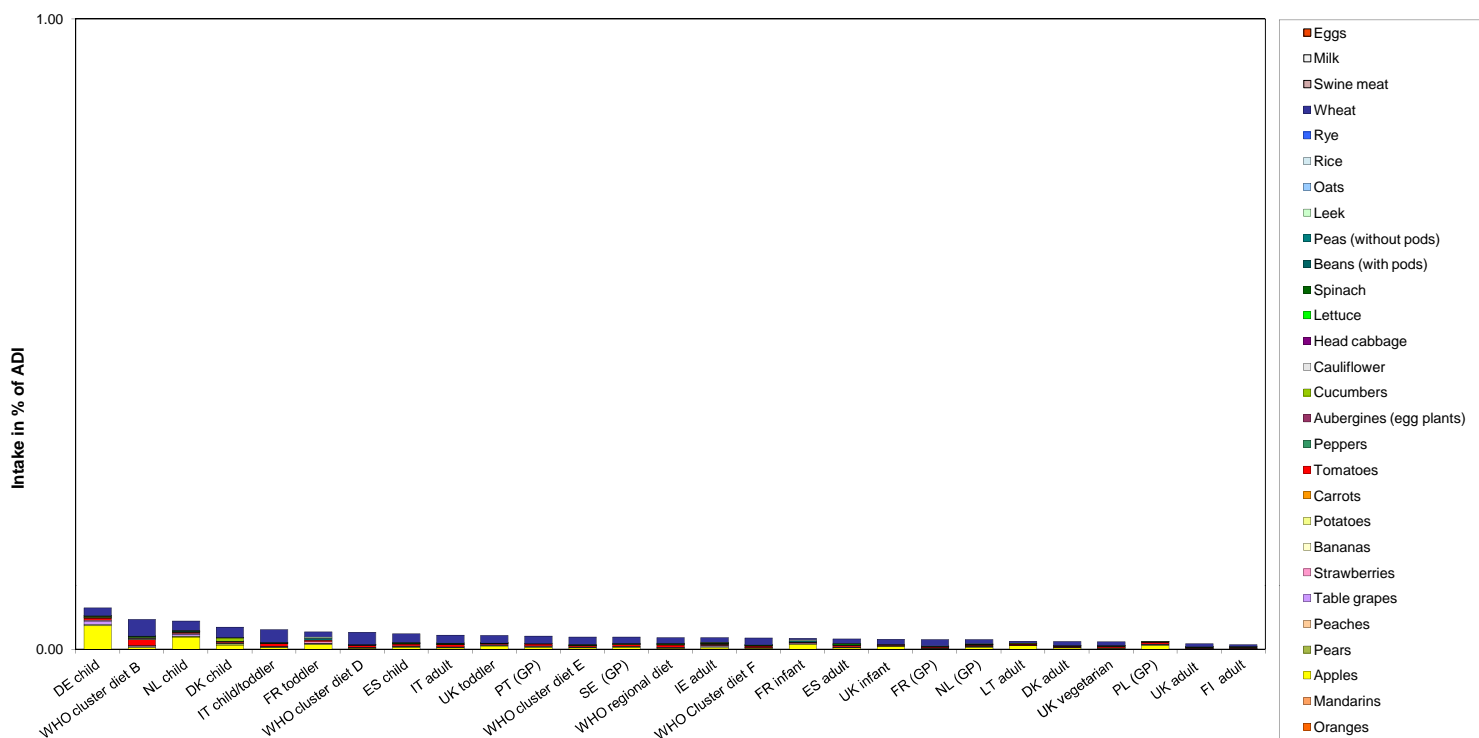
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.2	2997	0.23		0.07				
2010	Peaches	0.05	1483	0.07		0.03				
2010	Strawberries	1	2266	5.52		0.54				
2010	Tomatoes	0.5	2453	0.08		0.05				
2010	Head cabbage	0.05	1248							
2010	Lettuce	0.05	2344	0.26	0.04	0.10				
2010	Leek	5	973	2.57		0.32				
2010	Oats	0.05	264							
2010	Rye	0.05	449							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

<sup>c)</sup> TRL: toxicological threshold level

## Chronic risk assessment: Kresoxim-methyl



**Kresoxim-methyl**

Acute exposure: Kresoxim-methyl / Apples



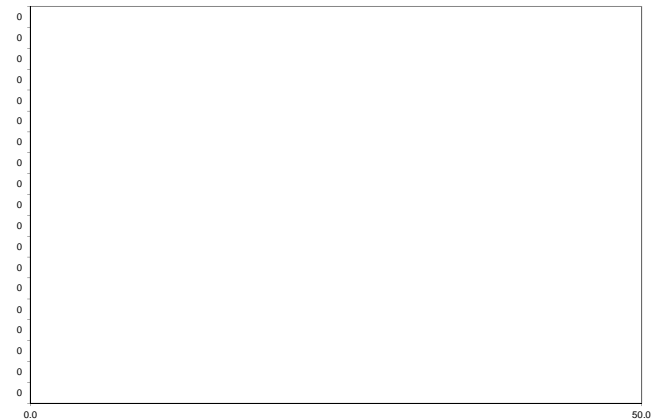
Intake in % of the ARfD

Acute exposure: Kresoxim-methyl / Peaches



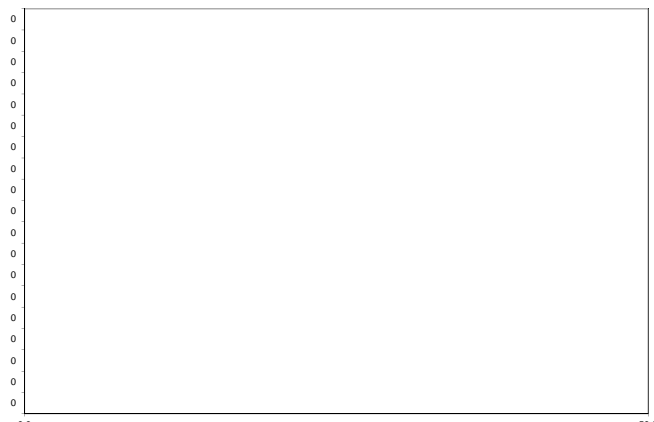
Intake in % of the ARfD

Acute exposure: Kresoxim-methyl / Strawberries



Intake in % of the ARfD

Acute exposure: Kresoxim-methyl / Tomatoes



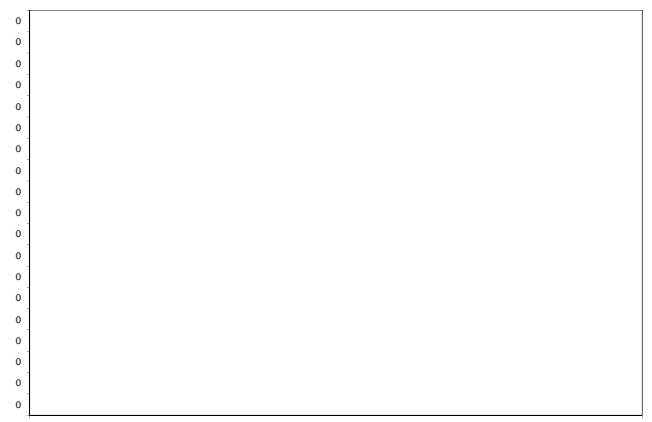
Intake in % of the ARfD

Acute exposure: Kresoxim-methyl / Head cabbage



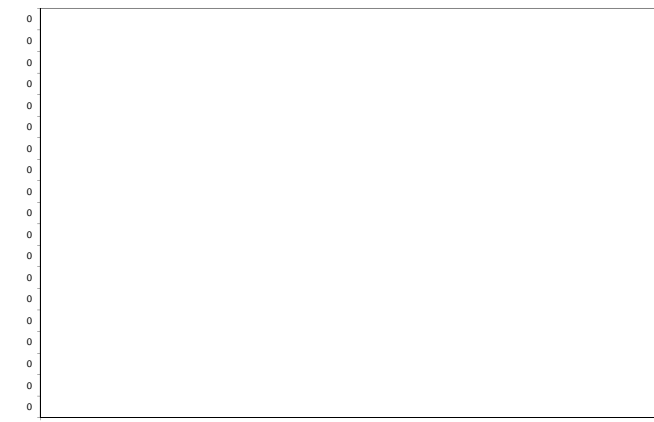
Intake in % of the ARfD

Acute exposure: Kresoxim-methyl / Lettuce



Intake in % of the ARfD

Acute exposure: Kresoxim-methyl / Leek



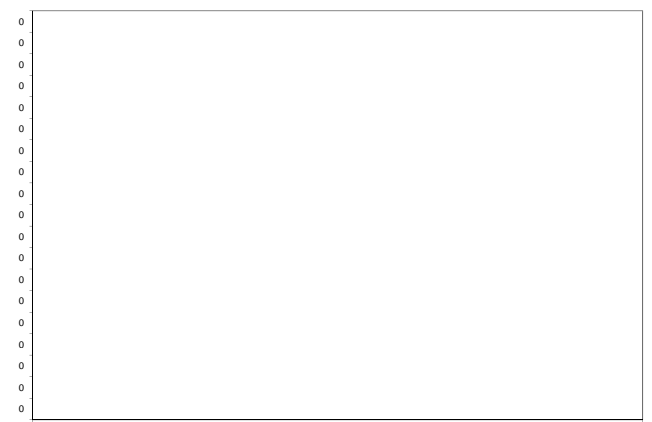
Intake in % of the ARfD

Acute exposure: Kresoxim-methyl / Oats



Intake in % of the ARfD

Acute exposure: Kresoxim-methyl / Rye



Intake in % of the ARfD

## lambda-Cyhalothrin

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.005	ARfD (mg/kg bw):	0.0075
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2001	Year of evaluation:	2001

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
1 6

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
5.99	DE child	3.24	Apples	0.95	Oranges	0.37	Table grapes
3.99	NL child	1.70	Apples	0.78	Oranges	0.22	Table grapes
3.09	FR toddler	0.71	Apples	0.50	Oranges	0.49	Carrots
2.55	WHO cluster diet B	0.88	Tomatoes	0.27	Apples	0.21	Oranges
2.27	FR infant	0.67	Apples	0.53	Carrots	0.23	Oranges
2.02	DK child	0.62	Apples	0.44	Cucumbers	0.28	Carrots
1.82	ES child	0.54	Oranges	0.31	Apples	0.28	Tomatoes
1.72	UK toddler	0.49	Oranges	0.46	Apples	0.17	Tomatoes
1.71	IE adult	0.26	Oranges	0.22	Apples	0.18	Peaches
1.61	SE (GP)	0.28	Apples	0.22	Tomatoes	0.19	Oranges
1.45	UK infant	0.42	Apples	0.32	Oranges	0.27	Carrots
1.40	NL (GP)	0.37	Oranges	0.32	Apples	0.12	Tomatoes
1.40	ES adult	0.32	Oranges	0.22	Tomatoes	0.21	Apples
1.38	PT (GP)	0.28	Apples	0.26	Tomatoes	0.18	Rice
1.36	IT child/toddler	0.41	Tomatoes	0.24	Apples	0.12	Oranges
1.31	WHO regional diet	0.31	Tomatoes	0.18	Apples	0.13	Lettuce
1.25	IT adult	0.33	Tomatoes	0.21	Apples	0.13	Lettuce
1.22	PL (GP)	0.55	Apples	0.25	Tomatoes	0.09	Table grapes
1.11	WHO Cluster diet F	0.22	Oranges	0.19	Tomatoes	0.18	Apples
1.09	WHO cluster diet E	0.23	Apples	0.15	Tomatoes	0.11	Oranges
1.07	LT adult	0.50	Apples	0.18	Tomatoes	0.11	Cucumbers
0.96	WHO cluster diet D	0.29	Tomatoes	0.18	Apples	0.12	Rice
0.94	UK vegetarian	0.22	Oranges	0.18	Tomatoes	0.16	Apples
0.76	FR (GP)	0.13	Apples	0.12	Tomatoes	0.07	Oranges
0.75	FI adult	0.24	Oranges	0.12	Tomatoes	0.11	Apples
0.74	DK adult	0.21	Apples	0.12	Tomatoes	0.09	Carrots
0.67	UK adult	0.14	Oranges	0.12	Tomatoes	0.11	Apples

## Acute risk assessment

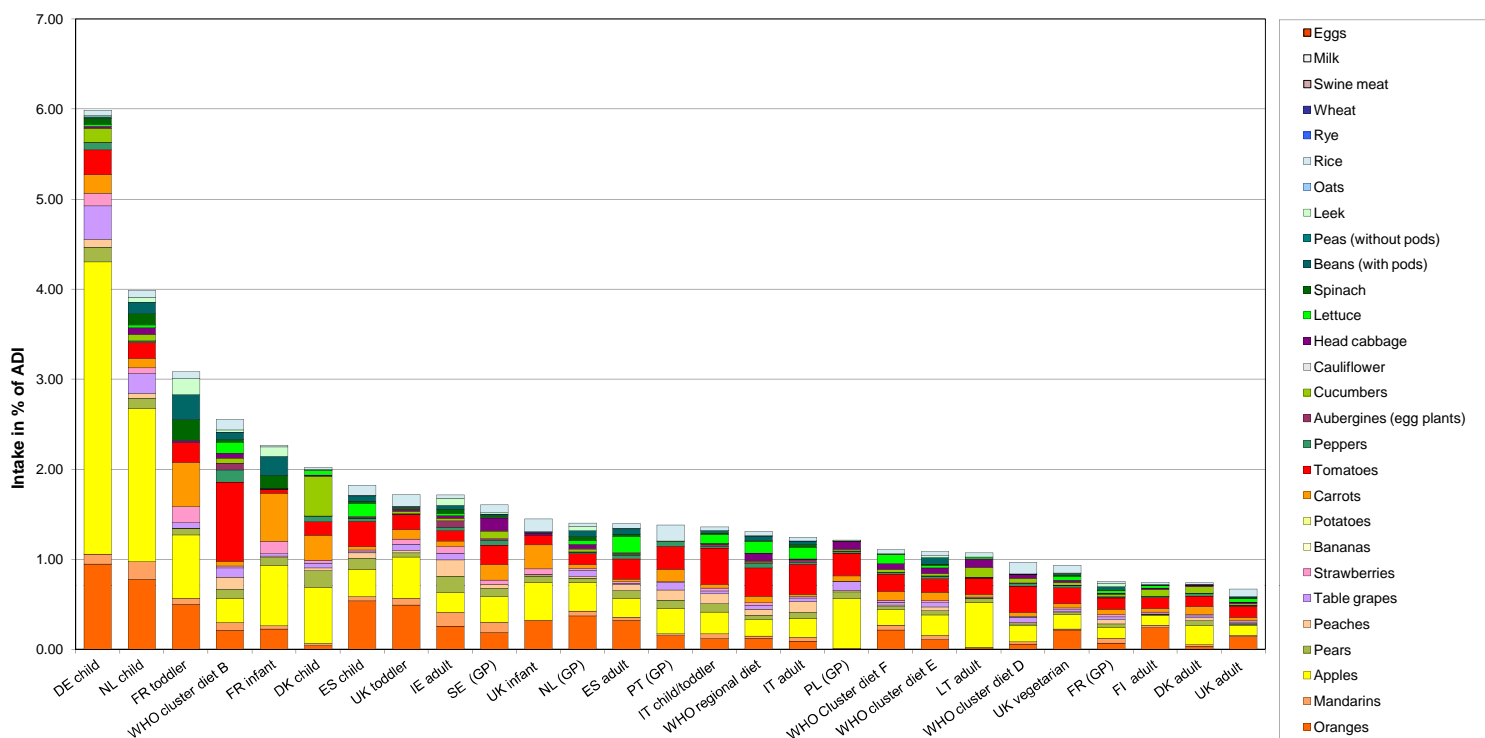
Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.1	2924	0.96		0.09	1	113.64	UK infant	
2010	Peaches	0.2	1381	7.10		0.20	1	158.22	DE child	
2010	Strawberries	0.5	2163	2.54		0.30		62.37	DE child	
2010	Tomatoes	0.1	2407	0.83		0.06		49.62	BE child	
2010	Head cabbage	0.2	1159	0.60		0.06		44.91	NL child	
2010	Lettuce	0.5	2326	6.92	0.09	0.66	6	236.76	DE child	
2010	Leek	0.3	894	1.01		0.04		27.51	BE child	
2010	Oats		249							
2010	Rye		373							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

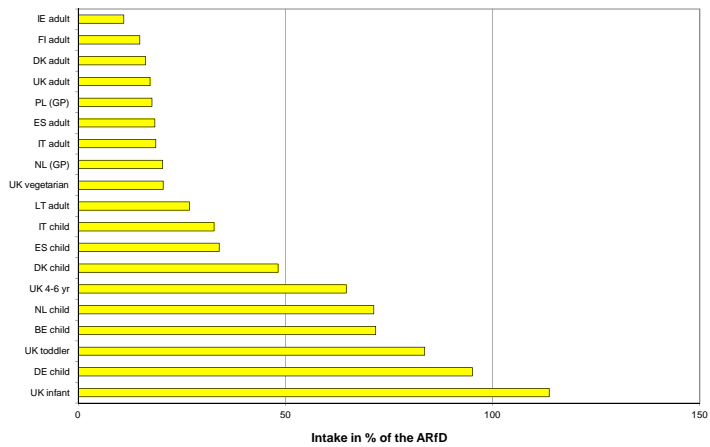
c) TRL: toxicological threshold level

## Chronic risk assessment: lambda-Cyhalothrin

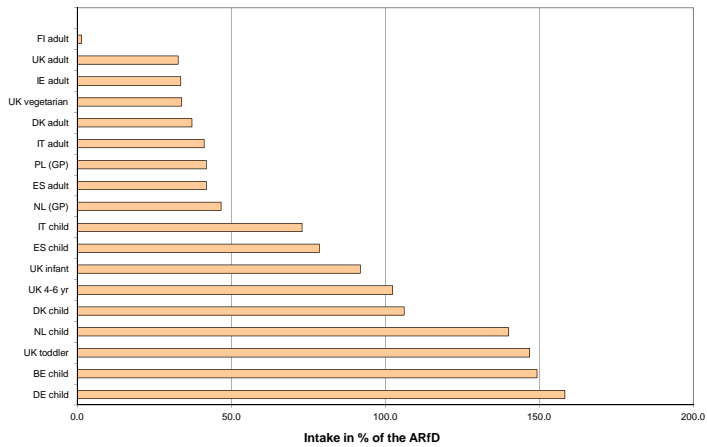


lambda-Cyhalothrin

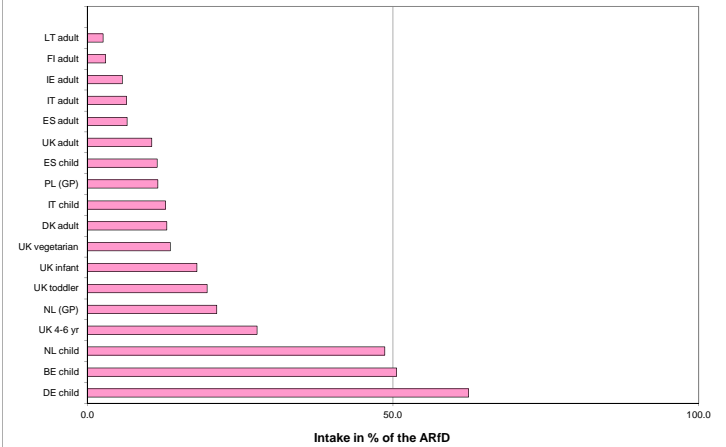
Acute exposure: lambda-Cyhalothrin / Apples



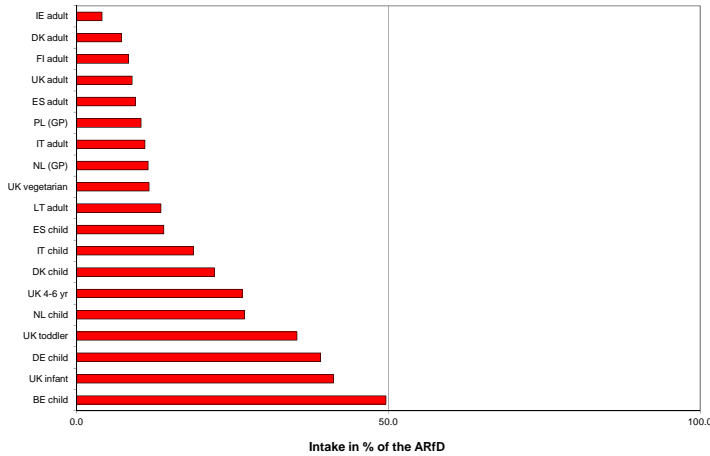
Acute exposure: lambda-Cyhalothrin / Peaches



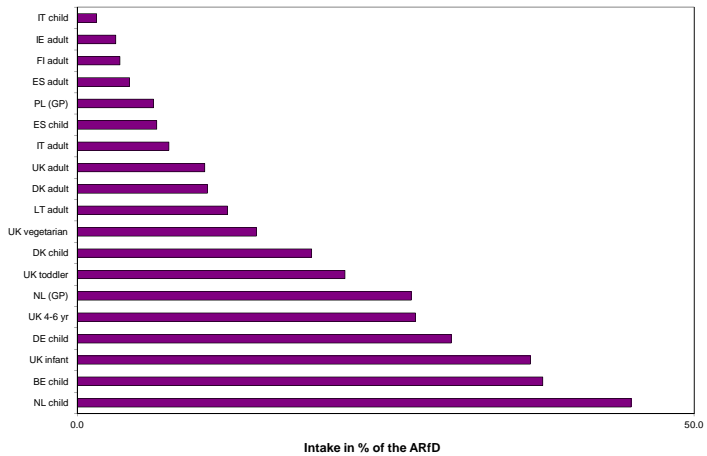
Acute exposure: lambda-Cyhalothrin / Strawberries



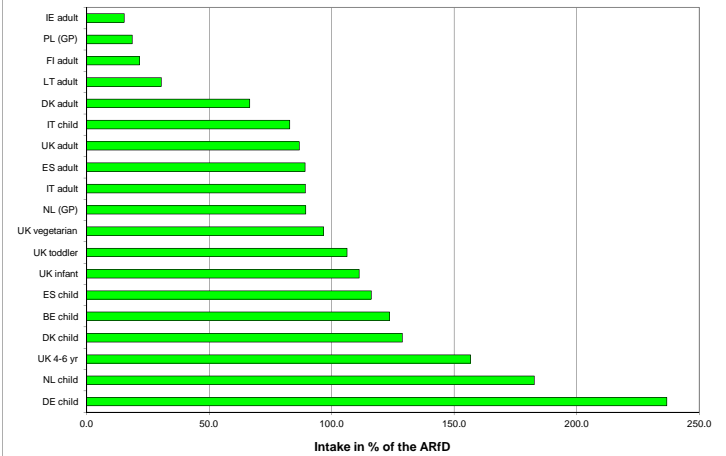
Acute exposure: lambda-Cyhalothrin / Tomatoes



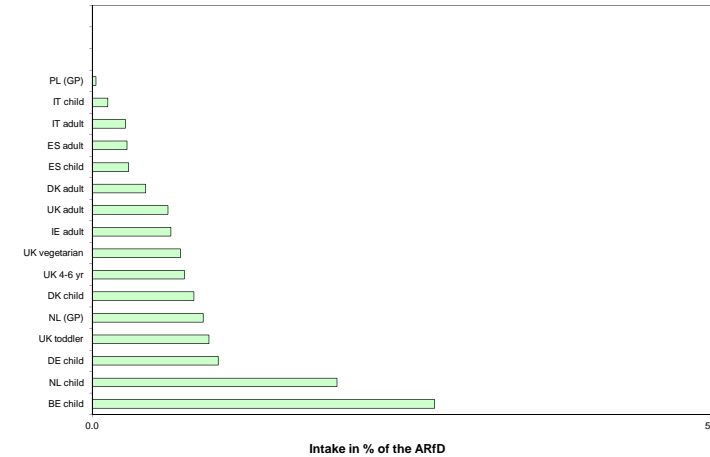
Acute exposure: lambda-Cyhalothrin / Head cabbage



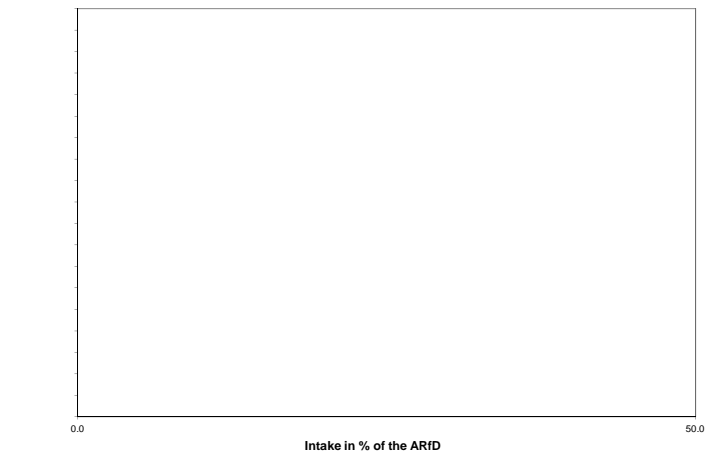
Acute exposure: lambda-Cyhalothrin / Lettuce



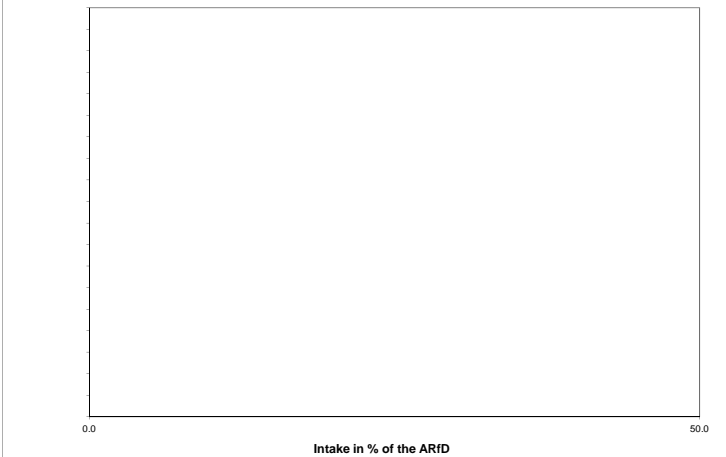
Acute exposure: lambda-Cyhalothrin / Leek



Acute exposure: lambda-Cyhalothrin / Oats



Acute exposure: lambda-Cyhalothrin / Rye



Lindane			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	A
Toxicological end points			
ADI (mg/kg bw/day):	0.005	ARfD (mg/kg bw):	0.06
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2000	Year of evaluation:	2000

**Chronic risk assessment**

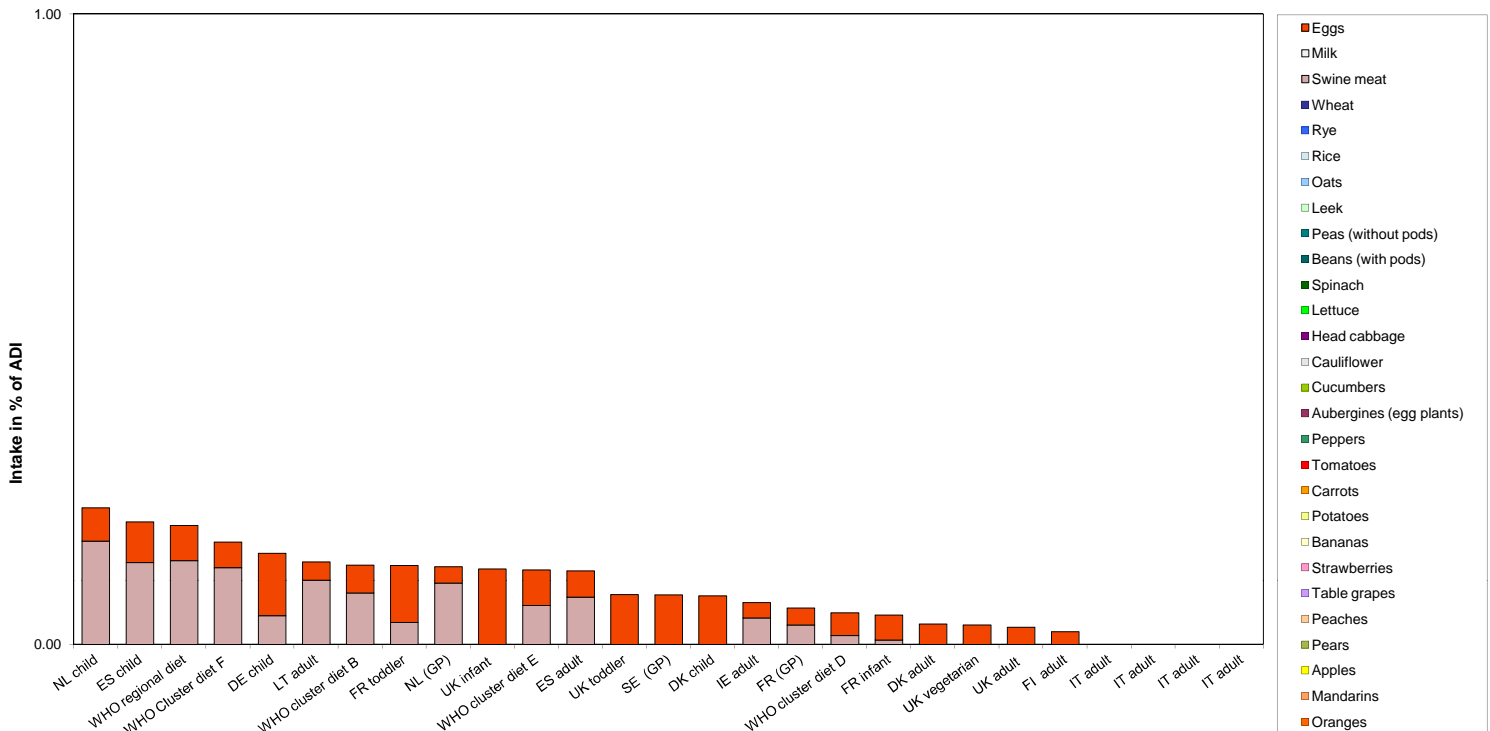
		Exposure (range) in % of ADI minimum - maximum					
		No of diets exceeding ADI: ---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.22	NL child	0.16	Swine meat	0.05	Eggs		FRUIT (FRESH OR FROZEN)
0.19	ES child	0.13	Swine meat	0.06	Eggs		FRUIT (FRESH OR FROZEN)
0.19	WHO regional diet	0.13	Swine meat	0.06	Eggs		FRUIT (FRESH OR FROZEN)
0.16	WHO Cluster diet F	0.12	Swine meat	0.04	Eggs		FRUIT (FRESH OR FROZEN)
0.14	DE child	0.10	Eggs	0.05	Swine meat		FRUIT (FRESH OR FROZEN)
0.13	LT adult	0.10	Swine meat	0.03	Eggs		FRUIT (FRESH OR FROZEN)
0.13	WHO cluster diet B	0.08	Swine meat	0.04	Eggs		FRUIT (FRESH OR FROZEN)
0.13	FR toddler	0.09	Eggs	0.03	Swine meat		FRUIT (FRESH OR FROZEN)
0.12	NL (GP)	0.10	Swine meat	0.03	Eggs		FRUIT (FRESH OR FROZEN)
0.12	UK infant	0.12	Eggs		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.12	WHO cluster diet E	0.06	Swine meat	0.06	Eggs		FRUIT (FRESH OR FROZEN)
0.12	ES adult	0.08	Swine meat	0.04	Eggs		FRUIT (FRESH OR FROZEN)
0.08	UK toddler	0.08	Eggs		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.08	SE (GP)	0.08	Eggs		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.08	DK child	0.08	Eggs		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.07	IE adult	0.04	Swine meat	0.02	Eggs		FRUIT (FRESH OR FROZEN)
0.06	FR (GP)	0.03	Swine meat	0.03	Eggs		FRUIT (FRESH OR FROZEN)
0.05	WHO cluster diet D	0.04	Eggs	0.01	Swine meat		FRUIT (FRESH OR FROZEN)
0.05	FR infant	0.04	Eggs	0.01	Swine meat		FRUIT (FRESH OR FROZEN)
0.03	DK adult	0.03	Eggs		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.03	UK vegetarian	0.03	Eggs		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.03	UK adult	0.03	Eggs		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.02	FI adult	0.02	Eggs		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
	IT adult		FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
	IT adult		FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
	IT adult		FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
	IT adult		FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)

**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples									
2010	Peaches									
2010	Strawberries									
2010	Tomatoes									
2010	Head cabbage									
2010	Lettuce									
2010	Leek									
2010	Oats									
2010	Rye									
2010	Swine Meat	0.02	603	1.33		0.00		0.00	DE child	
2010	Milk	0.001	822	0.36		0.00		0.02	UK infant	

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Lindane**



**Lindane**

Acute exposure: Lindane / Apples



Intake in % of the ARfD

Acute exposure: Lindane / Peaches



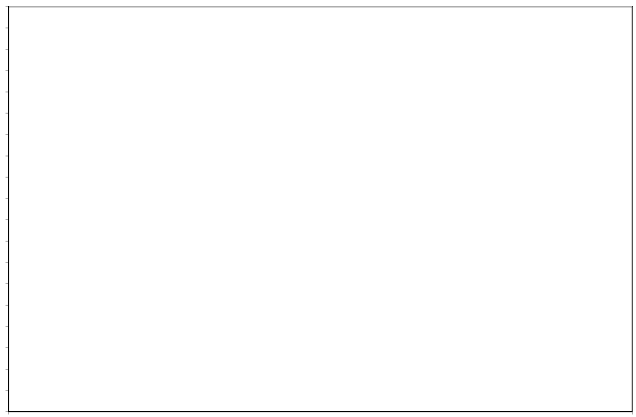
Intake in % of the ARfD

Acute exposure: Lindane / Strawberries



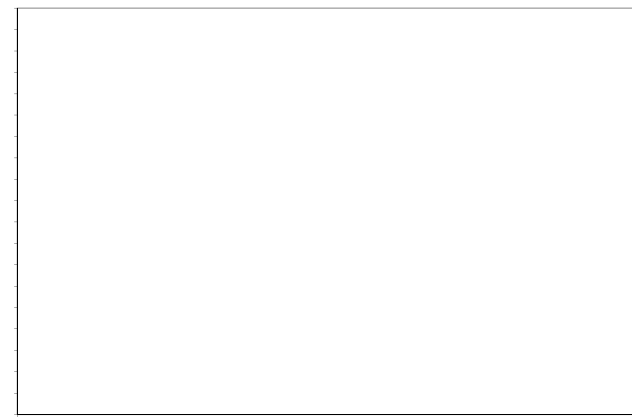
Intake in % of the ARfD

Acute exposure: Lindane / Tomatoes



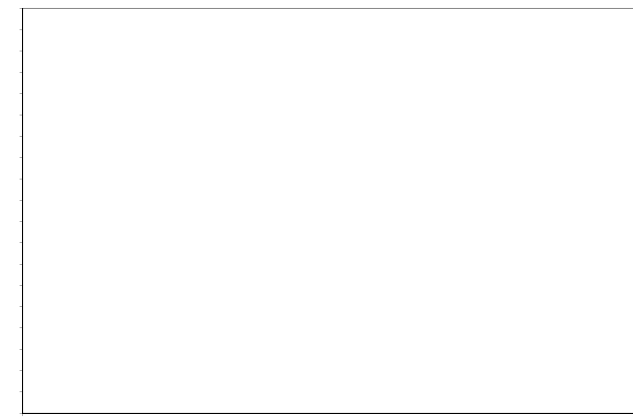
Intake in % of the ARfD

Acute exposure: Lindane / Head cabbage



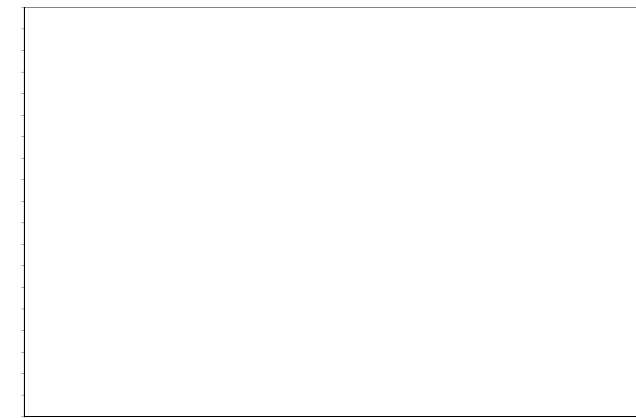
Intake in % of the ARfD

Acute exposure: Lindane / Lettuce



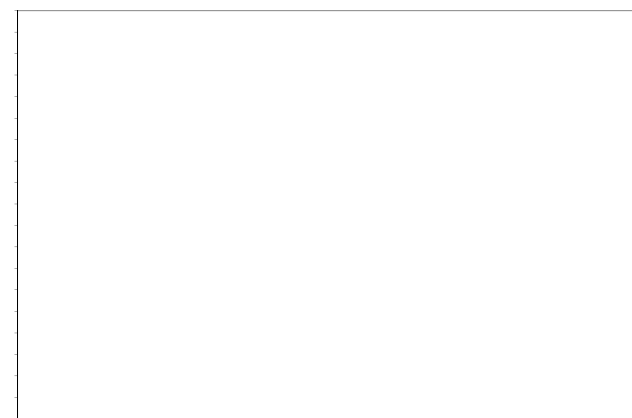
Intake in % of the ARfD

Acute exposure: Lindane / Leek



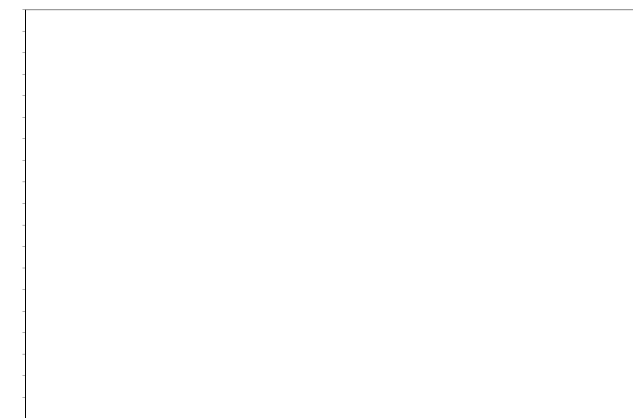
Intake in % of the ARfD

Acute exposure: Lindane / Oats



Intake in % of the ARfD

Acute exposure: Lindane / Rye



Intake in % of the ARfD



Linuron			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.003	ARfD (mg/kg bw):	0.03
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2002	Year of evaluation:	2002

**Chronic risk assessment**

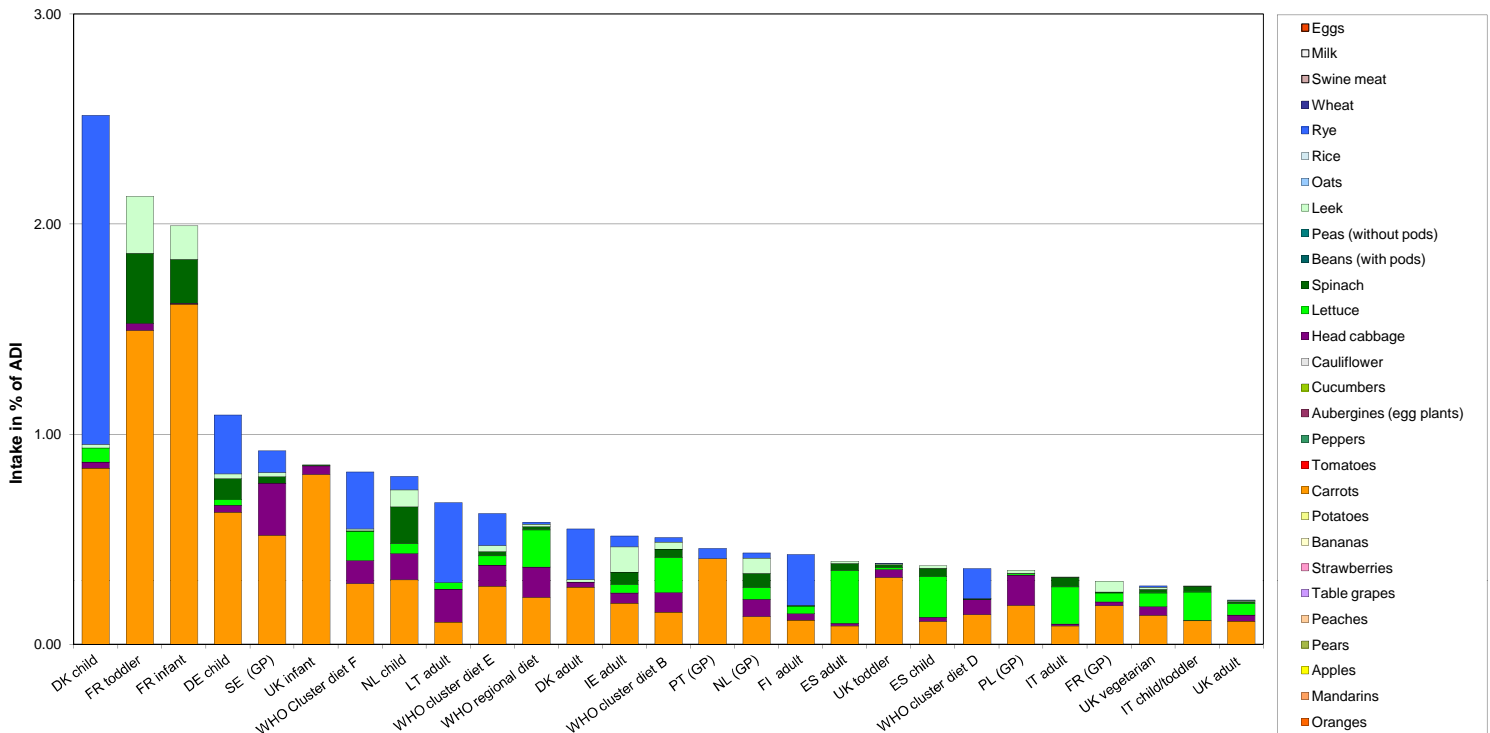
		Exposure (range) in % of ADI minimum - maximum					
		3					
No of diets exceeding ADI:		---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
2.52	DK child	1.57	Rye	0.84	Carrots	0.07	Lettuce
2.13	FR toddler	1.49	Carrots	0.33	Spinach	0.27	Leek
1.99	FR infant	1.62	Carrots	0.21	Spinach	0.16	Leek
1.09	DE child	0.63	Carrots	0.28	Rye	0.10	Spinach
0.92	SE (GP)	0.52	Carrots	0.25	Head cabbage	0.10	Rye
0.85	UK infant	0.81	Carrots	0.04	Head cabbage	0.01	Spinach
0.82	WHO Cluster diet F	0.29	Carrots	0.27	Rye	0.14	Lettuce
0.80	NL child	0.31	Carrots	0.18	Spinach	0.13	Head cabbage
0.68	LT adult	0.38	Rye	0.16	Head cabbage	0.11	Carrots
0.62	WHO cluster diet E	0.28	Carrots	0.15	Rye	0.10	Head cabbage
0.58	WHO regional diet	0.22	Carrots	0.18	Lettuce	0.14	Head cabbage
0.55	DK adult	0.27	Carrots	0.24	Rye	0.02	Head cabbage
0.52	IE adult	0.20	Carrots	0.12	Leek	0.06	Spinach
0.51	WHO cluster diet B	0.17	Lettuce	0.15	Carrots	0.09	Head cabbage
0.46	PT (GP)	0.41	Carrots	0.05	Rye		FRUIT (FRESH OR FROZEN)
0.44	NL (GP)	0.13	Carrots	0.08	Head cabbage	0.07	Leek
0.43	FI adult	0.24	Rye	0.12	Carrots	0.04	Lettuce
0.40	ES adult	0.25	Lettuce	0.09	Carrots	0.03	Spinach
0.39	UK toddler	0.32	Carrots	0.04	Head cabbage	0.01	Spinach
0.37	ES child	0.20	Lettuce	0.11	Carrots	0.04	Spinach
0.36	WHO cluster diet D	0.14	Rye	0.14	Carrots	0.07	Head cabbage
0.35	PL (GP)	0.19	Carrots	0.14	Head cabbage	0.02	Leek
0.32	IT adult	0.18	Lettuce	0.09	Carrots	0.04	Spinach
0.30	FR (GP)	0.18	Carrots	0.05	Leek	0.04	Lettuce
0.28	UK vegetarian	0.14	Carrots	0.07	Lettuce	0.04	Head cabbage
0.28	IT child/toddler	0.14	Lettuce	0.11	Carrots	0.03	Spinach
0.21	UK adult	0.11	Carrots	0.05	Lettuce	0.03	Head cabbage

**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	2549							
2010	Peaches	0.05	1262							
2010	Strawberries	0.05	2036							
2010	Tomatoes	0.05	1941							
2010	Head cabbage	0.05	1007	0.10		0.02		2.98	NL child	
2010	Lettuce	0.05	2043	0.34		0.02		1.61	DE child	
2010	Leek	0.05	807	0.87	0.12	0.08		16.51	BE child	
2010	Oats	0.05	154							
2010	Rye	0.05	370	0.27		0.02		0.42	UK infant	
2010	Swine Meat									
2010	Milk									

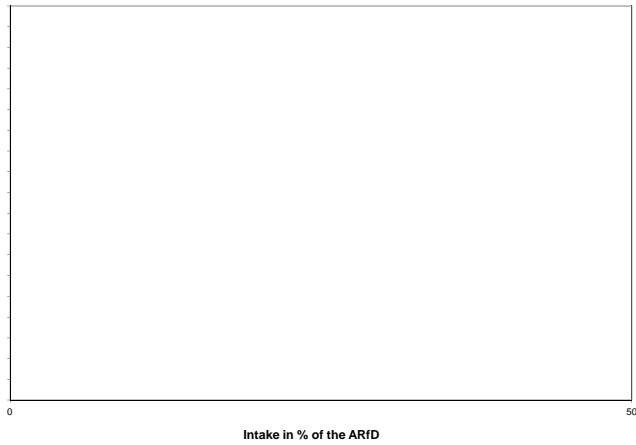
a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Linuron**

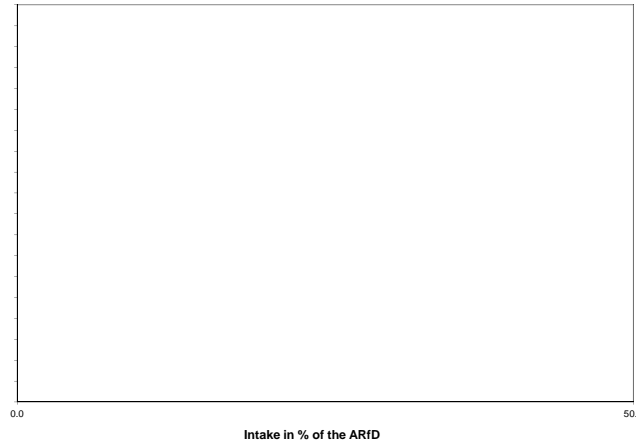


**Linuron**

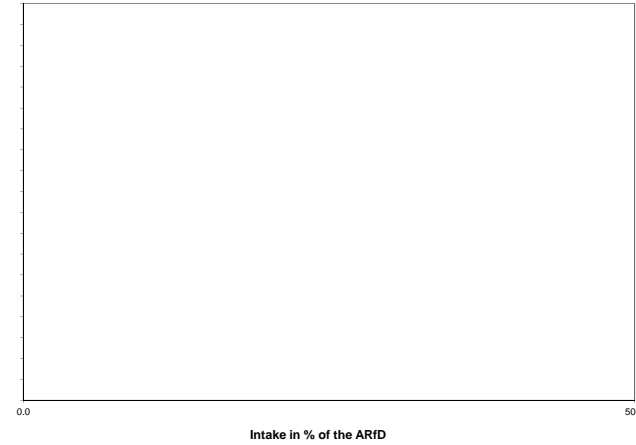
Acute exposure: Linuron / Apples



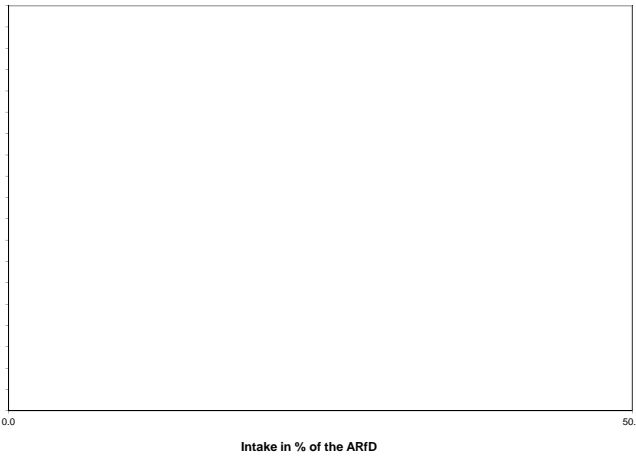
Acute exposure: Linuron / Peaches



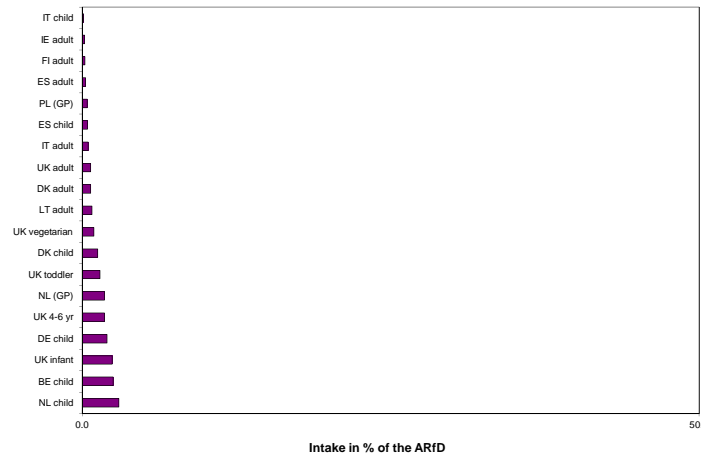
Acute exposure: Linuron / Strawberries



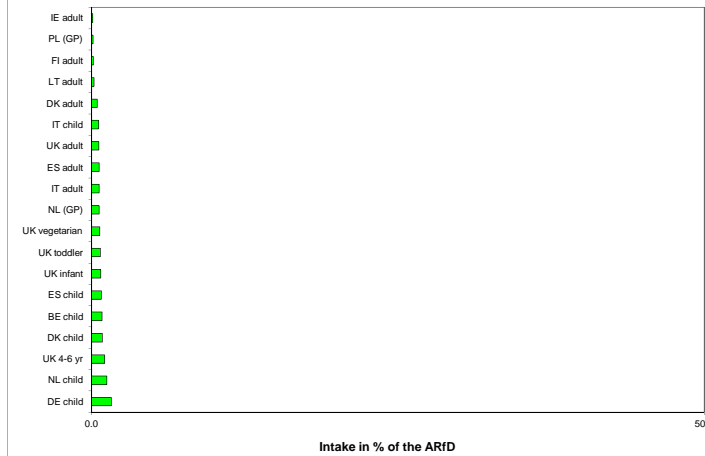
Acute exposure: Linuron / Tomatoes



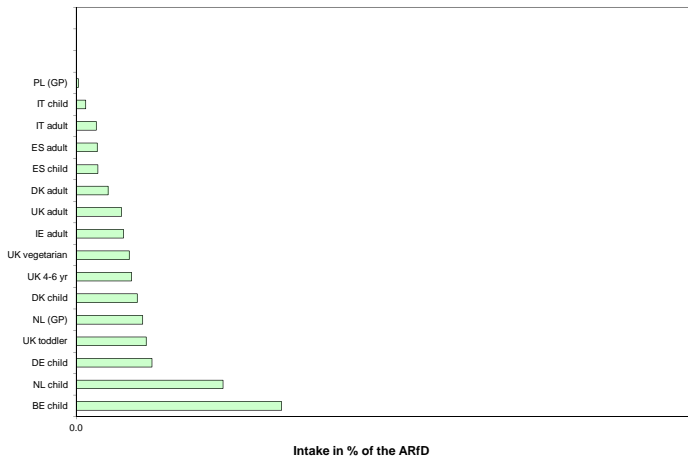
Acute exposure: Linuron / Head cabbage



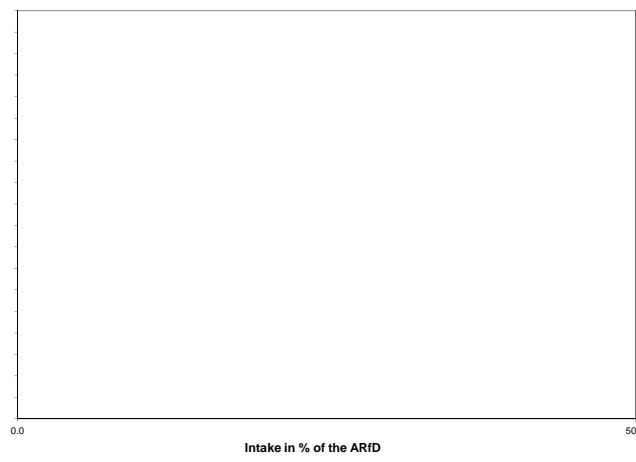
Acute exposure: Linuron / Lettuce



Acute exposure: Linuron / Leek



Acute exposure: Linuron / Oats



Acute exposure: Linuron / Rye



Lufenuron			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.015	ARfD (mg/kg bw):	n.n.
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2009	Year of evaluation:	2009

### Chronic risk assessment

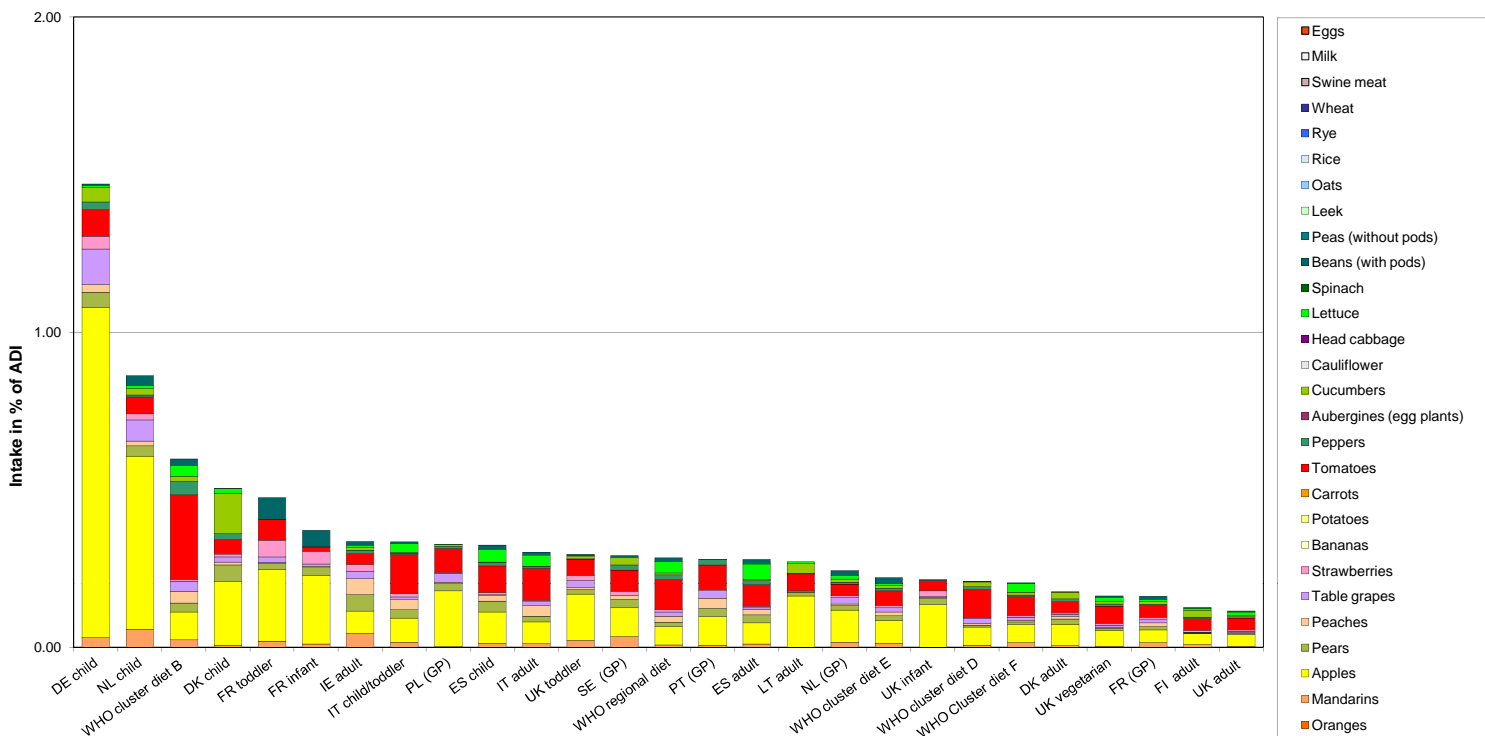
		Exposure (range) in % of ADI minimum - maximum					
		1					
		No of diets exceeding ADI: ---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
1.47	DE child	1.05	Apples	0.11	Table grapes	0.08	Tomatoes
0.86	NL child	0.55	Apples	0.07	Table grapes	0.06	Mandarins
0.60	WHO cluster diet B	0.27	Tomatoes	0.09	Apples	0.04	Peppers
0.50	DK child	0.20	Apples	0.13	Cucumbers	0.05	Pears
0.48	FR toddler	0.23	Apples	0.07	Beans (with pods)	0.07	Tomatoes
0.37	FR infant	0.22	Apples	0.05	Beans (with pods)	0.04	Strawberries
0.34	IE adult	0.07	Apples	0.05	Pears	0.05	Peaches
0.34	IT child/toddler	0.12	Tomatoes	0.08	Apples	0.03	Peaches
0.33	PL (GP)	0.18	Apples	0.08	Tomatoes	0.03	Table grapes
0.32	ES child	0.10	Apples	0.09	Tomatoes	0.04	Lettuce
0.30	IT adult	0.10	Tomatoes	0.07	Apples	0.04	Lettuce
0.29	UK toddler	0.15	Apples	0.05	Tomatoes	0.02	Table grapes
0.29	SE (GP)	0.09	Apples	0.07	Tomatoes	0.03	Mandarins
0.28	WHO regional diet	0.10	Tomatoes	0.06	Apples	0.04	Lettuce
0.28	PT (GP)	0.09	Apples	0.08	Tomatoes	0.03	Peaches
0.28	ES adult	0.07	Tomatoes	0.07	Apples	0.05	Lettuce
0.27	LT adult	0.16	Apples	0.05	Tomatoes	0.03	Cucumbers
0.24	NL (GP)	0.10	Apples	0.04	Tomatoes	0.02	Table grapes
0.22	WHO cluster diet E	0.07	Apples	0.05	Tomatoes	0.02	Beans (with pods)
0.21	UK infant	0.14	Apples	0.03	Tomatoes	0.02	Pears
0.21	WHO cluster diet D	0.09	Tomatoes	0.06	Apples	0.02	Table grapes
0.20	WHO Cluster diet F	0.06	Tomatoes	0.06	Apples	0.03	Lettuce
0.18	DK adult	0.07	Apples	0.04	Tomatoes	0.02	Cucumbers
0.16	UK vegetarian	0.05	Tomatoes	0.05	Apples	0.01	Lettuce
0.16	FR (GP)	0.04	Apples	0.04	Tomatoes	0.01	Mandarins
0.13	FI adult	0.04	Tomatoes	0.03	Apples	0.02	Cucumbers
0.12	UK adult	0.04	Tomatoes	0.04	Apples	0.01	Lettuce

### Acute risk assessment

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.5	1977	1.47		0.10				
2010	Peaches	1	1015	0.39		0.05				
2010	Strawberries	1	1618	0.25		0.04				
2010	Tomatoes	0.5	1524	0.46		0.07				
2010	Head cabbage	0.5	829							
2010	Lettuce	0.5	1530	0.26		0.09				
2010	Leek	0.05	640							
2010	Oats	0.02	135							
2010	Rye	0.02	334							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

### Chronic risk assessment: Lufenuron



**Lufenuron**

Acute exposure: Lufenuron / Apples



Intake in % of the ARfD

Acute exposure: Lufenuron / Peaches



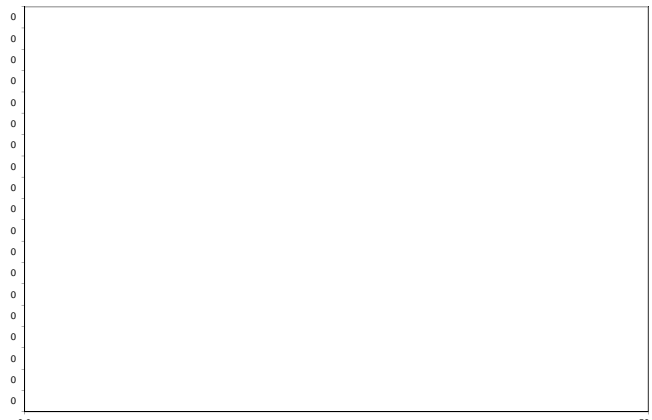
Intake in % of the ARfD

Acute exposure: Lufenuron / Strawberries



Intake in % of the ARfD

Acute exposure: Lufenuron / Tomatoes



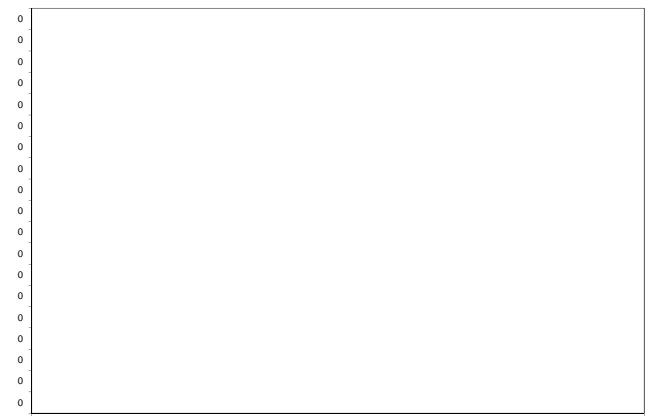
Intake in % of the ARfD

Acute exposure: Lufenuron / Head cabbage



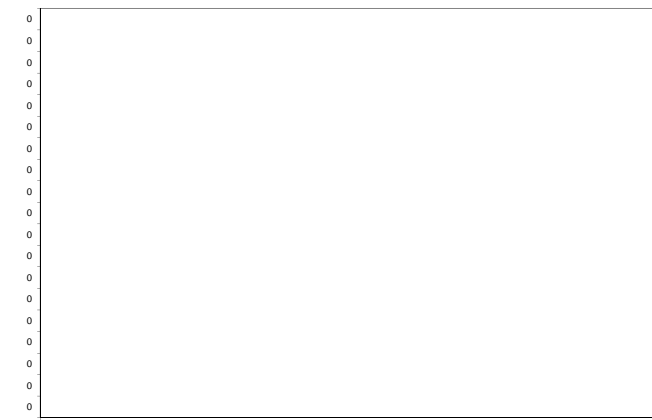
Intake in % of the ARfD

Acute exposure: Lufenuron / Lettuce



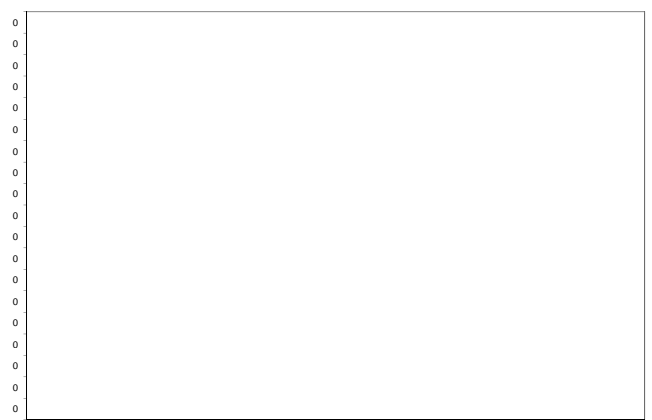
Intake in % of the ARfD

Acute exposure: Lufenuron / Leek



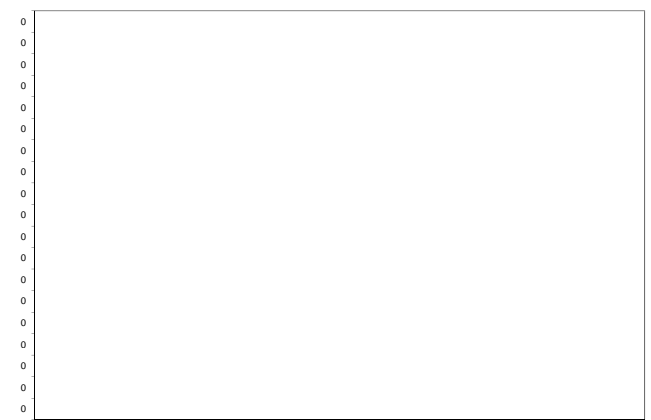
Intake in % of the ARfD

Acute exposure: Lufenuron / Oats



Intake in % of the ARfD

Acute exposure: Lufenuron / Rye



Intake in % of the ARfD

## Malathion

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.03</b>	ARfD (mg/kg bw):	<b>0.3</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2010</b>	Year of evaluation:	<b>2010</b>

### Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
1

**No of diets exceeding ADI:** ---

	Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.60	WHO cluster diet B	0.46	Wheat	0.03	Oranges	0.03	Rice	
0.48	NL child	0.26	Wheat	0.11	Oranges	0.03	Mandarins	
0.48	DE child	0.22	Wheat	0.14	Oranges	0.04	Table grapes	
0.43	IT child/toddler	0.36	Wheat	0.02	Oranges	0.01	Pears	
0.41	WHO cluster diet D	0.35	Wheat	0.03	Rice	0.01	Oranges	
0.38	ES child	0.24	Wheat	0.08	Oranges	0.02	Rice	
0.37	DK child	0.30	Wheat	0.02	Pears	0.01	Oats	
0.34	UK toddler	0.21	Wheat	0.07	Oranges	0.03	Rice	
0.32	PT (GP)	0.21	Wheat	0.04	Rice	0.02	Oranges	
0.29	FR toddler	0.14	Wheat	0.07	Oranges	0.04	Beans (with pods)	
0.28	IT adult	0.22	Wheat	0.01	Oranges	0.01	Peaches	
0.28	WHO cluster diet E	0.21	Wheat	0.02	Oranges	0.01	Rice	
0.26	SE (GP)	0.17	Wheat	0.03	Oranges	0.02	Rice	
0.26	WHO Cluster diet F	0.19	Wheat	0.03	Oranges	0.01	Rice	
0.26	IE adult	0.12	Wheat	0.04	Oranges	0.02	Pears	
0.24	UK infant	0.14	Wheat	0.05	Oranges	0.03	Rice	
0.22	WHO regional diet	0.16	Wheat	0.02	Oranges	0.01	Rice	
0.22	ES adult	0.13	Wheat	0.05	Oranges	0.01	Rice	
0.22	FR (GP)	0.18	Wheat	0.01	Oranges	0.01	Mandarins	
0.21	NL (GP)	0.11	Wheat	0.05	Oranges	0.01	Rice	
0.18	UK vegetarian	0.11	Wheat	0.03	Oranges	0.02	Rice	
0.14	DK adult	0.11	Wheat	0.01	Pears	0.00	Oranges	
0.14	UK adult	0.09	Wheat	0.02	Oranges	0.02	Rice	
0.13	FR infant	0.05	Wheat	0.03	Oranges	0.03	Beans (with pods)	
0.11	FI adult	0.05	Wheat	0.03	Oranges	0.01	Rice	
0.08	LT adult	0.06	Wheat	0.01	Rice	0.01	Pears	
0.03	PL (GP)	0.01	Table grapes	0.01	Pears	0.00	Peppers	

### Acute risk assessment

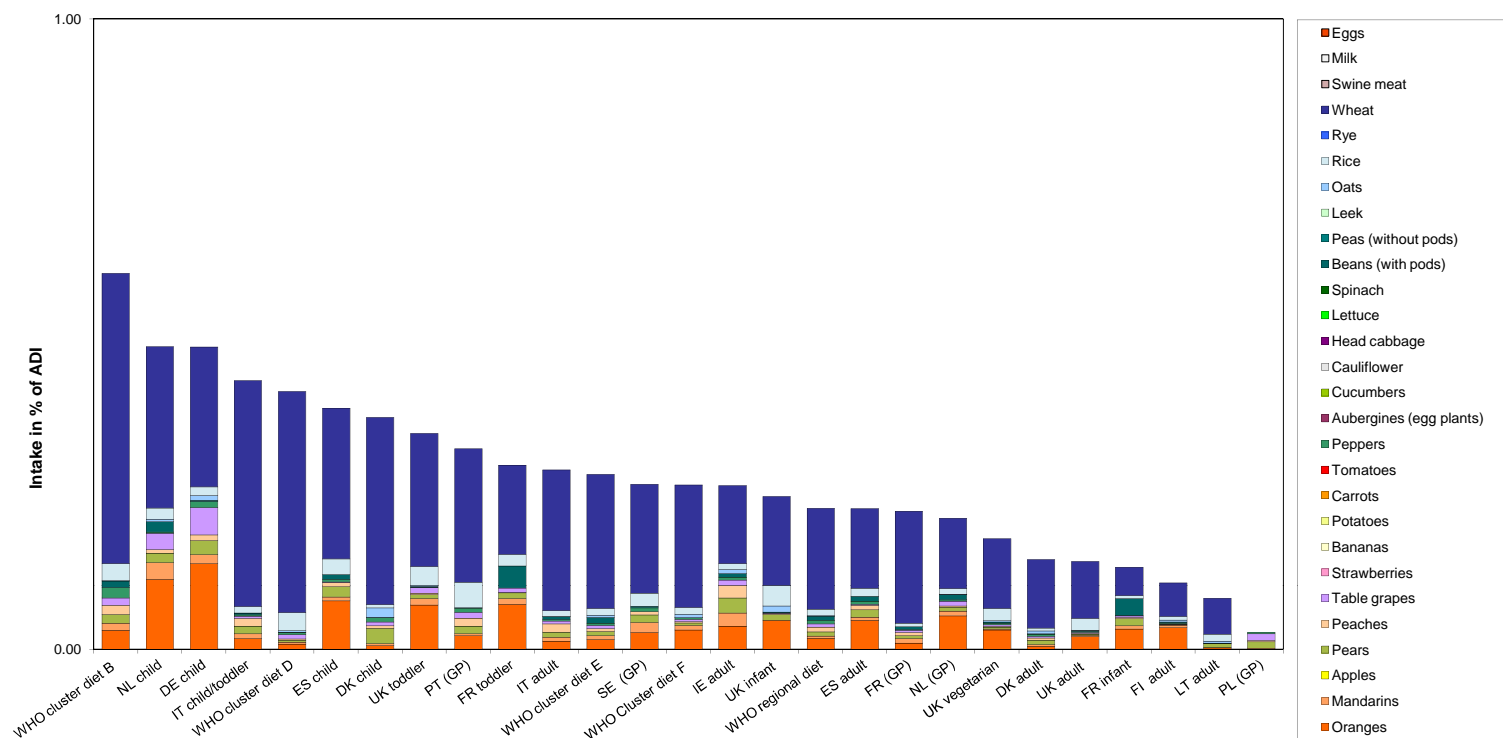
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.02	2648							
2010	Peaches	0.02	1258	0.08		0.03		0.57	DE child	
2010	Strawberries	0.02	1949							
2010	Tomatoes	0.02	2144							
2010	Head cabbage	0.02	1077							
2010	Lettuce	0.02	1942							
2010	Leek	0.02	808							
2010	Oats	8	205	0.49		0.01		0.02	DE child	
2010	Rye	8	400	0.25		0.06		0.13	UK infant	
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Malathion



**Malathion**

Acute exposure: Malathion / Apples



Intake in % of the ARfD

Acute exposure: Malathion / Peaches



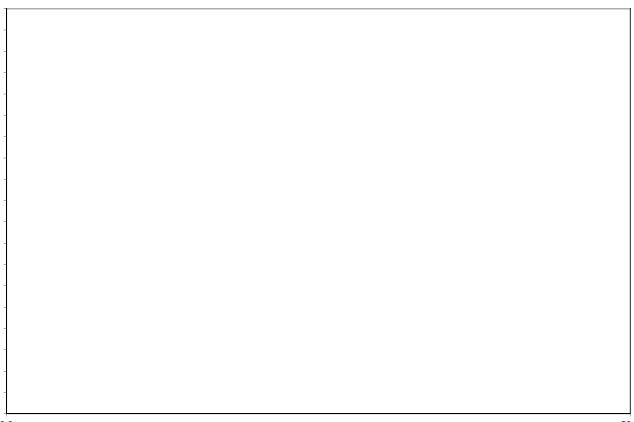
Intake in % of the ARfD

Acute exposure: Malathion / Strawberries



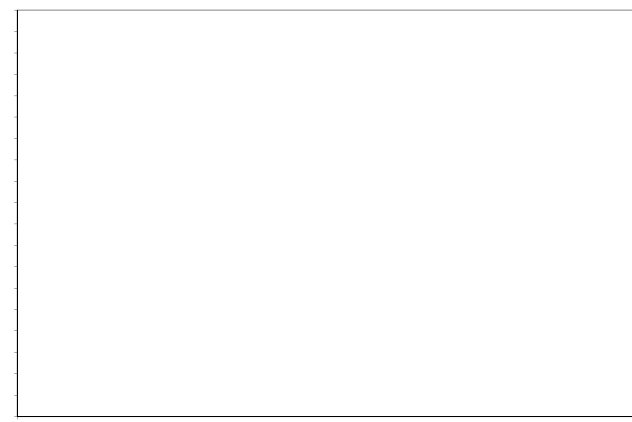
Intake in % of the ARfD

Acute exposure: Malathion / Tomatoes



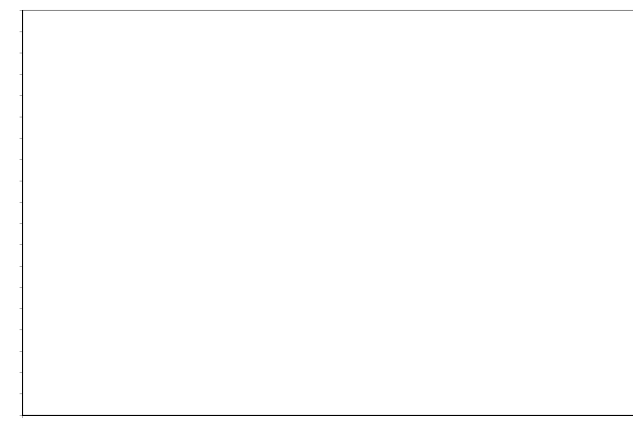
Intake in % of the ARfD

Acute exposure: Malathion / Head cabbage



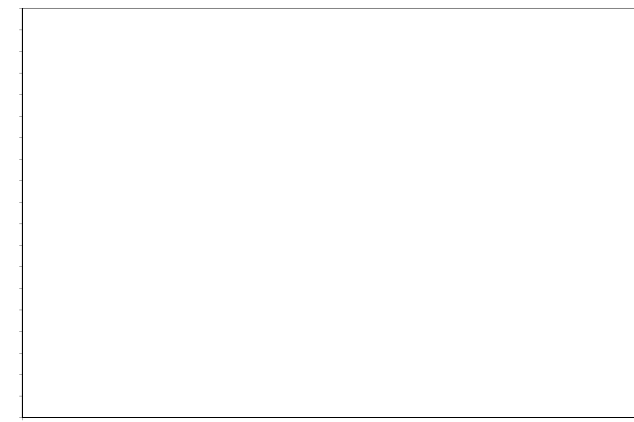
Intake in % of the ARfD

Acute exposure: Malathion / Lettuce



Intake in % of the ARfD

Acute exposure: Malathion / Leek



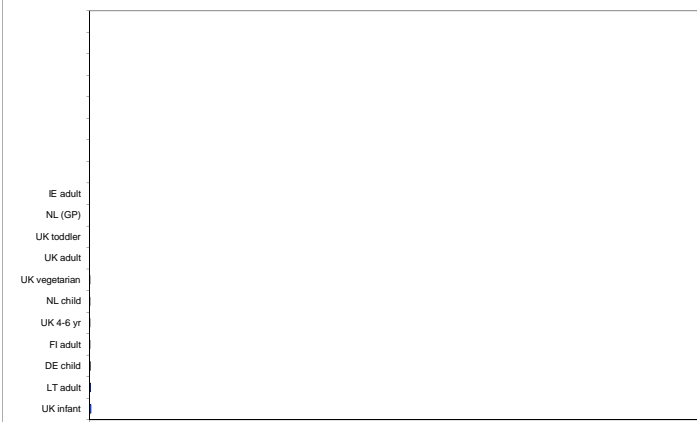
Intake in % of the ARfD

Acute exposure: Malathion / Oats



Intake in % of the ARfD

Acute exposure: Malathion / Rye



Intake in % of the ARfD

## Mepanipyrim

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.02</b>	ARfD (mg/kg bw):	<b>n.n.</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2004</b>	Year of evaluation:	<b>2004</b>

### Chronic risk assessment

Highest calculated exposure in % of ADI		MS Diet		Exposure (range) in % of ADI minimum - maximum		No of diets exceeding ADI: ---			
				Highest contributor to MS diet (in % of ADI)		2nd contributor to MS diet (in % of ADI)		3rd contributor to MS diet (in % of ADI)	
				Commodity / group of commodities		Commodity / group of commodities		Commodity / group of commodities	
0.03	FR toddler	0.03	Strawberries	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)			
0.03	DE child	0.03	Strawberries	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)			
0.03	FR infant	0.03	Strawberries	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)			
0.01	IE adult	0.01	Strawberries	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)			
0.01	NL child	0.01	Strawberries	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)			
0.01	UK infant	0.01	Strawberries	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)			
0.01	UK toddler	0.01	Strawberries	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)			
0.01	SE (GP)	0.01	Strawberries	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)			
0.01	IT child/toddler	0.01	Strawberries	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)			
0.01	DK child	0.01	Strawberries	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)			
0.00	FR (GP)	0.00	Strawberries	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)			
0.00	WHO regional diet	0.00	Strawberries	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)			
0.00	WHO cluster diet E	0.00	Strawberries	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)			
0.00	WHO cluster diet B	0.00	Strawberries	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)			
0.00	NL (GP)	0.00	Strawberries	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)			
0.00	FI adult	0.00	Strawberries	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)			
0.00	UK vegetarian	0.00	Strawberries	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)			
0.00	ES child	0.00	Strawberries	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)			
0.00	WHO Cluster diet F	0.00	Strawberries	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)			
0.00	ES adult	0.00	Strawberries	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)			
0.00	IT adult	0.00	Strawberries	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)			
0.00	UK adult	0.00	Strawberries	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)			
0.00	DK adult	0.00	Strawberries	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)			
0.00	PT (GP)	0.00	Strawberries	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)			
0.00	LT adult	0.00	Strawberries	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)			
0.00	WHO cluster diet D	0.00	Strawberries	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)			
0.00	PL (GP)	0.00	Strawberries	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)			

### Acute risk assessment

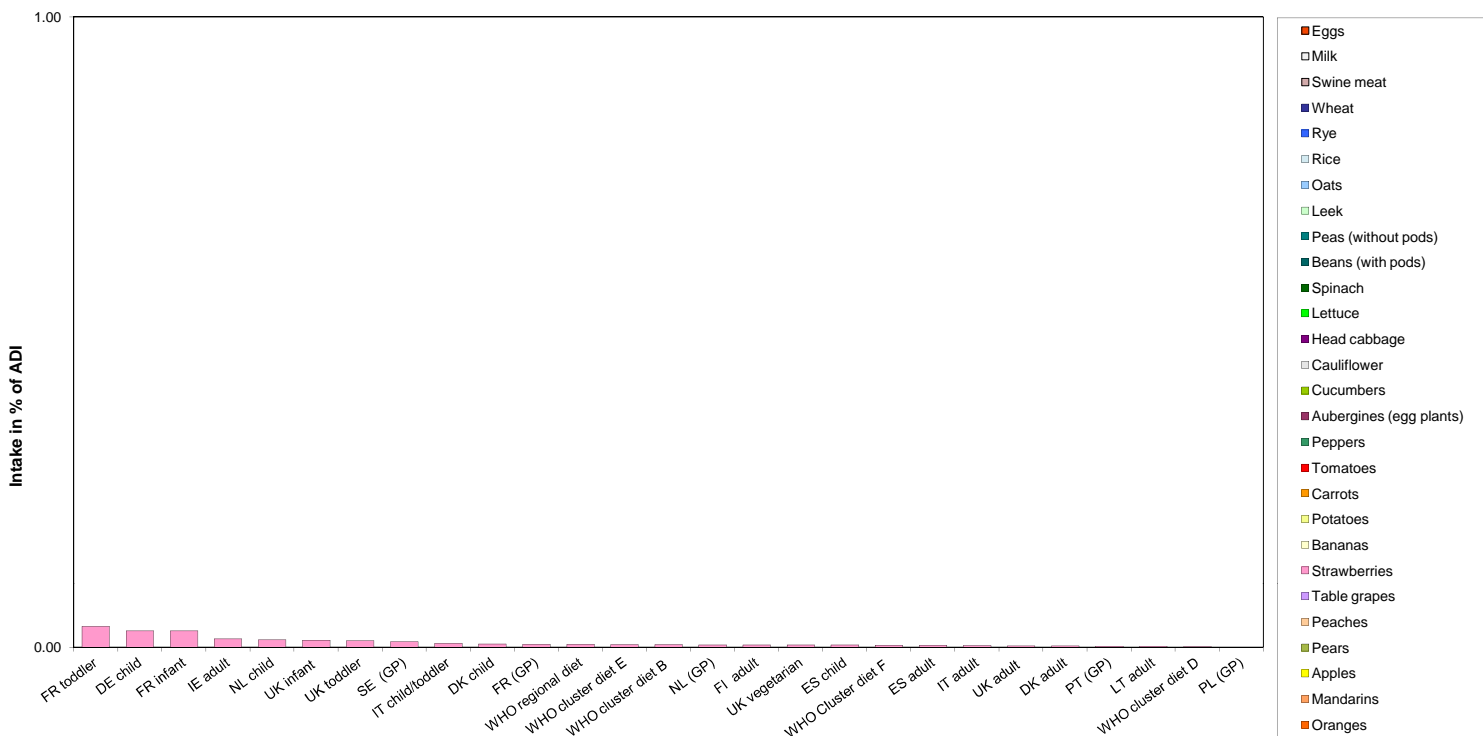
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
2010	Peaches	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
2010	Strawberries	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
2010	Tomatoes	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
2010	Head cabbage	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
2010	Lettuce	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
2010	Leek	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
2010	Oats	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
2010	Rye	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
2010	Swine Meat	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			
2010	Milk	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A			

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Mepanipyrim



**Mepanipyrim**

Acute exposure: Mepanipyrim / Apples



Intake in % of the ARfD

Acute exposure: Mepanipyrim / Peaches



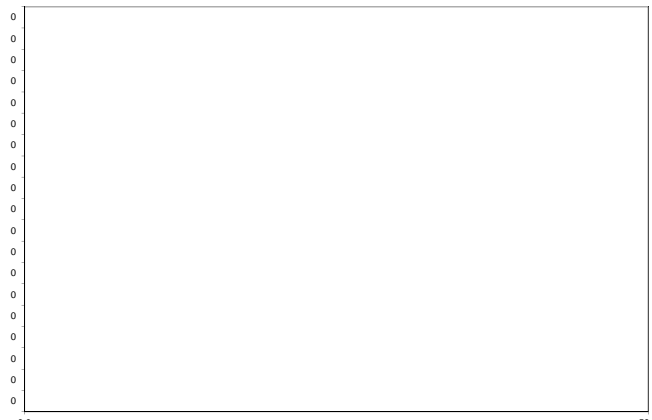
Intake in % of the ARfD

Acute exposure: Mepanipyrim / Strawberries



Intake in % of the ARfD

Acute exposure: Mepanipyrim / Tomatoes



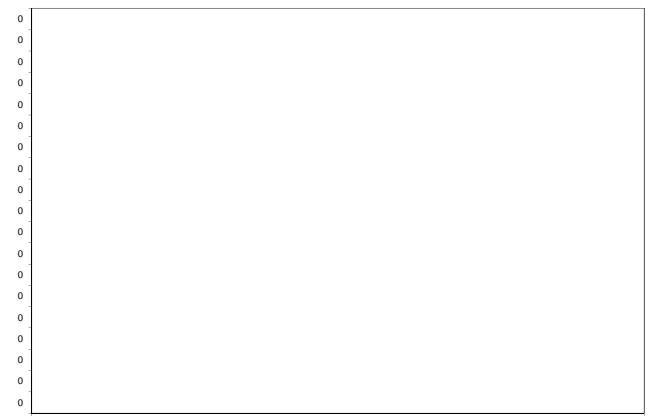
Intake in % of the ARfD

Acute exposure: Mepanipyrim / Head cabbage



Intake in % of the ARfD

Acute exposure: Mepanipyrim / Lettuce



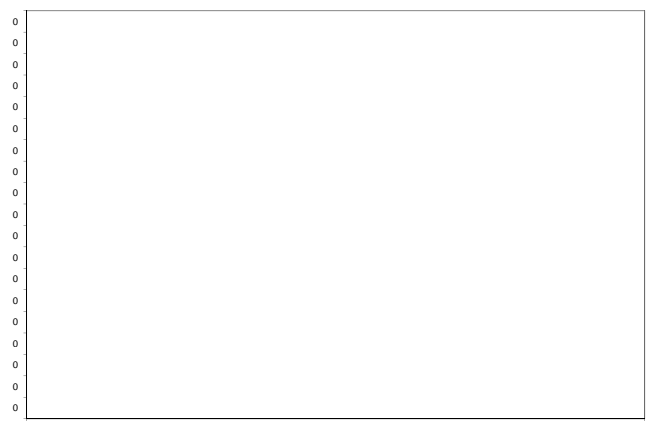
Intake in % of the ARfD

Acute exposure: Mepanipyrim / Leek



Intake in % of the ARfD

Acute exposure: Mepanipyrim / Oats



Intake in % of the ARfD

Acute exposure: Mepanipyrim / Rye



Intake in % of the ARfD



## Mepiquat

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:	obligatory on rye and oats	Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.154	ARfD (mg/kg bw):	0.23
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2008	Year of evaluation:	2008

ADI and ARfD are derived for mepiquat chloride (ADI: 0.2, ARfD: 0.3). Recalculation to mepiquat by multiplying with 0.77 (ADI=0,154 , ARfD= 0.23 )

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.10	WHO cluster diet B	0.09	Wheat	0.00	Pears	0.00	Rye
0.08	WHO cluster diet D	0.07	Wheat	0.01	Rye	0.00	Oats
0.08	IT child/toddler	0.07	Wheat	0.00	Pears	0.00	Oats
0.07	DE child	0.04	Wheat	0.02	Rye	0.01	Pears
0.06	NL child	0.05	Wheat	0.00	Pears	0.00	Rye
0.06	WHO Cluster diet F	0.04	Wheat	0.01	Rye	0.00	Oats
0.05	WHO cluster diet E	0.04	Wheat	0.01	Rye	0.00	Pears
0.05	ES child	0.05	Wheat	0.00	Pears	0.00	FRUIT (FRESH OR FROZEN)
0.05	PT (GP)	0.04	Wheat	0.00	Pears	0.00	Rye
0.05	IT adult	0.05	Wheat	0.00	Pears	0.00	Oats
0.05	UK toddler	0.04	Wheat	0.00	Pears	0.00	Oats
0.04	SE (GP)	0.03	Wheat	0.01	Rye	0.00	Pears
0.04	DK adult	0.02	Wheat	0.01	Rye	0.00	Pears
0.04	IE adult	0.03	Wheat	0.01	Pears	0.00	Rye
0.04	FR (GP)	0.04	Wheat	0.00	Pears	0.00	FRUIT (FRESH OR FROZEN)
0.04	WHO regional diet	0.03	Wheat	0.00	Pears	0.00	Oats
0.04	LT adult	0.02	Rye	0.01	Wheat	0.00	Pears
0.04	UK infant	0.03	Wheat	0.00	Oats	0.00	Pears
0.03	FR toddler	0.03	Wheat	0.00	Pears	0.00	FRUIT (FRESH OR FROZEN)
0.03	ES adult	0.03	Wheat	0.00	Pears	0.00	FRUIT (FRESH OR FROZEN)
0.03	NL (GP)	0.02	Wheat	0.00	Pears	0.00	Rye
0.03	FI adult	0.01	Rye	0.01	Wheat	0.00	Oats
0.02	UK vegetarian	0.02	Wheat	0.00	Pears	0.00	Oats
0.02	UK adult	0.02	Wheat	0.00	Pears	0.00	Oats
0.01	FR infant	0.01	Wheat	0.00	Pears	0.00	Oats
0.00	PL (GP)	0.00	Pears	0.00	FRUIT (FRESH OR FROZEN)	0.00	FRUIT (FRESH OR FROZEN)

## Acute risk assessment

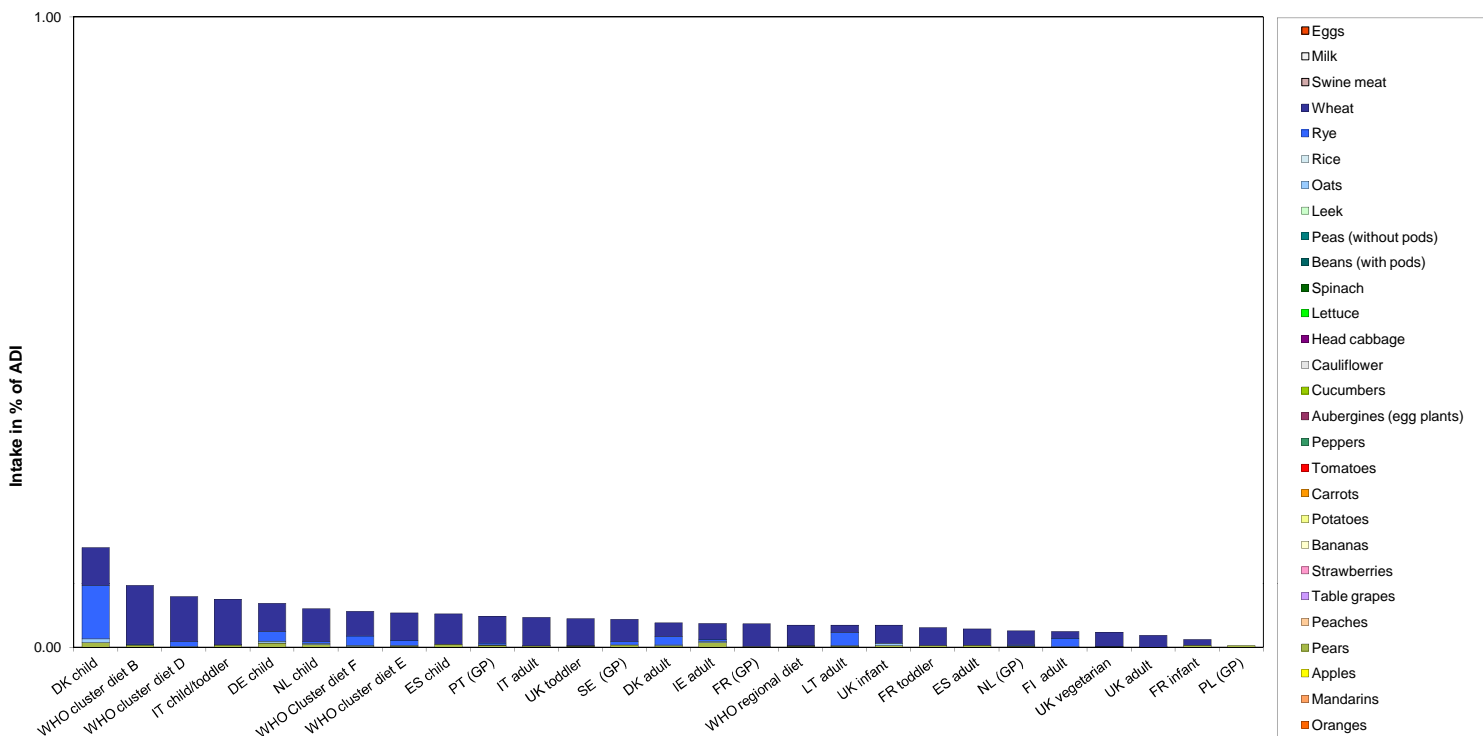
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples									
2010	Peaches									
2010	Strawberries									
2010	Tomatoes									
2010	Head cabbage									
2010	Lettuce									
2010	Leek									
2010	Oats	2	166	6.02		0.25		0.43	DE child	
2010	Rye	3	277	10.47		1.74		4.78	UK infant	
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

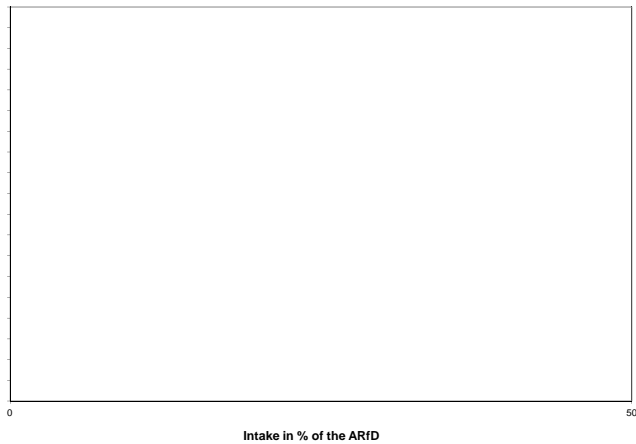
<sup>c)</sup> TRL: toxicological threshold level

## Chronic risk assessment: Mepiquat

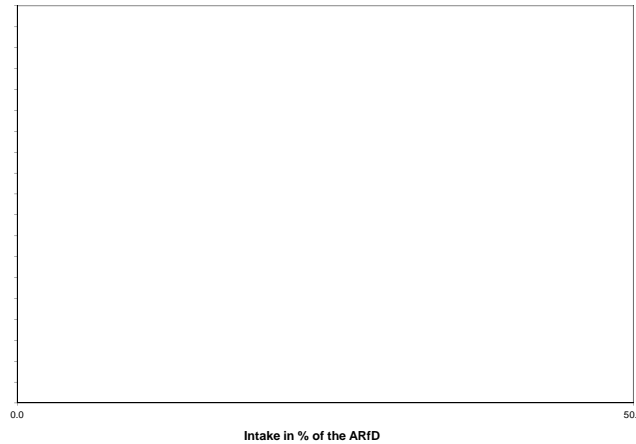


**Mepiquat**

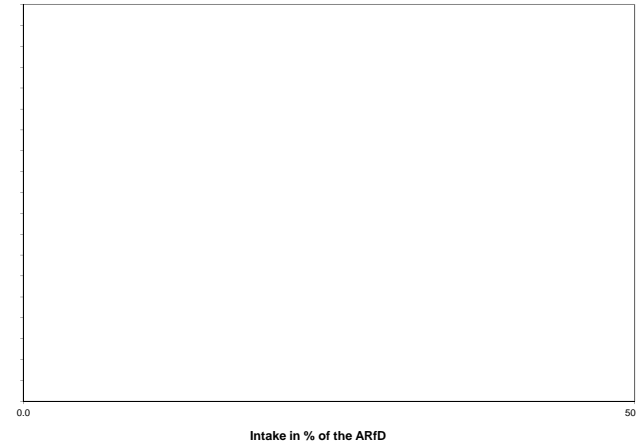
Acute exposure: Mepiquat / Apples



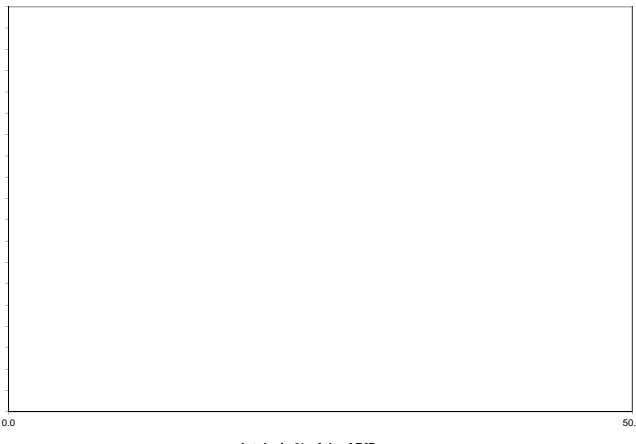
Acute exposure: Mepiquat / Peaches



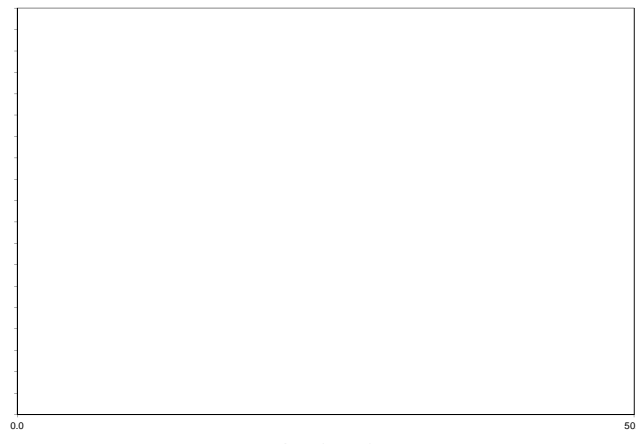
Acute exposure: Mepiquat / Strawberries



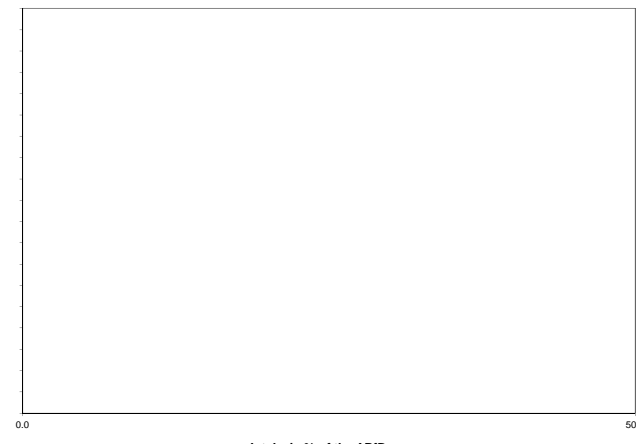
Acute exposure: Mepiquat / Tomatoes



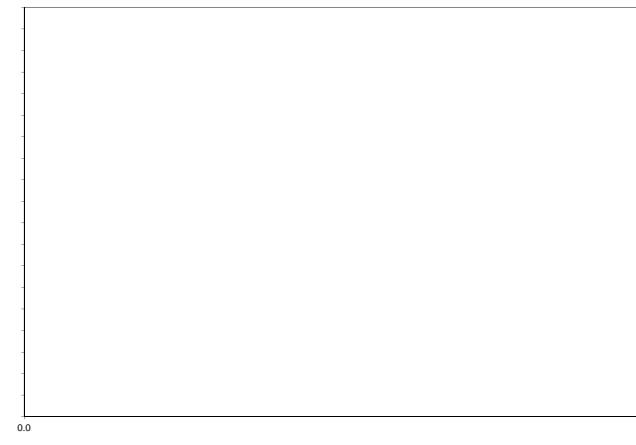
Acute exposure: Mepiquat / Head cabbage



Acute exposure: Mepiquat / Lettuce



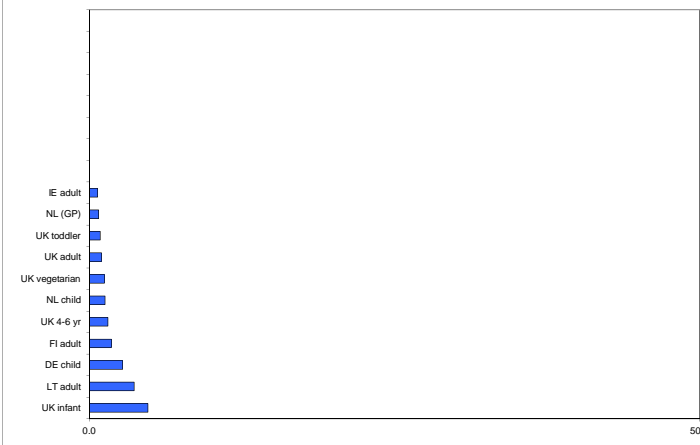
Acute exposure: Mepiquat / Leek



Acute exposure: Mepiquat / Oats



Acute exposure: Mepiquat / Rye



## Metalaxyl-M

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.08	ARfD (mg/kg bw):	0.5
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2002	Year of evaluation:	2002

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.50	DE child	0.29	Apples	0.05	Potatoes	0.03	Bananas
0.41	NL child	0.15	Apples	0.11	Potatoes	0.04	Bananas
0.32	FR toddler	0.10	Potatoes	0.06	Apples	0.04	Carrots
0.25	FR infant	0.08	Potatoes	0.06	Apples	0.04	Carrots
0.23	WHO cluster diet B	0.07	Tomatoes	0.05	Potatoes	0.02	Apples
0.22	DK child	0.06	Apples	0.05	Potatoes	0.03	Cucumbers
0.22	SE (GP)	0.08	Potatoes	0.04	Bananas	0.02	Apples
0.19	PT (GP)	0.10	Potatoes	0.02	Apples	0.02	Tomatoes
0.18	UK toddler	0.07	Potatoes	0.04	Apples	0.02	Bananas
0.18	UK infant	0.06	Potatoes	0.04	Apples	0.03	Bananas
0.17	WHO regional diet	0.08	Potatoes	0.02	Tomatoes	0.02	Apples
0.17	PL (GP)	0.06	Potatoes	0.05	Apples	0.02	Tomatoes
0.17	IE adult	0.04	Potatoes	0.02	Apples	0.02	Bananas
0.15	WHO cluster diet E	0.07	Potatoes	0.02	Apples	0.01	Tomatoes
0.15	ES child	0.03	Potatoes	0.03	Apples	0.02	Tomatoes
0.14	LT adult	0.06	Potatoes	0.04	Apples	0.01	Tomatoes
0.14	WHO Cluster diet F	0.06	Potatoes	0.02	Apples	0.02	Tomatoes
0.14	WHO cluster diet D	0.08	Potatoes	0.02	Tomatoes	0.02	Apples
0.14	NL (GP)	0.05	Potatoes	0.03	Apples	0.01	Tomatoes
0.12	IT child/toddler	0.03	Tomatoes	0.02	Apples	0.02	Potatoes
0.10	ES adult	0.02	Apples	0.02	Tomatoes	0.02	Potatoes
0.10	IT adult	0.03	Tomatoes	0.02	Apples	0.01	Potatoes
0.09	DK adult	0.03	Potatoes	0.02	Apples	0.01	Tomatoes
0.09	UK vegetarian	0.03	Potatoes	0.01	Tomatoes	0.01	Apples
0.08	FR (GP)	0.02	Potatoes	0.01	Apples	0.01	Tomatoes
0.07	UK adult	0.03	Potatoes	0.01	Tomatoes	0.01	Apples
0.07	FI adult	0.02	Potatoes	0.01	Tomatoes	0.01	Apples

## Acute risk assessment

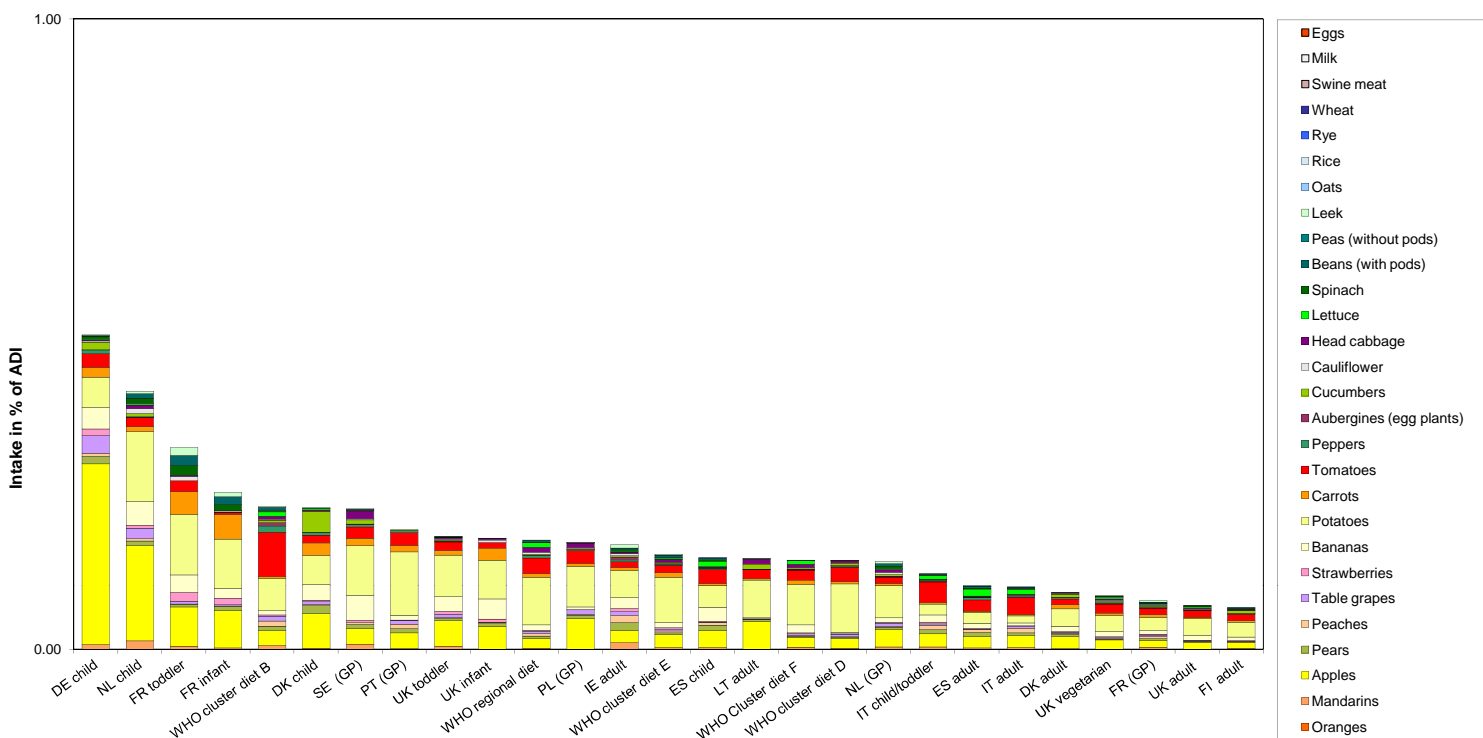
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	1	2258	0.04		0.03		0.63	UK infant	
2010	Peaches	0.05	1154	0.17		0.04		0.47	DE child	
2010	Strawberries	0.5	1725	1.04		0.08		0.24	DE child	
2010	Tomatoes	0.2	1742	1.89		0.11		1.28	BE child	
2010	Head cabbage	1	846	1.30		0.02		0.25	NL child	
2010	Lettuce	2	1892	8.35		0.88		4.75	DE child	
2010	Leek	0.2	759	0.13		0.01		0.14	BE child	
2010	Oats	0.05	164							
2010	Rye	0.05	363							
2010	Swine Meat									
2010	Milk									

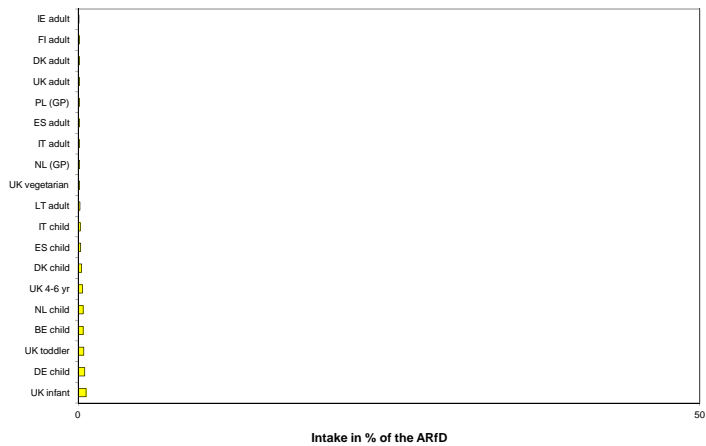
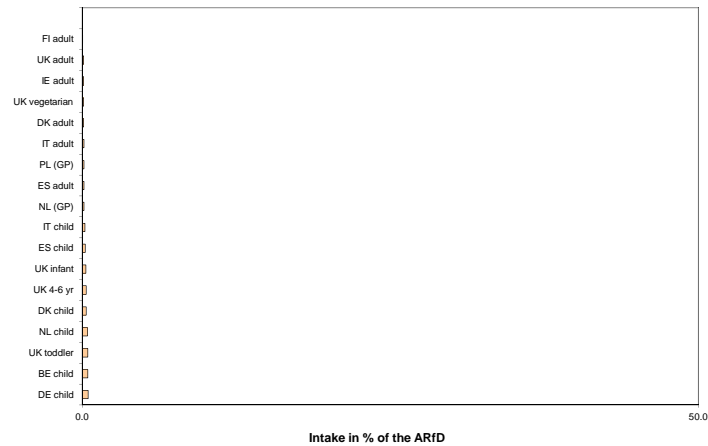
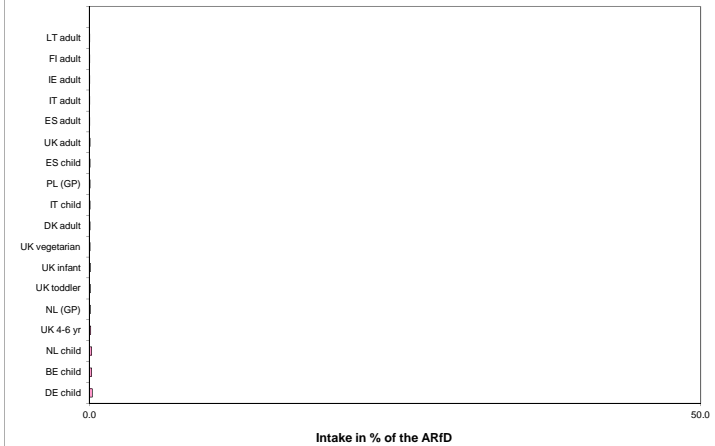
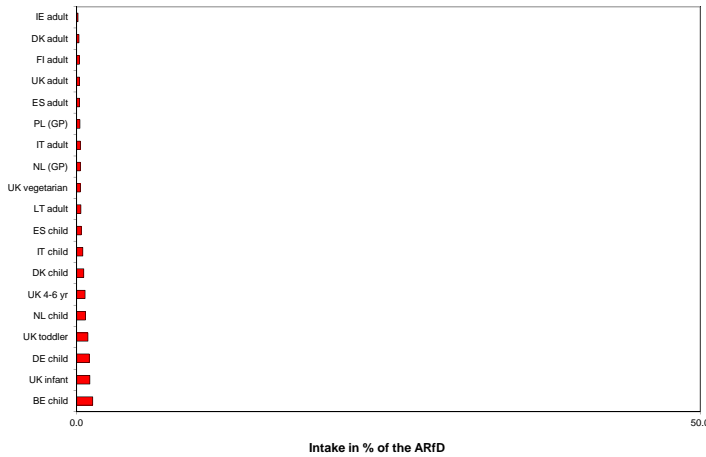
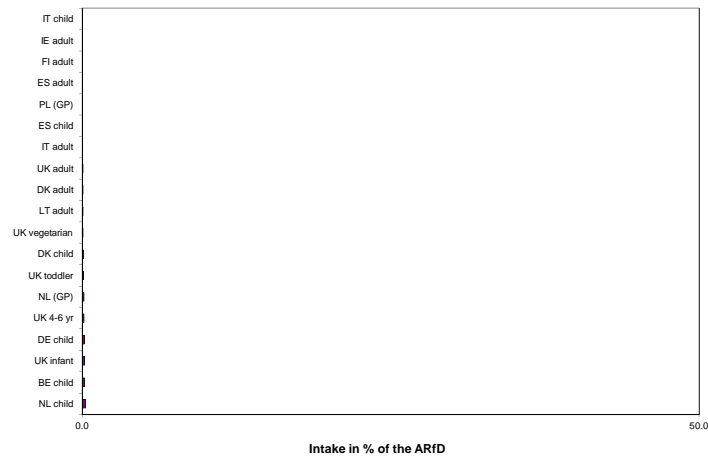
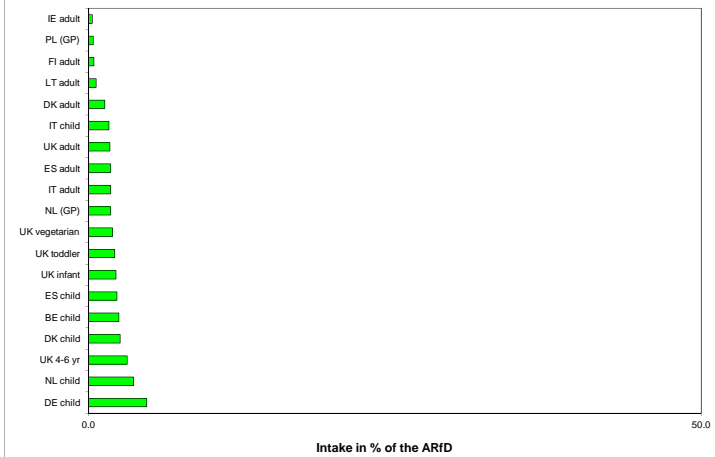
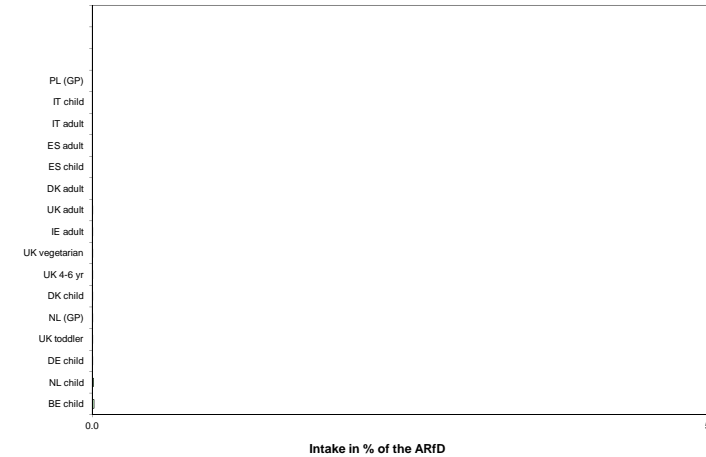
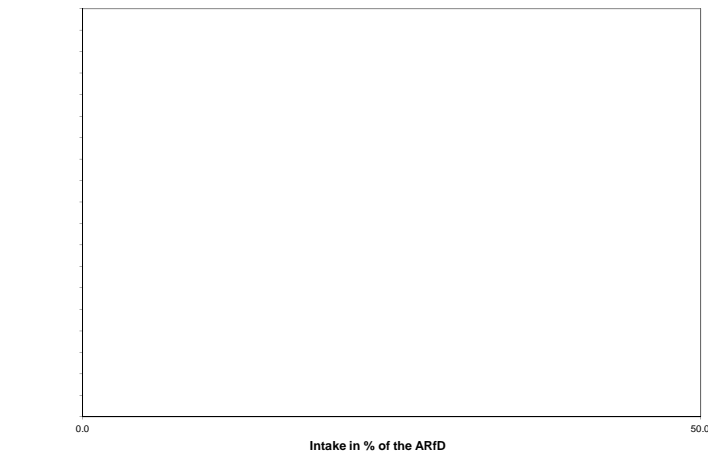
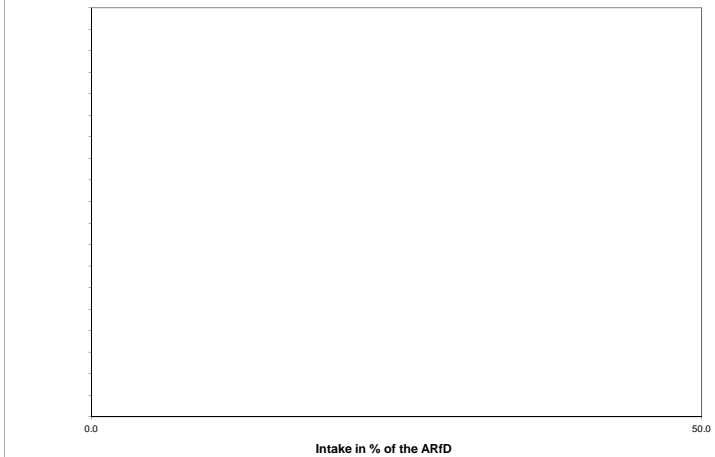
a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

c) TRL: toxicological threshold level

## Chronic risk assessment: Metalaxyl-M



**Metalaxyl-M****Acute exposure: Metalaxyl-M / Apples****Acute exposure: Metalaxyl-M / Peaches****Acute exposure: Metalaxyl-M / Strawberries****Acute exposure: Metalaxyl-M / Tomatoes****Acute exposure: Metalaxyl-M / Head cabbage****Acute exposure: Metalaxyl-M / Lettuce****Acute exposure: Metalaxyl-M / Leek****Acute exposure: Metalaxyl-M / Oats****Acute exposure: Metalaxyl-M / Rye**

Metconazole			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:	Yes	Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.01	ARfD (mg/kg bw):	0.01
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2006	Year of evaluation:	2006

**Chronic risk assessment**

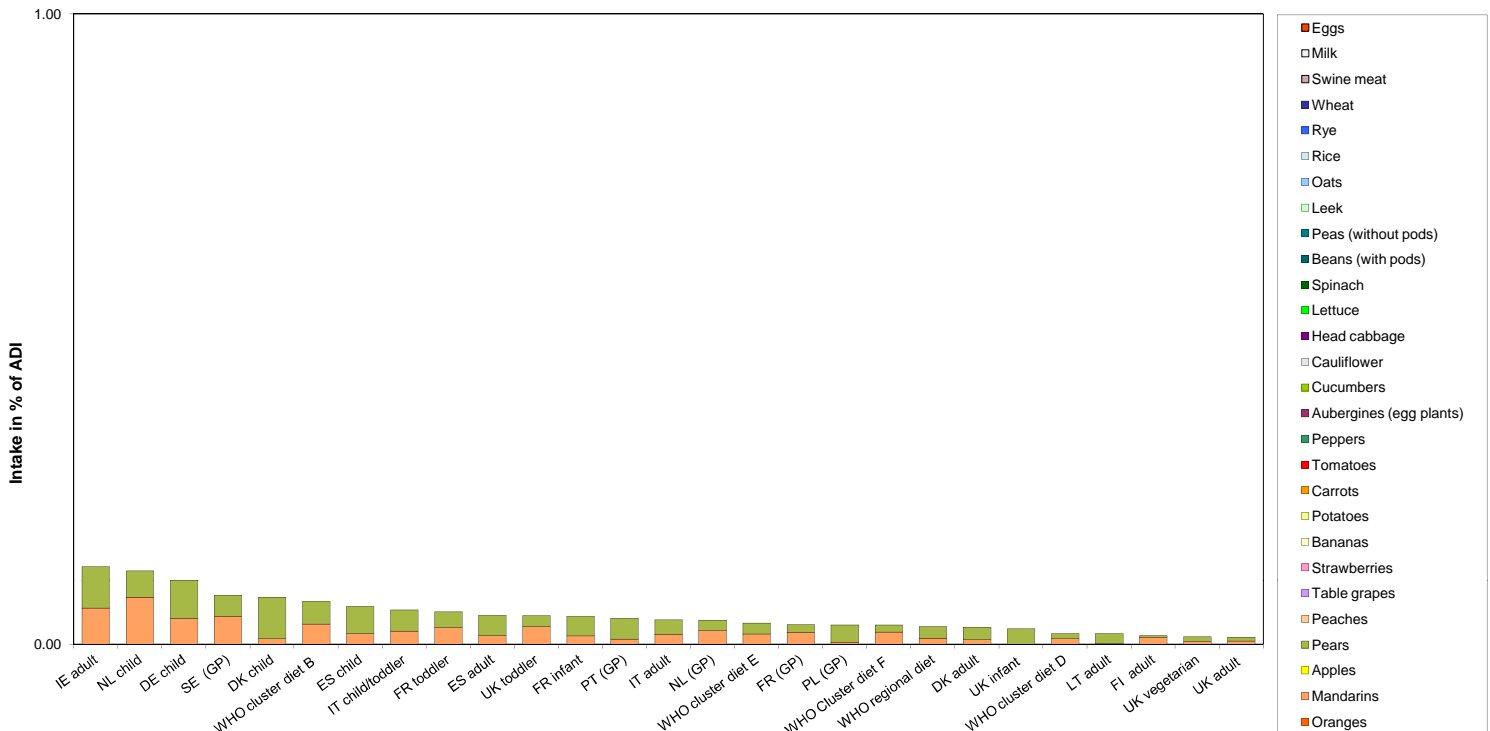
Highest calculated exposure in % of ADI		MS Diet		Exposure (range) in % of ADI minimum - maximum		No of diets exceeding ADI:		---			
Highest contributor to MS diet (in % of ADI)		Commodity / group of commodities		2nd contributor to MS diet (in % of ADI)		Commodity / group of commodities		3rd contributor to MS diet (in % of ADI)		Commodity / group of commodities	
0.12	IE adult	0.07	Pears	0.06	Mandarins						FRUIT (FRESH OR FROZEN)
0.12	NL child	0.08	Mandarins	0.04	Pears						FRUIT (FRESH OR FROZEN)
0.10	DE child	0.06	Pears	0.04	Mandarins						FRUIT (FRESH OR FROZEN)
0.08	SE (GP)	0.04	Mandarins	0.03	Pears						FRUIT (FRESH OR FROZEN)
0.08	DK child	0.07	Pears	0.01	Mandarins						FRUIT (FRESH OR FROZEN)
0.07	WHO cluster diet B	0.04	Pears	0.03	Mandarins						FRUIT (FRESH OR FROZEN)
0.06	ES child	0.04	Pears	0.02	Mandarins						FRUIT (FRESH OR FROZEN)
0.05	IT child/toddler	0.03	Pears	0.02	Mandarins						FRUIT (FRESH OR FROZEN)
0.05	FR toddler	0.03	Mandarins	0.02	Pears						FRUIT (FRESH OR FROZEN)
0.05	ES adult	0.03	Pears	0.01	Mandarins						FRUIT (FRESH OR FROZEN)
0.05	UK toddler	0.03	Mandarins	0.02	Pears						FRUIT (FRESH OR FROZEN)
0.04	FR infant	0.03	Pears	0.01	Mandarins						FRUIT (FRESH OR FROZEN)
0.04	PT (GP)	0.03	Pears	0.01	Mandarins						FRUIT (FRESH OR FROZEN)
0.04	IT adult	0.02	Pears	0.02	Mandarins						FRUIT (FRESH OR FROZEN)
0.04	NL (GP)	0.02	Mandarins	0.02	Pears						FRUIT (FRESH OR FROZEN)
0.03	WHO cluster diet E	0.02	Pears	0.02	Mandarins						FRUIT (FRESH OR FROZEN)
0.03	FR (GP)	0.02	Mandarins	0.01	Pears						FRUIT (FRESH OR FROZEN)
0.03	PL (GP)	0.03	Pears	0.00	Mandarins						FRUIT (FRESH OR FROZEN)
0.03	WHO Cluster diet F	0.02	Mandarins	0.01	Pears						FRUIT (FRESH OR FROZEN)
0.03	WHO regional diet	0.02	Pears	0.01	Mandarins						FRUIT (FRESH OR FROZEN)
0.03	DK adult	0.02	Pears	0.01	Mandarins						FRUIT (FRESH OR FROZEN)
0.02	UK infant	0.02	Pears		FRUIT (FRESH OR						FRUIT (FRESH OR FROZEN)
0.02	WHO cluster diet D	0.01	Mandarins	0.01	Pears						FRUIT (FRESH OR FROZEN)
0.02	LT adult	0.02	Pears	0.00	Mandarins						FRUIT (FRESH OR FROZEN)
0.01	FI adult	0.01	Mandarins	0.00	Pears						FRUIT (FRESH OR FROZEN)
0.01	UK vegetarian	0.01	Pears	0.00	Mandarins						FRUIT (FRESH OR FROZEN)
0.01	UK adult	0.01	Pears	0.01	Mandarins						FRUIT (FRESH OR FROZEN)

**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.02	2220							
2010	Peaches		1020							
2010	Strawberries	0.02	1654							
2010	Tomatoes	0.02	1749							
2010	Head cabbage	0.02	950							
2010	Lettuce	0.02	1794							
2010	Leek	0.02	713							
2010	Oats	0.1	210							
2010	Rye	0.1	333							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Metconazole**



**Metconazole**

Acute exposure: Metconazole / Apples



Intake in % of the ARfD

Acute exposure: Metconazole / Peaches



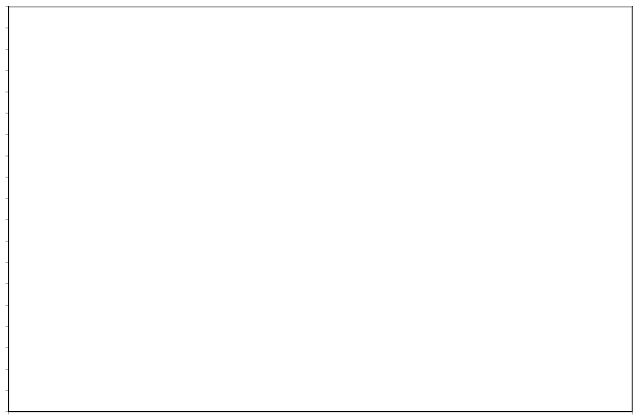
Intake in % of the ARfD

Acute exposure: Metconazole / Strawberries



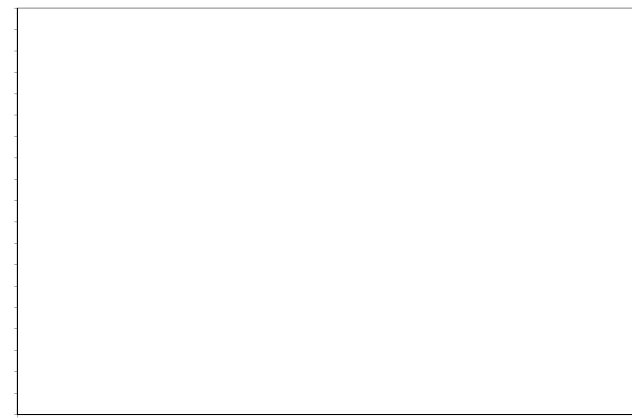
Intake in % of the ARfD

Acute exposure: Metconazole / Tomatoes



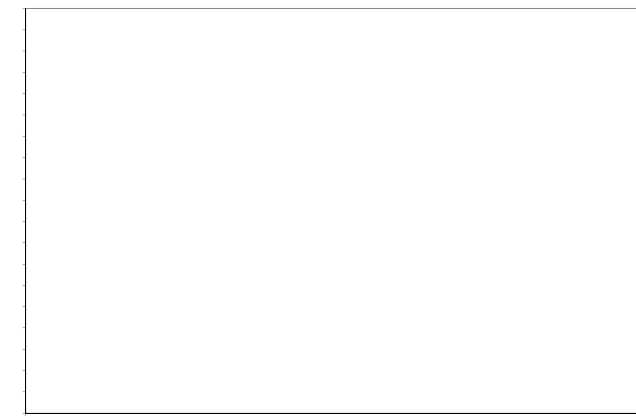
Intake in % of the ARfD

Acute exposure: Metconazole / Head cabbage



Intake in % of the ARfD

Acute exposure: Metconazole / Lettuce



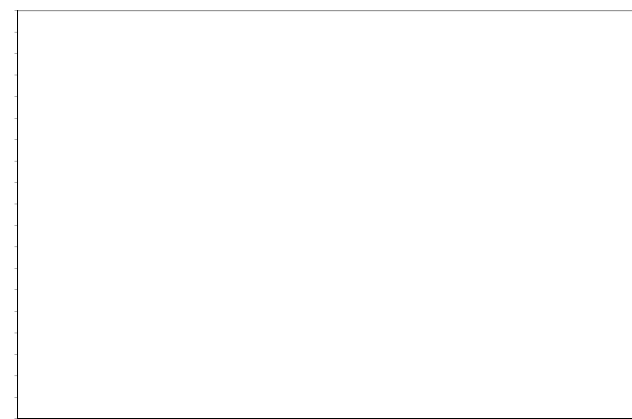
Intake in % of the ARfD

Acute exposure: Metconazole / Leek



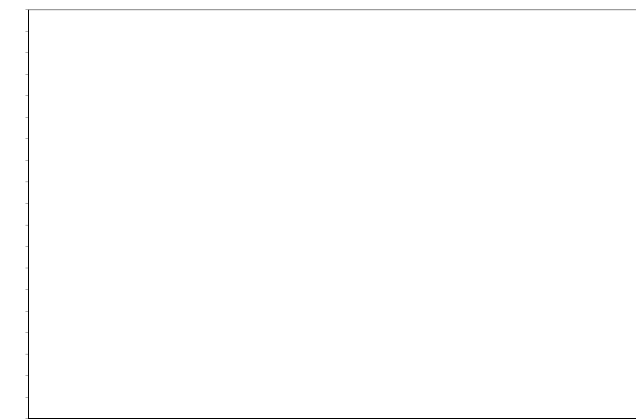
Intake in % of the ARfD

Acute exposure: Metconazole / Oats



Intake in % of the ARfD

Acute exposure: Metconazole / Rye



Intake in % of the ARfD

## Methamidophos

Status of the active substance:	<b>Excluded</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.001</b>	ARfD (mg/kg bw):	<b>0.003</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2007</b>	Year of evaluation:	<b>2007</b>

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum						
		6						
		No of diets exceeding ADI:		---				
	Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
	6.15	FR toddler	2.25	Carrots	1.89	Oranges	1.35	Beans (with pods)
	5.44	DE child	3.59	Oranges	0.94	Carrots	0.52	Strawberries
	4.85	FR infant	2.43	Carrots	1.03	Beans (with pods)	0.86	Oranges
	4.33	NL child	2.94	Oranges	0.62	Beans (with pods)	0.46	Carrots
	2.73	UK infant	1.23	Oranges	1.21	Carrots	0.23	Strawberries
	2.69	ES child	2.05	Oranges	0.29	Beans (with pods)	0.16	Carrots
	2.64	UK toddler	1.87	Oranges	0.48	Carrots	0.21	Strawberries
	2.06	NL (GP)	1.40	Oranges	0.31	Beans (with pods)	0.20	Carrots
	2.04	WHO cluster diet B	0.81	Oranges	0.50	Peppers	0.41	Beans (with pods)
	1.95	SE (GP)	0.78	Carrots	0.70	Oranges	0.19	Peppers
	1.89	IE adult	0.99	Oranges	0.29	Carrots	0.27	Strawberries
	1.86	ES adult	1.22	Oranges	0.29	Beans (with pods)	0.16	Peppers
	1.76	DK child	1.26	Carrots	0.22	Peppers	0.16	Oranges
	1.43	PT (GP)	0.61	Carrots	0.58	Oranges	0.19	Peppers
	1.40	WHO Cluster diet F	0.82	Oranges	0.43	Carrots	0.07	Strawberries
	1.37	WHO cluster diet E	0.42	Oranges	0.42	Carrots	0.34	Beans (with pods)
	1.32	WHO regional diet	0.47	Oranges	0.34	Carrots	0.24	Beans (with pods)
	1.27	FI adult	0.92	Oranges	0.17	Carrots	0.08	Strawberries
	1.26	UK vegetarian	0.82	Oranges	0.21	Carrots	0.08	Peppers
	0.93	IT child/toddler	0.45	Oranges	0.17	Carrots	0.13	Strawberries
	0.85	FR (GP)	0.28	Carrots	0.27	Oranges	0.17	Beans (with pods)
	0.85	UK adult	0.53	Oranges	0.17	Carrots	0.06	Beans (with pods)
	0.80	IT adult	0.35	Oranges	0.19	Beans (with pods)	0.13	Carrots
	0.71	DK adult	0.41	Carrots	0.13	Oranges	0.11	Peppers
	0.60	WHO cluster diet D	0.23	Oranges	0.21	Carrots	0.11	Peppers
	0.39	PL (GP)	0.28	Carrots	0.08	Peppers	0.02	Strawberries
	0.29	LT adult	0.16	Carrots	0.07	Oranges	0.04	Strawberries

### Acute risk assessment

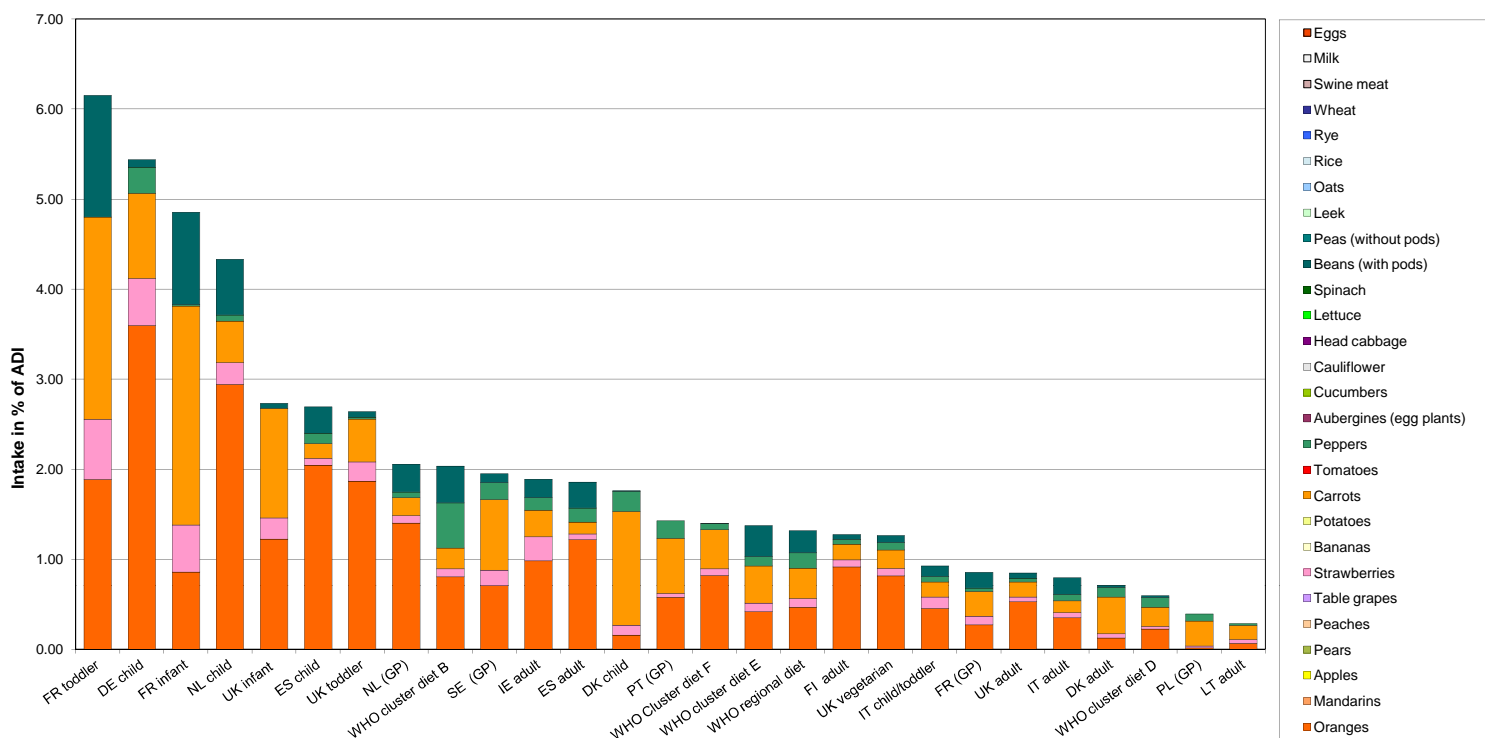
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.01	3033		0.03	0.06	1	195.93	UK infant	
2010	Peaches	0.05	1453							
2010	Strawberries	0.01	2279		0.09	1.50	1	779.57	DE child	
2010	Tomatoes	0.01	2377		0.04	0.03		50.39	BE child	
2010	Head cabbage	0.01	1219							
2010	Lettuce	0.01	2246							
2010	Leek	0.01	969							
2010	Oats	0.01	175							
2010	Rye	0.01	418							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

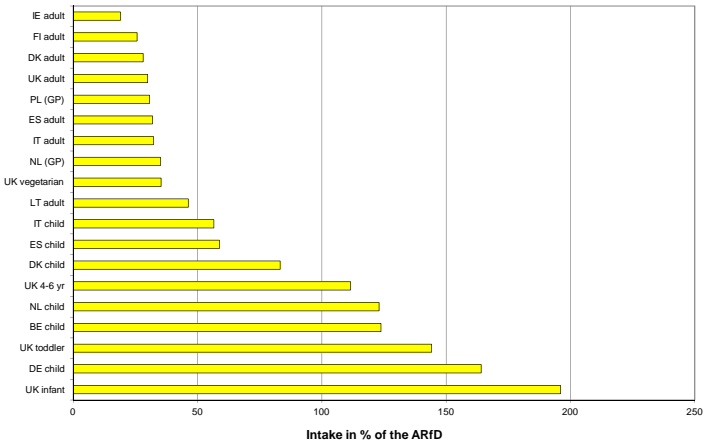
<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Methamidophos

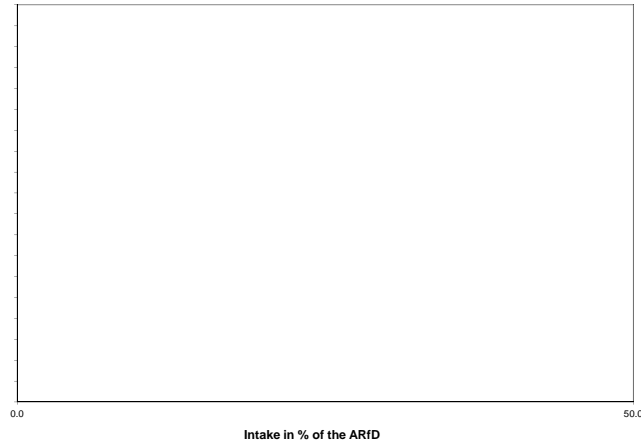


**Methamidophos**

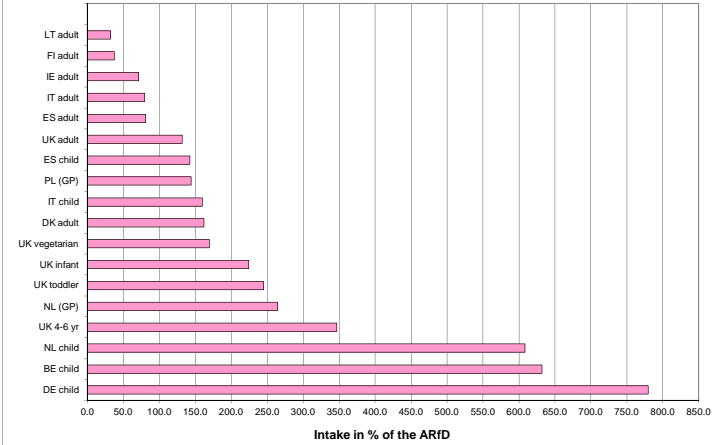
Acute exposure: Methamidophos / Apples



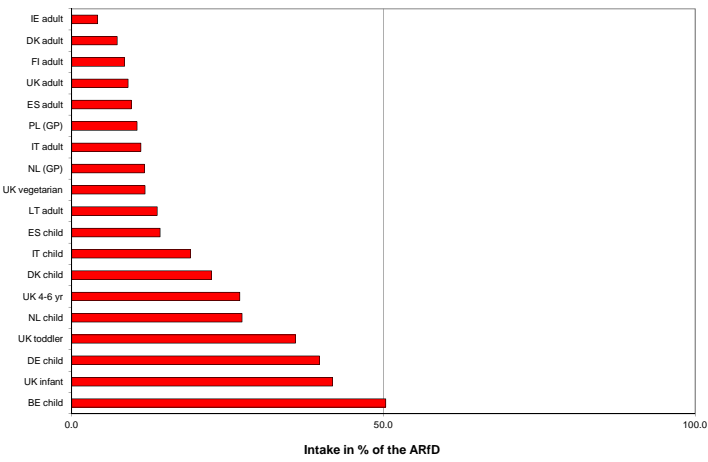
Acute exposure: Methamidophos / Peaches



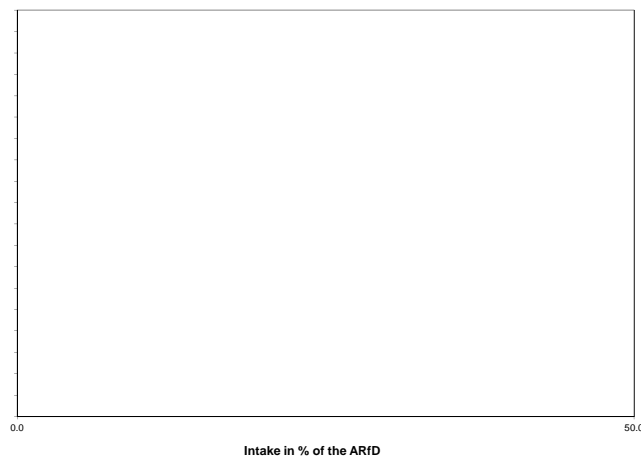
Acute exposure: Methamidophos / Strawberries



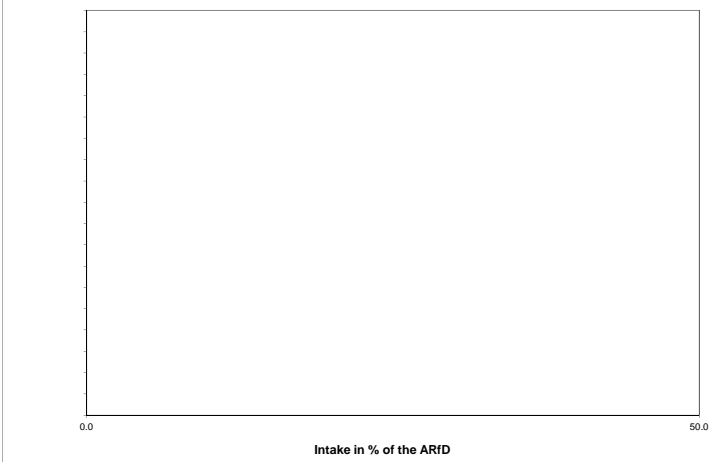
Acute exposure: Methamidophos / Tomatoes



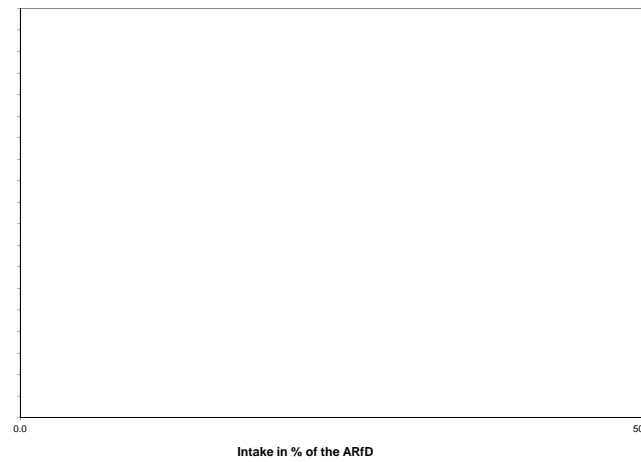
Acute exposure: Methamidophos / Head cabbage



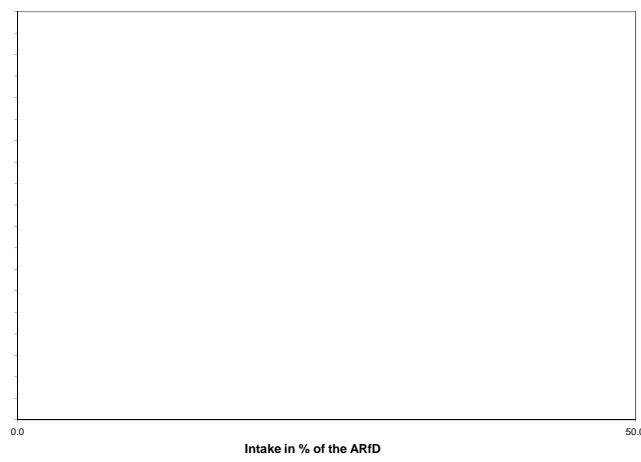
Acute exposure: Methamidophos / Lettuce



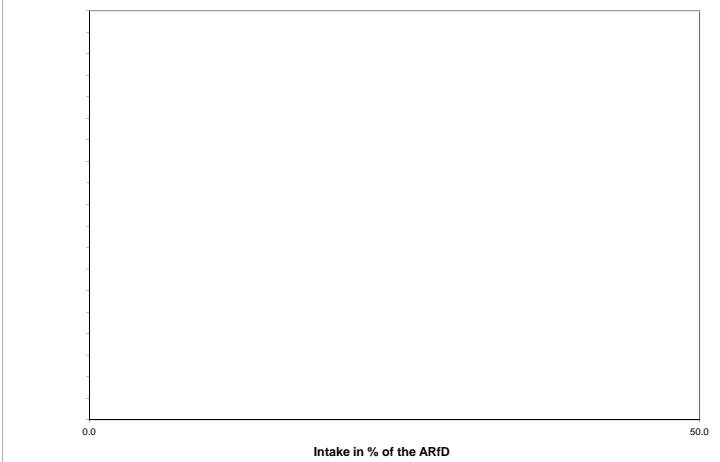
Acute exposure: Methamidophos / Leek



Acute exposure: Methamidophos / Oats



Acute exposure: Methamidophos / Rye





## Methamidophos

Status of the active substance:	<b>Excluded</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.001</b>	ARfD (mg/kg bw):	<b>0.003</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2007</b>	Year of evaluation:	<b>2007</b>

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum					
		6					
		No of diets exceeding ADI:		---			
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
6.15	FR toddler	2.25	Carrots	1.89	Oranges	1.35	Beans (with pods)
5.44	DE child	3.59	Oranges	0.94	Carrots	0.52	Strawberries
4.85	FR infant	2.43	Carrots	1.03	Beans (with pods)	0.86	Oranges
4.33	NL child	2.94	Oranges	0.62	Beans (with pods)	0.46	Carrots
2.73	UK infant	1.23	Oranges	1.21	Carrots	0.23	Strawberries
2.69	ES child	2.05	Oranges	0.29	Beans (with pods)	0.16	Carrots
2.64	UK toddler	1.87	Oranges	0.48	Carrots	0.21	Strawberries
2.06	NL (GP)	1.40	Oranges	0.31	Beans (with pods)	0.20	Carrots
2.04	WHO cluster diet B	0.81	Oranges	0.50	Peppers	0.41	Beans (with pods)
1.95	SE (GP)	0.78	Carrots	0.70	Oranges	0.19	Peppers
1.89	IE adult	0.99	Oranges	0.29	Carrots	0.27	Strawberries
1.86	ES adult	1.22	Oranges	0.29	Beans (with pods)	0.16	Peppers
1.76	DK child	1.26	Carrots	0.22	Peppers	0.16	Oranges
1.43	PT (GP)	0.61	Carrots	0.58	Oranges	0.19	Peppers
1.40	WHO Cluster diet F	0.82	Oranges	0.43	Carrots	0.07	Strawberries
1.37	WHO cluster diet E	0.42	Oranges	0.42	Carrots	0.34	Beans (with pods)
1.32	WHO regional diet	0.47	Oranges	0.34	Carrots	0.24	Beans (with pods)
1.27	FI adult	0.92	Oranges	0.17	Carrots	0.08	Strawberries
1.26	UK vegetarian	0.82	Oranges	0.21	Carrots	0.08	Peppers
0.93	IT child/toddler	0.45	Oranges	0.17	Carrots	0.13	Strawberries
0.85	FR (GP)	0.28	Carrots	0.27	Oranges	0.17	Beans (with pods)
0.85	UK adult	0.53	Oranges	0.17	Carrots	0.06	Beans (with pods)
0.80	IT adult	0.35	Oranges	0.19	Beans (with pods)	0.13	Carrots
0.71	DK adult	0.41	Carrots	0.13	Oranges	0.11	Peppers
0.60	WHO cluster diet D	0.23	Oranges	0.21	Carrots	0.11	Peppers
0.39	PL (GP)	0.28	Carrots	0.08	Peppers	0.02	Strawberries
0.29	LT adult	0.16	Carrots	0.07	Oranges	0.04	Strawberries

### Acute risk assessment

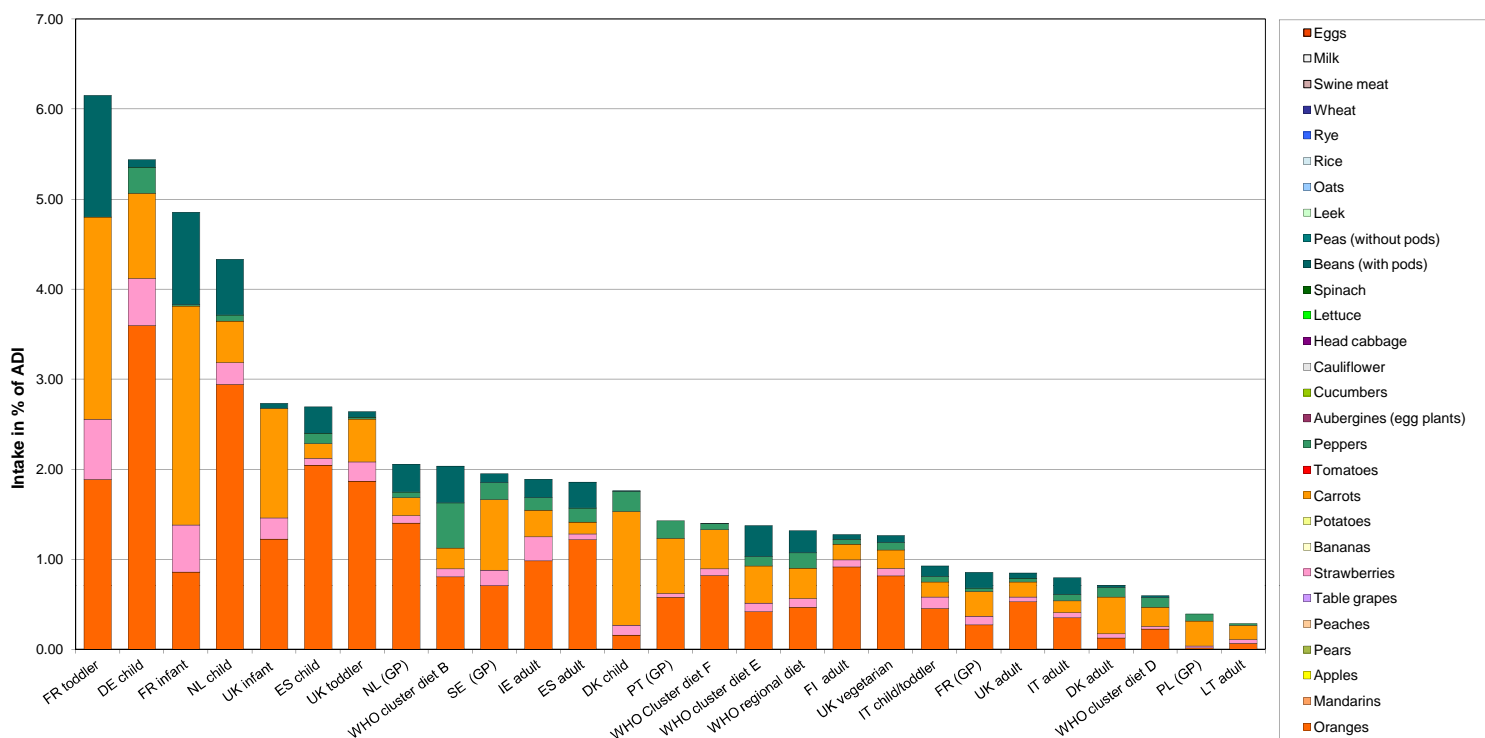
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.01	3033		0.03	0.06	1	195.93	UK infant	
2010	Peaches	0.05	1453							
2010	Strawberries	0.01	2279		0.09	1.50	1	779.57	DE child	
2010	Tomatoes	0.01	2377		0.04	0.03		50.39	BE child	
2010	Head cabbage	0.01	1219							
2010	Lettuce	0.01	2246							
2010	Leek	0.01	969							
2010	Oats	0.01	175							
2010	Rye	0.01	418							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

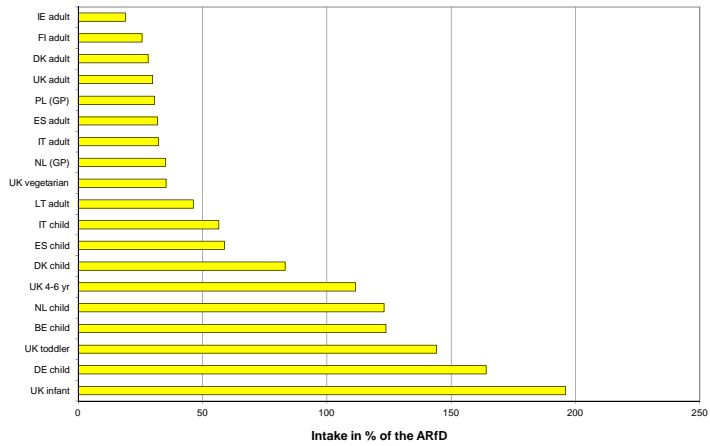
<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Methamidophos

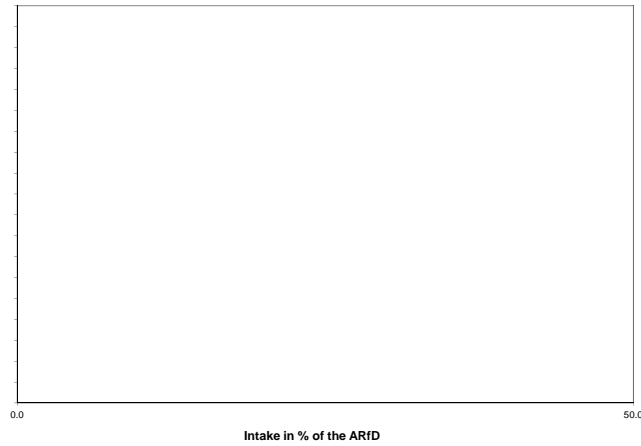


**Methamidophos**

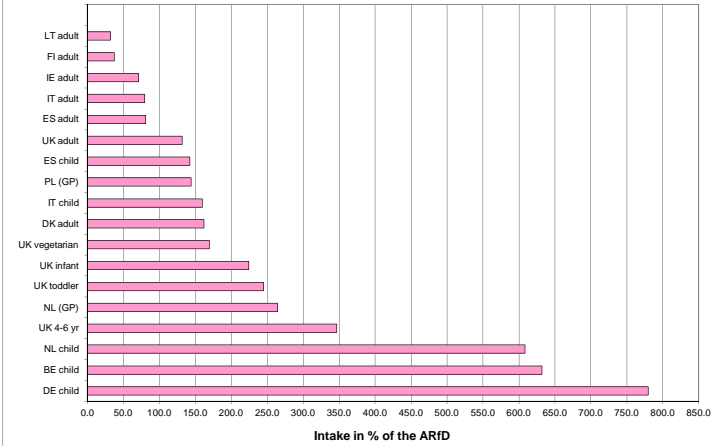
Acute exposure: Methamidophos / Apples



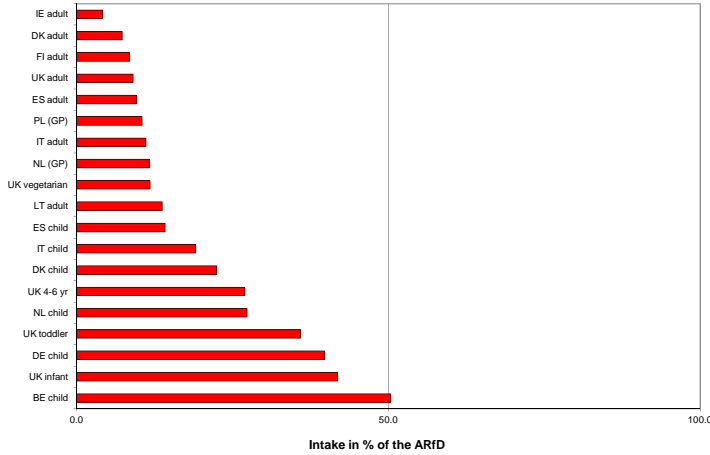
Acute exposure: Methamidophos / Peaches



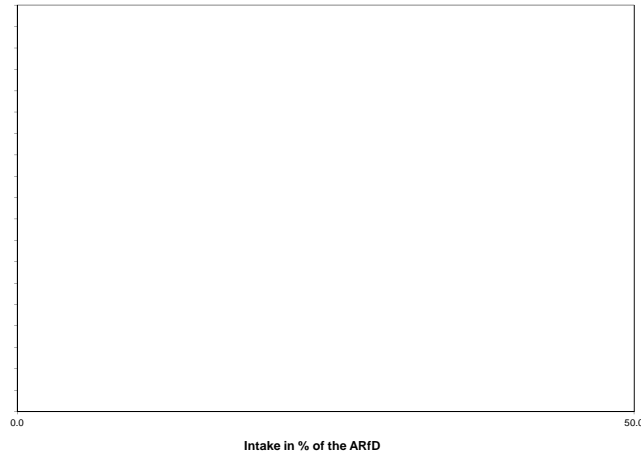
Acute exposure: Methamidophos / Strawberries



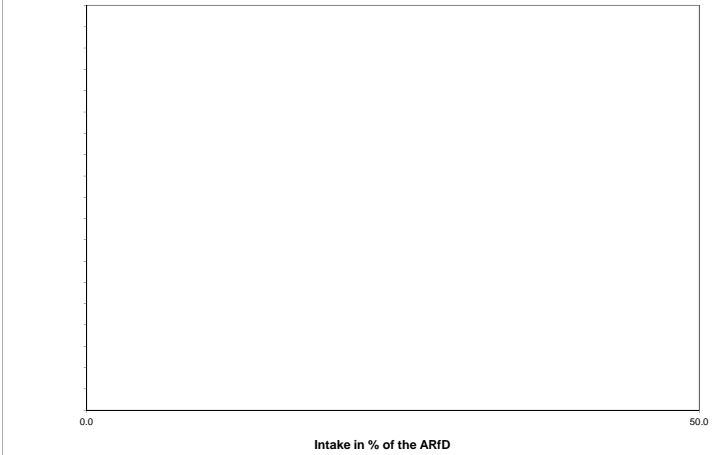
Acute exposure: Methamidophos / Tomatoes



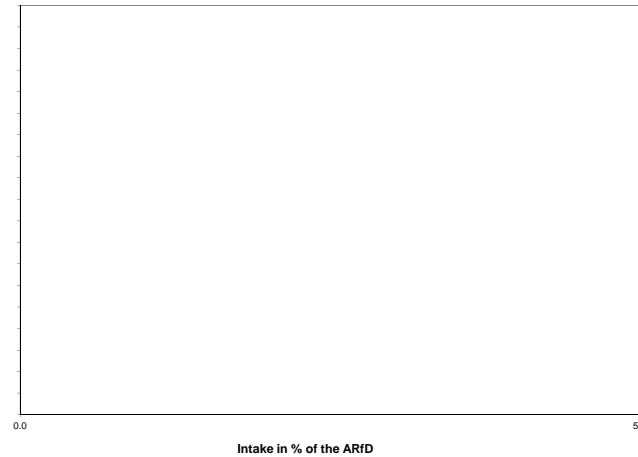
Acute exposure: Methamidophos / Head cabbage



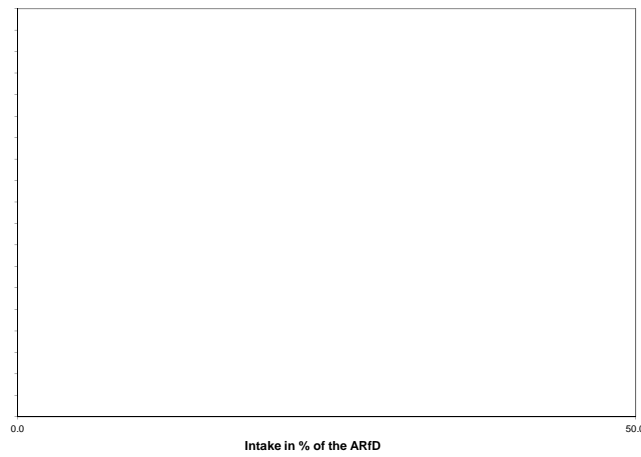
Acute exposure: Methamidophos / Lettuce



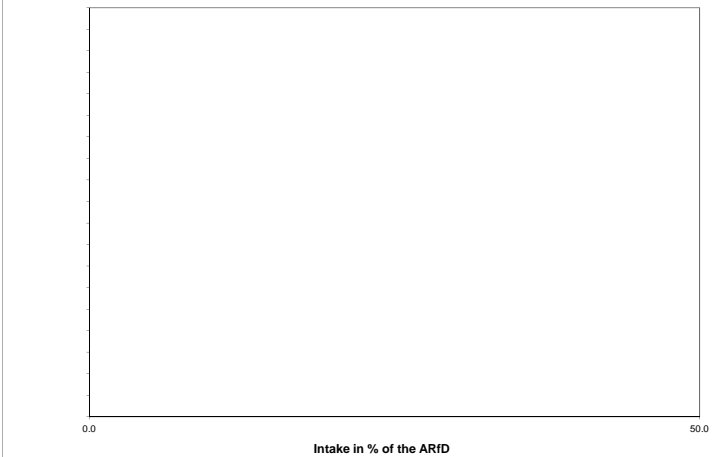
Acute exposure: Methamidophos / Leek



Acute exposure: Methamidophos / Oats



Acute exposure: Methamidophos / Rye



Methodathion			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P and A
Toxicological end points			
ADI (mg/kg bw/day):	0.001	ARfD (mg/kg bw):	0.01
Source of ADI:	JMPR	Source of ARfD:	JMPR
Year of evaluation:	1997	Year of evaluation:	1997

### Chronic risk assessment

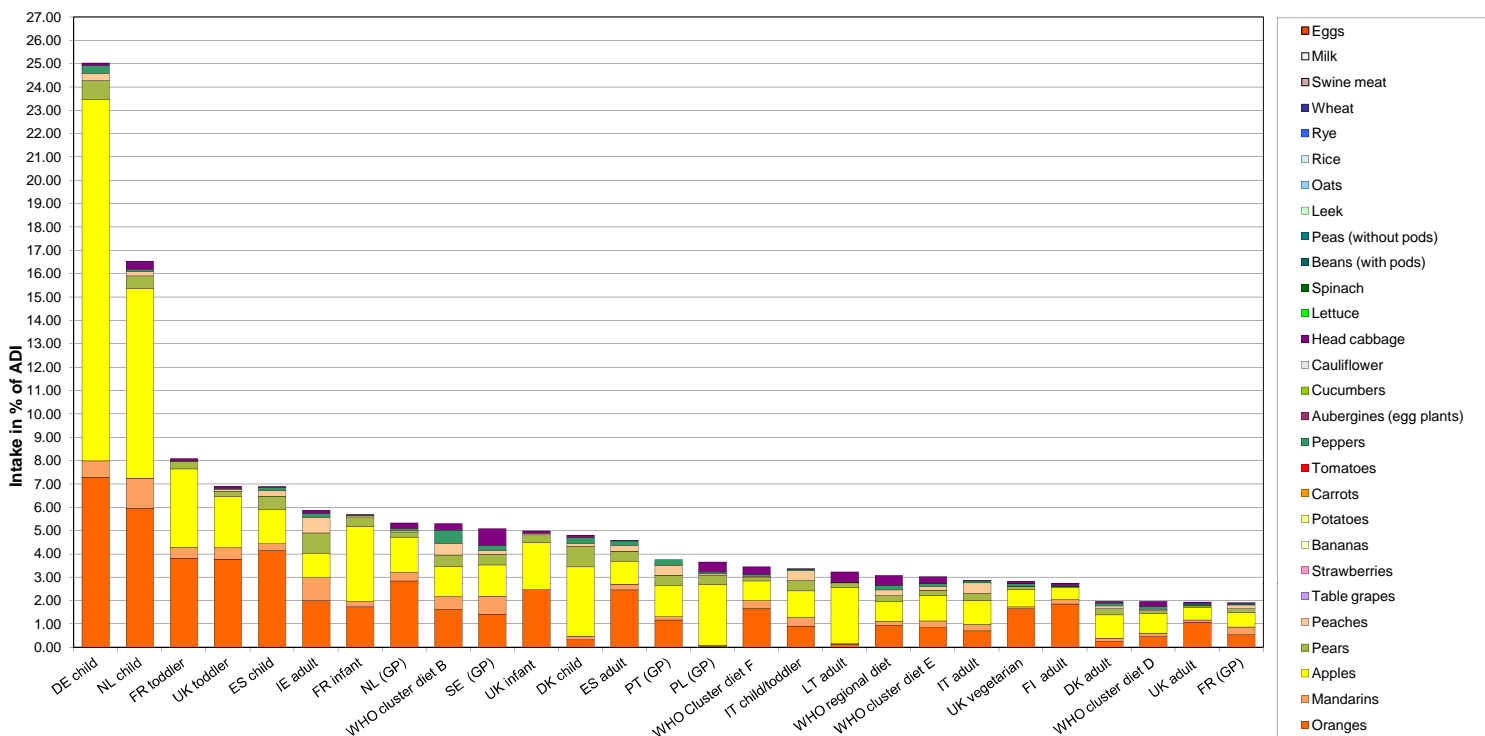
		Exposure (range) in % of ADI minimum - maximum					
		2	25				
No of diets exceeding ADI:		---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
25.03	DE child	15.48	Apples	7.28	Oranges	0.80	Pears
16.55	NL child	8.13	Apples	5.96	Oranges	1.28	Mandarins
8.08	FR toddler	3.83	Oranges	3.37	Apples	0.46	Mandarins
6.90	UK toddler	3.79	Oranges	2.19	Apples	0.48	Mandarins
6.90	ES child	4.15	Oranges	1.47	Apples	0.57	Pears
5.88	IE adult	2.00	Oranges	1.05	Apples	0.99	Mandarins
5.69	FR infant	3.21	Apples	1.74	Oranges	0.41	Pears
5.33	NL (GP)	2.84	Oranges	1.52	Apples	0.37	Mandarins
5.30	WHO cluster diet B	1.63	Oranges	1.29	Apples	0.57	Peppers
5.08	SE (GP)	1.43	Oranges	1.35	Apples	0.76	Mandarins
4.99	UK infant	2.48	Oranges	2.01	Apples	0.33	Pears
4.80	DK child	2.98	Apples	0.87	Pears	0.32	Oranges
4.59	ES adult	2.47	Oranges	0.99	Apples	0.42	Pears
3.75	PT (GP)	1.35	Apples	1.17	Oranges	0.44	Pears
3.65	PL (GP)	2.62	Apples	0.41	Head cabbage	0.36	Pears
3.45	WHO Cluster diet F	1.66	Oranges	0.84	Apples	0.34	Mandarins
3.36	IT child/toddler	1.14	Apples	0.92	Oranges	0.45	Pears
3.24	LT adult	2.40	Apples	0.45	Head cabbage	0.20	Pears
3.08	WHO regional diet	0.95	Oranges	0.86	Apples	0.41	Head cabbage
3.03	WHO cluster diet E	1.09	Apples	0.85	Oranges	0.29	Head cabbage
2.87	IT adult	1.02	Apples	0.71	Oranges	0.45	Peaches
2.84	UK vegetarian	1.66	Oranges	0.76	Apples	0.12	Head cabbage
2.75	FI adult	1.86	Oranges	0.52	Apples	0.19	Mandarins
1.97	DK adult	1.01	Apples	0.26	Pears	0.26	Oranges
1.97	WHO cluster diet D	0.85	Apples	0.46	Oranges	0.21	Head cabbage
1.94	UK adult	1.07	Oranges	0.53	Apples	0.10	Mandarins
1.92	FR (GP)	0.61	Apples	0.55	Oranges	0.33	Mandarins

### Acute risk assessment

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	3143	0.06		0.01		11.76	UK infant	
2010	Peaches	0.05	1524	0.07		0.03		17.80	DE child	
2010	Strawberries	0.02	2376							
2010	Tomatoes	0.1	2608							
2010	Head cabbage	0.1	1281	0.08		0.03		13.68	NL child	
2010	Lettuce	0.02	2413							
2010	Leek	0.02	1018							
2010	Oats	0.02	177							
2010	Rye	0.02	456							
2010	Swine Meat	0.02	553							
2010	Milk	0.02	686							

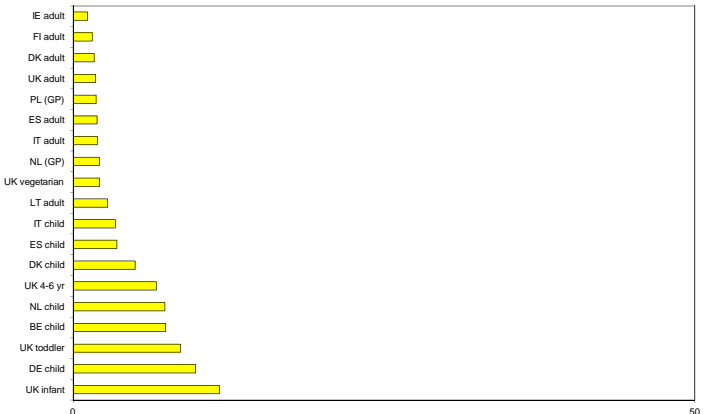
a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

### Chronic risk assessment: Methodathion



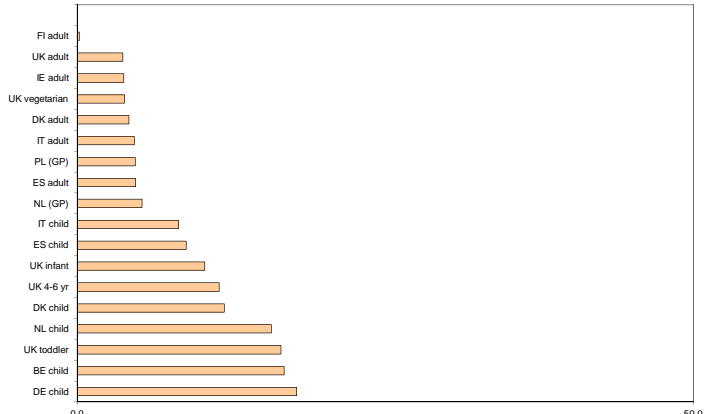
**Methidathion**

Acute exposure: Methidathion / Apples



Intake in % of the ARfD

Acute exposure: Methidathion / Peaches



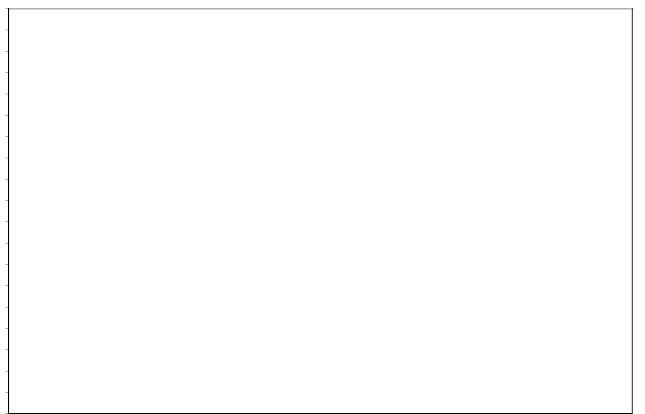
Intake in % of the ARfD

Acute exposure: Methidathion / Strawberries



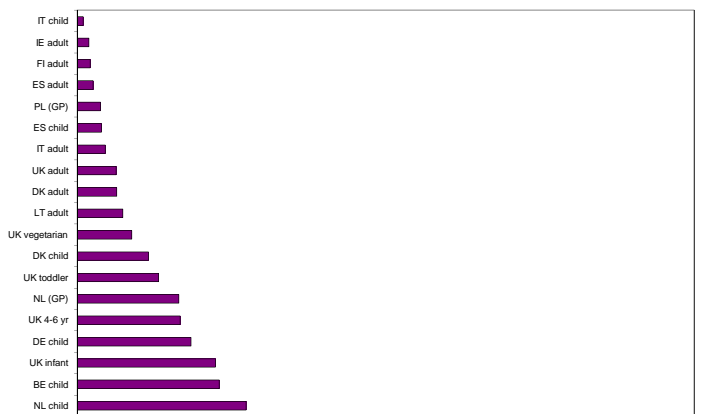
Intake in % of the ARfD

Acute exposure: Methidathion / Tomatoes



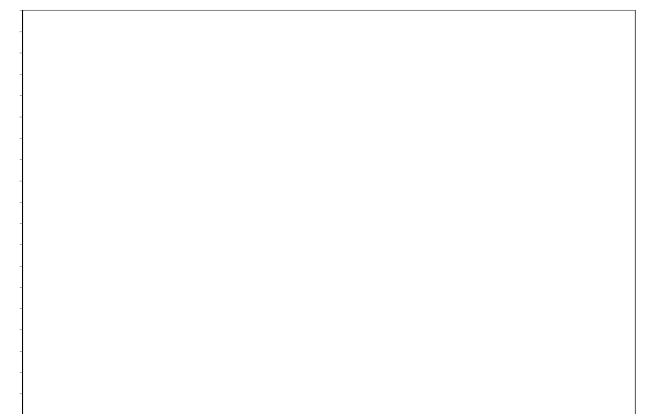
Intake in % of the ARfD

Acute exposure: Methidathion / Head cabbage



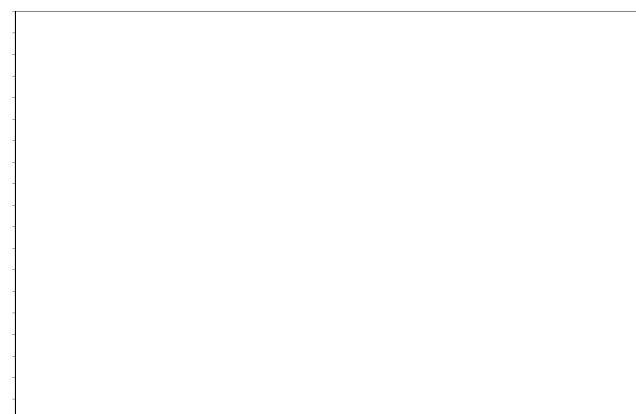
Intake in % of the ARfD

Acute exposure: Methidathion / Lettuce



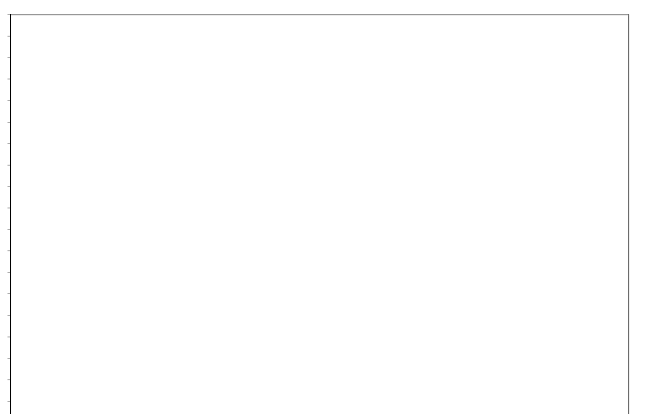
Intake in % of the ARfD

Acute exposure: Methidathion / Leek



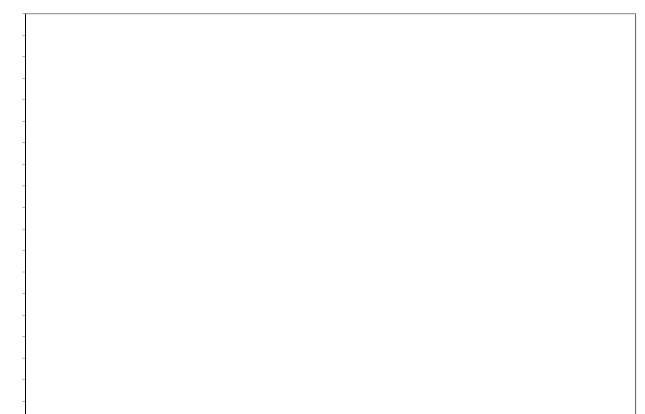
Intake in % of the ARfD

Acute exposure: Methidathion / Oats



Intake in % of the ARfD

Acute exposure: Methidathion / Rye



Intake in % of the ARfD

## Methiocarb

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.013	ARfD (mg/kg bw):	0.013
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2007	Year of evaluation:	2007

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
1

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.62	DE child	0.30	Oranges	0.11	Table grapes	0.05	Cucumbers
0.55	NL child	0.24	Oranges	0.07	Table grapes	0.06	Mandarins
0.46	FR toddler	0.16	Oranges	0.09	Beans (with pods)	0.07	Spinach
0.31	WHO cluster diet B	0.07	Oranges	0.04	Peppers	0.03	Peaches
0.30	IE adult	0.08	Oranges	0.05	Mandarins	0.05	Peaches
0.29	ES child	0.17	Oranges	0.04	Lettuce	0.02	Beans (with pods)
0.27	FR infant	0.07	Oranges	0.07	Beans (with pods)	0.04	Spinach
0.25	NL (GP)	0.12	Oranges	0.02	Table grapes	0.02	Beans (with pods)
0.25	UK toddler	0.16	Oranges	0.02	Mandarins	0.02	Table grapes
0.23	DK child	0.14	Cucumbers	0.02	Peppers	0.02	Table grapes
0.23	ES adult	0.10	Oranges	0.04	Lettuce	0.02	Beans (with pods)
0.22	SE (GP)	0.06	Oranges	0.04	Head cabbage	0.04	Mandarins
0.19	WHO regional diet	0.04	Oranges	0.03	Lettuce	0.03	Head cabbage
0.17	WHO Cluster diet F	0.07	Oranges	0.03	Lettuce	0.02	Head cabbage
0.16	WHO cluster diet E	0.03	Oranges	0.02	Beans (with pods)	0.02	Head cabbage
0.15	IT adult	0.03	Lettuce	0.03	Peaches	0.03	Oranges
0.15	IT child/toddler	0.04	Oranges	0.03	Peaches	0.02	Lettuce
0.14	FI adult	0.08	Oranges	0.02	Cucumbers	0.01	Mandarins
0.14	UK infant	0.10	Oranges	0.02	Strawberries	0.01	Head cabbage
0.13	UK vegetarian	0.07	Oranges	0.01	Lettuce	0.01	Cucumbers
0.13	PT (GP)	0.05	Oranges	0.03	Peaches	0.02	Table grapes
0.11	FR (GP)	0.02	Oranges	0.02	Mandarins	0.01	Peaches
0.09	WHO cluster diet D	0.02	Oranges	0.02	Table grapes	0.02	Cucumbers
0.09	UK adult	0.04	Oranges	0.01	Lettuce	0.01	Head cabbage
0.08	PL (GP)	0.03	Table grapes	0.03	Head cabbage	0.01	Peppers
0.08	LT adult	0.03	Cucumbers	0.03	Head cabbage	0.01	Oranges
0.08	DK adult	0.02	Cucumbers	0.01	Oranges	0.01	Peppers

## Acute risk assessment

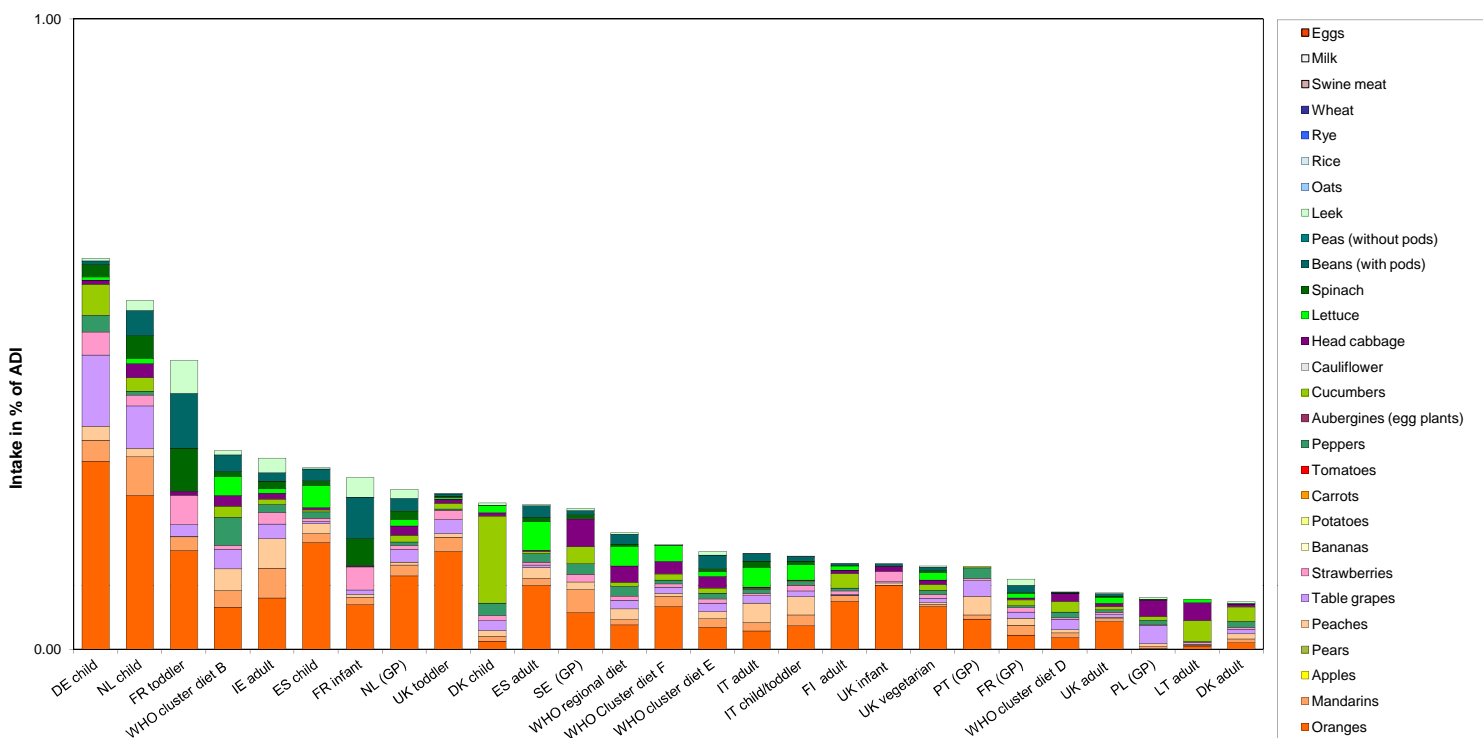
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.1	2339							
2010	Peaches	0.2	1200	0.17	0.08	0.41	1	187.12	DE child	
2010	Strawberries	1	1799	0.28		0.31		37.18	DE child	
2010	Tomatoes	0.2	1791							
2010	Head cabbage	0.1	972	0.21		0.03		10.12	NL child	
2010	Lettuce	1	1827	0.16		0.03		6.21	DE child	
2010	Leek	0.2	784	0.89		0.04		19.11	BE child	
2010	Oats	0.1	157							
2010	Rye	0.1	414							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

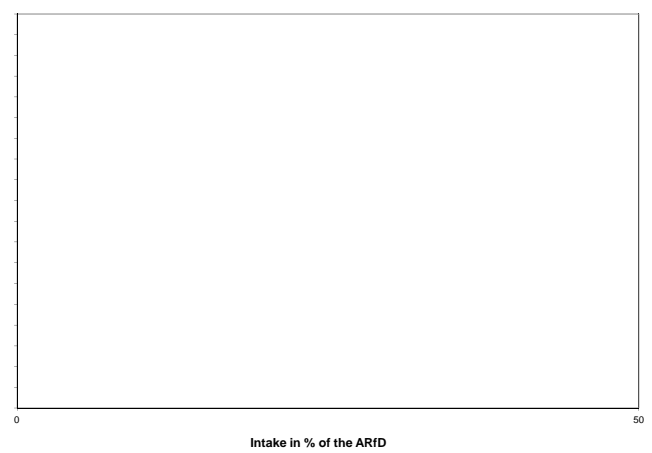
<sup>c)</sup> TRL: toxicological threshold level

## Chronic risk assessment: Methiocarb

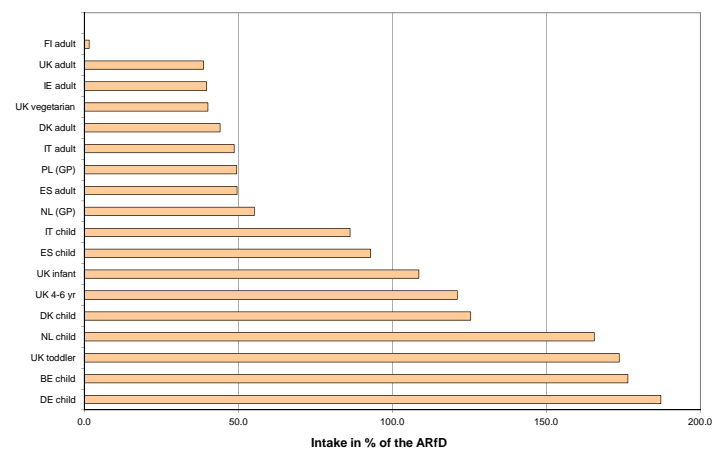


**Methiocarb**

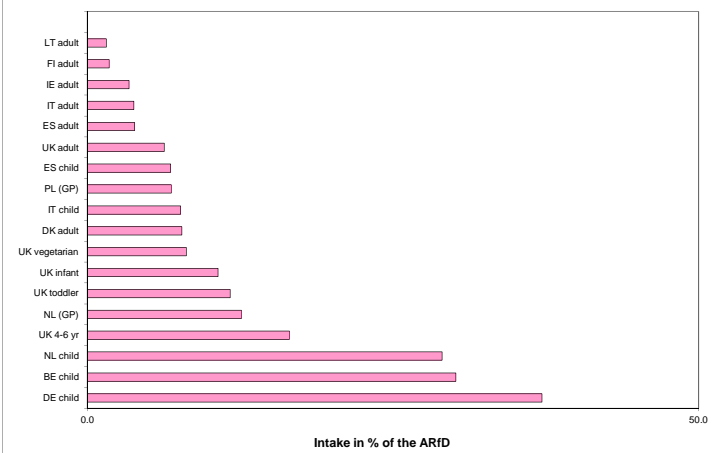
Acute exposure: Methiocarb / Apples



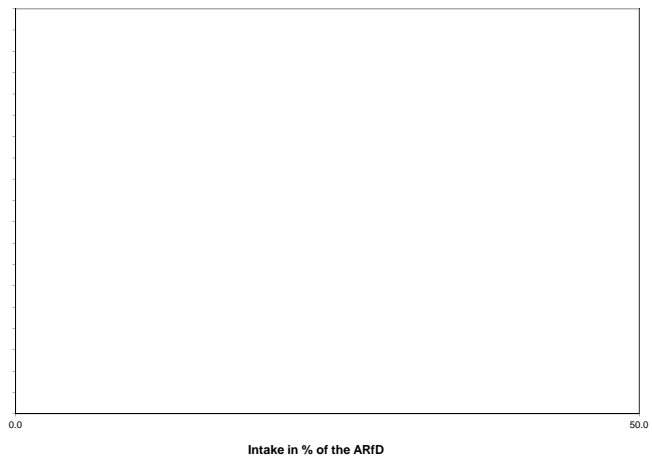
Acute exposure: Methiocarb / Peaches



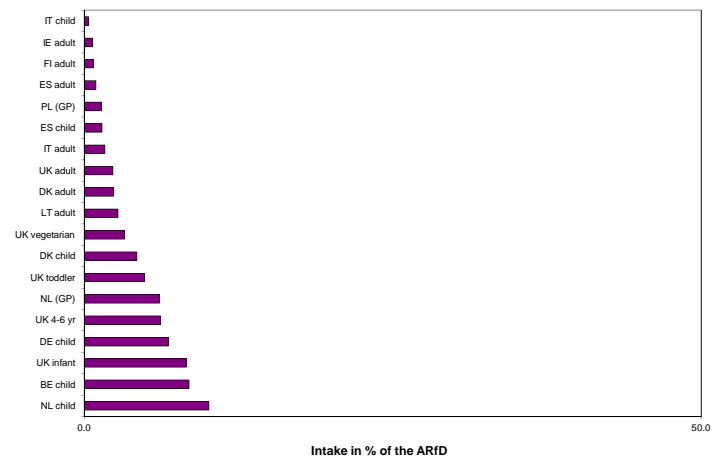
Acute exposure: Methiocarb / Strawberries



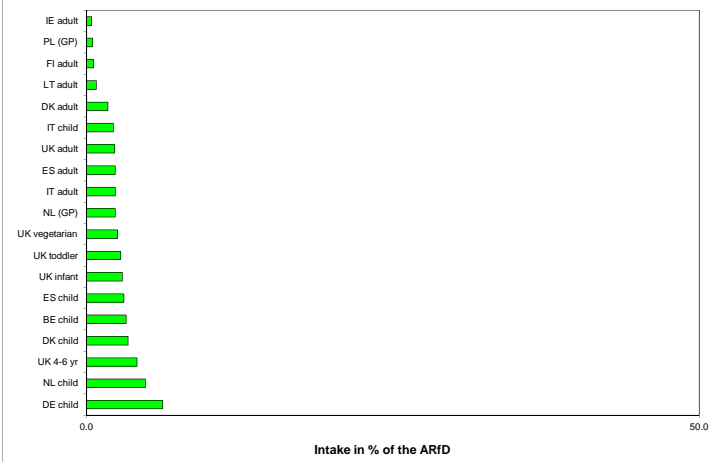
Acute exposure: Methiocarb / Tomatoes



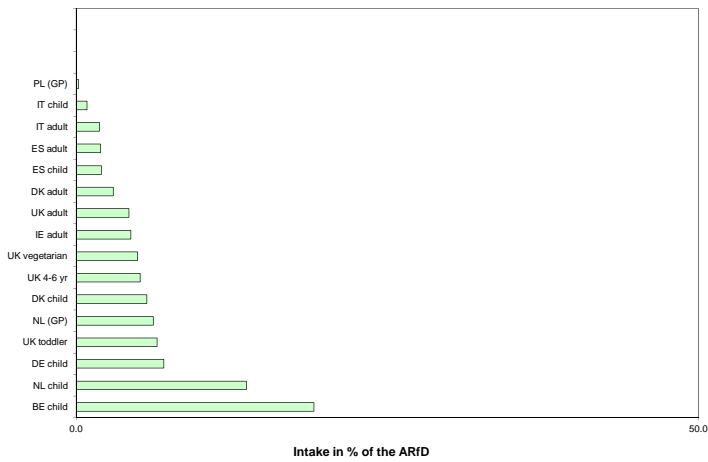
Acute exposure: Methiocarb / Head cabbage



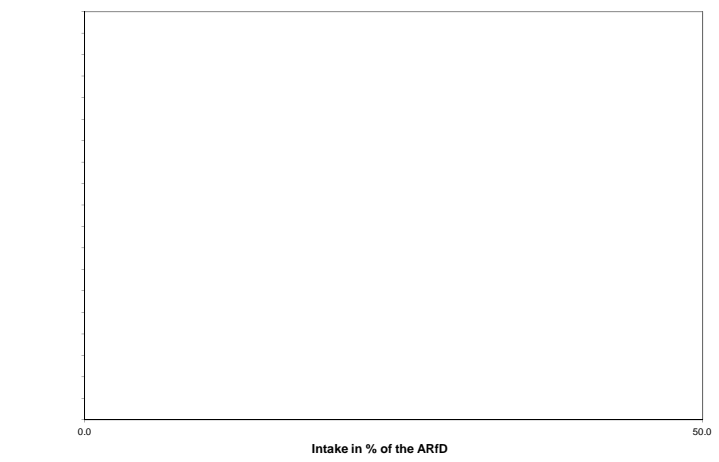
Acute exposure: Methiocarb / Lettuce



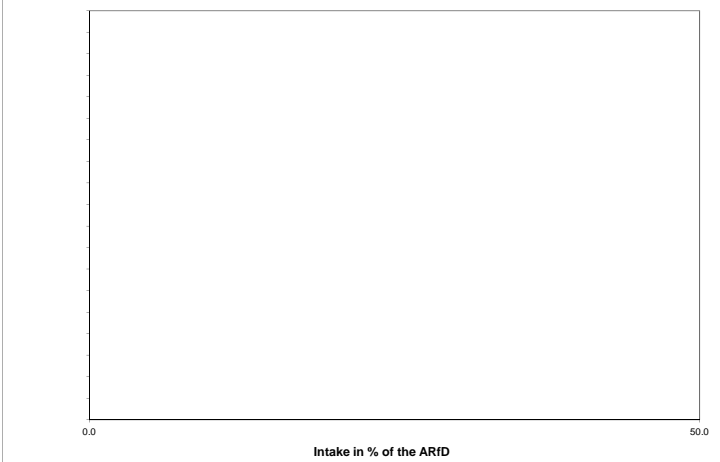
Acute exposure: Methiocarb / Leek



Acute exposure: Methiocarb / Oats



Acute exposure: Methiocarb / Rye



Methomyl			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.0025	ARfD (mg/kg bw):	0.0025
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2009	Year of evaluation:	2009

For the risk assessment the toxicological reference values for methomyl were selected. Thiodicarb: ADI: 0.01 mg/kg bw/d (EFSA, 2005); ARfD: 0.01 mg/kg bw (EFSA, 2005).

**Chronic risk assessment**

		Exposure (range) in % of ADI minimum - maximum		No of diets exceeding ADI:			
		3		---			
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
2.61	DE child	0.67	Bananas	0.55	Table grapes	0.42	Cucumbers
2.29	NL child	0.73	Bananas	0.36	Mandarins	0.33	Table grapes
2.26	DK child	1.17	Cucumbers	0.49	Bananas	0.27	Pears
1.91	FR toddler	0.56	Bananas	0.48	Beans (with pods)	0.28	Strawberries
1.65	SE (GP)	0.78	Bananas	0.23	Cucumbers	0.21	Mandarins
1.53	IE adult	0.34	Bananas	0.27	Mandarins	0.27	Pears
1.44	WHO cluster diet B	0.34	Peppers	0.15	Mandarins	0.15	Cucumbers
1.31	FR infant	0.36	Beans (with pods)	0.31	Bananas	0.22	Strawberries
0.99	UK toddler	0.46	Bananas	0.13	Mandarins	0.11	Table grapes
0.98	ES child	0.44	Bananas	0.18	Bananas	0.10	Beans (with pods)
0.86	UK infant	0.63	Bananas	0.10	Pears	0.10	Strawberries
0.74	IT child/toddler	0.23	Bananas	0.14	Pears	0.10	Mandarins
0.74	NL (GP)	0.13	Bananas	0.11	Beans (with pods)	0.10	Mandarins
0.70	WHO cluster diet E	0.16	Bananas	0.12	Beans (with pods)	0.08	Mandarins
0.68	WHO regional diet	0.16	Bananas	0.12	Peppers	0.09	Beans (with pods)
0.68	ES adult	0.16	Bananas	0.13	Pears	0.10	Peppers
0.61	DK adult	0.19	Cucumbers	0.16	Bananas	0.08	Pears
0.61	PT (GP)	0.15	Bananas	0.14	Pears	0.13	Peppers
0.60	WHO Cluster diet F	0.24	Bananas	0.09	Mandarins	0.08	Cucumbers
0.56	IT adult	0.09	Pears	0.09	Bananas	0.08	Mandarins
0.51	FR (GP)	0.11	Bananas	0.09	Mandarins	0.08	Cucumbers
0.47	UK vegetarian	0.16	Bananas	0.08	Cucumbers	0.05	Peppers
0.47	PL (GP)	0.14	Table grapes	0.11	Pears	0.08	Bananas
0.47	FI adult	0.19	Cucumbers	0.11	Bananas	0.05	Mandarins
0.45	WHO cluster diet D	0.14	Cucumbers	0.08	Table grapes	0.07	Peppers
0.43	LT adult	0.28	Cucumbers	0.06	Pears	0.02	Bananas
0.35	UK adult	0.15	Bananas	0.04	Cucumbers	0.03	Peppers

**Acute risk assessment**

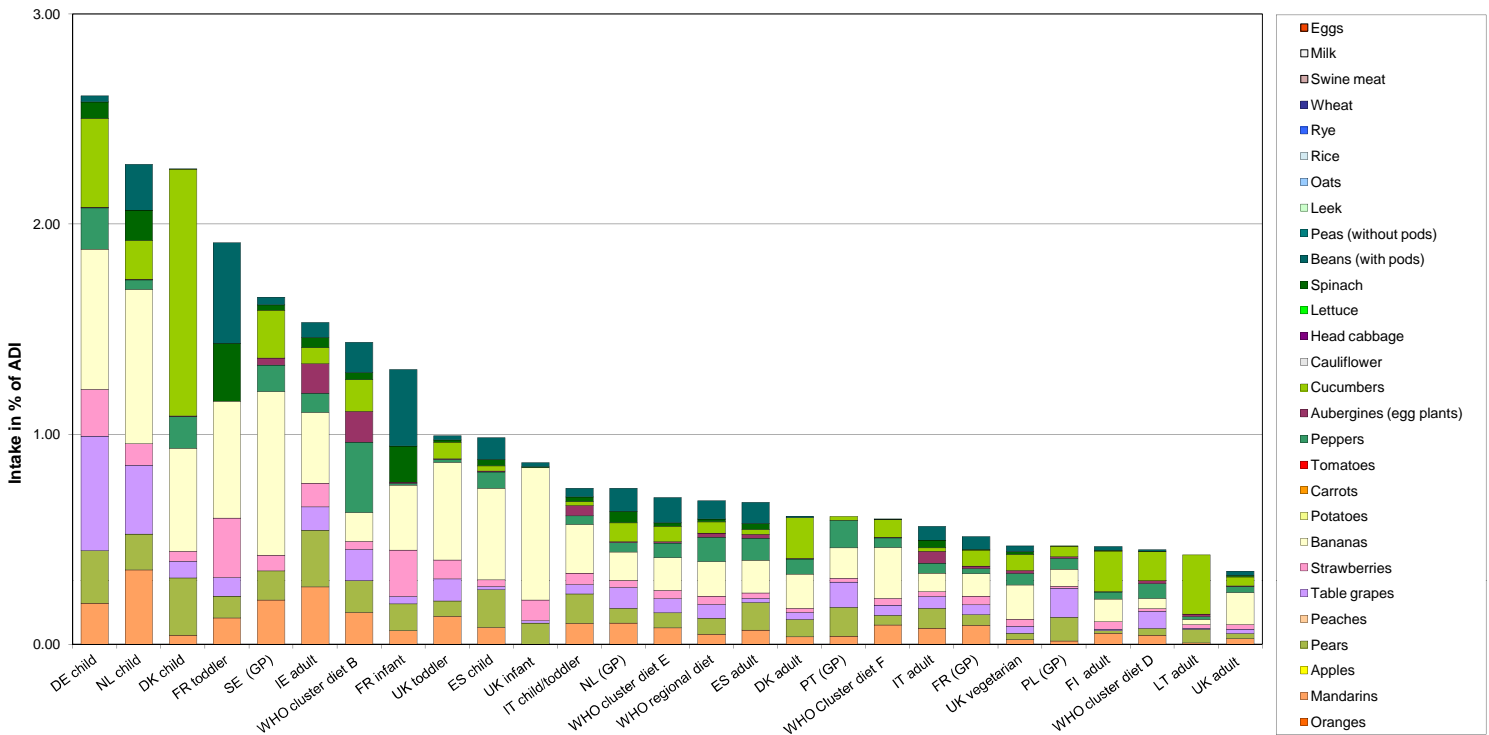
Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.2	2288							
2010	Peaches	0.02	1137							
2010	Strawberries	0.05	1924	0.10	0.36	0.43	1	271.23	DE child	
2010	Tomatoes	0.02	1879							
2010	Head cabbage	0.05	939		0.11	0.06	1	115.79	NL child	
2010	Lettuce	0.2	1963	0.05		0.02		25.83	DE child	
2010	Leek	0.02	707							
2010	Oats	0.02	163							
2010	Rye	0.02	388							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

c) TRL: toxicological threshold level

**Chronic risk assessment: Methomyl**



**Methomyl**

Acute exposure: Methomyl / Apples



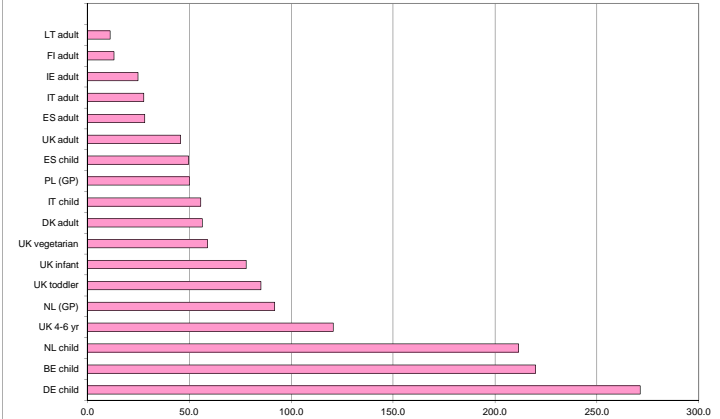
Intake in % of the ARfD

Acute exposure: Methomyl / Peaches



Intake in % of the ARfD

Acute exposure: Methomyl / Strawberries



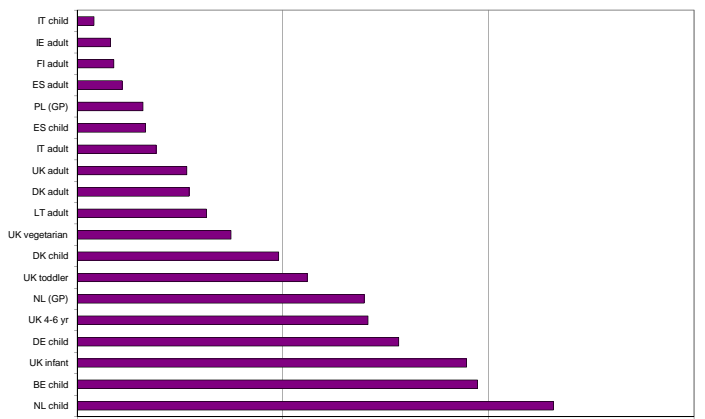
Intake in % of the ARfD

Acute exposure: Methomyl / Tomatoes



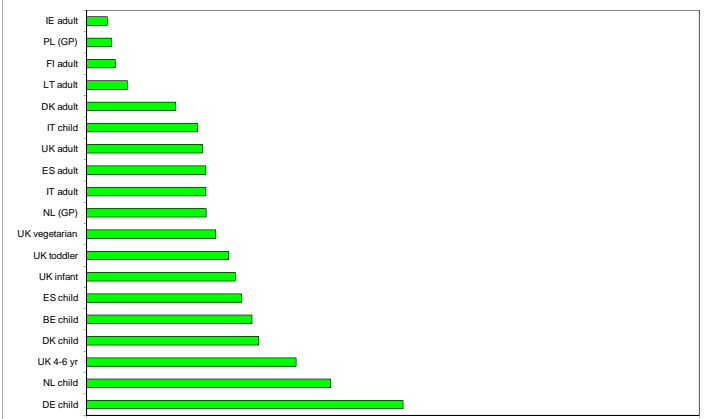
Intake in % of the ARfD

Acute exposure: Methomyl / Head cabbage



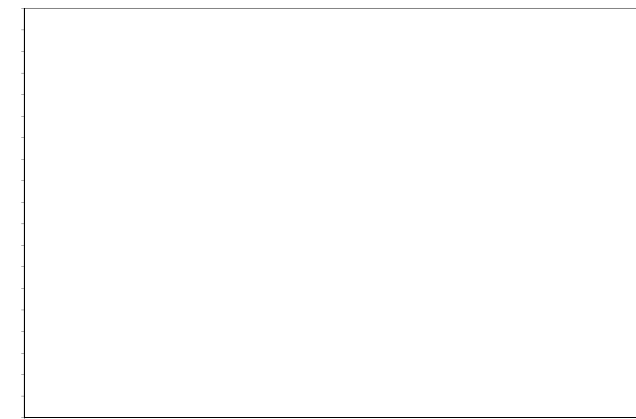
Intake in % of the ARfD

Acute exposure: Methomyl / Lettuce



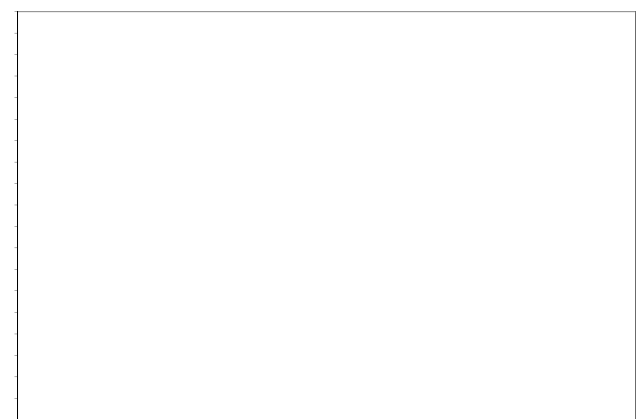
Intake in % of the ARfD

Acute exposure: Methomyl / Leek



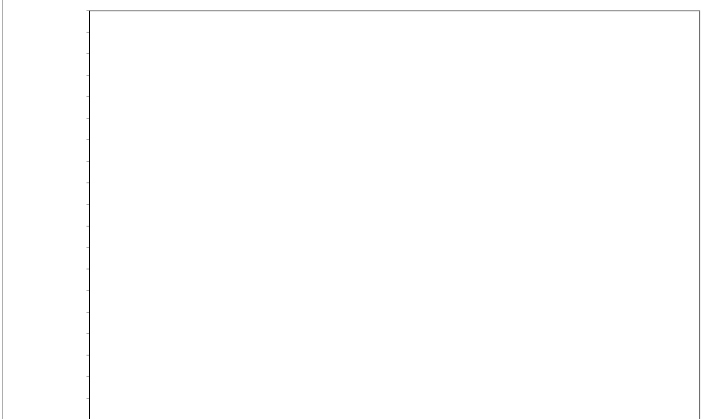
Intake in % of the ARfD

Acute exposure: Methomyl / Oats



Intake in % of the ARfD

Acute exposure: Methomyl / Rye



Intake in % of the ARfD



## Methoxychlor

Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	A
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.1	ARfD (mg/kg bw):	0.1
Source of ADI:	JMPR	Source of ARfD:	
Year of evaluation:	1977	Year of evaluation:	

Active substance was not assessed for ARfD by JMPR. ADI is used as surrogate.

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.01	DE child	0.01	Eggs		FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	
0.01	FR toddler	0.01	Eggs		FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	
0.01	UK toddler	0.01	Eggs		FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	
0.01	SE (GP)	0.01	Eggs		FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	
0.01	DK child	0.01	Eggs		FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	
0.00	ES child	0.00	Eggs		FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	
0.00	WHO cluster diet E	0.00	Eggs		FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	
0.00	WHO regional diet	0.00	Eggs		FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	
0.00	NL child	0.00	Eggs		FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	
0.00	WHO cluster diet B	0.00	Eggs		FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	
0.00	ES adult	0.00	Eggs		FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	
0.00	WHO Cluster diet F	0.00	Eggs		FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	
0.00	FR infant	0.00	Eggs		FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	
0.00	WHO cluster diet D	0.00	Eggs		FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	
0.00	DK adult	0.00	Eggs		FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	
0.00	UK vegetarian	0.00	Eggs		FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	
0.00	LT adult	0.00	Eggs		FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	
0.00	UK adult	0.00	Eggs		FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	
0.00	FR (GP)	0.00	Eggs		FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	
0.00	NL (GP)	0.00	Eggs		FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	
0.00	IE adult	0.00	Eggs		FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	
0.00	FI adult	0.00	Eggs		FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	
	IT adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	
	IT adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	
	IT adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	
	IT adult		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)	FRUIT (FRESH OR FROZEN)	

## Acute risk assessment

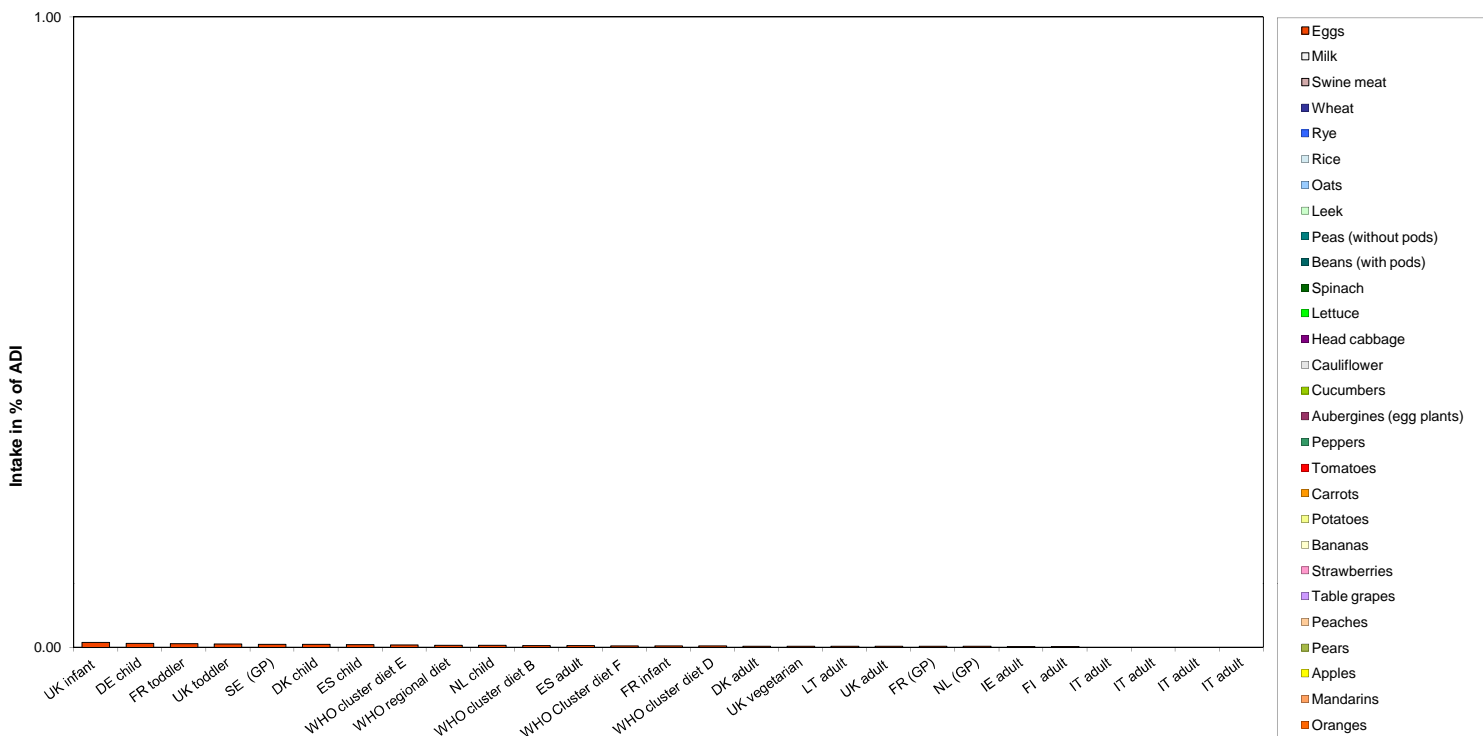
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples									
2010	Peaches									
2010	Strawberries									
2010	Tomatoes									
2010	Head cabbage									
2010	Lettuce									
2010	Leek									
2010	Oats									
2010	Rye									
2010	Swine Meat	0.01	549							
2010	Milk	0.01	790							

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

<sup>c)</sup> TRL: toxicological threshold level

## Chronic risk assessment: Methoxychlor



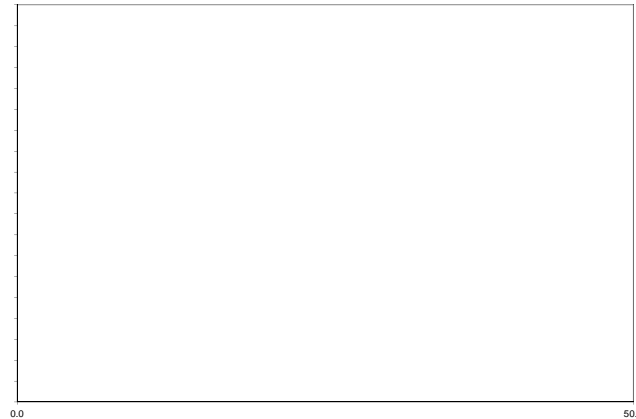
**Methoxychlor**

Acute exposure: Methoxychlor / Apples



Intake in % of the ARfD

Acute exposure: Methoxychlor / Peaches



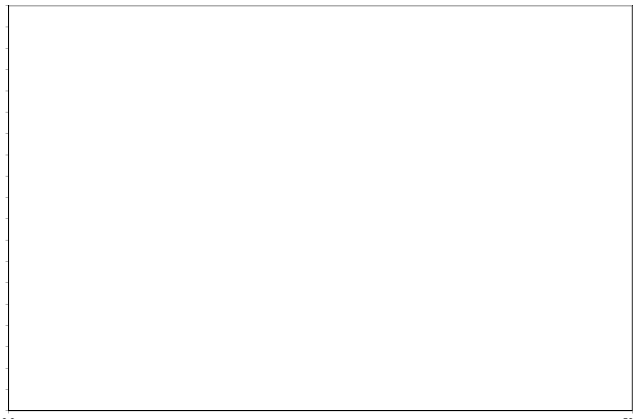
Intake in % of the ARfD

Acute exposure: Methoxychlor / Strawberries



Intake in % of the ARfD

Acute exposure: Methoxychlor / Tomatoes



Intake in % of the ARfD

Acute exposure: Methoxychlor / Head cabbage



Intake in % of the ARfD

Acute exposure: Methoxychlor / Lettuce



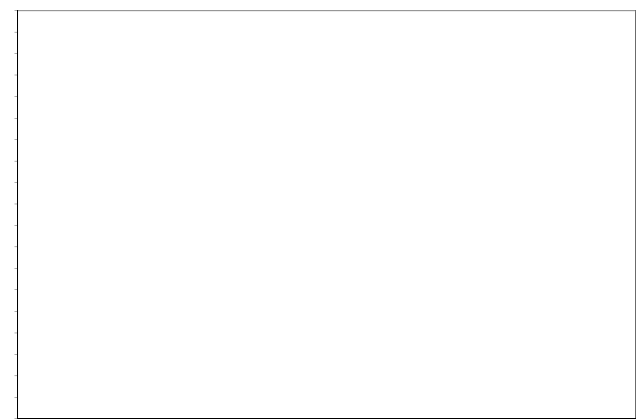
Intake in % of the ARfD

Acute exposure: Methoxychlor / Leek



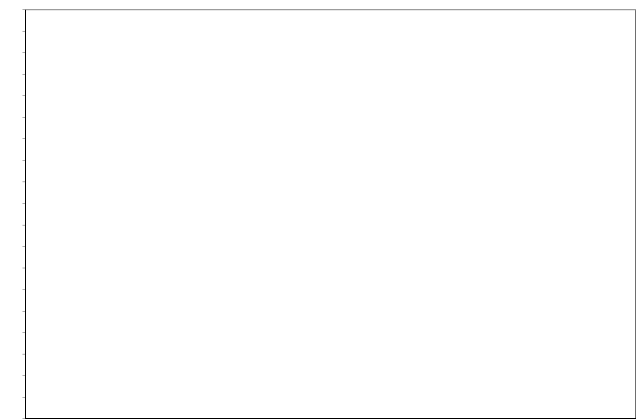
Intake in % of the ARfD

Acute exposure: Methoxychlor / Oats



Intake in % of the ARfD

Acute exposure: Methoxychlor / Rye



Intake in % of the ARfD

## Methoxyfenozide

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.1	ARfD (mg/kg bw):	0.2
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2005	Year of evaluation:	2005

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.18	DE child	0.13	Apples	0.02	Table grapes	0.01	Pears
0.11	NL child	0.07	Apples	0.01	Table grapes	0.01	Pears
0.08	WHO cluster diet B	0.03	Tomatoes	0.01	Apples	0.01	Pears
0.06	FR toddler	0.03	Apples	0.01	Beans (with pods)	0.01	Tomatoes
0.05	DK child	0.03	Apples	0.01	Pears	0.01	Tomatoes
0.05	PL (GP)	0.02	Apples	0.01	Tomatoes	0.01	Pears
0.05	FR infant	0.03	Apples	0.01	Beans (with pods)	0.01	Pears
0.04	IE adult	0.01	Pears	0.01	Apples	0.01	Peaches
0.04	IT child/toddler	0.02	Tomatoes	0.01	Apples	0.01	Pears
0.04	ES child	0.01	Apples	0.01	Tomatoes	0.01	Pears
0.04	PT (GP)	0.01	Apples	0.01	Tomatoes	0.01	Pears
0.04	SE (GP)	0.01	Apples	0.01	Tomatoes	0.01	Pears
0.04	IT adult	0.01	Tomatoes	0.01	Apples	0.00	Pears
0.03	WHO regional diet	0.01	Tomatoes	0.01	Apples	0.00	Pears
0.03	UK toddler	0.02	Apples	0.01	Tomatoes	0.00	Table grapes
0.03	LT adult	0.02	Apples	0.01	Tomatoes	0.00	Head cabbage
0.03	ES adult	0.01	Tomatoes	0.01	Apples	0.01	Pears
0.03	NL (GP)	0.01	Apples	0.00	Tomatoes	0.00	Table grapes
0.03	WHO cluster diet E	0.01	Apples	0.01	Tomatoes	0.00	Pears
0.03	UK infant	0.02	Apples	0.00	Pears	0.00	Tomatoes
0.03	WHO cluster diet D	0.01	Tomatoes	0.01	Apples	0.00	Table grapes
0.02	WHO Cluster diet F	0.01	Tomatoes	0.01	Apples	0.00	Head cabbage
0.02	DK adult	0.01	Apples	0.00	Tomatoes	0.00	Pears
0.02	UK vegetarian	0.01	Tomatoes	0.01	Apples	0.00	Pears
0.02	FR (GP)	0.01	Apples	0.00	Tomatoes	0.00	Pears
0.01	UK adult	0.00	Tomatoes	0.00	Apples	0.00	Pears
0.01	FI adult	0.00	Tomatoes	0.00	Apples	0.00	Head cabbage

## Acute risk assessment

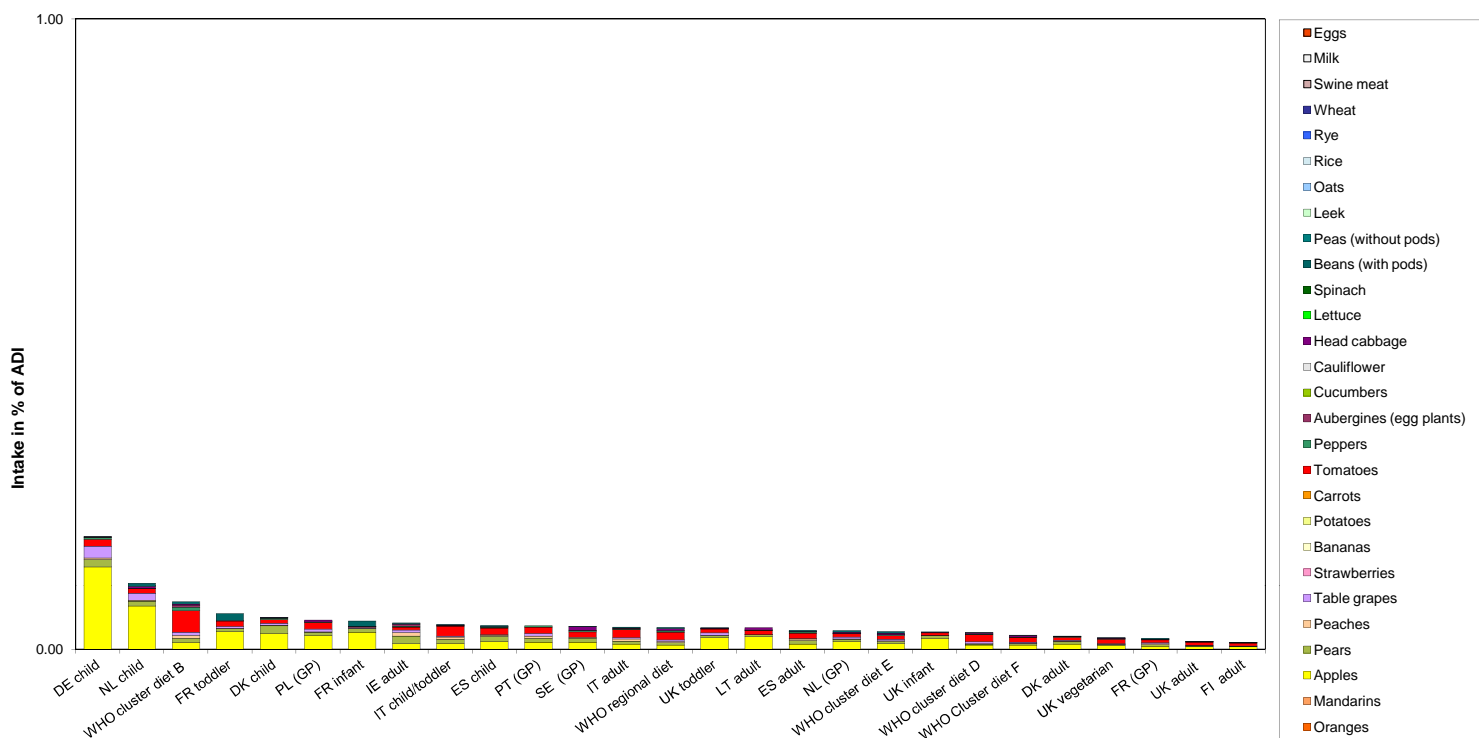
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	2	2194	6.97		0.18		8.62	UK infant	
2010	Peaches	0.3	1135	4.32		0.16		4.75	DE child	
2010	Strawberries	0.02	1812							
2010	Tomatoes	2	1690	2.90		0.39		11.34	BE child	
2010	Head cabbage	0.02	925		0.11	0.13		3.42	NL child	
2010	Lettuce	0.02	1770							
2010	Leek	0.02	729							
2010	Oats	0.05	147							
2010	Rye	0.05	355							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

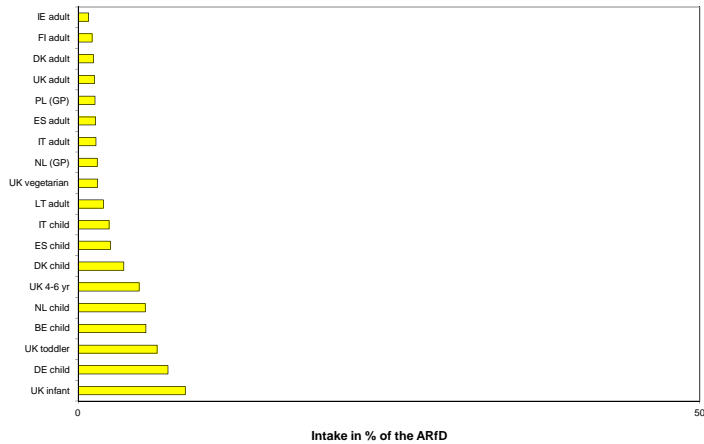
c) TRL: toxicological threshold level

## Chronic risk assessment: Methoxyfenozide

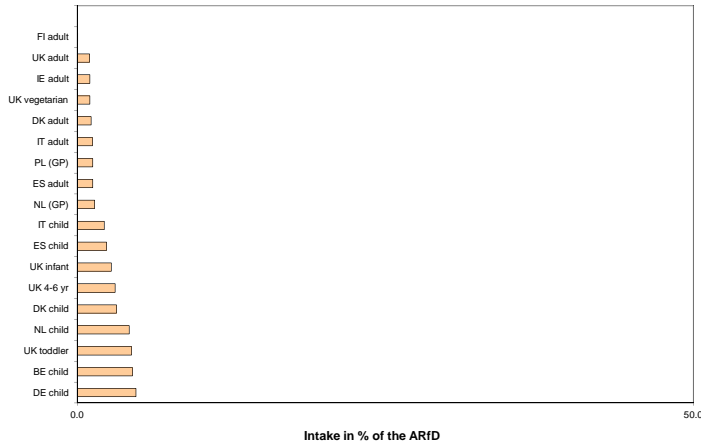


**Methoxyfenozide**

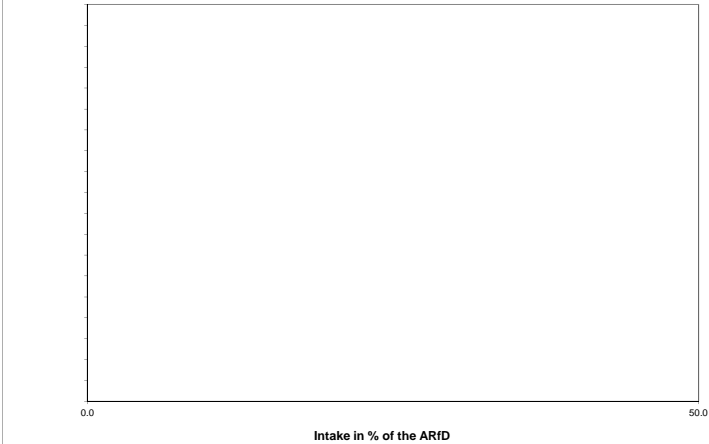
Acute exposure: Methoxyfenozide / Apples



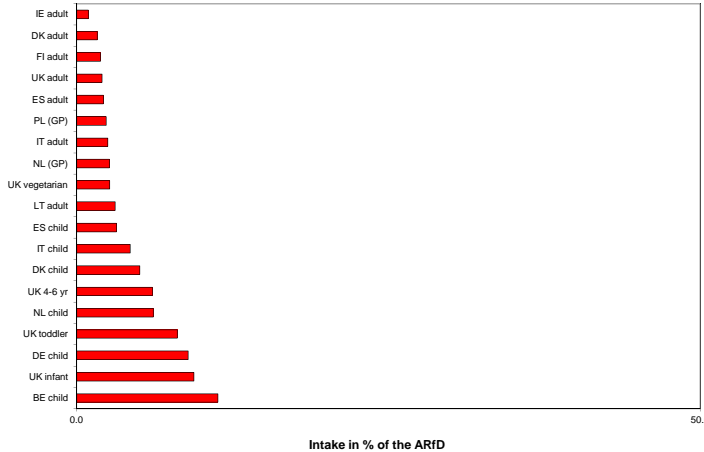
Acute exposure: Methoxyfenozide / Peaches



Acute exposure: Methoxyfenozide / Strawberries



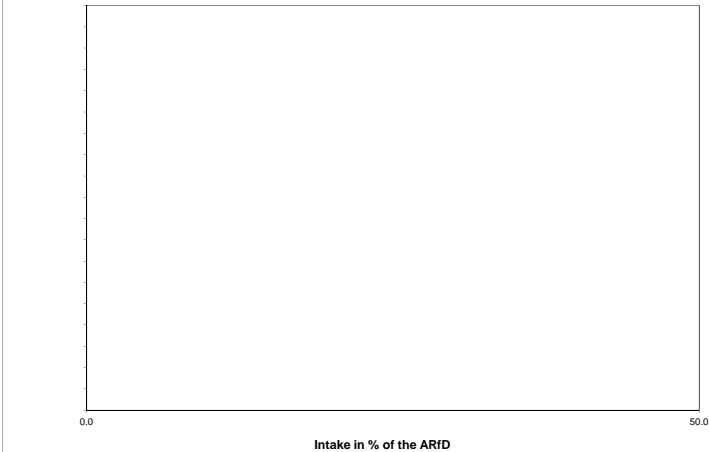
Acute exposure: Methoxyfenozide / Tomatoes



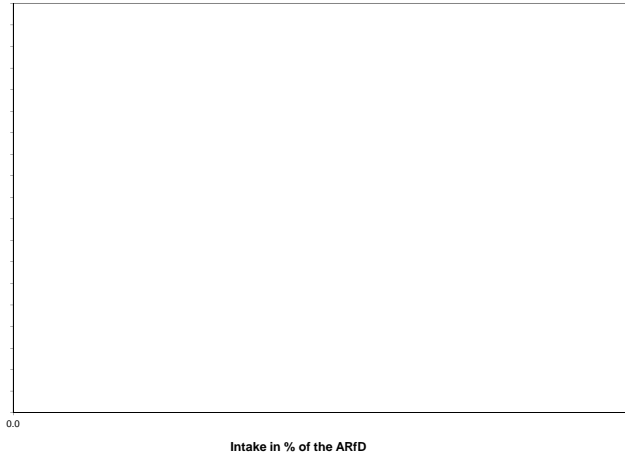
Acute exposure: Methoxyfenozide / Head cabbage



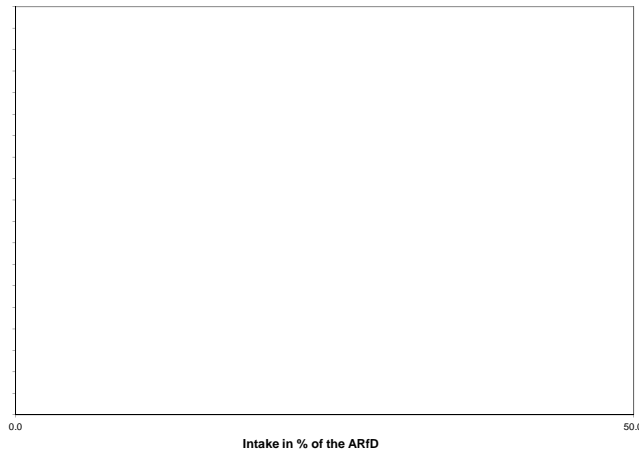
Acute exposure: Methoxyfenozide / Lettuce



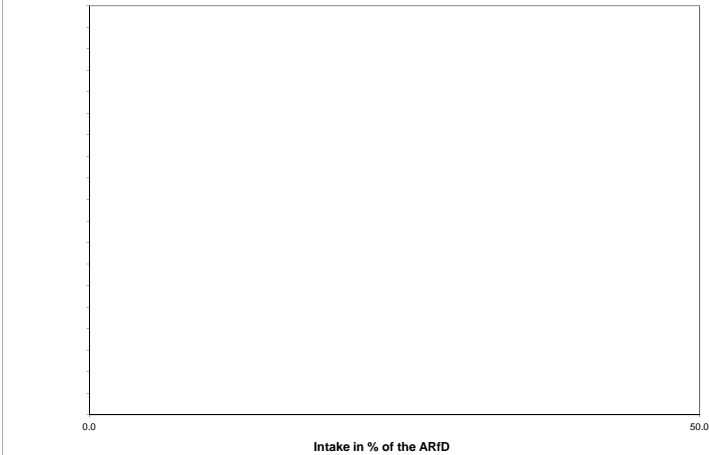
Acute exposure: Methoxyfenozide / Leek



Acute exposure: Methoxyfenozide / Oats



Acute exposure: Methoxyfenozide / Rye



## Monocrotophos

Status of the active substance:	<b>Excluded</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.0006</b>	ARfD (mg/kg bw):	<b>0.002</b>
Source of ADI:	<b>JMPR</b>	Source of ARfD:	<b>JMPR</b>
Year of evaluation:	<b>1995</b>	Year of evaluation:	<b>1995</b>

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum					
		3					
		No of diets exceeding ADI:		---			
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
3.44	FR toddler	2.07	Beans (with pods)	1.38	Strawberries		FRUIT (FRESH OR FROZEN)
2.71	FR infant	1.58	Beans (with pods)	1.08	Strawberries	0.03	Peppers
2.54	WHO cluster diet B	1.12	Peppers	0.63	Beans (with pods)	0.61	Aubergines (egg plants)
1.88	DE child	1.08	Strawberries	0.65	Peppers	0.13	Beans (with pods)
1.76	IE adult	0.58	Aubergines (egg)	0.55	Strawberries	0.31	Beans (with pods)
1.61	NL child	0.95	Beans (with pods)	0.50	Strawberries	0.15	Peppers
1.08	SE (GP)	0.42	Peppers	0.36	Strawberries	0.16	Beans (with pods)
1.04	WHO regional diet	0.39	Peppers	0.37	Beans (with pods)	0.20	Strawberries
1.00	ES adult	0.44	Beans (with pods)	0.35	Peppers	0.13	Strawberries
0.98	WHO cluster diet E	0.52	Beans (with pods)	0.23	Peppers	0.19	Strawberries
0.89	ES child	0.45	Beans (with pods)	0.26	Peppers	0.16	Strawberries
0.81	NL (GP)	0.47	Beans (with pods)	0.17	Strawberries	0.15	Peppers
0.79	IT adult	0.28	Beans (with pods)	0.24	Aubergines (egg)	0.16	Peppers
0.79	IT child/toddler	0.26	Strawberries	0.21	Aubergines (egg)	0.18	Beans (with pods)
0.75	DK child	0.50	Peppers	0.23	Strawberries	0.01	Aubergines (egg plants)
0.60	FR (GP)	0.27	Beans (with pods)	0.20	Strawberries	0.08	Peppers
0.59	UK toddler	0.44	Strawberries	0.09	Beans (with pods)	0.05	Peppers
0.57	UK infant	0.48	Strawberries	0.09	Beans (with pods)		FRUIT (FRESH OR FROZEN)
0.53	UK vegetarian	0.18	Peppers	0.17	Strawberries	0.12	Beans (with pods)
0.52	PT (GP)	0.43	Peppers	0.09	Strawberries		FRUIT (FRESH OR FROZEN)
0.39	WHO cluster diet D	0.24	Peppers	0.06	Strawberries	0.06	Aubergines (egg plants)
0.38	DK adult	0.24	Peppers	0.10	Strawberries	0.03	Beans (with pods)
0.37	FI adult	0.17	Strawberries	0.11	Peppers	0.08	Beans (with pods)
0.32	WHO Cluster diet F	0.15	Strawberries	0.15	Peppers	0.01	Aubergines (egg plants)
0.30	UK adult	0.10	Strawberries	0.10	Peppers	0.09	Beans (with pods)
0.25	PL (GP)	0.17	Peppers	0.04	Strawberries	0.03	Aubergines (egg plants)
0.18	LT adult	0.08	Strawberries	0.05	Aubergines (egg)	0.05	Peppers

### Acute risk assessment

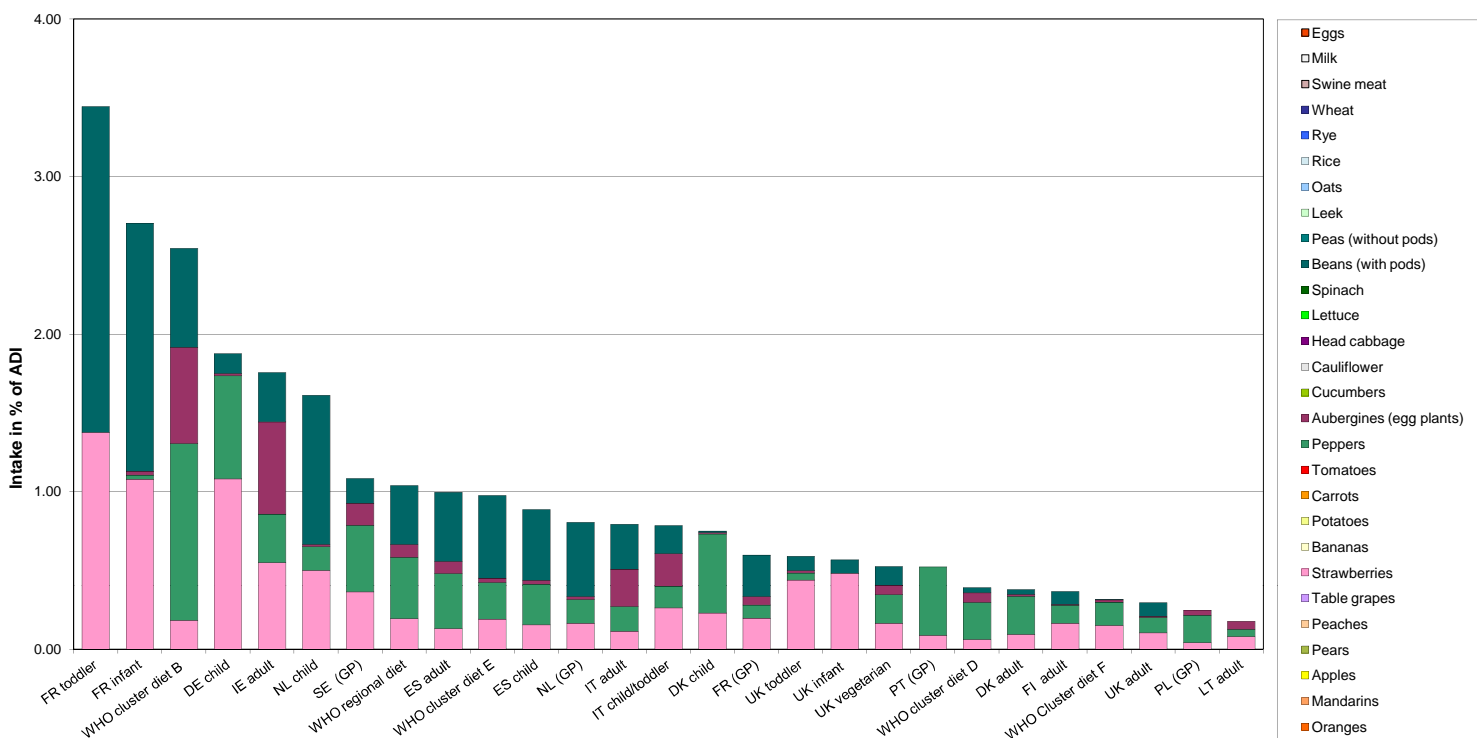
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.01	2907							
2010	Peaches	0.01	1409							
2010	Strawberries	0.01	2205		0.05	0.03		21.83	DE child	
2010	Tomatoes	0.01	2347							
2010	Head cabbage	0.01	1163							
2010	Lettuce	0.01	2209							
2010	Leek	0.01	935							
2010	Oats	0.01	179							
2010	Rye	0.01	413							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Monocrotophos



**Monocotophos**

Acute exposure: Monocotophos / Apples



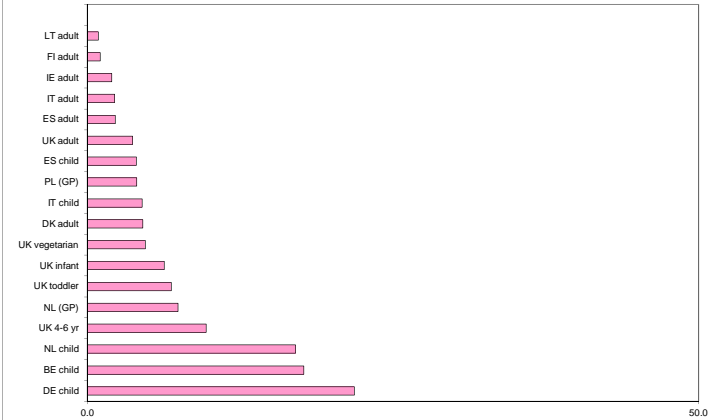
Intake in % of the ARfD

Acute exposure: Monocotophos / Peaches



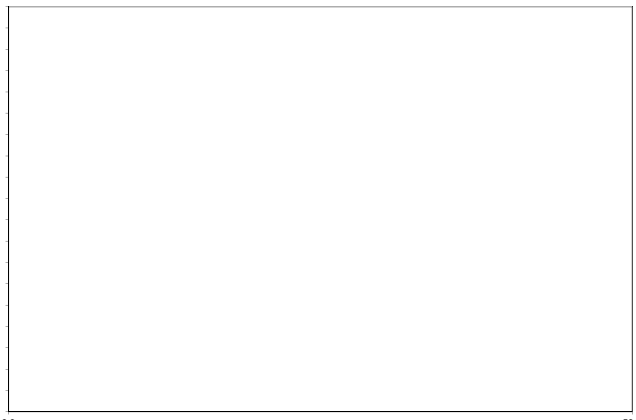
Intake in % of the ARfD

Acute exposure: Monocotophos / Strawberries



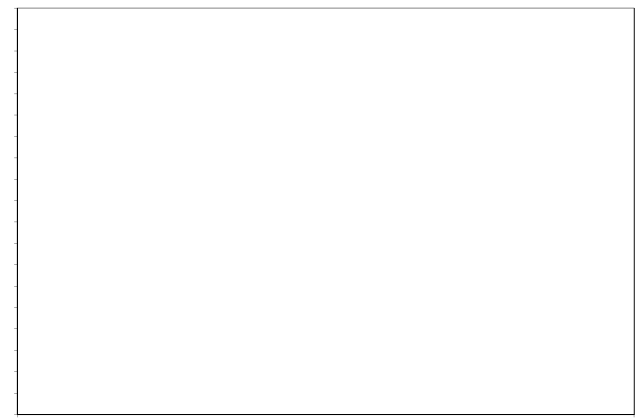
Intake in % of the ARfD

Acute exposure: Monocotophos / Tomatoes



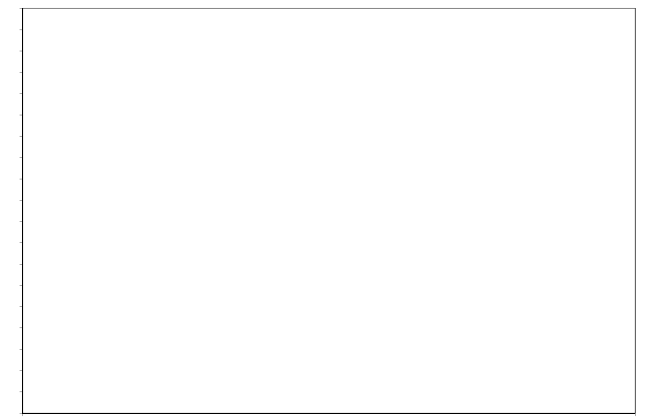
Intake in % of the ARfD

Acute exposure: Monocotophos / Head cabbage



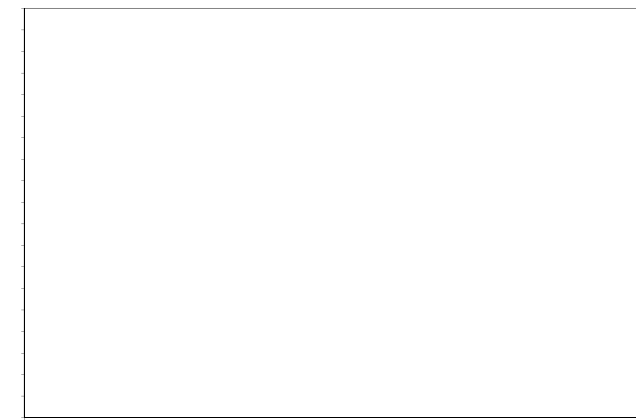
Intake in % of the ARfD

Acute exposure: Monocotophos / Lettuce



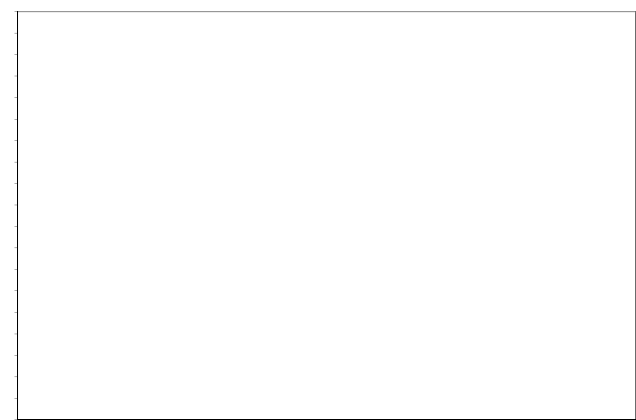
Intake in % of the ARfD

Acute exposure: Monocotophos / Leek



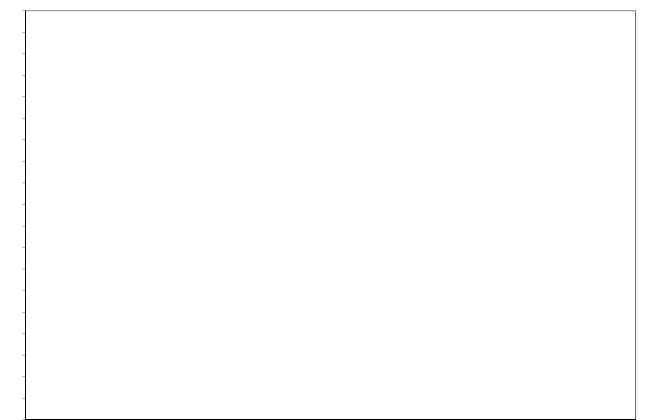
Intake in % of the ARfD

Acute exposure: Monocotophos / Oats



Intake in % of the ARfD

Acute exposure: Monocotophos / Rye



Intake in % of the ARfD

Myclobutanil			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.025	ARfD (mg/kg bw):	0.31
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2010	Year of evaluation:	2010

### Chronic risk assessment

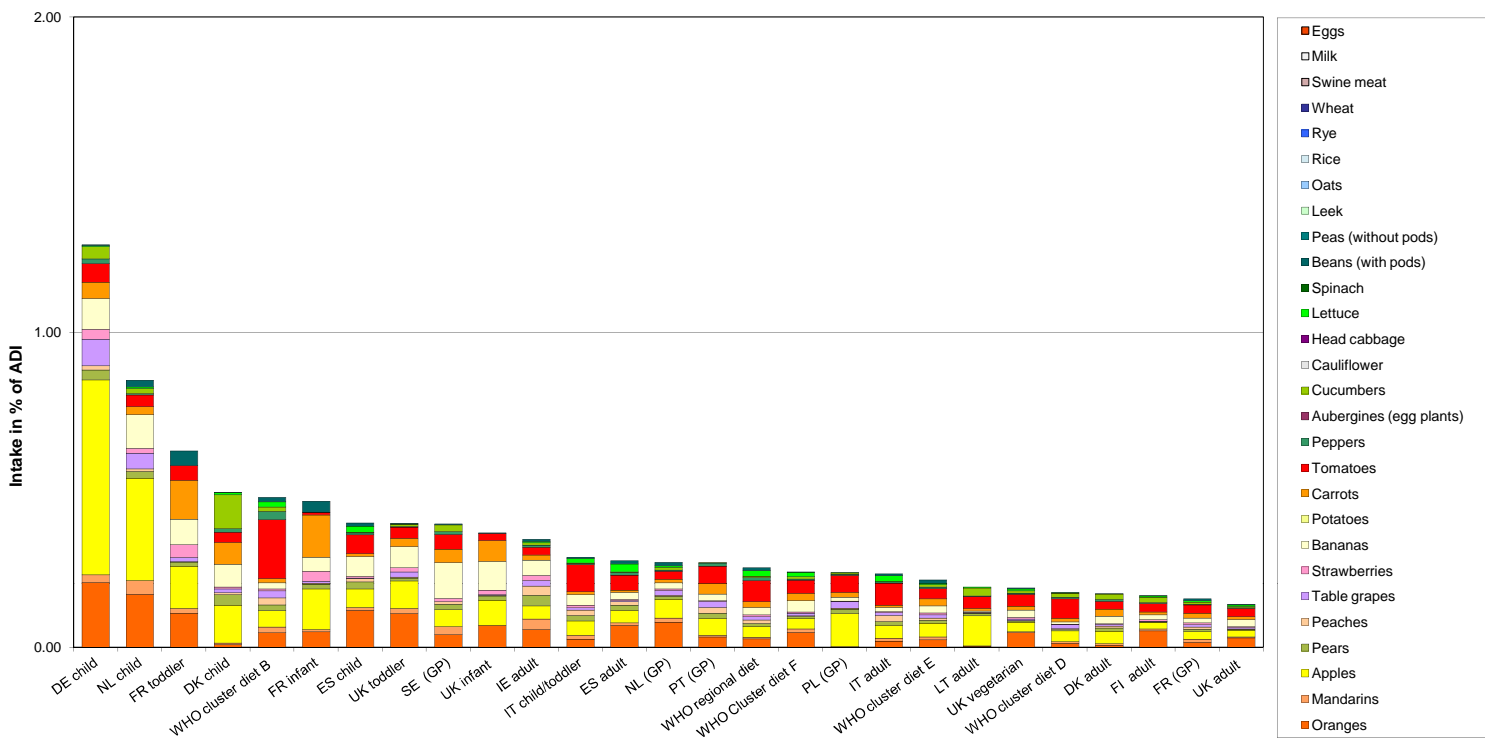
Exposure (range) in % of ADI minimum - maximum		1					
No of diets exceeding ADI: ---							
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
1.28	DE child	0.62	Apples	0.21	Oranges	0.10	Bananas
0.85	NL child	0.32	Apples	0.17	Oranges	0.11	Bananas
0.62	FR toddler	0.13	Apples	0.12	Carrots	0.11	Oranges
0.49	DK child	0.12	Apples	0.11	Cucumbers	0.07	Bananas
0.48	WHO cluster diet B	0.19	Tomatoes	0.05	Apples	0.05	Oranges
0.46	FR infant	0.13	Carrots	0.13	Apples	0.05	Oranges
0.39	ES child	0.12	Oranges	0.06	Bananas	0.06	Tomatoes
0.39	UK toddler	0.11	Oranges	0.09	Apples	0.07	Bananas
0.39	SE (GP)	0.11	Bananas	0.05	Apples	0.05	Tomatoes
0.36	UK infant	0.09	Bananas	0.08	Apples	0.07	Oranges
0.34	IE adult	0.06	Oranges	0.05	Bananas	0.04	Apples
0.29	IT child/toddler	0.09	Tomatoes	0.05	Apples	0.03	Bananas
0.27	ES adult	0.07	Oranges	0.05	Tomatoes	0.04	Apples
0.27	NL (GP)	0.08	Oranges	0.06	Apples	0.03	Tomatoes
0.27	PT (GP)	0.05	Tomatoes	0.05	Apples	0.03	Carrots
0.25	WHO regional diet	0.07	Tomatoes	0.03	Apples	0.03	Oranges
0.24	WHO Cluster diet F	0.05	Oranges	0.04	Tomatoes	0.04	Bananas
0.24	PL (GP)	0.10	Apples	0.05	Tomatoes	0.02	Table grapes
0.23	IT adult	0.07	Tomatoes	0.04	Apples	0.02	Oranges
0.21	WHO cluster diet E	0.04	Apples	0.03	Tomatoes	0.02	Oranges
0.19	LT adult	0.10	Apples	0.04	Tomatoes	0.03	Cucumbers
0.19	UK vegetarian	0.05	Oranges	0.04	Tomatoes	0.03	Apples
0.17	WHO cluster diet D	0.06	Tomatoes	0.03	Apples	0.01	Oranges
0.17	DK adult	0.04	Apples	0.03	Tomatoes	0.02	Bananas
0.16	FI adult	0.05	Oranges	0.03	Tomatoes	0.02	Apples
0.15	FR (GP)	0.03	Tomatoes	0.02	Apples	0.02	Oranges
0.14	UK adult	0.03	Oranges	0.03	Tomatoes	0.02	Bananas

### Acute risk assessment

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.5	3094	2.29		0.11		3.36	UK infant	
2010	Peaches	0.5	1517	2.11		0.08		1.51	DE child	
2010	Strawberries	1	2297	9.93		0.39		1.96	DE child	
2010	Tomatoes	0.3	2569	0.74		0.05		0.94	BE child	
2010	Head cabbage	0.02	1219							
2010	Lettuce	0.02	2381	0.13	0.08	0.08		0.66	DE child	
2010	Leek	0.02	961							
2010	Oats	0.02	184							
2010	Rye	0.02	428							
2010	Swine Meat									
2010	Milk									

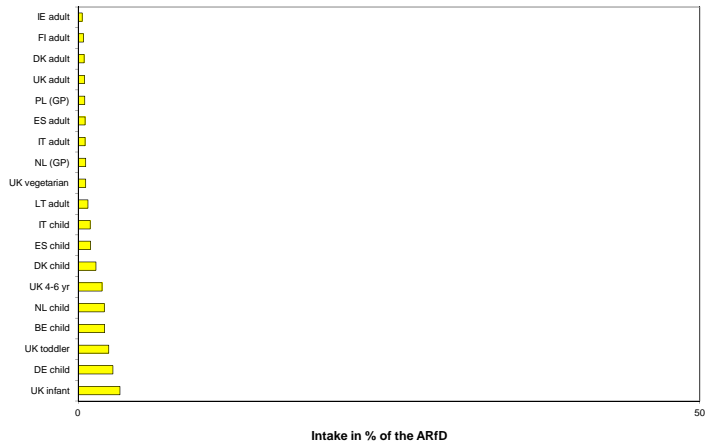
a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

### Chronic risk assessment: Myclobutanil

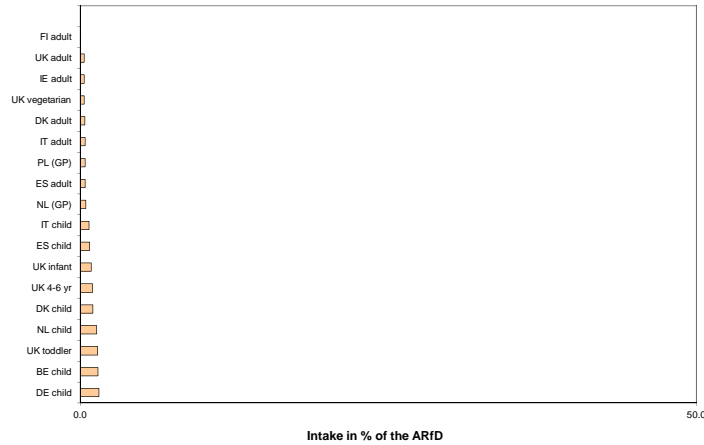


**Myclobutanil**

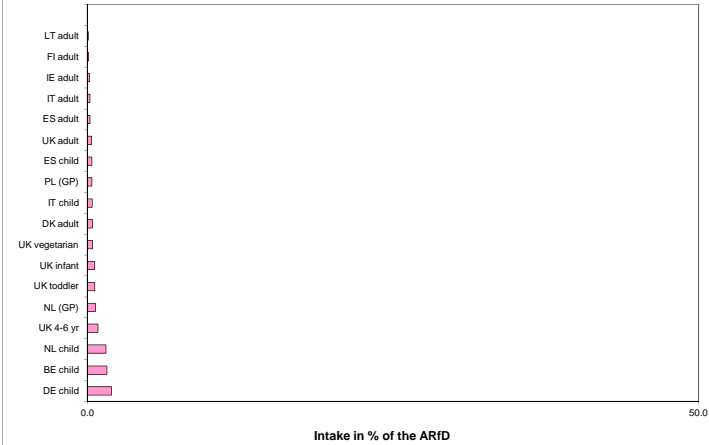
Acute exposure: Myclobutanil / Apples



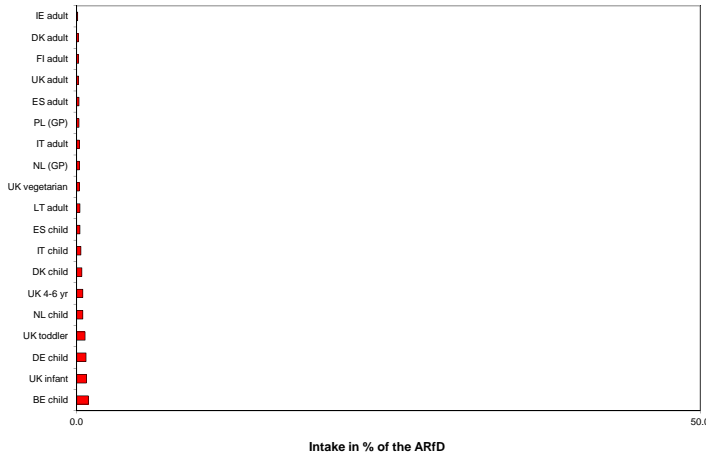
Acute exposure: Myclobutanil / Peaches



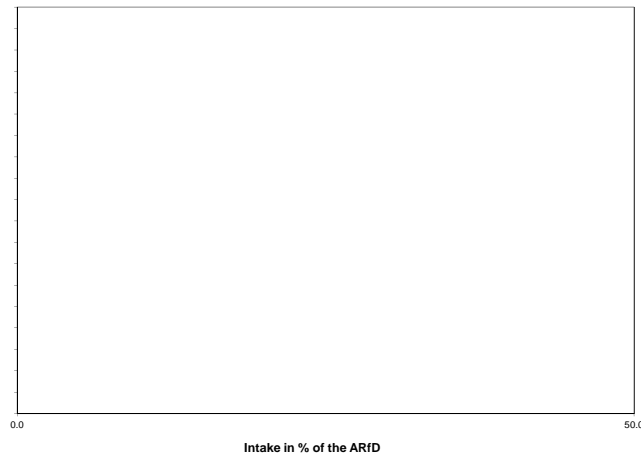
Acute exposure: Myclobutanil / Strawberries



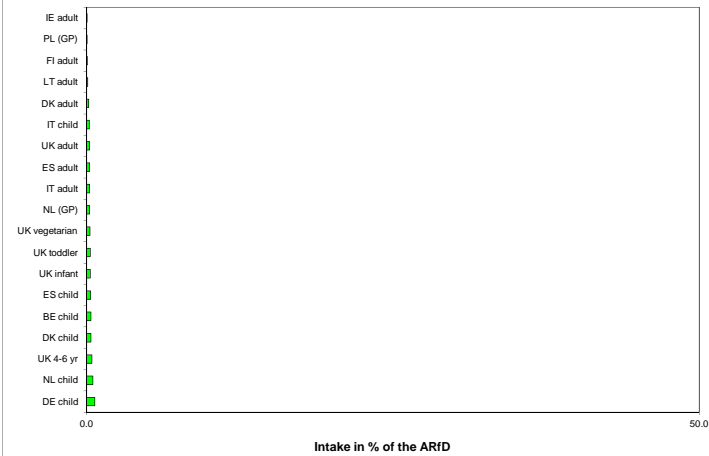
Acute exposure: Myclobutanil / Tomatoes



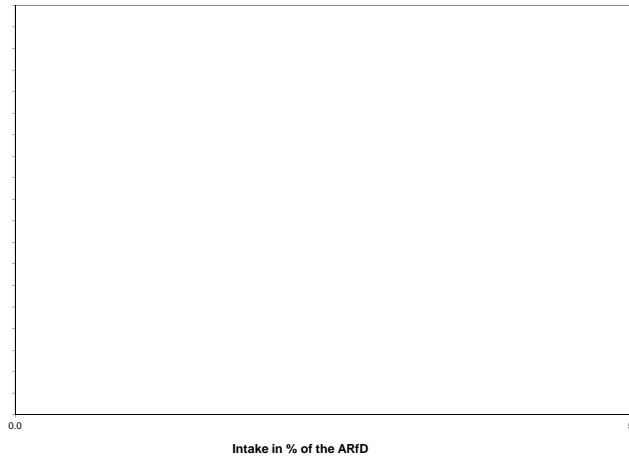
Acute exposure: Myclobutanil / Head cabbage



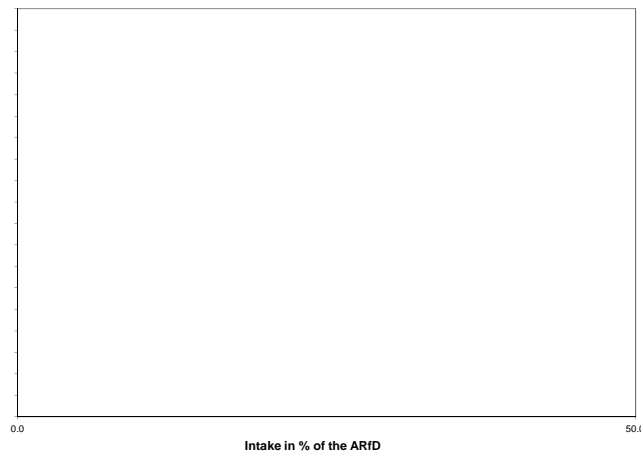
Acute exposure: Myclobutanil / Lettuce



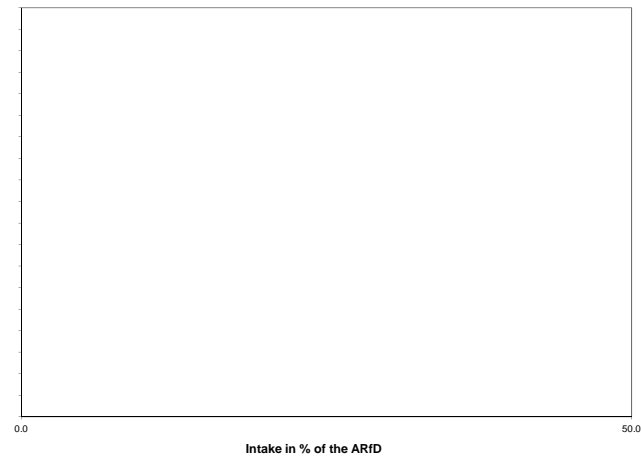
Acute exposure: Myclobutanil / Leek



Acute exposure: Myclobutanil / Oats



Acute exposure: Myclobutanil / Rye





Oxadixyl			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.01	ARfD (mg/kg bw):	0.01
Source of ADI:	FR	Source of ARfD:	
Year of evaluation:	1984	Year of evaluation:	

FR ADI value, used as surrogate also for ARfD; see EFSA Journal 2012;10(2)2565

**Chronic risk assessment**

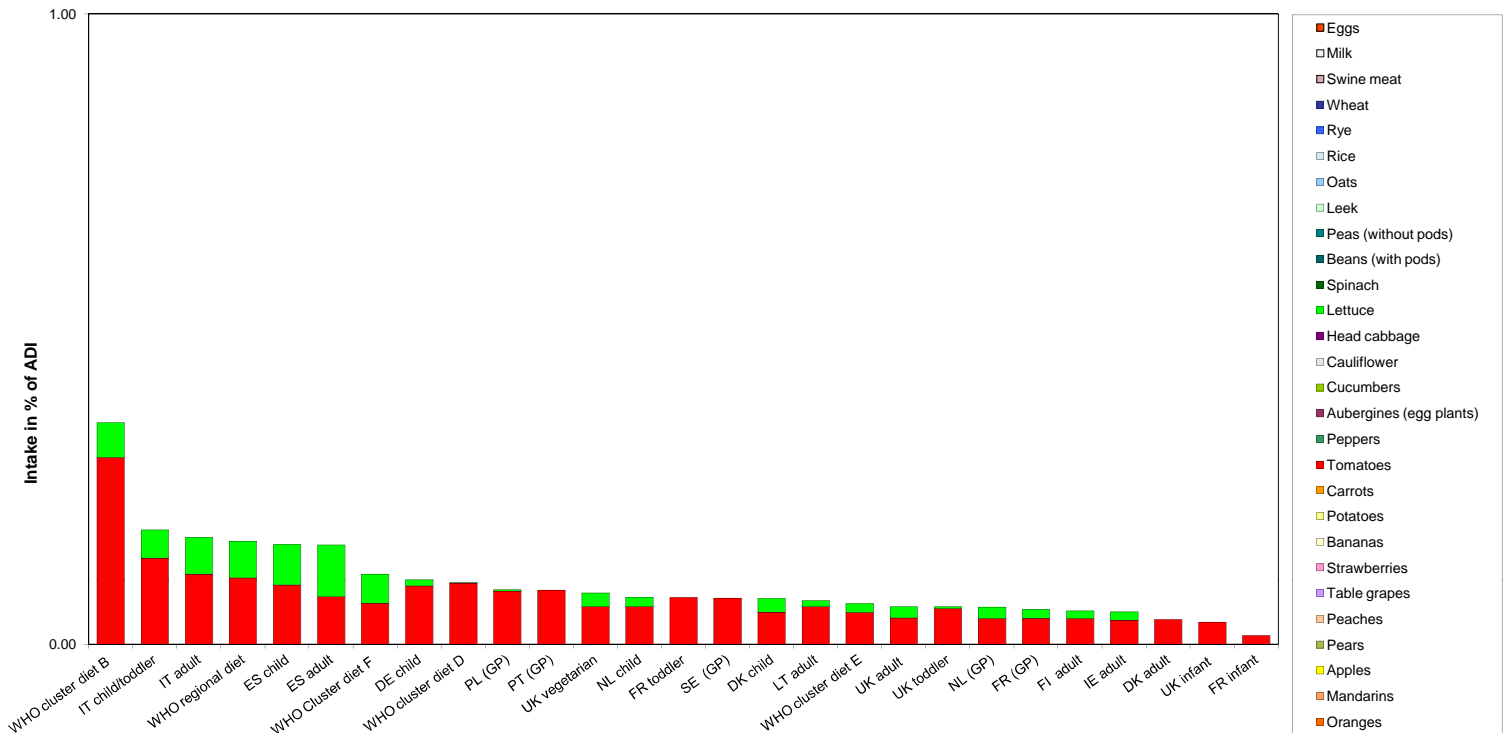
		Exposure (range) in % of ADI minimum - maximum		No of diets exceeding ADI: ---			
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.35	WHO cluster diet B	0.30	Tomatoes	0.06	Lettuce		FRUIT (FRESH OR FROZEN)
0.18	IT child/toddler	0.14	Tomatoes	0.04	Lettuce		FRUIT (FRESH OR FROZEN)
0.17	IT adult	0.11	Tomatoes	0.06	Lettuce		FRUIT (FRESH OR FROZEN)
0.16	WHO regional diet	0.11	Tomatoes	0.06	Lettuce		FRUIT (FRESH OR FROZEN)
0.16	ES child	0.09	Tomatoes	0.06	Lettuce		FRUIT (FRESH OR FROZEN)
0.16	ES adult	0.08	Lettuce	0.08	Tomatoes		FRUIT (FRESH OR FROZEN)
0.11	WHO Cluster diet F	0.07	Tomatoes	0.05	Lettuce		FRUIT (FRESH OR FROZEN)
0.10	DE child	0.09	Tomatoes	0.01	Lettuce		FRUIT (FRESH OR FROZEN)
0.10	WHO cluster diet D	0.10	Tomatoes	0.00	Lettuce		FRUIT (FRESH OR FROZEN)
0.09	PL (GP)	0.08	Tomatoes	0.00	Lettuce		FRUIT (FRESH OR FROZEN)
0.09	PT (GP)	0.09	Tomatoes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.08	UK vegetarian	0.06	Tomatoes	0.02	Lettuce		FRUIT (FRESH OR FROZEN)
0.08	NL child	0.06	Tomatoes	0.02	Lettuce		FRUIT (FRESH OR FROZEN)
0.07	FR toddler	0.07	Tomatoes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.07	SE (GP)	0.07	Tomatoes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.07	DK child	0.05	Tomatoes	0.02	Lettuce		FRUIT (FRESH OR FROZEN)
0.07	LT adult	0.06	Tomatoes	0.01	Lettuce		FRUIT (FRESH OR FROZEN)
0.06	WHO cluster diet E	0.05	Tomatoes	0.01	Lettuce		FRUIT (FRESH OR FROZEN)
0.06	UK adult	0.04	Tomatoes	0.02	Lettuce		FRUIT (FRESH OR FROZEN)
0.06	UK toddler	0.06	Tomatoes	0.00	Lettuce		FRUIT (FRESH OR FROZEN)
0.06	NL (GP)	0.04	Tomatoes	0.02	Lettuce		FRUIT (FRESH OR FROZEN)
0.06	FR (GP)	0.04	Tomatoes	0.01	Lettuce		FRUIT (FRESH OR FROZEN)
0.05	FI adult	0.04	Tomatoes	0.01	Lettuce		FRUIT (FRESH OR FROZEN)
0.05	IE adult	0.04	Tomatoes	0.01	Lettuce		FRUIT (FRESH OR FROZEN)
0.04	DK adult	0.04	Tomatoes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.04	UK infant	0.04	Tomatoes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.01	FR infant	0.01	Tomatoes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)

**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.01	2817							
2010	Peaches	0.01	1331							
2010	Strawberries	0.01	2172							
2010	Tomatoes	0.01	2231	0.04	0.09	0.05		26.75	BE child	
2010	Head cabbage	0.01	1122							
2010	Lettuce	0.1	2210	0.81	0.05	0.21		56.50	DE child	
2010	Leek	0.01	889							
2010	Oats	0.01	176							
2010	Rye	0.01	408							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Oxadixyl**



**Oxadixyl**

Acute exposure: Oxadixyl / Apples



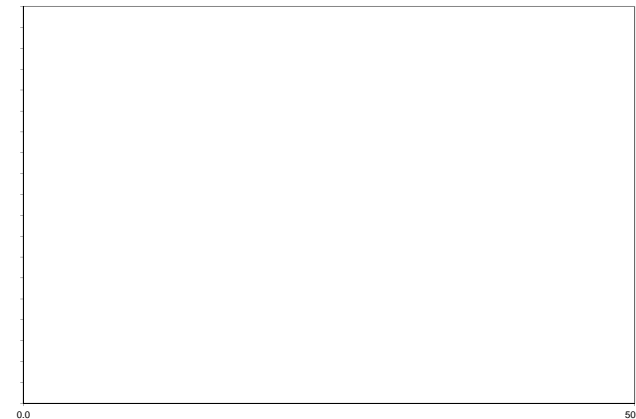
Intake in % of the ARfD

Acute exposure: Oxadixyl / Peaches



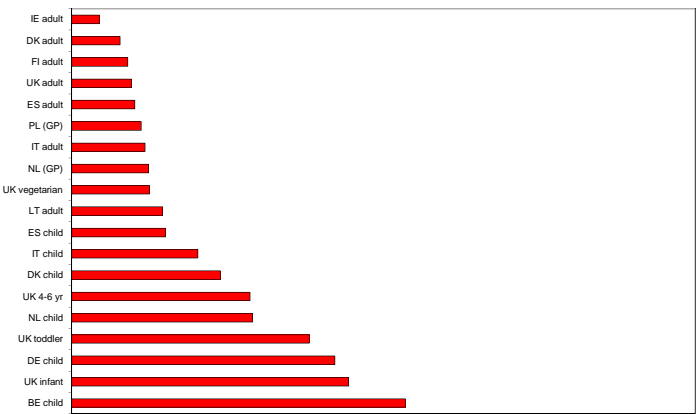
Intake in % of the ARfD

Acute exposure: Oxadixyl / Strawberries



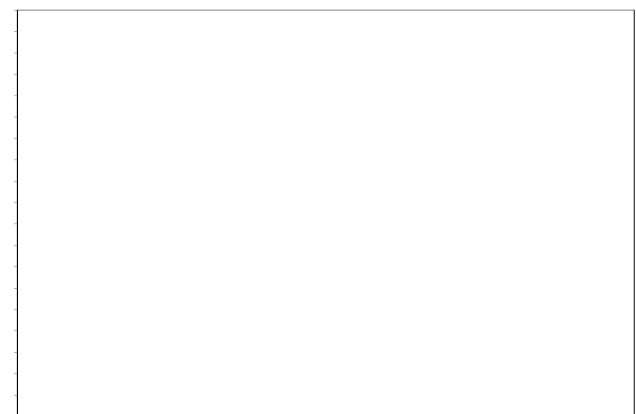
Intake in % of the ARfD

Acute exposure: Oxadixyl / Tomatoes



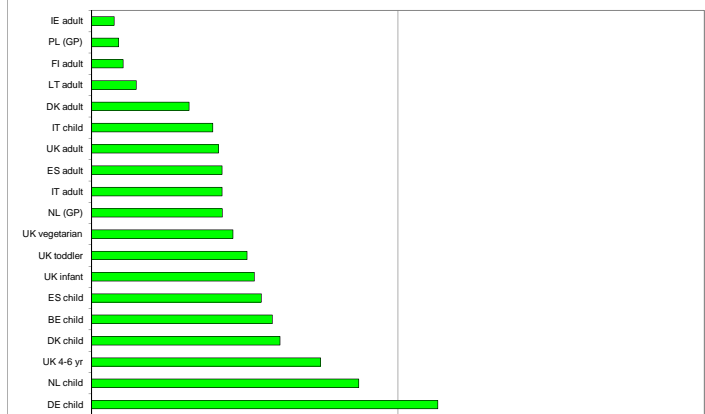
Intake in % of the ARfD

Acute exposure: Oxadixyl / Head cabbage



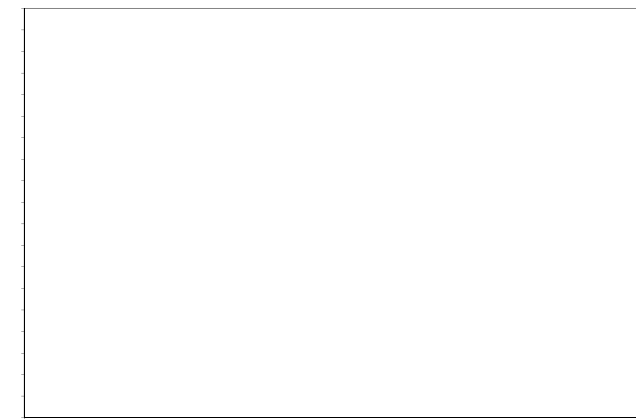
Intake in % of the ARfD

Acute exposure: Oxadixyl / Lettuce



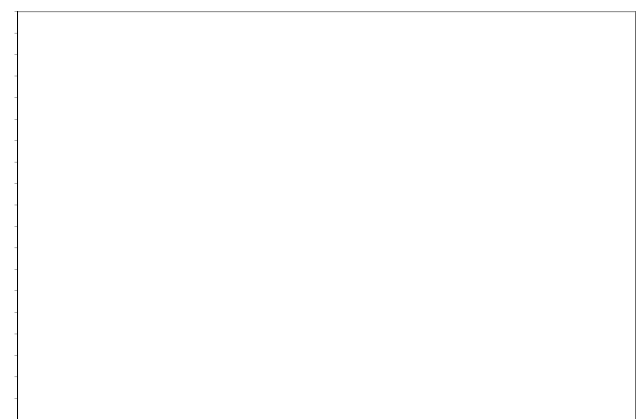
Intake in % of the ARfD

Acute exposure: Oxadixyl / Leek



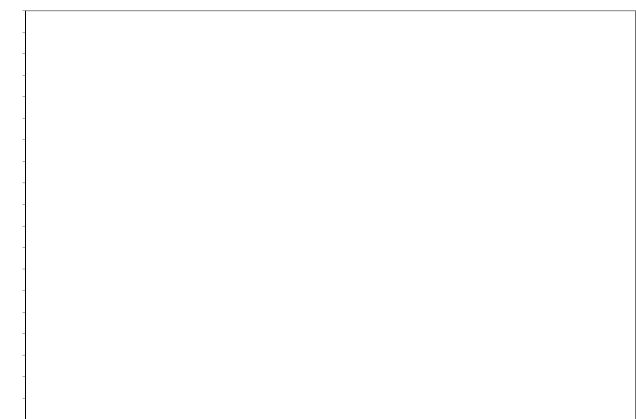
Intake in % of the ARfD

Acute exposure: Oxadixyl / Oats



Intake in % of the ARfD

Acute exposure: Oxadixyl / Rye



Intake in % of the ARfD

Oxamyl			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.001	ARfD (mg/kg bw):	0.001
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2006	Year of evaluation:	2006

### Chronic risk assessment

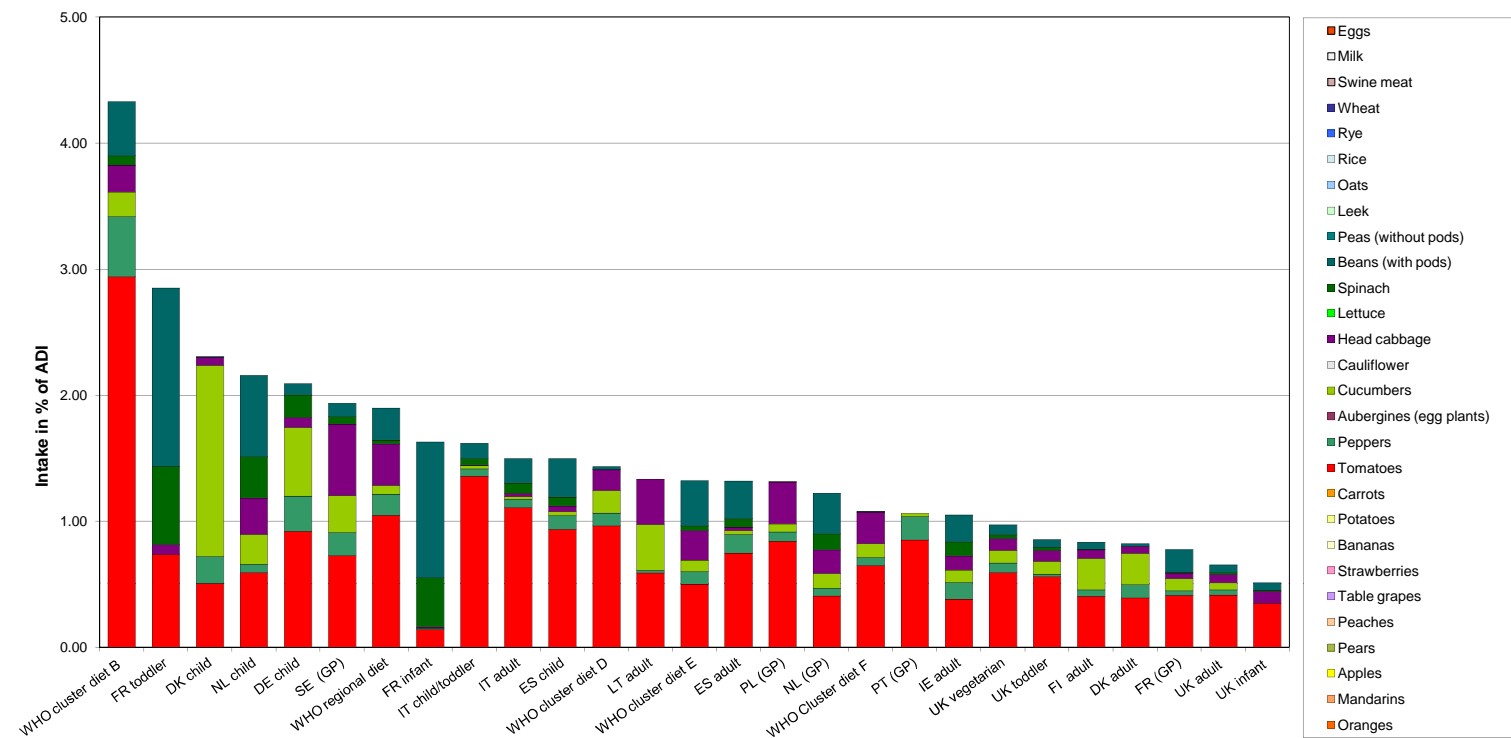
		Exposure (range) in % of ADI minimum - maximum					
		1	4				
No of diets exceeding ADI: ---							
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
4.33	WHO cluster diet B	2.94	Tomatoes	0.48	Peppers	0.43	Beans (with pods)
2.85	FR toddler	1.41	Beans (with pods)	0.74	Tomatoes	0.62	Spinach
2.31	DK child	1.52	Cucumbers	0.51	Tomatoes	0.21	Peppers
2.16	NL child	0.65	Beans (with pods)	0.59	Tomatoes	0.33	Spinach
2.09	DE child	0.92	Tomatoes	0.54	Cucumbers	0.28	Peppers
1.94	SE (GP)	0.73	Tomatoes	0.57	Head cabbage	0.29	Cucumbers
1.90	WHO regional diet	1.05	Tomatoes	0.33	Head cabbage	0.26	Beans (with pods)
1.63	FR infant	1.08	Beans (with pods)	0.39	Spinach	0.14	Tomatoes
1.62	IT child/toddler	1.36	Tomatoes	0.12	Beans (with pods)	0.06	Peppers
1.50	IT adult	1.11	Tomatoes	0.19	Beans (with pods)	0.08	Spinach
1.50	ES child	0.94	Tomatoes	0.31	Beans (with pods)	0.11	Peppers
1.43	WHO cluster diet D	0.96	Tomatoes	0.18	Cucumbers	0.17	Head cabbage
1.34	LT adult	0.59	Tomatoes	0.36	Cucumbers	0.36	Head cabbage
1.32	WHO cluster diet E	0.50	Tomatoes	0.36	Beans (with pods)	0.23	Head cabbage
1.32	ES adult	0.75	Tomatoes	0.30	Beans (with pods)	0.15	Peppers
1.31	PL (GP)	0.84	Tomatoes	0.33	Head cabbage	0.07	Peppers
1.22	NL (GP)	0.41	Tomatoes	0.32	Beans (with pods)	0.19	Head cabbage
1.08	WHO Cluster diet F	0.65	Tomatoes	0.25	Head cabbage	0.11	Cucumbers
1.06	PT (GP)	0.85	Tomatoes	0.19	Peppers	0.02	Cucumbers
1.05	IE adult	0.38	Tomatoes	0.21	Beans (with pods)	0.13	Peppers
0.97	UK vegetarian	0.59	Tomatoes	0.10	Cucumbers	0.09	Head cabbage
0.86	UK toddler	0.56	Tomatoes	0.10	Cucumbers	0.09	Head cabbage
0.84	FI adult	0.41	Tomatoes	0.25	Cucumbers	0.07	Head cabbage
0.82	DK adult	0.39	Tomatoes	0.25	Cucumbers	0.10	Peppers
0.78	FR (GP)	0.41	Tomatoes	0.18	Beans (with pods)	0.10	Cucumbers
0.65	UK adult	0.42	Tomatoes	0.07	Head cabbage	0.06	Beans (with pods)
0.51	UK infant	0.35	Tomatoes	0.09	Head cabbage	0.06	Beans (with pods)

### Acute risk assessment

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.01	2553							
2010	Peaches	0.01	1300							
2010	Strawberries	0.01	2013							
2010	Tomatoes	0.02	1980	0.10	0.05	0.10	1	155.91	DE child	
2010	Head cabbage	0.01	1018		0.15	0.38	4	2209.55	BE child	
2010	Lettuce	0.01	2027		0.10	0.25	1	1315.79	NL child	
2010	Leek	0.01	823							
2010	Oats	0.01	161							
2010	Rye	0.01	396							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

### Chronic risk assessment: Oxamyl



**Oxamyl**

Acute exposure: Oxamyl / Apples



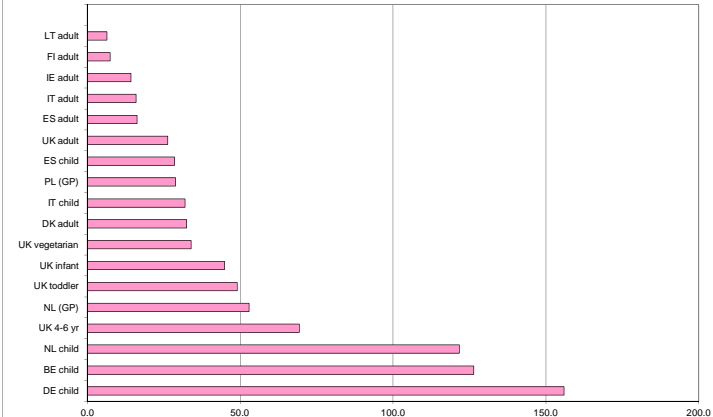
Intake in % of the ARfD

Acute exposure: Oxamyl / Peaches



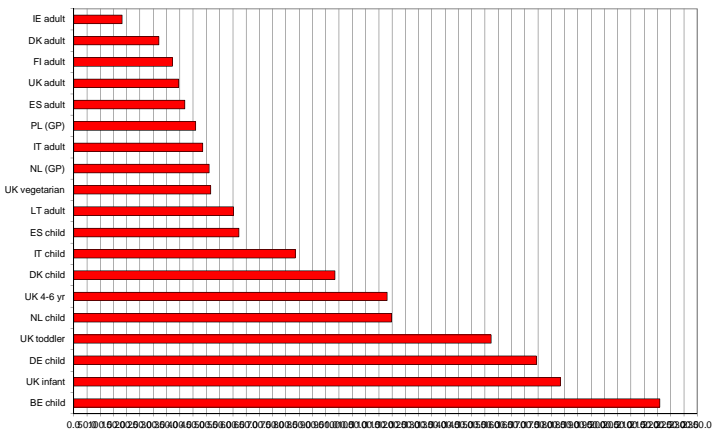
Intake in % of the ARfD

Acute exposure: Oxamyl / Strawberries



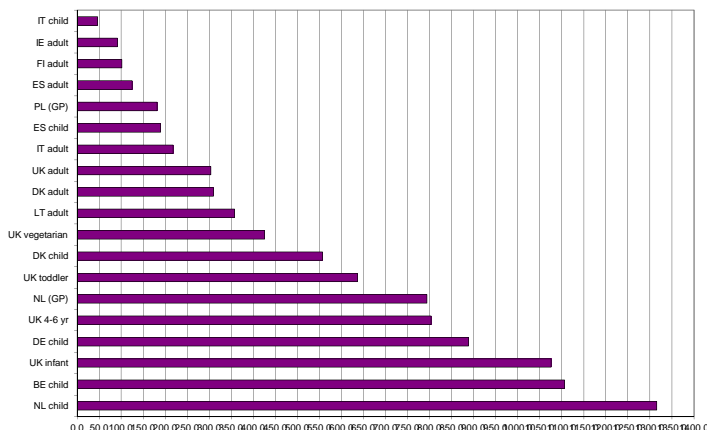
Intake in % of the ARfD

Acute exposure: Oxamyl / Tomatoes



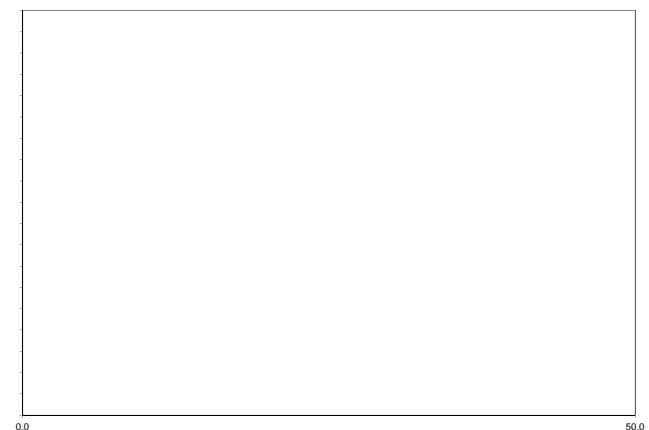
Intake in % of the ARfD

Acute exposure: Oxamyl / Head cabbage



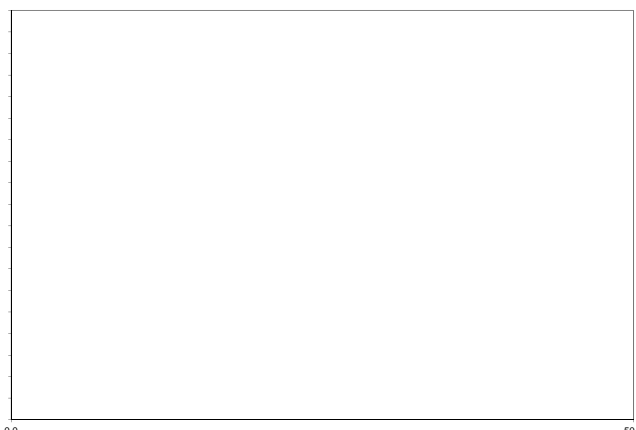
Intake in % of the ARfD

Acute exposure: Oxamyl / Lettuce



Intake in % of the ARfD

Acute exposure: Oxamyl / Leek



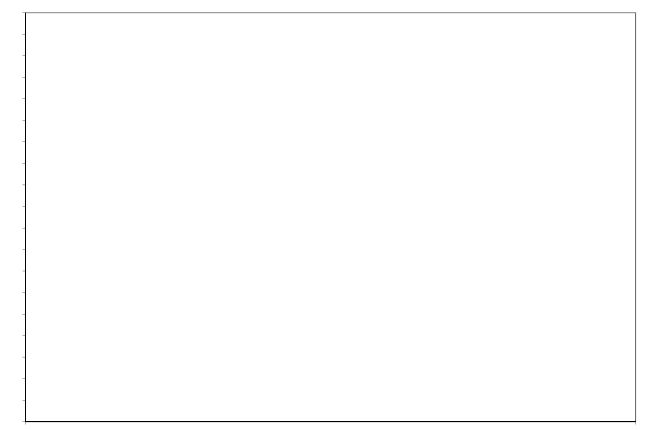
Intake in % of the ARfD

Acute exposure: Oxamyl / Oats



Intake in % of the ARfD

Acute exposure: Oxamyl / Rye



Intake in % of the ARfD

## Oxydemeton-methyl

Status of the active substance:	<b>Excluded</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.0003</b>	ARfD (mg/kg bw):	<b>0.0015</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2006</b>	Year of evaluation:	<b>2006</b>

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum						
		2	45					
No of diets exceeding ADI: ---								
	Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
	44.70	DE child	43.74	Apples	0.96	Peppers		FRUIT (FRESH OR FROZEN)
	23.18	NL child	22.95	Apples	0.22	Peppers		FRUIT (FRESH OR FROZEN)
	9.51	FR toddler	9.51	Apples		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	9.15	DK child	8.42	Apples	0.73	Peppers		FRUIT (FRESH OR FROZEN)
	9.10	FR infant	9.06	Apples	0.04	Peppers		FRUIT (FRESH OR FROZEN)
	7.66	PL (GP)	7.41	Apples	0.26	Peppers		FRUIT (FRESH OR FROZEN)
	6.83	LT adult	6.77	Apples	0.07	Peppers		FRUIT (FRESH OR FROZEN)
	6.25	UK toddler	6.18	Apples		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	5.67	UK infant	5.67	Apples		FRUIT (FRESH OR FROZEN)		FRUIT (FRESH OR FROZEN)
	5.29	WHO cluster diet B	3.65	Apples	1.64	Peppers		FRUIT (FRESH OR FROZEN)
	4.52	ES child	4.14	Apples	0.38	Peppers		FRUIT (FRESH OR FROZEN)
	4.50	NL (GP)	4.28	Apples	0.22	Peppers		FRUIT (FRESH OR FROZEN)
	4.44	PT (GP)	3.81	Apples	0.64	Peppers		FRUIT (FRESH OR FROZEN)
	4.42	SE (GP)	3.81	Apples	0.62	Peppers		FRUIT (FRESH OR FROZEN)
	3.43	IE adult	2.98	Apples	0.45	Peppers		FRUIT (FRESH OR FROZEN)
	3.41	IT child/toddler	3.21	Apples	0.20	Peppers		FRUIT (FRESH OR FROZEN)
	3.41	WHO cluster diet E	3.07	Apples	0.34	Peppers		FRUIT (FRESH OR FROZEN)
	3.30	ES adult	2.79	Apples	0.51	Peppers		FRUIT (FRESH OR FROZEN)
	3.20	DK adult	2.85	Apples	0.35	Peppers		FRUIT (FRESH OR FROZEN)
	3.11	IT adult	2.88	Apples	0.23	Peppers		FRUIT (FRESH OR FROZEN)
	2.99	WHO regional diet	2.42	Apples	0.57	Peppers		FRUIT (FRESH OR FROZEN)
	2.76	WHO cluster diet D	2.41	Apples	0.35	Peppers		FRUIT (FRESH OR FROZEN)
	2.60	WHO Cluster diet F	2.38	Apples	0.22	Peppers		FRUIT (FRESH OR FROZEN)
	2.41	UK vegetarian	2.15	Apples	0.27	Peppers		FRUIT (FRESH OR FROZEN)
	1.84	FR (GP)	1.72	Apples	0.12	Peppers		FRUIT (FRESH OR FROZEN)
	1.63	UK adult	1.49	Apples	0.14	Peppers		FRUIT (FRESH OR FROZEN)
	1.63	FI adult	1.46	Apples	0.17	Peppers		FRUIT (FRESH OR FROZEN)

### Acute risk assessment

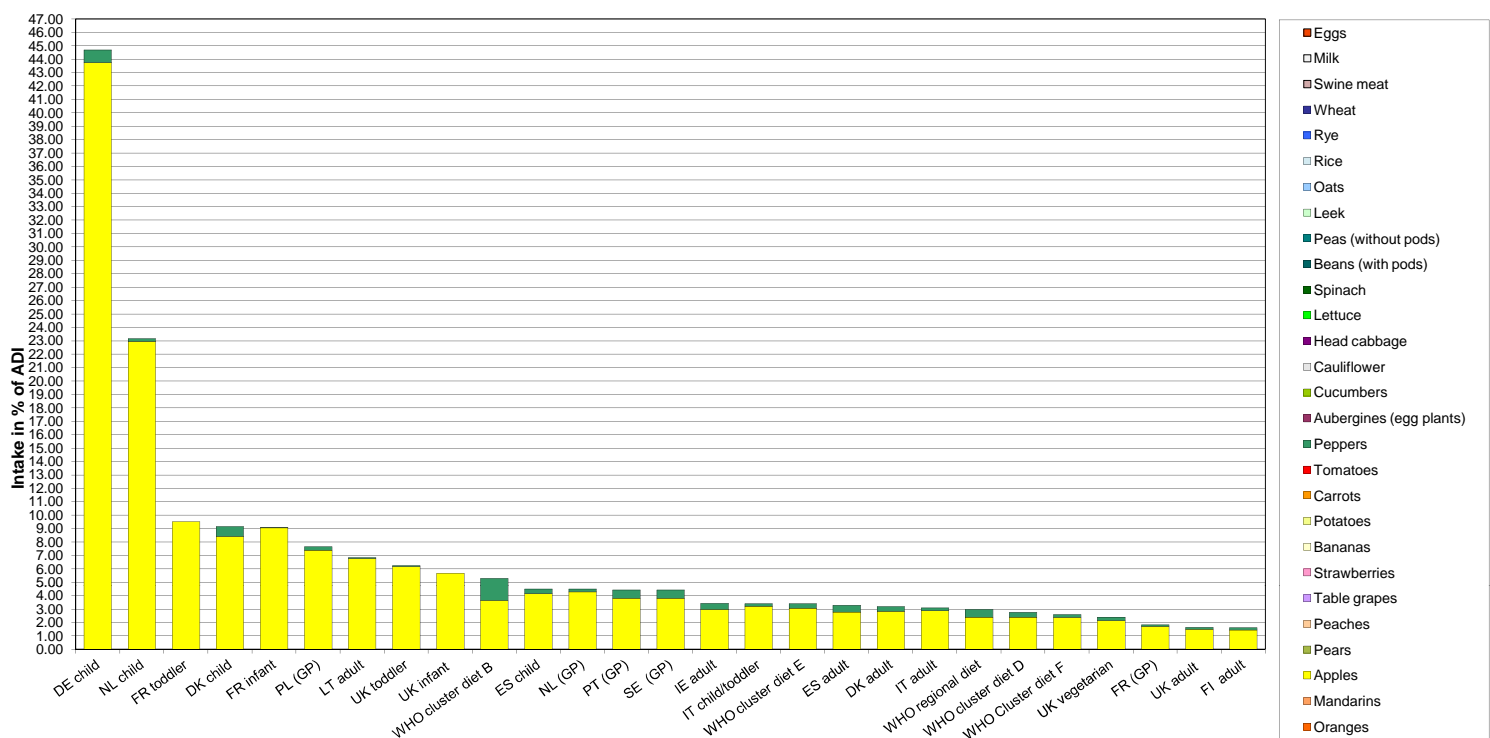
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.01	2169		0.05	0.03	1	169.81	UK infant	
2010	Peaches	0.01	1170							
2010	Strawberries	0.01	1852							
2010	Tomatoes	0.01	1768							
2010	Head cabbage	0.01	940							
2010	Lettuce	0.01	1793							
2010	Leek	0.01	758							
2010	Oats	0.02	133							
2010	Rye	0.02	367							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

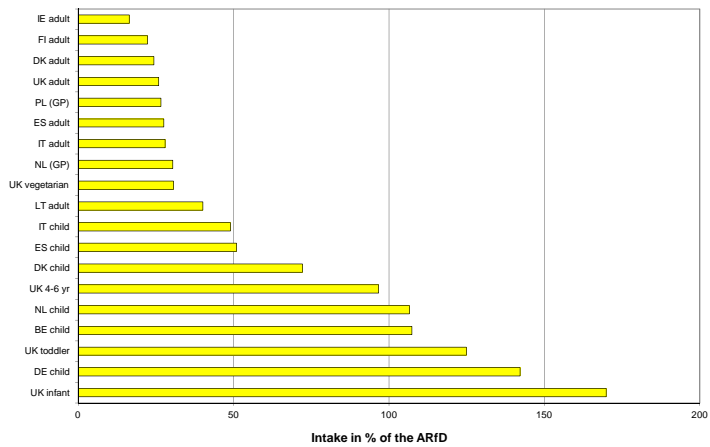
<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Oxydemeton-methyl

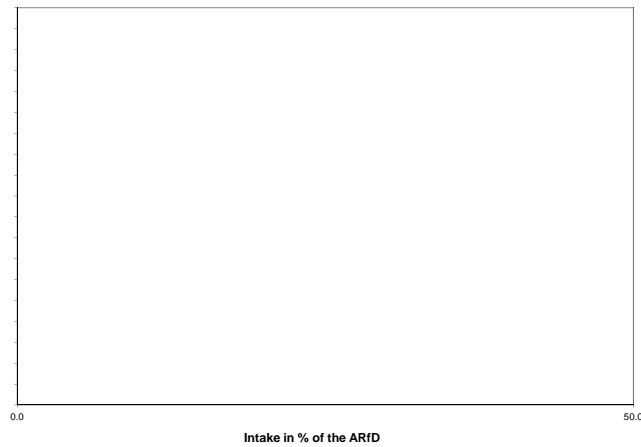


**Oxydemeton-methyl**

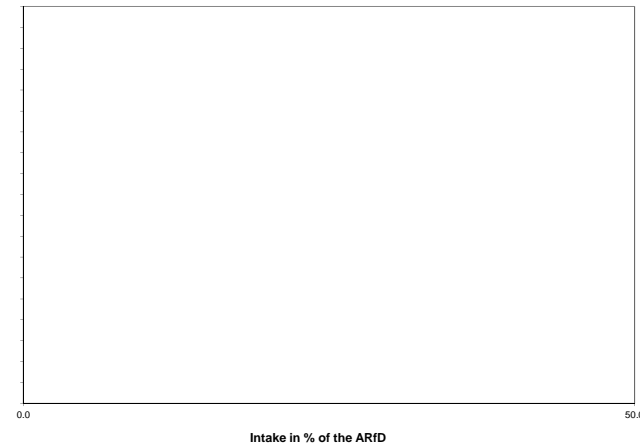
Acute exposure: Oxydemeton-methyl / Apples



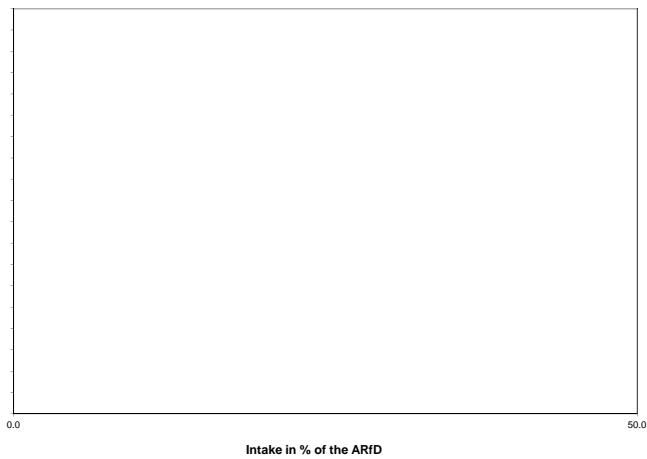
Acute exposure: Oxydemeton-methyl / Peaches



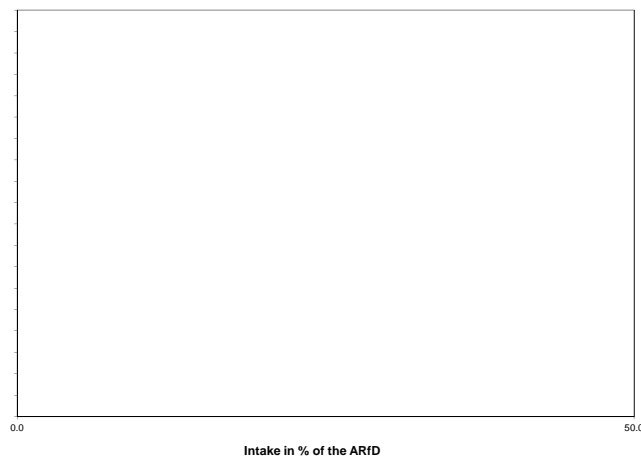
Acute exposure: Oxydemeton-methyl / Strawberries



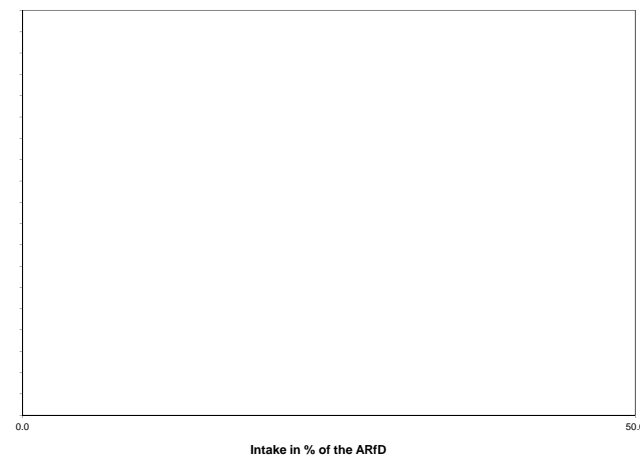
Acute exposure: Oxydemeton-methyl / Tomatoes



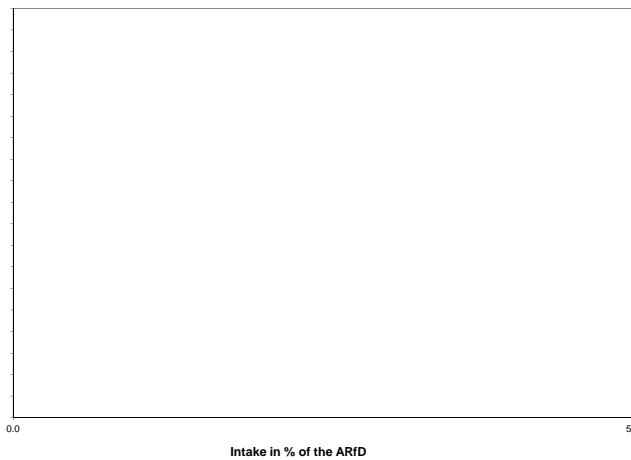
Acute exposure: Oxydemeton-methyl / Head cabbage



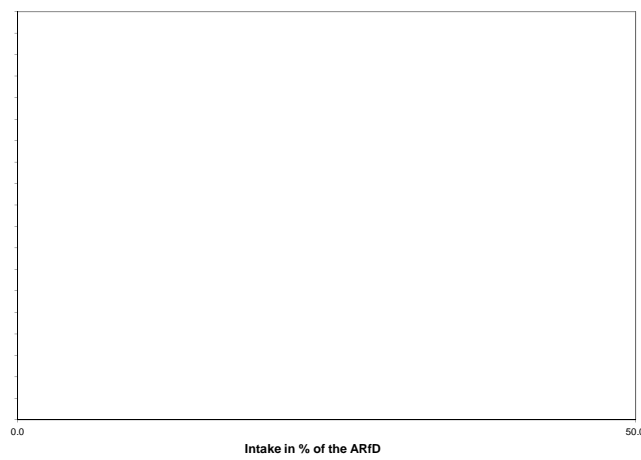
Acute exposure: Oxydemeton-methyl / Lettuce



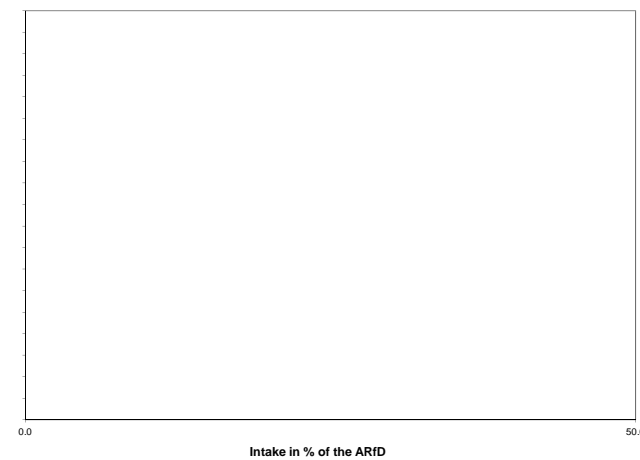
Acute exposure: Oxydemeton-methyl / Leek



Acute exposure: Oxydemeton-methyl / Oats



Acute exposure: Oxydemeton-methyl / Rye



## Paclobutrazol

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:	<b>Yes</b>	Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.022</b>	ARfD (mg/kg bw):	<b>0.1</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2011</b>	Year of evaluation:	<b>2011</b>

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum						
		No of diets exceeding ADI:						
	Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
	0.14	FR infant	0.12	Carrots	0.02	Pears		FRUIT (FRESH OR FROZEN)
	0.13	FR toddler	0.11	Carrots	0.02	Pears		FRUIT (FRESH OR FROZEN)
	0.11	DK child	0.06	Carrots	0.05	Pears		FRUIT (FRESH OR FROZEN)
	0.09	DE child	0.05	Carrots	0.04	Pears		FRUIT (FRESH OR FROZEN)
	0.08	UK infant	0.06	Carrots	0.02	Pears		FRUIT (FRESH OR FROZEN)
	0.06	SE (GP)	0.04	Carrots	0.02	Pears		FRUIT (FRESH OR FROZEN)
	0.06	IE adult	0.04	Pears	0.01	Carrots		FRUIT (FRESH OR FROZEN)
	0.05	PT (GP)	0.03	Carrots	0.02	Pears		FRUIT (FRESH OR FROZEN)
	0.05	NL child	0.03	Pears	0.02	Carrots		FRUIT (FRESH OR FROZEN)
	0.04	ES child	0.03	Pears	0.01	Carrots		FRUIT (FRESH OR FROZEN)
	0.04	WHO cluster diet B	0.02	Pears	0.01	Carrots		FRUIT (FRESH OR FROZEN)
	0.03	UK toddler	0.02	Carrots	0.01	Pears		FRUIT (FRESH OR FROZEN)
	0.03	DK adult	0.02	Carrots	0.01	Pears		FRUIT (FRESH OR FROZEN)
	0.03	PL (GP)	0.02	Pears	0.01	Carrots		FRUIT (FRESH OR FROZEN)
	0.03	WHO cluster diet E	0.02	Carrots	0.01	Pears		FRUIT (FRESH OR FROZEN)
	0.03	IT child/toddler	0.02	Pears	0.01	Carrots		FRUIT (FRESH OR FROZEN)
	0.03	WHO regional diet	0.02	Carrots	0.01	Pears		FRUIT (FRESH OR FROZEN)
	0.03	WHO Cluster diet F	0.02	Carrots	0.01	Pears		FRUIT (FRESH OR FROZEN)
	0.03	ES adult	0.02	Pears	0.01	Carrots		FRUIT (FRESH OR FROZEN)
	0.02	IT adult	0.02	Pears	0.01	Carrots		FRUIT (FRESH OR FROZEN)
	0.02	FR (GP)	0.01	Carrots	0.01	Pears		FRUIT (FRESH OR FROZEN)
	0.02	NL (GP)	0.01	Pears	0.01	Carrots		FRUIT (FRESH OR FROZEN)
	0.02	LT adult	0.01	Pears	0.01	Carrots		FRUIT (FRESH OR FROZEN)
	0.02	WHO cluster diet D	0.01	Carrots	0.01	Pears		FRUIT (FRESH OR FROZEN)
	0.02	UK vegetarian	0.01	Carrots	0.01	Pears		FRUIT (FRESH OR FROZEN)
	0.01	UK adult	0.01	Carrots	0.00	Pears		FRUIT (FRESH OR FROZEN)
	0.01	FI adult	0.01	Carrots	0.00	Pears		FRUIT (FRESH OR FROZEN)

### Acute risk assessment

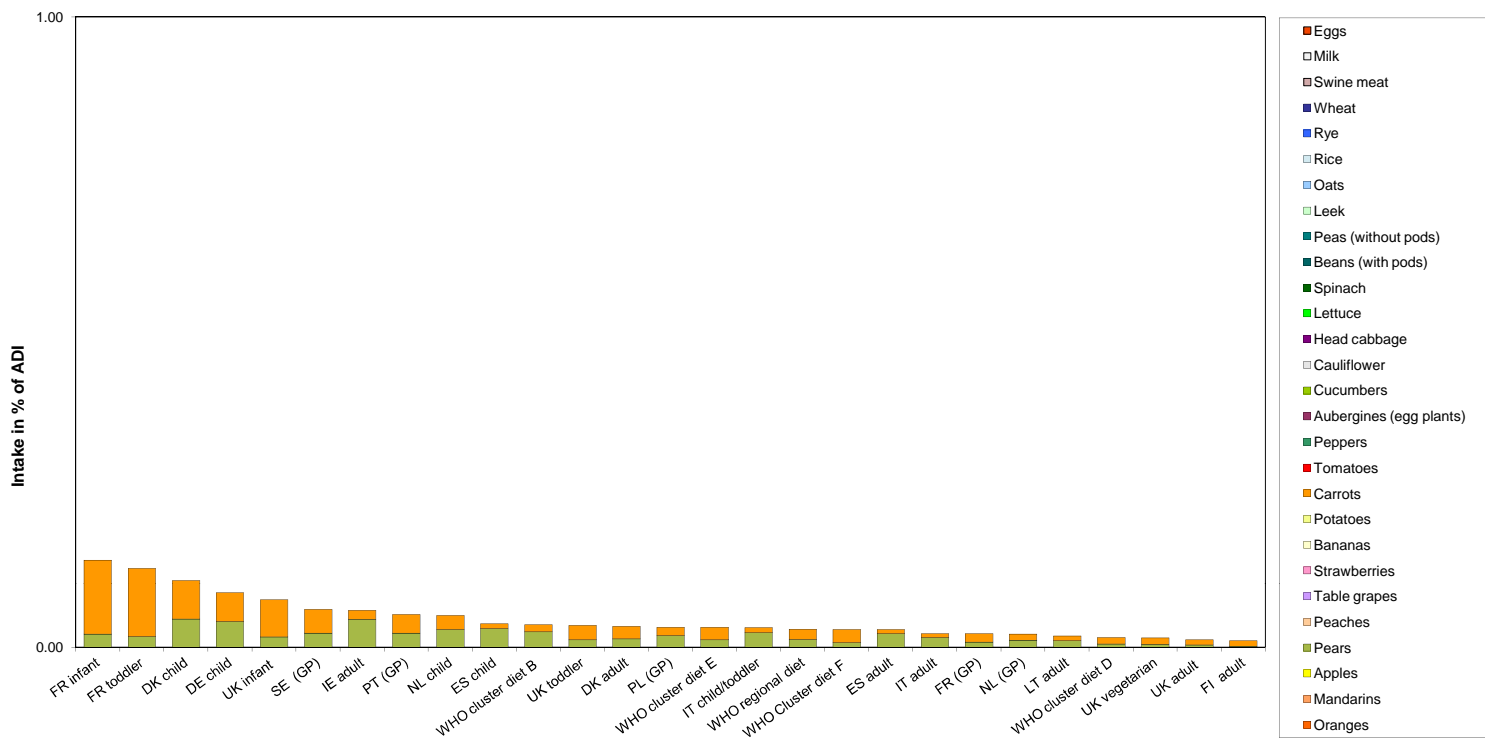
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.5	2010	0.05		0.01		0.98	UK infant	
2010	Peaches	0.5	1010							
2010	Strawberries	0.5	1693							
2010	Tomatoes	0.02	1553							
2010	Head cabbage	0.02	890							
2010	Lettuce	0.02	1740							
2010	Leek	0.02	677							
2010	Oats	0.02	134							
2010	Rye	0.02	315							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

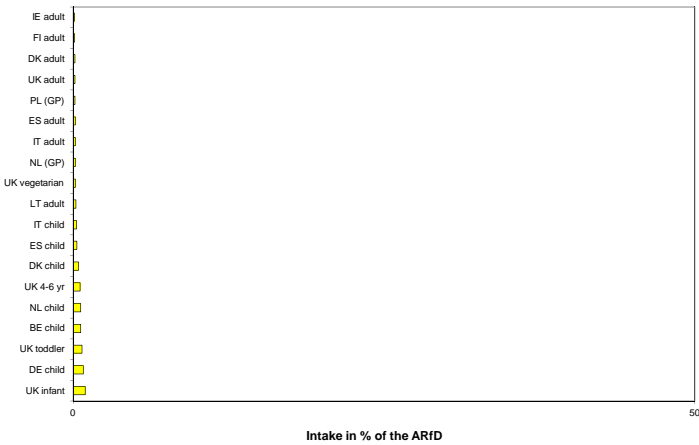
<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Paclobutrazol

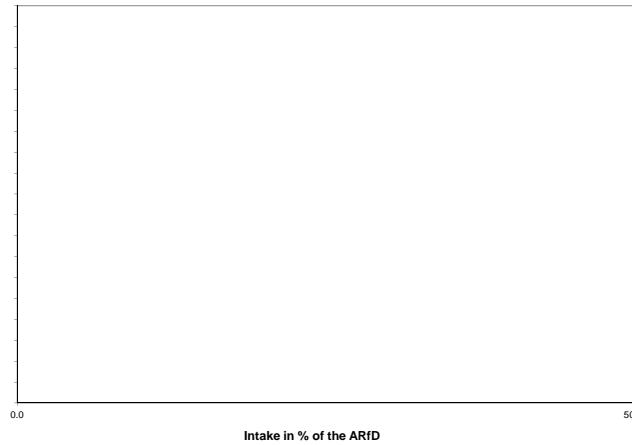


**Pacllobutrazol**

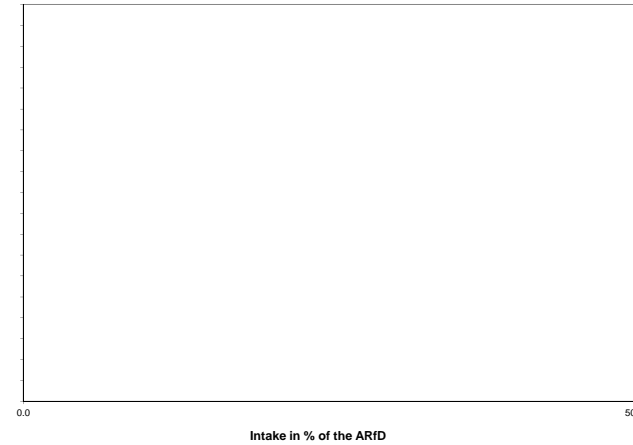
Acute exposure: Pacllobutrazol / Apples



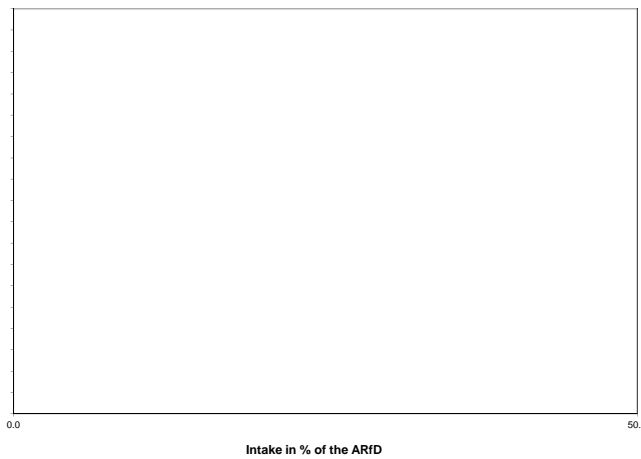
Acute exposure: Pacllobutrazol / Peaches



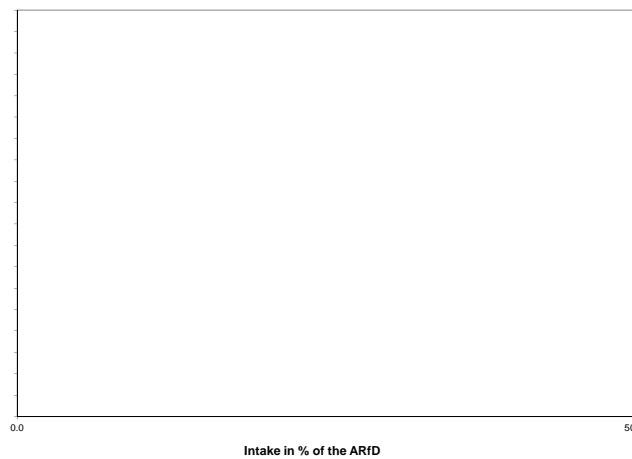
Acute exposure: Pacllobutrazol / Strawberries



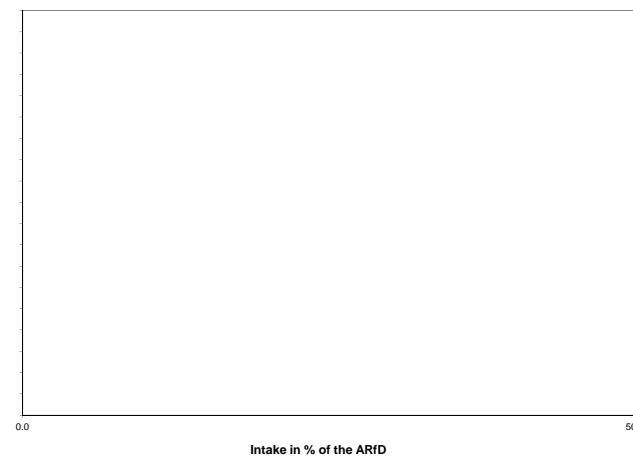
Acute exposure: Pacllobutrazol / Tomatoes



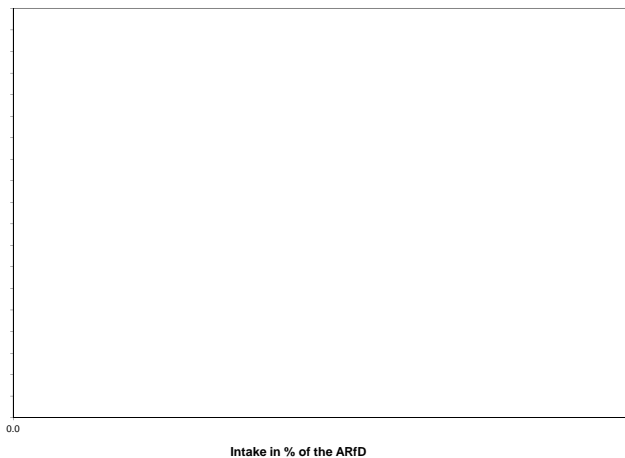
Acute exposure: Pacllobutrazol / Head cabbage



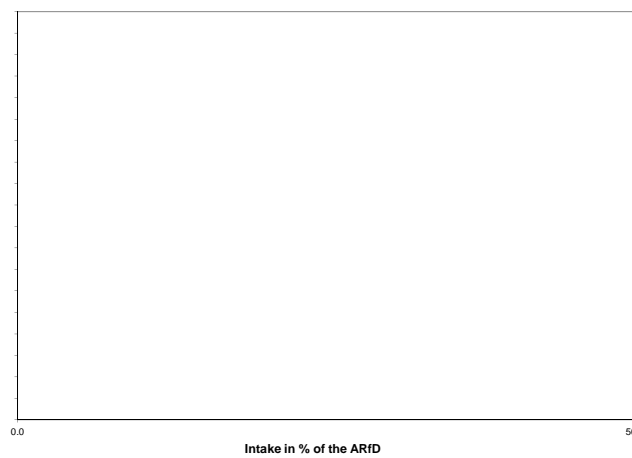
Acute exposure: Pacllobutrazol / Lettuce



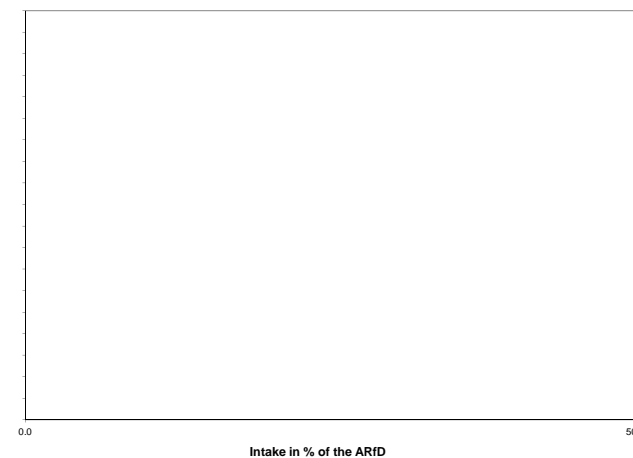
Acute exposure: Pacllobutrazol / Leek



Acute exposure: Pacllobutrazol / Oats



Acute exposure: Pacllobutrazol / Rye





Parathion			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P and A
Toxicological end points			
ADI (mg/kg bw/day):	0.0006	ARfD (mg/kg bw):	0.005
Source of ADI:	ECCO 100	Source of ARfD:	ECCO 100
Year of evaluation:	2001	Year of evaluation:	2001

### Chronic risk assessment

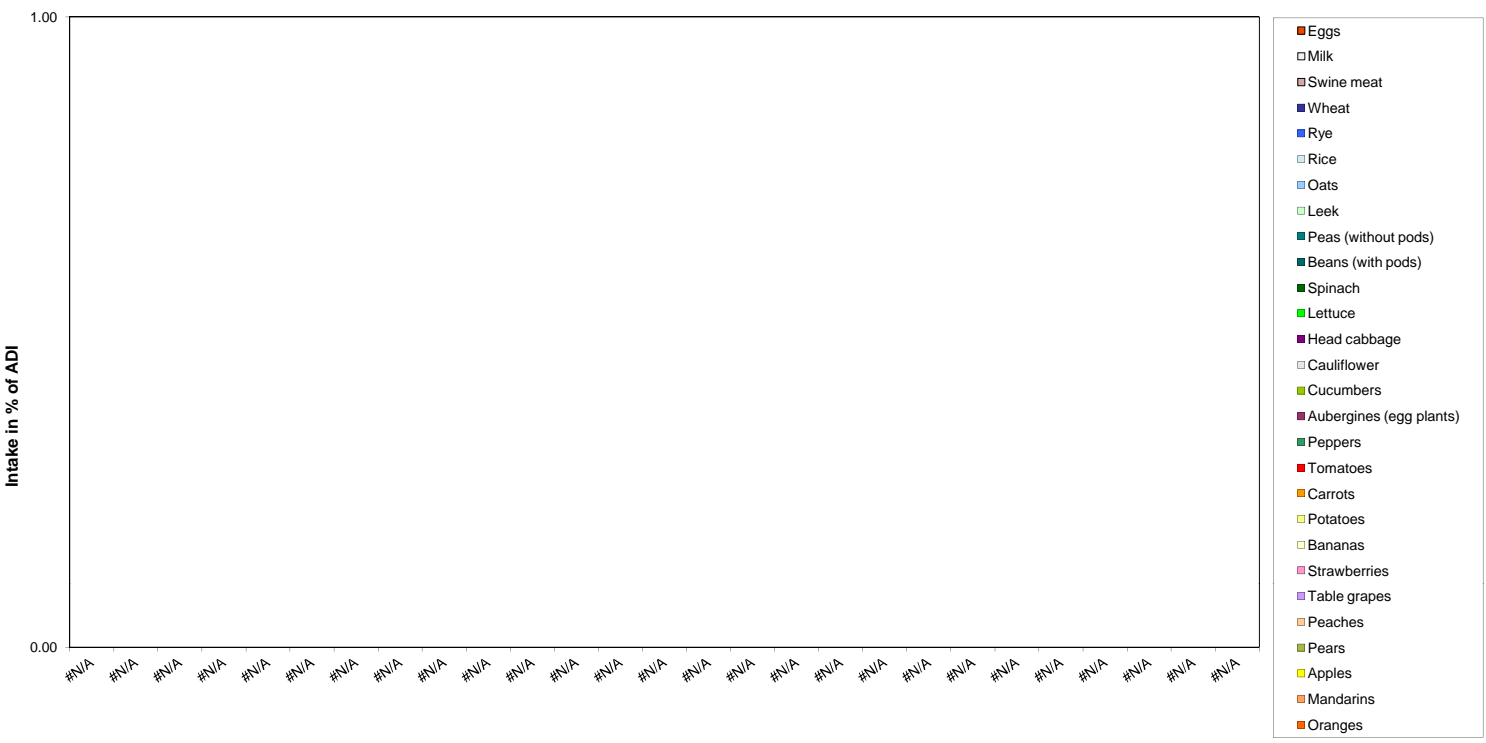
Highest calculated exposure in % of ADI		MS Diet		Highest contributor to MS diet (in % of ADI)		Commodity / group of commodities		2nd contributor to MS diet (in % of ADI)		Commodity / group of commodities		3rd contributor to MS diet (in % of ADI)		Commodity / group of commodities	
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
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#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
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### Acute risk assessment

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	2868							
2010	Peaches	0.05	1480							
2010	Strawberries	0.05	2239							
2010	Tomatoes	0.05	2450							
2010	Head cabbage	0.05	1204							
2010	Lettuce	0.05	2340							
2010	Leek	0.05	985							
2010	Oats	0.05	268							
2010	Rye	0.05	465							
2010	Swine Meat	0.05	456							
2010	Milk	0.05	724							

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

### Chronic risk assessment: Parathion



**Parathion**

Acute exposure: Parathion / Apples



Intake in % of the ARfD

Acute exposure: Parathion / Peaches



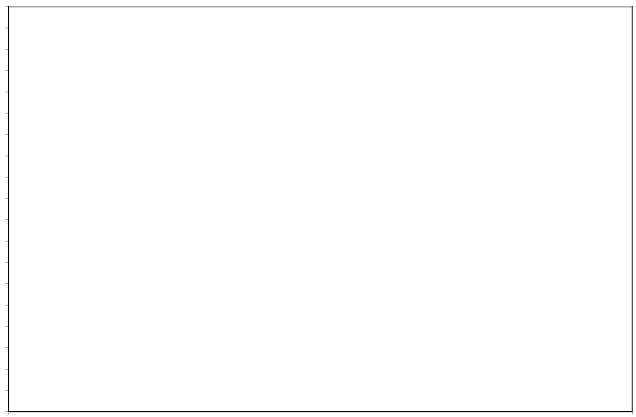
Intake in % of the ARfD

Acute exposure: Parathion / Strawberries



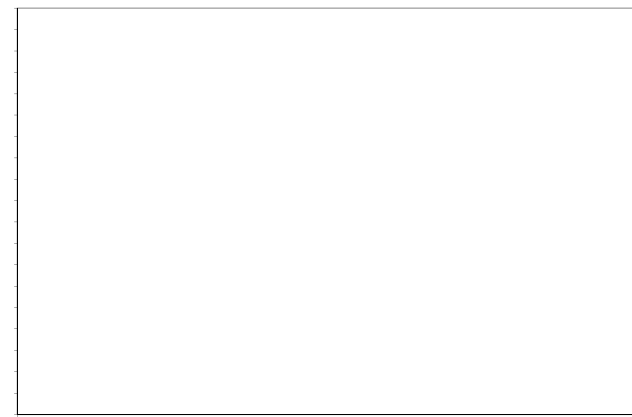
Intake in % of the ARfD

Acute exposure: Parathion / Tomatoes



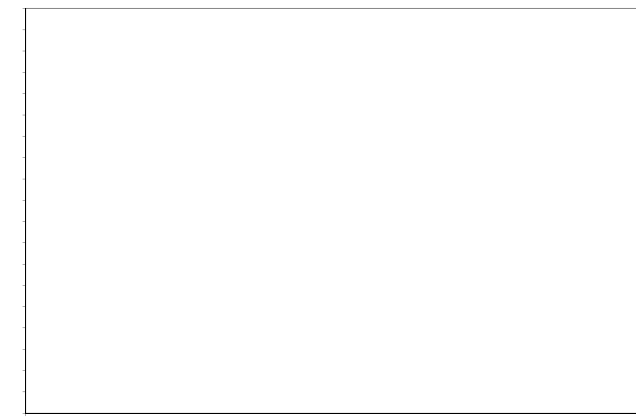
Intake in % of the ARfD

Acute exposure: Parathion / Head cabbage



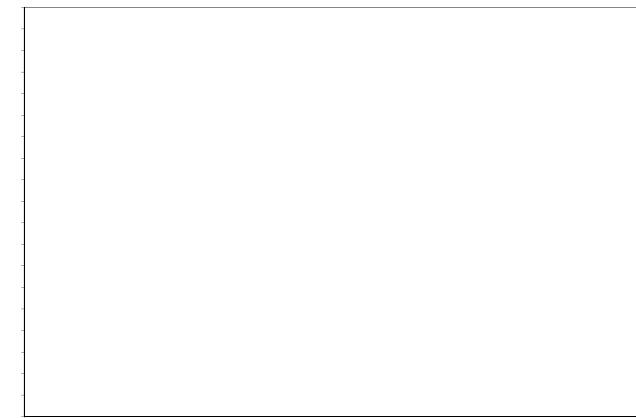
Intake in % of the ARfD

Acute exposure: Parathion / Lettuce



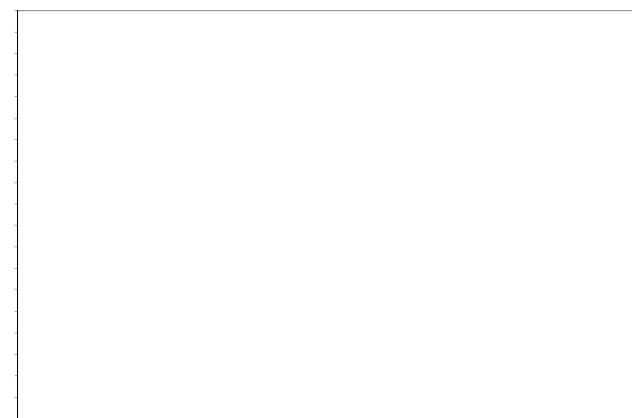
Intake in % of the ARfD

Acute exposure: Parathion / Leek



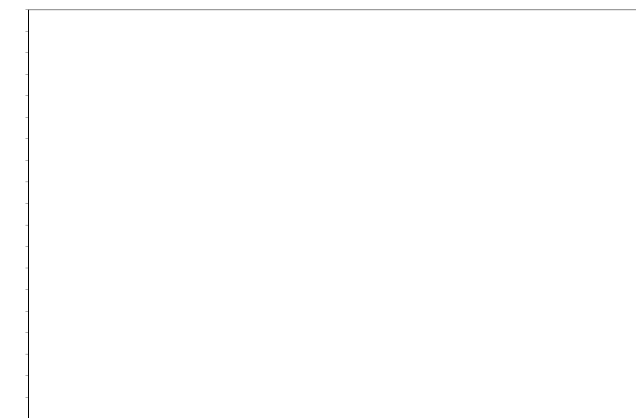
Intake in % of the ARfD

Acute exposure: Parathion / Oats



Intake in % of the ARfD

Acute exposure: Parathion / Rye

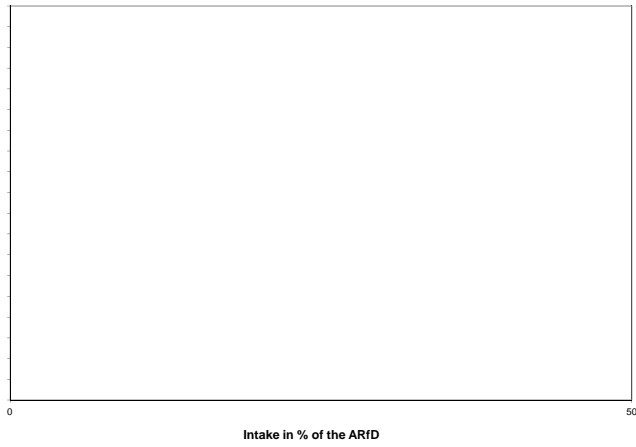


Intake in % of the ARfD

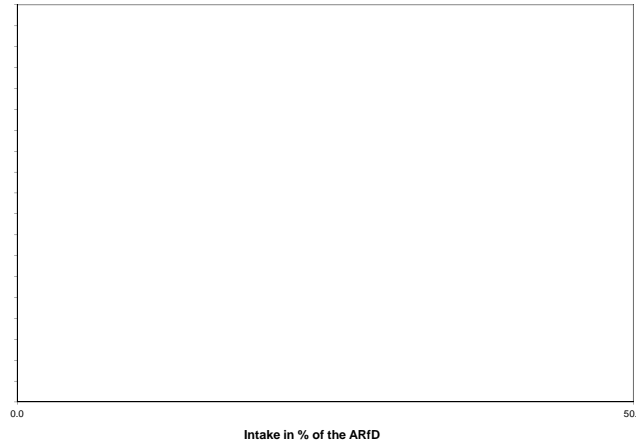


**Parathion-methyl**

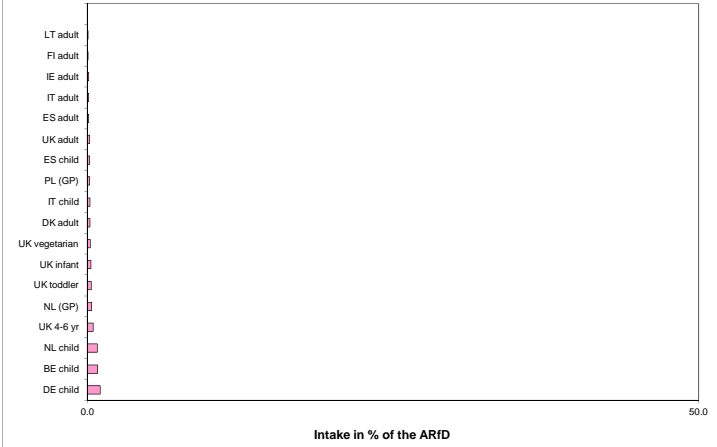
Acute exposure: Parathion-methyl / Apples



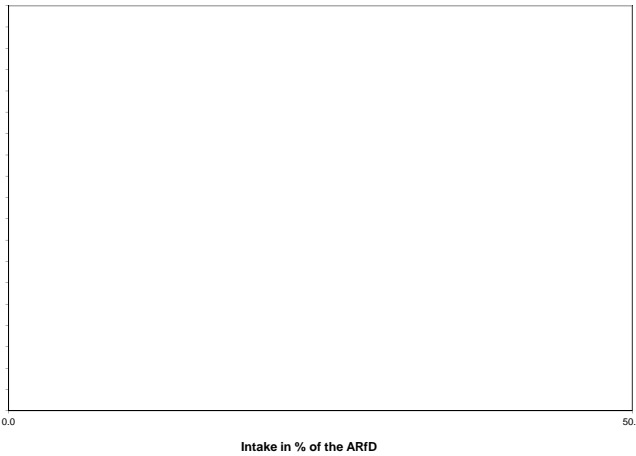
Acute exposure: Parathion-methyl / Peaches



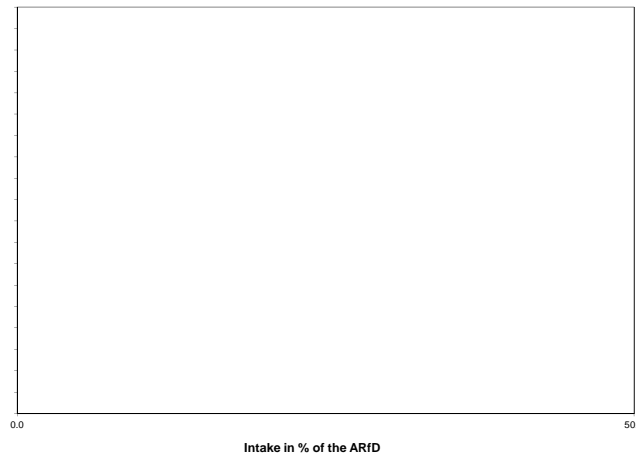
Acute exposure: Parathion-methyl / Strawberries



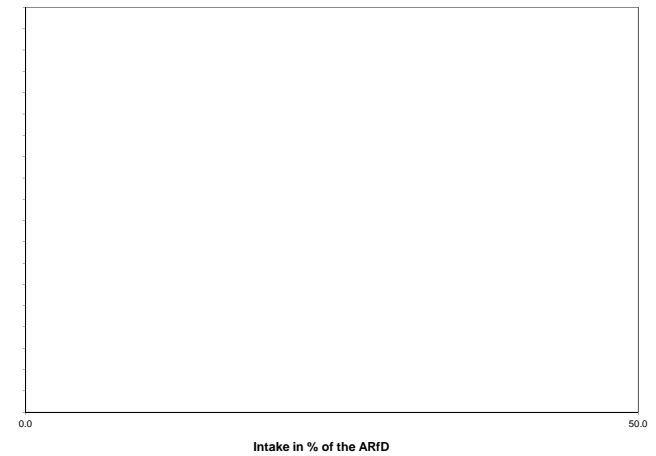
Acute exposure: Parathion-methyl / Tomatoes



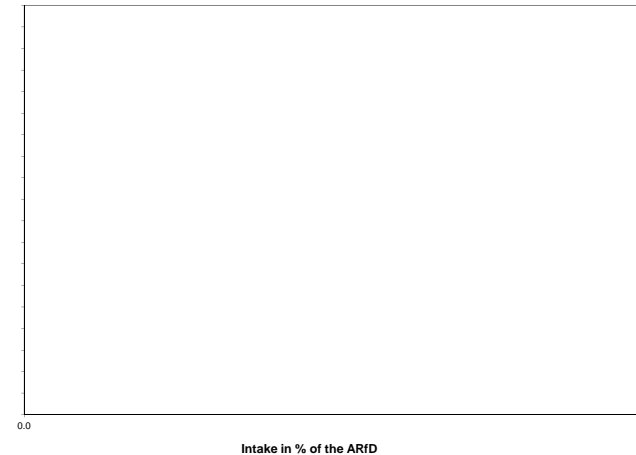
Acute exposure: Parathion-methyl / Head cabbage



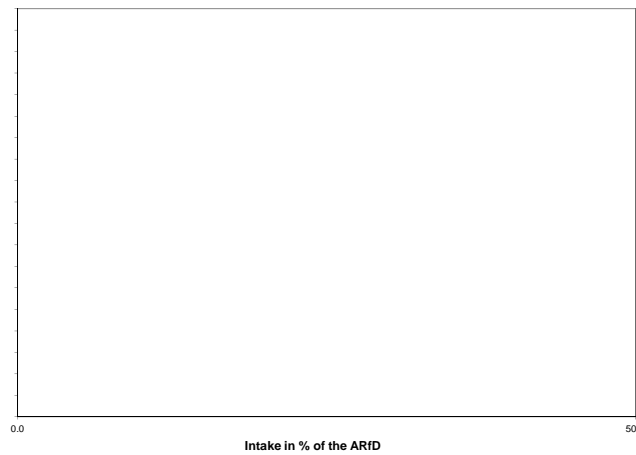
Acute exposure: Parathion-methyl / Lettuce



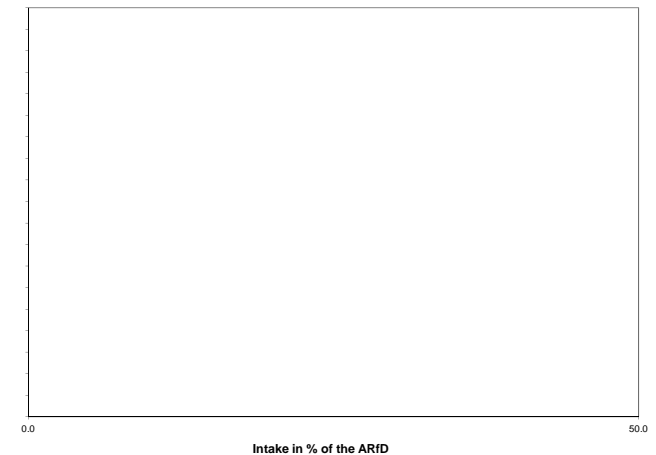
Acute exposure: Parathion-methyl / Leek



Acute exposure: Parathion-methyl / Oats



Acute exposure: Parathion-methyl / Rye



## Penconazole

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.03</b>	ARfD (mg/kg bw):	<b>0.5</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2009</b>	Year of evaluation:	<b>2009</b>

### Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
1

**No of diets exceeding ADI:** ---

	Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.86	DE child		0.47	Apples	0.09	Potatoes	0.06	Bananas
0.69	NL child		0.25	Apples	0.22	Potatoes	0.06	Bananas
0.56	FR toddler		0.19	Potatoes	0.10	Apples	0.10	Carrots
0.46	FR infant		0.15	Potatoes	0.10	Carrots	0.10	Apples
0.43	DK child		0.09	Apples	0.09	Potatoes	0.07	Cucumbers
0.40	SE (GP)		0.15	Potatoes	0.07	Bananas	0.04	Apples
0.40	WHO cluster diet B		0.14	Tomatoes	0.10	Potatoes	0.04	Apples
0.37	PT (GP)		0.20	Potatoes	0.04	Apples	0.04	Tomatoes
0.33	UK infant		0.12	Potatoes	0.06	Apples	0.05	Bananas
0.32	UK toddler		0.13	Potatoes	0.07	Apples	0.04	Bananas
0.31	PL (GP)		0.13	Potatoes	0.08	Apples	0.04	Tomatoes
0.31	WHO regional diet		0.15	Potatoes	0.05	Tomatoes	0.03	Apples
0.28	WHO cluster diet E		0.14	Potatoes	0.03	Apples	0.02	Tomatoes
0.27	IE adult		0.08	Potatoes	0.03	Apples	0.03	Bananas
0.27	WHO cluster diet D		0.15	Potatoes	0.05	Tomatoes	0.03	Apples
0.27	LT adult		0.12	Potatoes	0.07	Apples	0.03	Tomatoes
0.26	WHO Cluster diet F		0.13	Potatoes	0.03	Tomatoes	0.03	Apples
0.25	ES child		0.07	Potatoes	0.04	Apples	0.04	Tomatoes
0.23	NL (GP)		0.10	Potatoes	0.05	Apples	0.02	Tomatoes
0.21	IT child/toddler		0.06	Tomatoes	0.03	Apples	0.03	Potatoes
0.17	DK adult		0.05	Potatoes	0.03	Apples	0.02	Tomatoes
0.16	ES adult		0.04	Tomatoes	0.03	Potatoes	0.03	Apples
0.16	IT adult		0.05	Tomatoes	0.03	Apples	0.02	Potatoes
0.15	UK vegetarian		0.05	Potatoes	0.03	Tomatoes	0.02	Apples
0.13	FR (GP)		0.04	Potatoes	0.02	Tomatoes	0.02	Apples
0.12	UK adult		0.05	Potatoes	0.02	Tomatoes	0.02	Apples
0.12	FI adult		0.05	Potatoes	0.02	Tomatoes	0.02	Apples

### Acute risk assessment

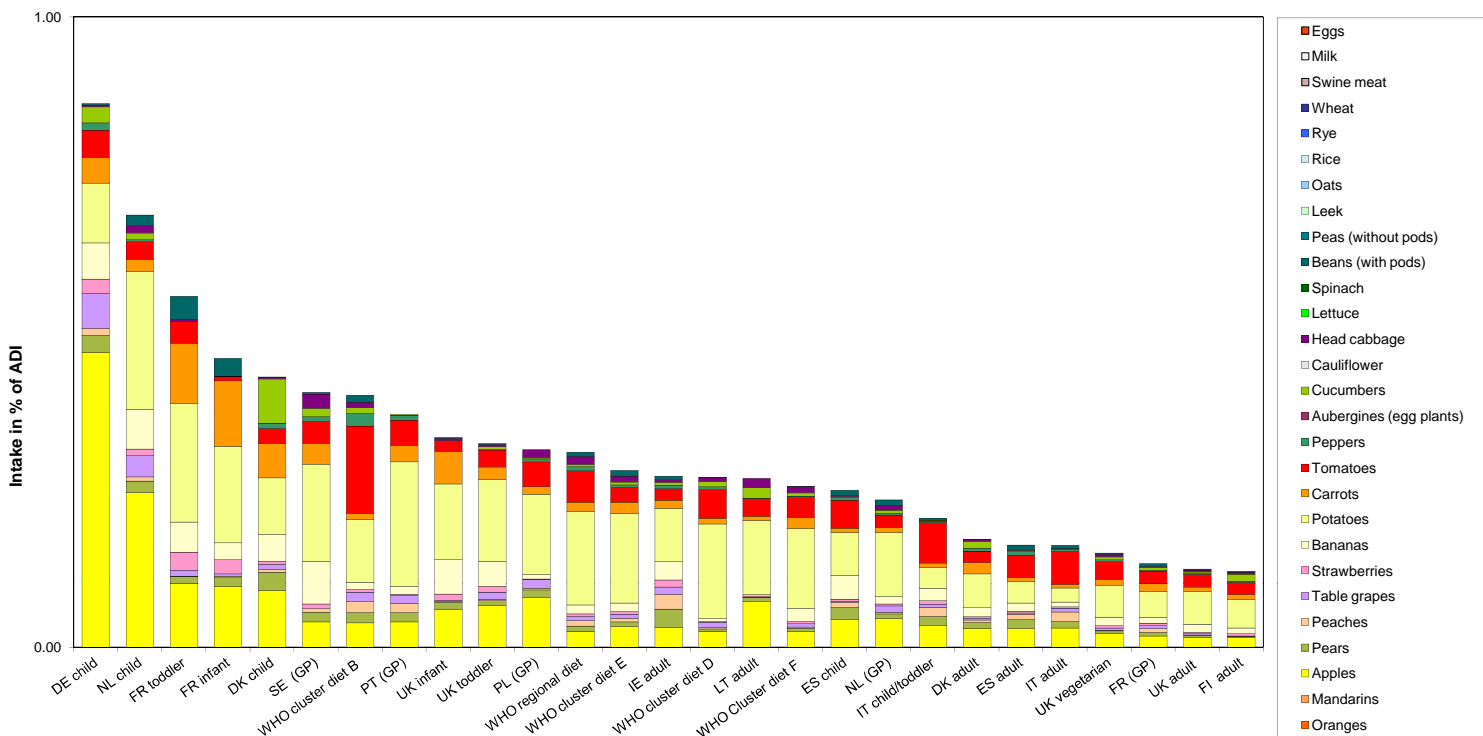
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.2	3063	0.88		0.04		0.82	UK infant	
2010	Peaches	0.1	1524	0.52		0.10		1.19	DE child	
2010	Strawberries	0.5	2316	6.26		0.42		1.32	DE child	
2010	Tomatoes	0.1	2545	0.20		0.10		1.16	BE child	
2010	Head cabbage	0.05	1191	0.08		0.02		0.21	NL child	
2010	Lettuce	0.05	2399							
2010	Leek	0.05	937							
2010	Oats	0.05	258							
2010	Rye	0.05	442							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

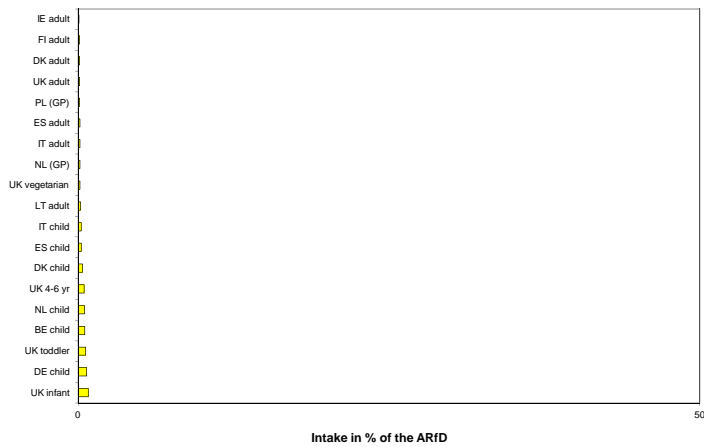
<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Penconazole

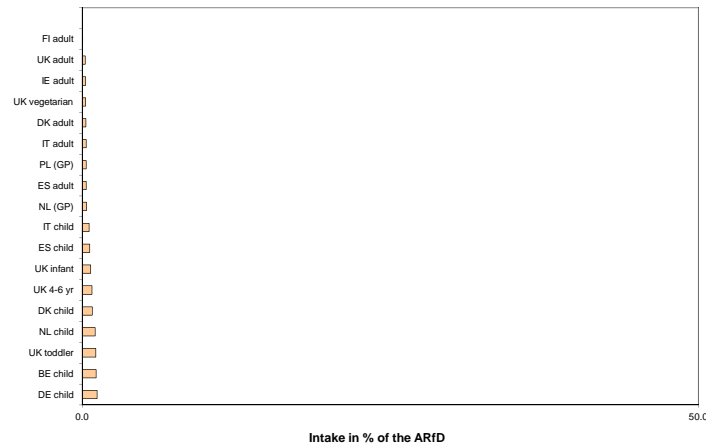


**Penconazole**

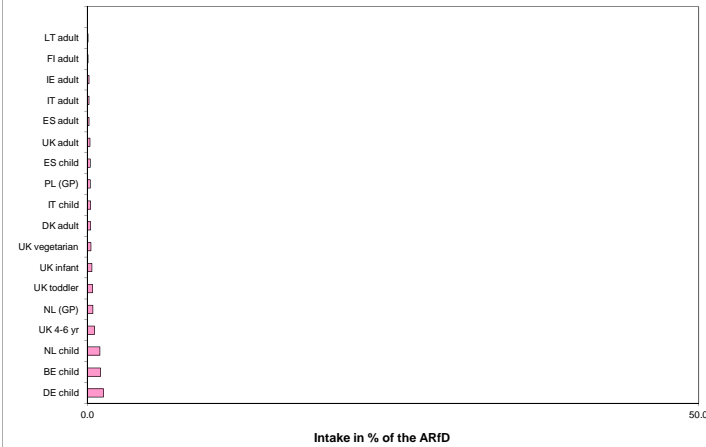
Acute exposure: Penconazole / Apples



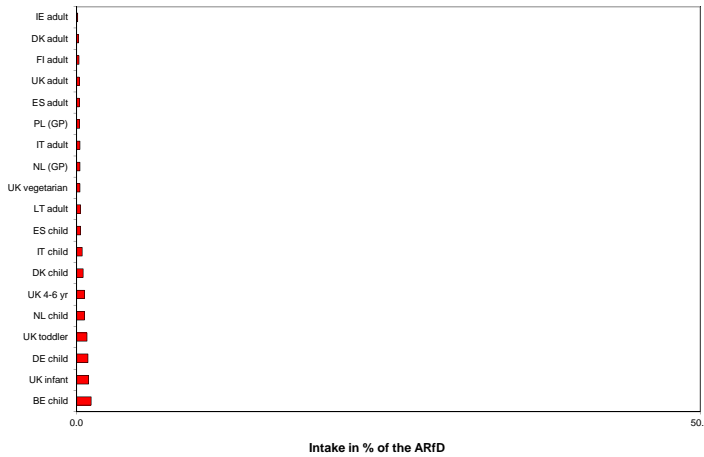
Acute exposure: Penconazole / Peaches



Acute exposure: Penconazole / Strawberries



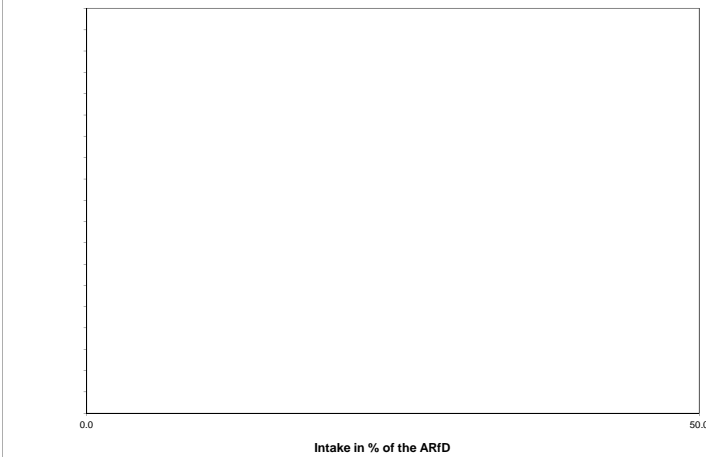
Acute exposure: Penconazole / Tomatoes



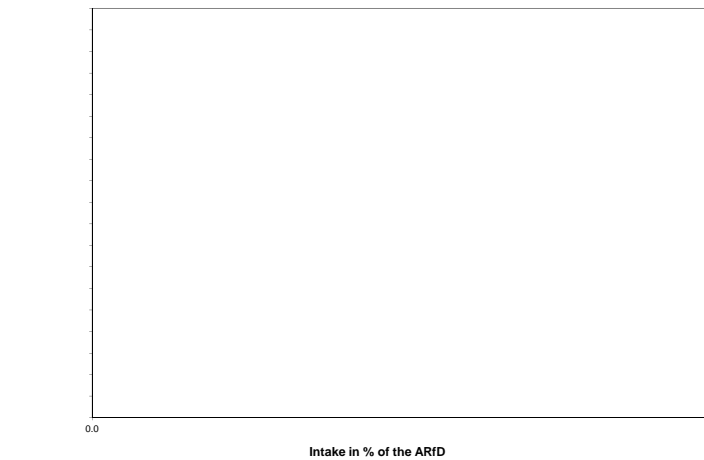
Acute exposure: Penconazole / Head cabbage



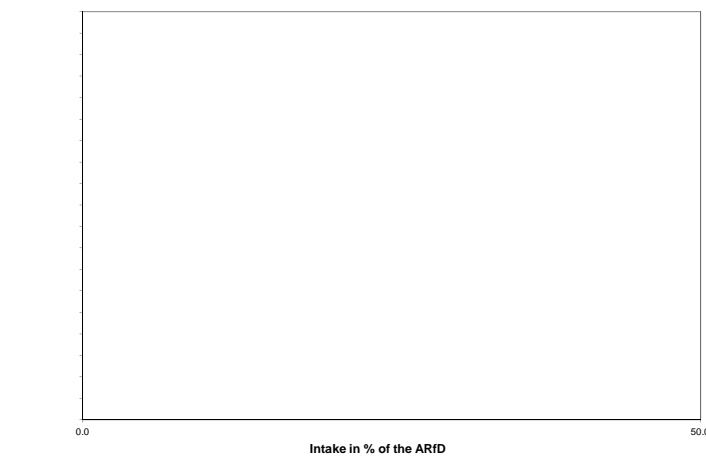
Acute exposure: Penconazole / Lettuce



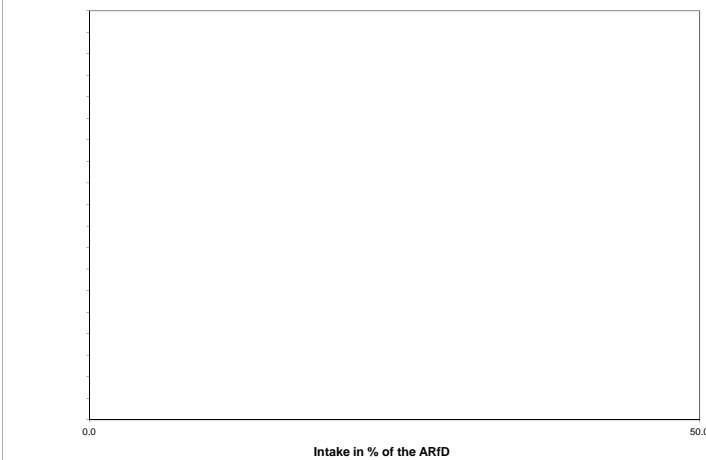
Acute exposure: Penconazole / Leek



Acute exposure: Penconazole / Oats



Acute exposure: Penconazole / Rye



## Pencycuron

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.2</b>	ARfD (mg/kg bw):	<b>n.n.</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2011</b>	Year of evaluation:	<b>2011</b>

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum						
		No of diets exceeding ADI:		---				
	Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.06	NL child		0.03	Potatoes	0.02	Oranges	0.00	Mandarins
0.04	FR toddler		0.03	Potatoes	0.01	Oranges	0.00	Spinach
0.04	DE child		0.02	Oranges	0.01	Potatoes	0.00	Mandarins
0.03	PT (GP)		0.03	Potatoes	0.00	Oranges	0.00	Mandarins
0.03	SE (GP)		0.02	Potatoes	0.00	Oranges	0.00	Head cabbage
0.03	UK toddler		0.02	Potatoes	0.01	Oranges	0.00	Mandarins
0.03	WHO regional diet		0.02	Potatoes	0.00	Lettuce	0.00	Oranges
0.03	FR infant		0.02	Potatoes	0.00	Oranges	0.00	Spinach
0.03	WHO Cluster diet F		0.02	Potatoes	0.00	Oranges	0.00	Lettuce
0.03	ES child		0.01	Oranges	0.01	Potatoes	0.00	Lettuce
0.03	NL (GP)		0.01	Potatoes	0.01	Oranges	0.00	Lettuce
0.03	WHO cluster diet B		0.01	Potatoes	0.00	Oranges	0.00	Lettuce
0.03	WHO cluster diet E		0.02	Potatoes	0.00	Oranges	0.00	Head cabbage
0.02	UK infant		0.02	Potatoes	0.01	Oranges	0.00	Head cabbage
0.02	WHO cluster diet D		0.02	Potatoes	0.00	Oranges	0.00	Head cabbage
0.02	IE adult		0.01	Potatoes	0.01	Oranges	0.00	Mandarins
0.02	PL (GP)		0.02	Potatoes	0.00	Head cabbage	0.00	Mandarins
0.02	LT adult		0.02	Potatoes	0.00	Head cabbage	0.00	Lettuce
0.02	ES adult		0.01	Oranges	0.01	Lettuce	0.00	Potatoes
0.02	DK child		0.01	Potatoes	0.00	Lettuce	0.00	Oranges
0.01	UK vegetarian		0.01	Potatoes	0.00	Oranges	0.00	Lettuce
0.01	FI adult		0.01	Potatoes	0.01	Oranges	0.00	Lettuce
0.01	UK adult		0.01	Potatoes	0.00	Oranges	0.00	Lettuce
0.01	IT child/toddler		0.00	Potatoes	0.00	Lettuce	0.00	Oranges
0.01	IT adult		0.00	Lettuce	0.00	Potatoes	0.00	Oranges
0.01	FR (GP)		0.01	Potatoes	0.00	Oranges	0.00	Lettuce
0.01	DK adult		0.01	Potatoes	0.00	Oranges	0.00	Mandarins

### Acute risk assessment

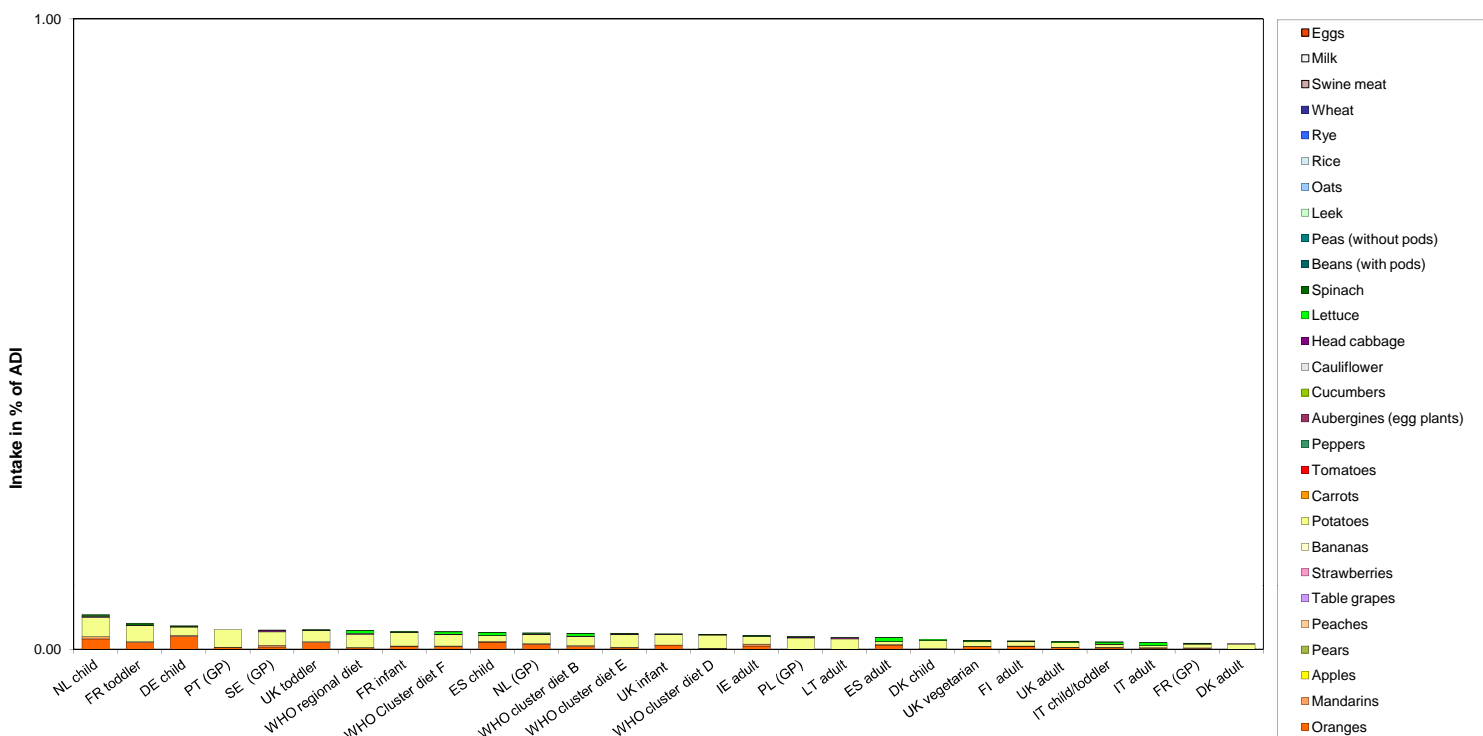
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	2261							
2010	Peaches	0.05	1093							
2010	Strawberries	0.05	1829							
2010	Tomatoes	0.05	1668							
2010	Head cabbage	0.05	886	0.11		0.01				
2010	Lettuce	2	1811	1.27	0.17	6.40				
2010	Leek	0.05	711							
2010	Oats	0.05	132							
2010	Rye	0.05	320							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Pencycuron



**Pencycuron**

Acute exposure: Pencycuron / Apples



Intake in % of the ARfD

Acute exposure: Pencycuron / Peaches



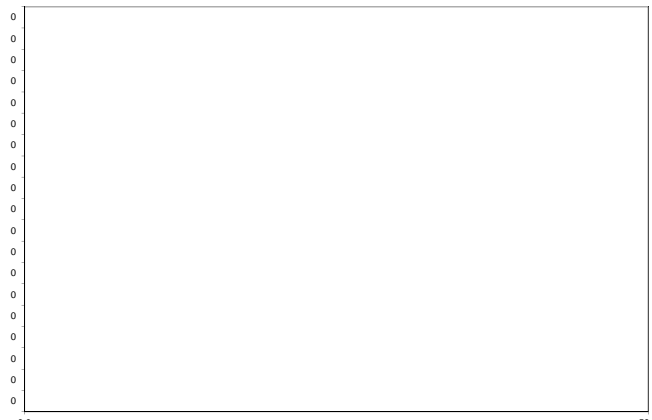
Intake in % of the ARfD

Acute exposure: Pencycuron / Strawberries



Intake in % of the ARfD

Acute exposure: Pencycuron / Tomatoes



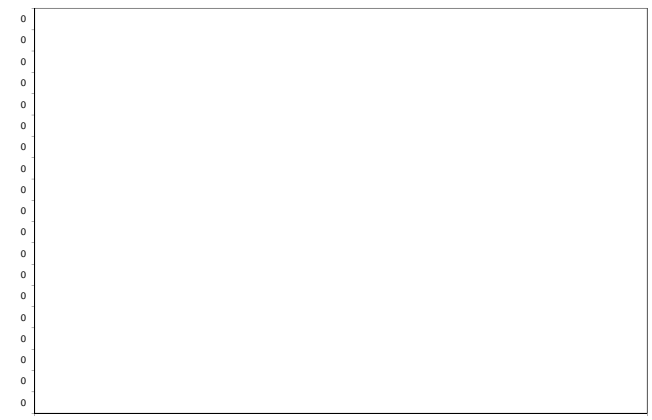
Intake in % of the ARfD

Acute exposure: Pencycuron / Head cabbage



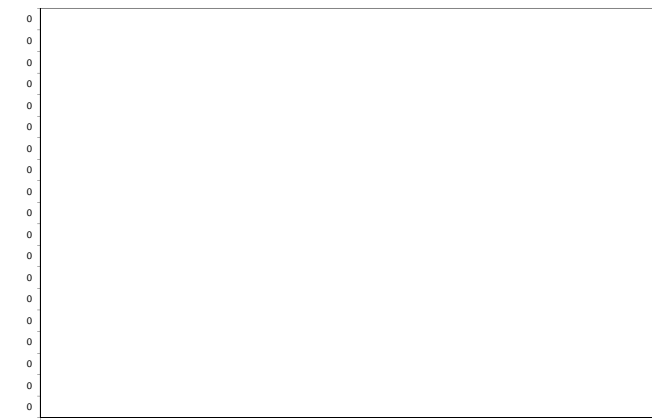
Intake in % of the ARfD

Acute exposure: Pencycuron / Lettuce



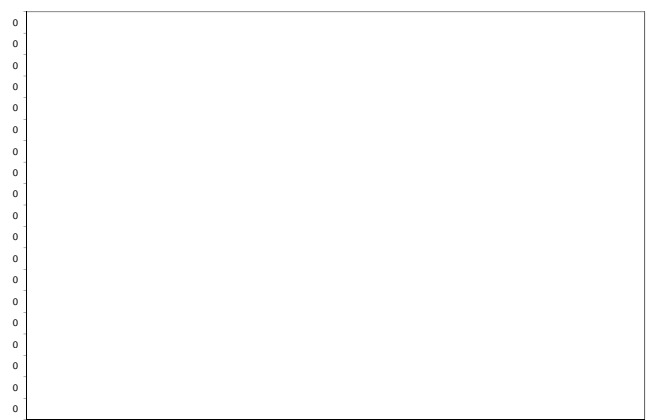
Intake in % of the ARfD

Acute exposure: Pencycuron / Leek



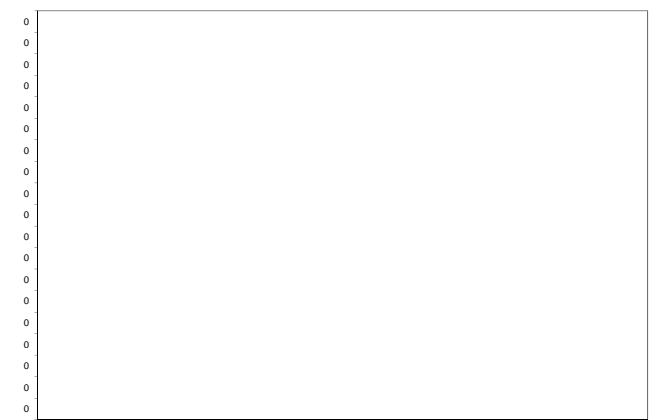
Intake in % of the ARfD

Acute exposure: Pencycuron / Oats



Intake in % of the ARfD

Acute exposure: Pencycuron / Rye



Intake in % of the ARfD



## Pendimethalin

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.125	ARfD (mg/kg bw):	n.n.
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2003	Year of evaluation:	2003

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.15	DE child	0.12	Apples	0.01	Carrots	0.01	Cucumbers
0.10	NL child	0.06	Apples	0.01	Mandarins	0.01	Carrots
0.09	FR toddler	0.03	Carrots	0.03	Apples	0.01	Beans (with pods)
0.08	FR infant	0.03	Carrots	0.02	Apples	0.01	Beans (with pods)
0.06	DK child	0.02	Apples	0.02	Cucumbers	0.02	Carrots
0.04	SE (GP)	0.01	Apples	0.01	Carrots	0.01	Head cabbage
0.04	IE adult	0.01	Apples	0.01	Peaches	0.01	Mandarins
0.04	WHO cluster diet B	0.01	Apples	0.00	Peaches	0.00	Lettuce
0.03	UK infant	0.02	Apples	0.01	Carrots	0.00	Strawberries
0.03	UK toddler	0.02	Apples	0.01	Carrots	0.00	Mandarins
0.03	PL (GP)	0.02	Apples	0.00	Head cabbage	0.00	Carrots
0.03	LT adult	0.02	Apples	0.00	Cucumbers	0.00	Head cabbage
0.03	NL (GP)	0.01	Apples	0.00	Carrots	0.00	Beans (with pods)
0.03	ES child	0.01	Apples	0.00	Lettuce	0.00	Beans (with pods)
0.03	WHO regional diet	0.01	Apples	0.00	Lettuce	0.00	Carrots
0.03	WHO cluster diet E	0.01	Apples	0.01	Carrots	0.00	Beans (with pods)
0.02	IT adult	0.01	Apples	0.00	Lettuce	0.00	Peaches
0.02	IT child/toddler	0.01	Apples	0.00	Peaches	0.00	Lettuce
0.02	ES adult	0.01	Apples	0.01	Lettuce	0.00	Peaches
0.02	PT (GP)	0.01	Apples	0.01	Carrots	0.00	Peaches
0.02	WHO Cluster diet F	0.01	Apples	0.01	Carrots	0.00	Lettuce
0.02	DK adult	0.01	Apples	0.00	Carrots	0.00	Cucumbers
0.02	FR (GP)	0.00	Apples	0.00	Carrots	0.00	Mandarins
0.02	WHO cluster diet D	0.01	Apples	0.00	Carrots	0.00	Cucumbers
0.02	UK vegetarian	0.01	Apples	0.00	Carrots	0.00	Lettuce
0.01	FI adult	0.00	Apples	0.00	Cucumbers	0.00	Carrots
0.01	UK adult	0.00	Apples	0.00	Carrots	0.00	Lettuce

## Acute risk assessment

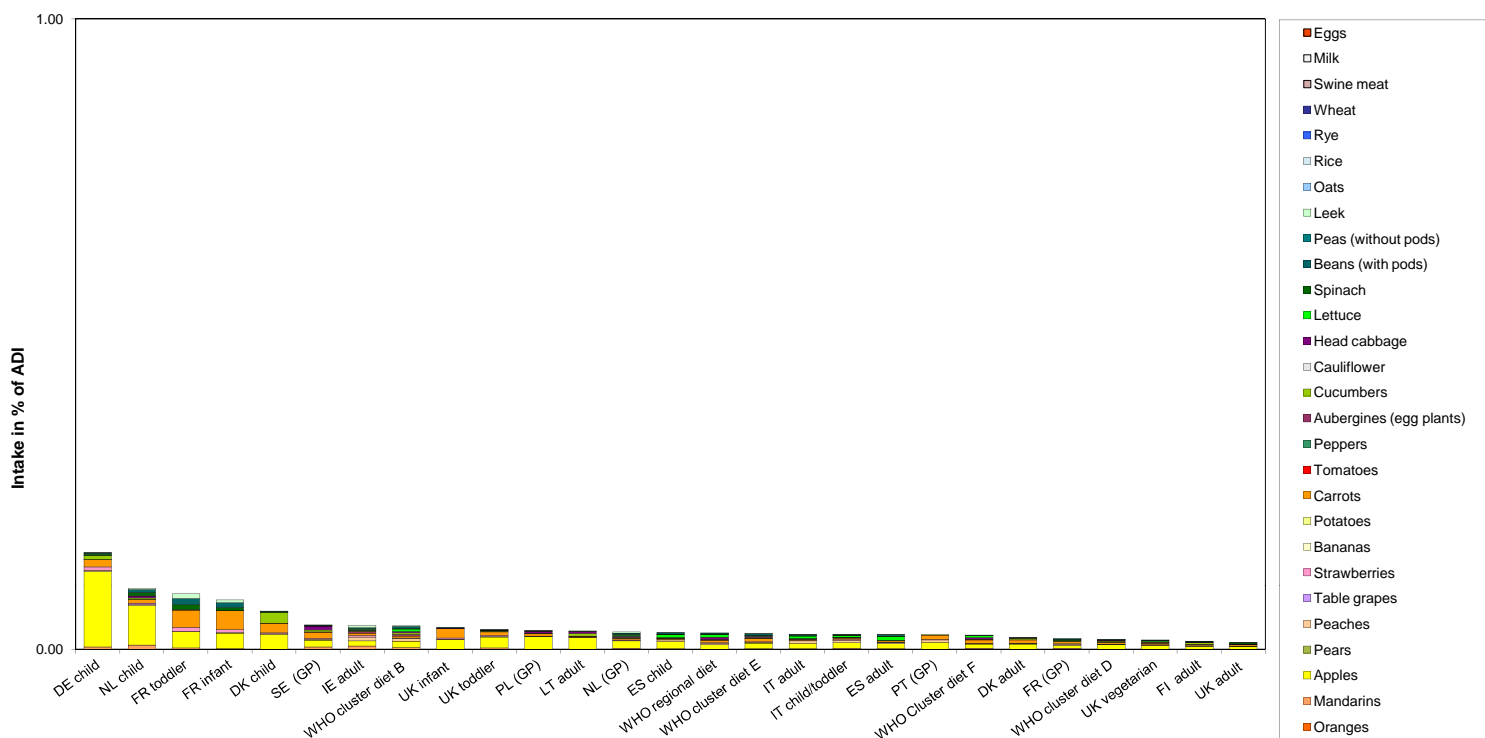
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	2815	0.21		0.02				
2010	Peaches	0.05	1349	0.22		0.04				
2010	Strawberries	0.05	2142	0.37		0.01				
2010	Tomatoes	0.05	2261							
2010	Head cabbage	0.05	1095	0.18		0.01				
2010	Lettuce	0.05	2197	0.91	0.09	0.17				
2010	Leek	0.05	854	0.12		0.02				
2010	Oats	0.05	244							
2010	Rye	0.05	412							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

c) TRL: toxicological threshold level

## Chronic risk assessment: Pendimethalin



**Pendimethalin**

Acute exposure: Pendimethalin / Apples



Intake in % of the ARfD

Acute exposure: Pendimethalin / Peaches



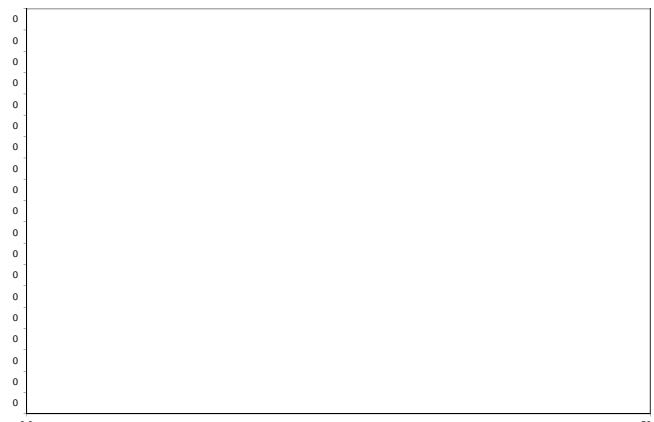
Intake in % of the ARfD

Acute exposure: Pendimethalin / Strawberries



Intake in % of the ARfD

Acute exposure: Pendimethalin / Tomatoes



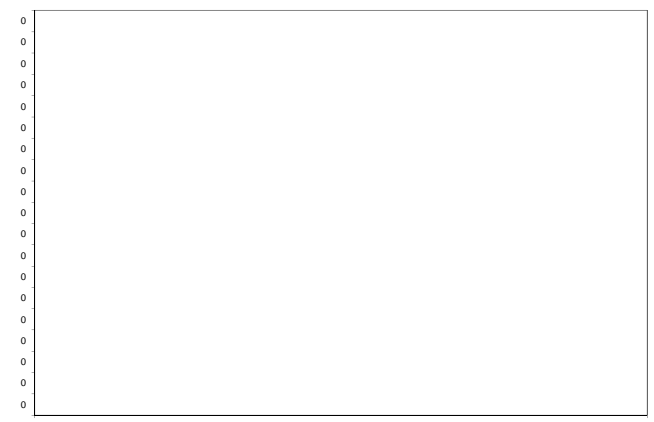
Intake in % of the ARfD

Acute exposure: Pendimethalin / Head cabbage



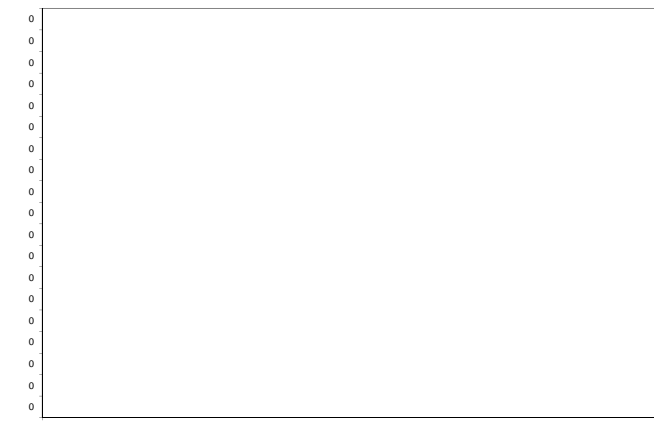
Intake in % of the ARfD

Acute exposure: Pendimethalin / Lettuce



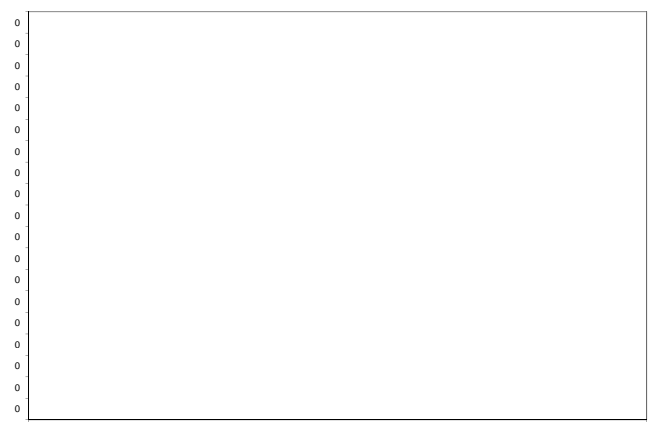
Intake in % of the ARfD

Acute exposure: Pendimethalin / Leek



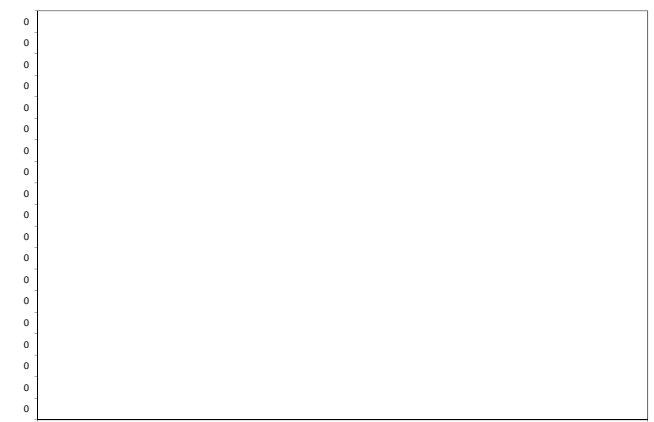
Intake in % of the ARfD

Acute exposure: Pendimethalin / Oats



Intake in % of the ARfD

Acute exposure: Pendimethalin / Rye



Intake in % of the ARfD



**Permethrin**

Acute exposure: Permethrin / Apples



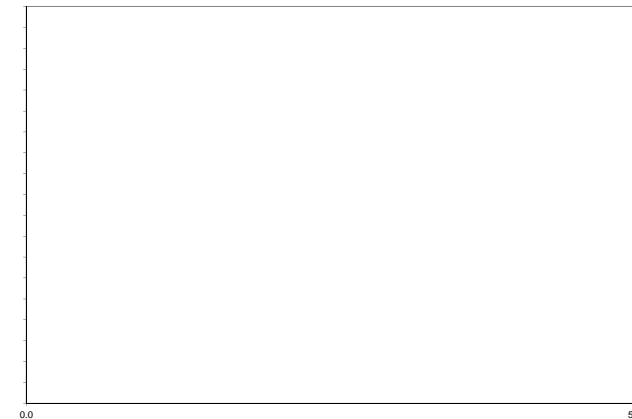
Intake in % of the ARfD

Acute exposure: Permethrin / Peaches



Intake in % of the ARfD

Acute exposure: Permethrin / Strawberries



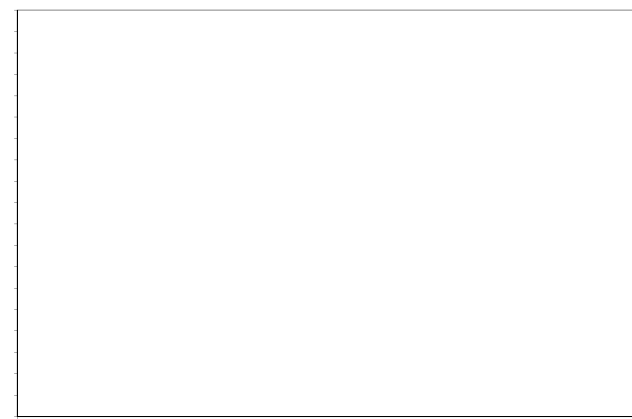
Intake in % of the ARfD

Acute exposure: Permethrin / Tomatoes



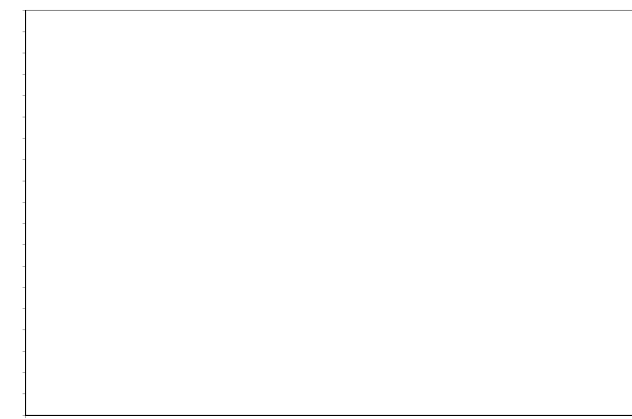
Intake in % of the ARfD

Acute exposure: Permethrin / Head cabbage



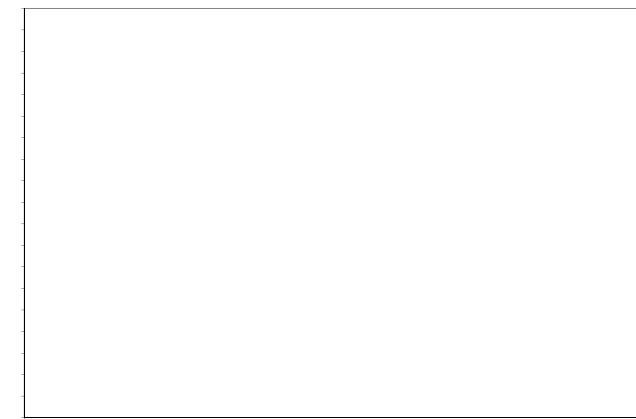
Intake in % of the ARfD

Acute exposure: Permethrin / Lettuce



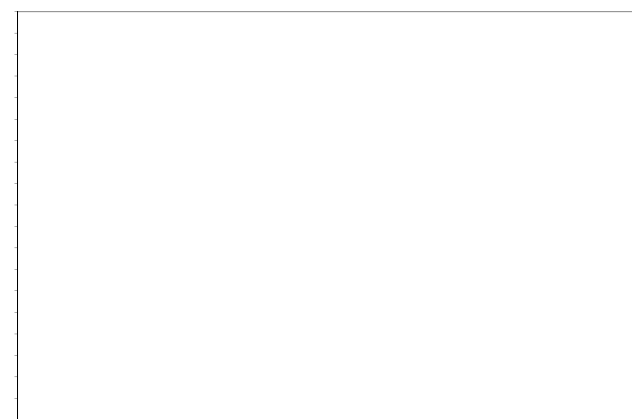
Intake in % of the ARfD

Acute exposure: Permethrin / Leek



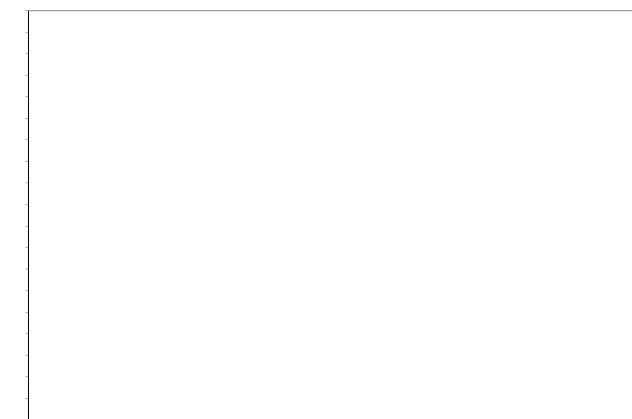
Intake in % of the ARfD

Acute exposure: Permethrin / Oats



Intake in % of the ARfD

Acute exposure: Permethrin / Rye



Intake in % of the ARfD

Phenthoate			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:	Yes	Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.003	ARfD (mg/kg bw):	0.003
Source of ADI:	JMPR	Source of ARfD:	
Year of evaluation:	1984	Year of evaluation:	

Active substance was not assessed regarding the setting of an ARfD. ADI is used as a surrogate.

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum					
		No of diets exceeding ADI:		---			
Highest calculated exposure in % of ADI		Highest contributor to MS diet (in % of ADI)		2nd contributor to MS diet (in % of ADI)		3rd contributor to MS diet (in % of ADI)	
MS Diet		Commodity / group of commodities		Commodity / group of commodities		Commodity / group of commodities	
1.61	DE child	1.50	Oranges	0.11	Peppers		FRUIT (FRESH OR FROZEN)
1.25	NL child	1.23	Oranges	0.03	Peppers		FRUIT (FRESH OR FROZEN)
0.90	ES child	0.85	Oranges	0.04	Peppers		FRUIT (FRESH OR FROZEN)
0.79	FR toddler	0.79	Oranges		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.79	UK toddler	0.78	Oranges	0.01	Peppers		FRUIT (FRESH OR FROZEN)
0.61	NL (GP)	0.59	Oranges	0.03	Peppers		FRUIT (FRESH OR FROZEN)
0.57	ES adult	0.51	Oranges	0.06	Peppers		FRUIT (FRESH OR FROZEN)
0.53	WHO cluster diet B	0.34	Oranges	0.19	Peppers		FRUIT (FRESH OR FROZEN)
0.51	UK infant	0.51	Oranges		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.46	IE adult	0.41	Oranges	0.05	Peppers		FRUIT (FRESH OR FROZEN)
0.40	FI adult	0.38	Oranges	0.02	Peppers		FRUIT (FRESH OR FROZEN)
0.37	UK vegetarian	0.34	Oranges	0.03	Peppers		FRUIT (FRESH OR FROZEN)
0.37	WHO Cluster diet F	0.34	Oranges	0.03	Peppers		FRUIT (FRESH OR FROZEN)
0.37	SE (GP)	0.29	Oranges	0.07	Peppers		FRUIT (FRESH OR FROZEN)
0.36	FR infant	0.36	Oranges	0.00	Peppers		FRUIT (FRESH OR FROZEN)
0.31	PT (GP)	0.24	Oranges	0.07	Peppers		FRUIT (FRESH OR FROZEN)
0.26	WHO regional diet	0.20	Oranges	0.07	Peppers		FRUIT (FRESH OR FROZEN)
0.24	UK adult	0.22	Oranges	0.02	Peppers		FRUIT (FRESH OR FROZEN)
0.21	WHO cluster diet E	0.18	Oranges	0.04	Peppers		FRUIT (FRESH OR FROZEN)
0.21	IT child/toddler	0.19	Oranges	0.02	Peppers		FRUIT (FRESH OR FROZEN)
0.17	IT adult	0.15	Oranges	0.03	Peppers		FRUIT (FRESH OR FROZEN)
0.15	DK child	0.08	Peppers	0.07	Oranges		FRUIT (FRESH OR FROZEN)
0.13	WHO cluster diet D	0.09	Oranges	0.04	Peppers		FRUIT (FRESH OR FROZEN)
0.13	FR (GP)	0.11	Oranges	0.01	Peppers		FRUIT (FRESH OR FROZEN)
0.09	DK adult	0.05	Oranges	0.04	Peppers		FRUIT (FRESH OR FROZEN)
0.04	PL (GP)	0.03	Peppers	0.01	Oranges		FRUIT (FRESH OR FROZEN)
0.04	LT adult	0.03	Oranges	0.01	Peppers		FRUIT (FRESH OR FROZEN)

### Acute risk assessment

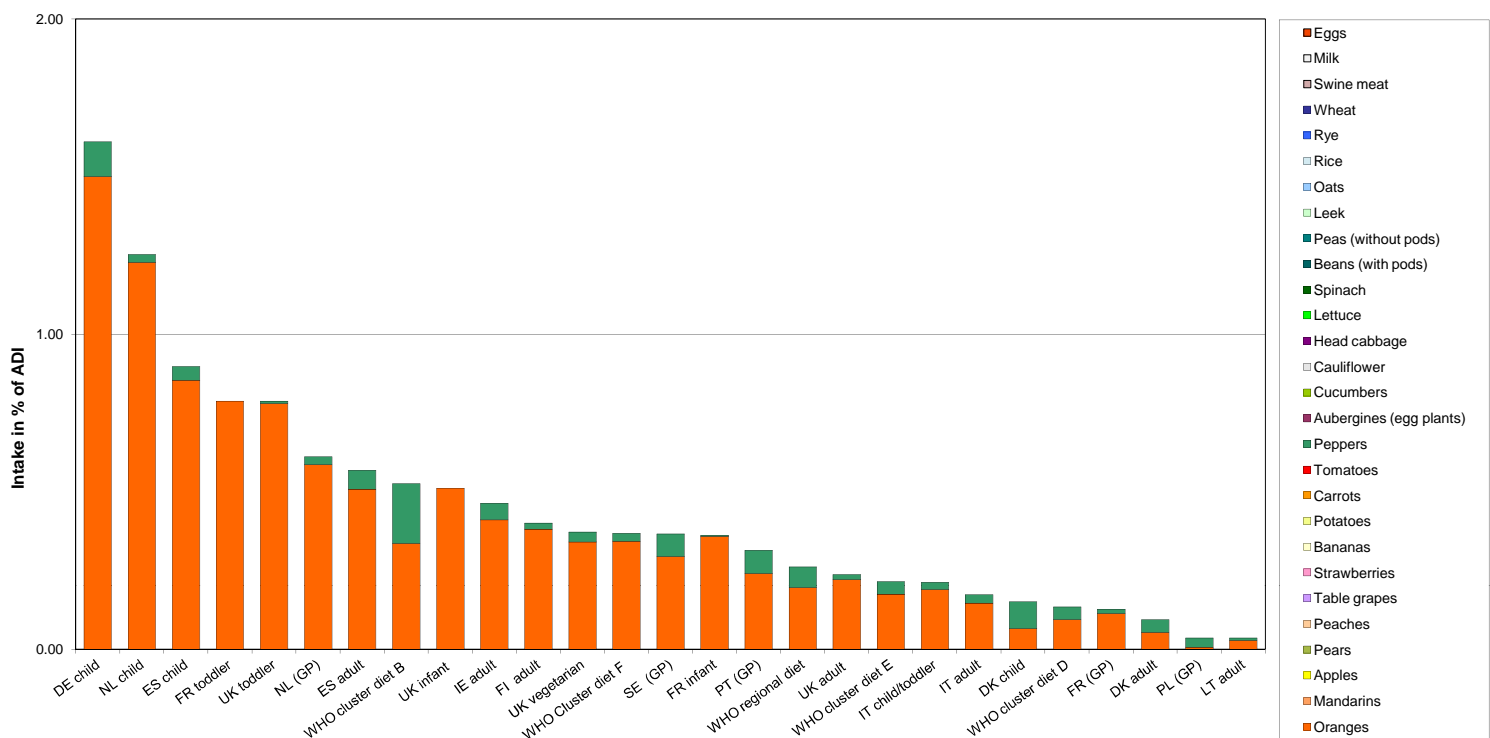
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.01	2222							
2010	Peaches	0.01	1046							
2010	Strawberries	0.01	1707							
2010	Tomatoes	0.01	1676							
2010	Head cabbage	0.01	877							
2010	Lettuce	0.01	1808							
2010	Leek	0.01	698							
2010	Oats	0.01	138							
2010	Rye	0.01	327							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Phenthoate



**Phenthoate**

Acute exposure: Phenthoate / Apples



Intake in % of the ARfD

Acute exposure: Phenthoate / Peaches



Intake in % of the ARfD

Acute exposure: Phenthoate / Strawberries



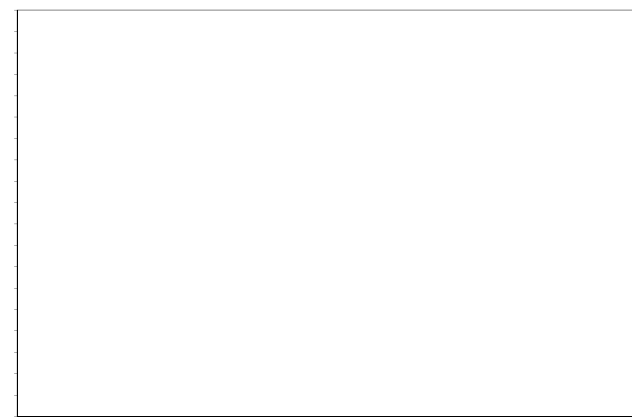
Intake in % of the ARfD

Acute exposure: Phenthoate / Tomatoes



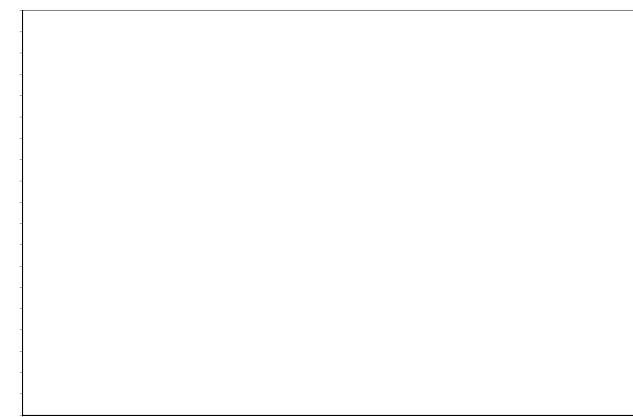
Intake in % of the ARfD

Acute exposure: Phenthoate / Head cabbage



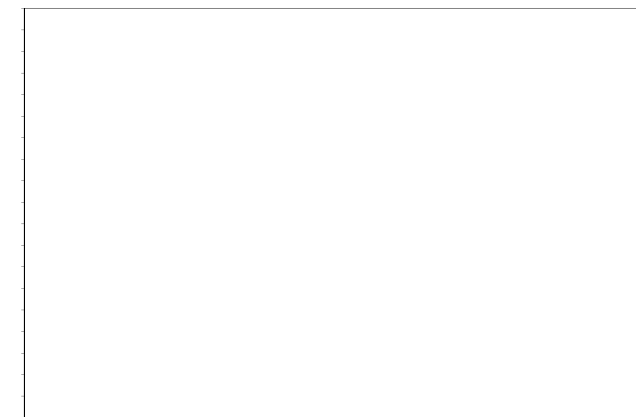
Intake in % of the ARfD

Acute exposure: Phenthoate / Lettuce



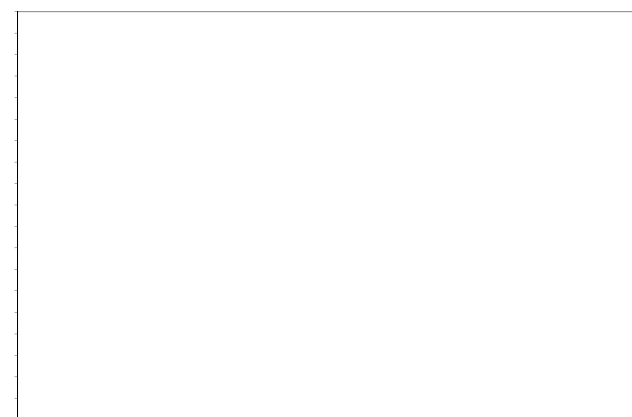
Intake in % of the ARfD

Acute exposure: Phenthoate / Leek



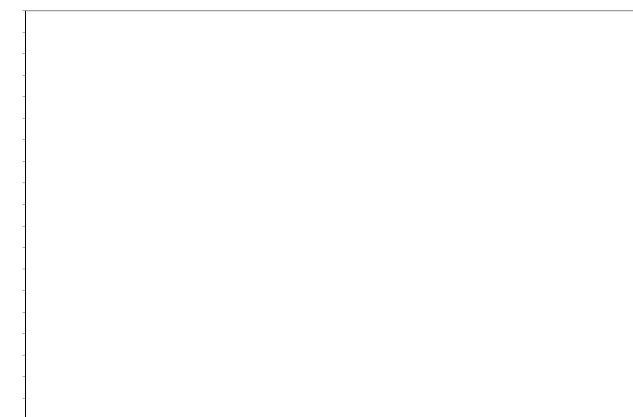
Intake in % of the ARfD

Acute exposure: Phenthoate / Oats



Intake in % of the ARfD

Acute exposure: Phenthoate / Rye



Intake in % of the ARfD

## Phosalone

Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.01	ARfD (mg/kg bw):	0.1
Source of ADI:	EFSA	Source of ARfD:	EFSA
Year of evaluation:	2006	Year of evaluation:	2006

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
2

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
2.41	DE child	1.66	Apples	0.47	Oranges	0.14	Tomatoes
1.56	NL child	0.87	Apples	0.39	Oranges	0.10	Mandarins
0.93	FR toddler	0.36	Apples	0.25	Oranges	0.13	Beans (with pods)
0.91	WHO cluster diet B	0.45	Tomatoes	0.14	Apples	0.11	Oranges
0.70	ES child	0.27	Oranges	0.16	Apples	0.14	Tomatoes
0.68	UK toddler	0.25	Oranges	0.23	Apples	0.09	Tomatoes
0.61	FR infant	0.34	Apples	0.11	Oranges	0.10	Beans (with pods)
0.51	UK infant	0.21	Apples	0.16	Oranges	0.08	Rice
0.50	NL (GP)	0.18	Oranges	0.16	Apples	0.06	Tomatoes
0.49	SE (GP)	0.14	Apples	0.11	Tomatoes	0.09	Oranges
0.49	PT (GP)	0.14	Apples	0.13	Tomatoes	0.10	Rice
0.48	ES adult	0.16	Oranges	0.11	Tomatoes	0.11	Apples
0.47	DK child	0.32	Apples	0.08	Tomatoes	0.03	Peppers
0.46	IT child/toddler	0.21	Tomatoes	0.12	Apples	0.06	Oranges
0.44	IE adult	0.13	Oranges	0.11	Apples	0.08	Mandarins
0.43	PL (GP)	0.28	Apples	0.13	Tomatoes	0.01	Peppers
0.40	WHO regional diet	0.16	Tomatoes	0.09	Apples	0.06	Oranges
0.40	IT adult	0.17	Tomatoes	0.11	Apples	0.05	Oranges
0.39	LT adult	0.26	Apples	0.09	Tomatoes	0.03	Rice
0.37	WHO cluster diet D	0.15	Tomatoes	0.09	Apples	0.07	Rice
0.36	WHO Cluster diet F	0.11	Oranges	0.10	Tomatoes	0.09	Apples
0.35	UK vegetarian	0.11	Oranges	0.09	Tomatoes	0.08	Apples
0.34	WHO cluster diet E	0.12	Apples	0.08	Tomatoes	0.06	Oranges
0.28	FI adult	0.12	Oranges	0.06	Tomatoes	0.06	Apples
0.25	UK adult	0.07	Oranges	0.06	Tomatoes	0.06	Apples
0.22	FR (GP)	0.07	Apples	0.06	Tomatoes	0.04	Oranges
0.22	DK adult	0.11	Apples	0.06	Tomatoes	0.02	Oranges

## Acute risk assessment

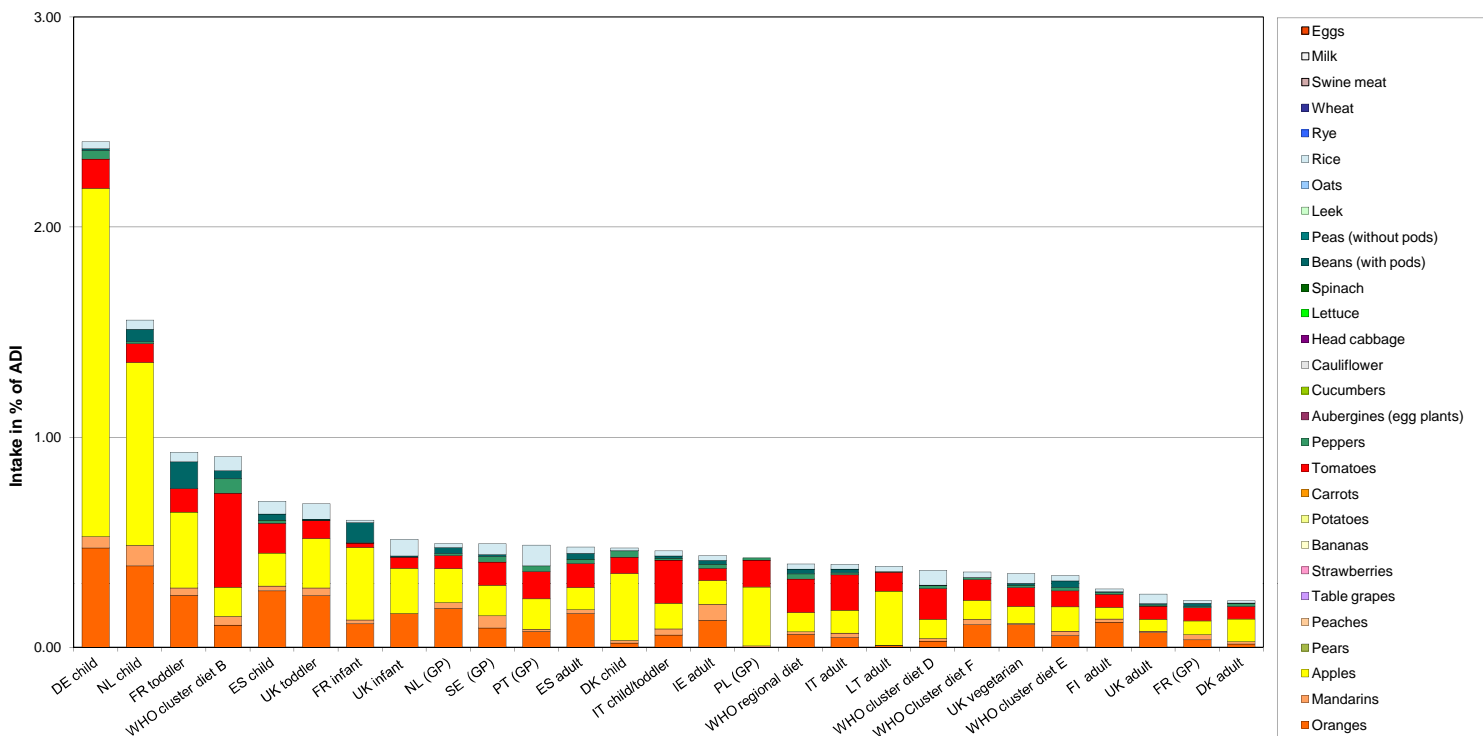
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	3226	0.12	0.12	0.47		46.04	UK infant	
2010	Peaches	2	1547							
2010	Strawberries	0.05	2344							
2010	Tomatoes	0.05	2641	0.04		0.02		0.93	BE child	
2010	Head cabbage	0.05	1286							
2010	Lettuce	0.05	2392							
2010	Leek	0.05	1019							
2010	Oats	0.05	187							
2010	Rye	0.05	419							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

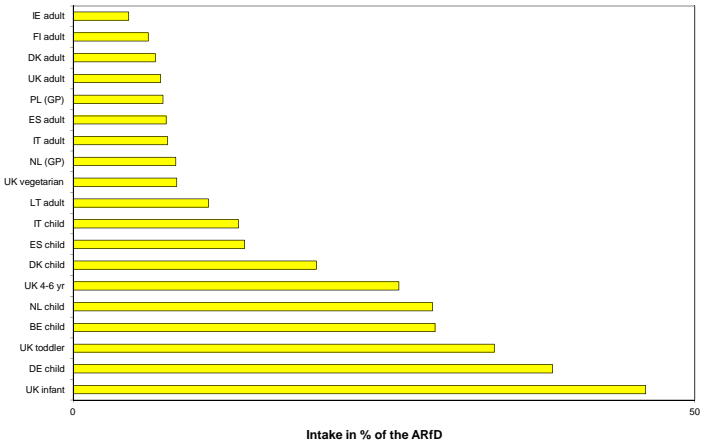
<sup>c)</sup> TRL: toxicological threshold level

## Chronic risk assessment: Phosalone

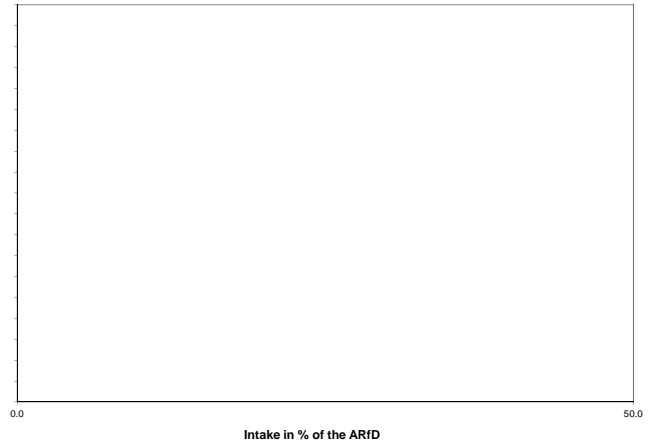


**Phosalone**

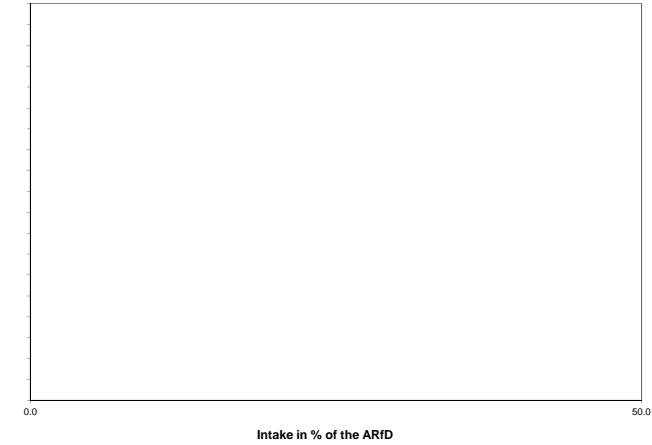
Acute exposure: Phosalone / Apples



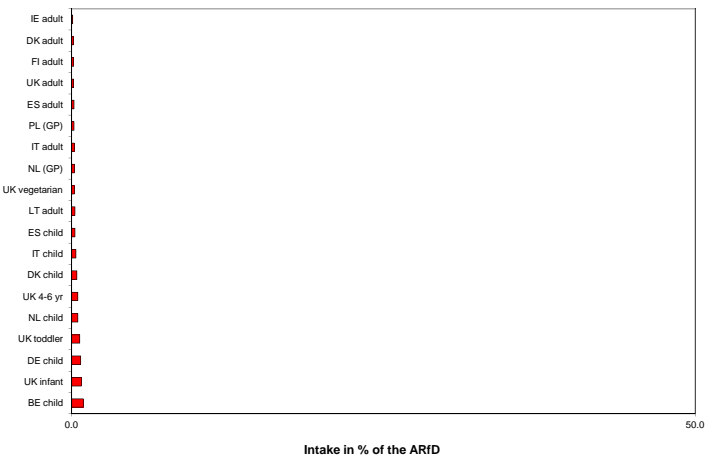
Acute exposure: Phosalone / Peaches



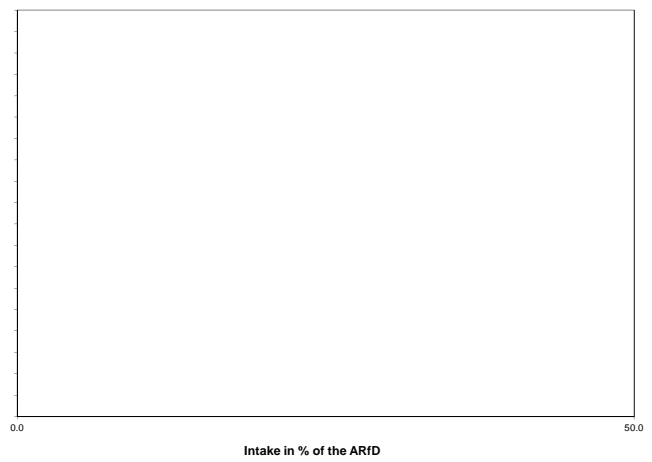
Acute exposure: Phosalone / Strawberries



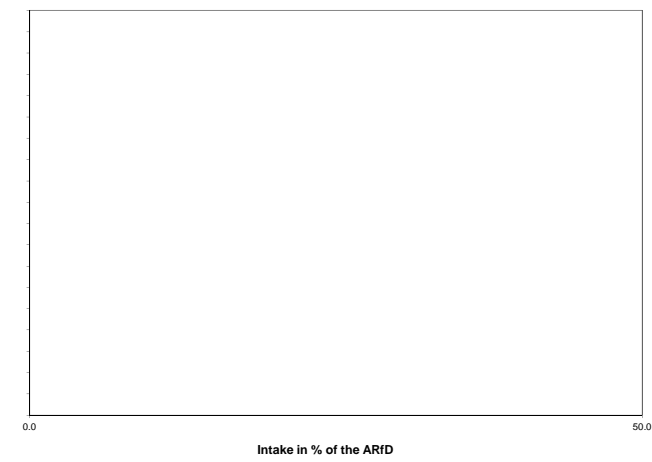
Acute exposure: Phosalone / Tomatoes



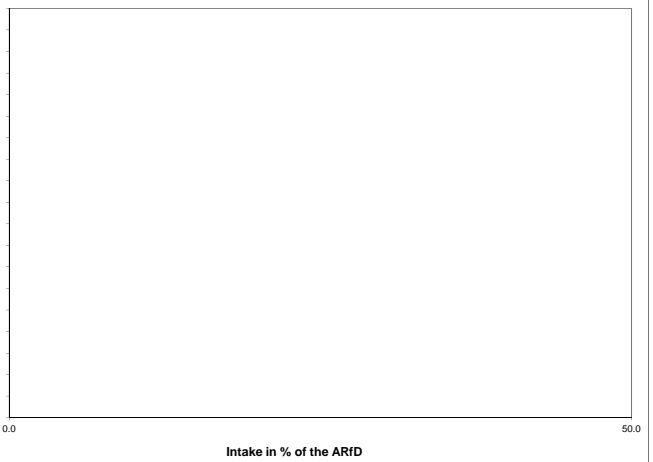
Acute exposure: Phosalone / Head cabbage



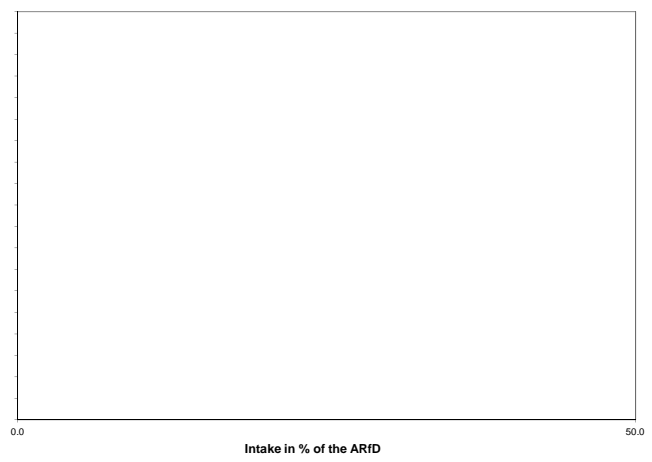
Acute exposure: Phosalone / Lettuce



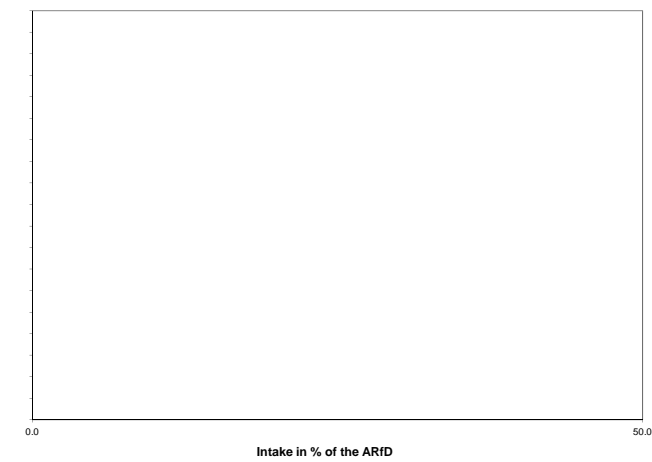
Acute exposure: Phosalone / Leek



Acute exposure: Phosalone / Oats



Acute exposure: Phosalone / Rye





## Phosmet

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.01	ARfD (mg/kg bw):	0.045
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2011	Year of evaluation:	2011

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
3

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
1.61	NL child	0.77	Apples	0.43	Oranges	0.12	Table grapes
0.88	FR toddler	0.32	Apples	0.28	Oranges	0.11	Tomatoes
0.88	WHO cluster diet B	0.43	Tomatoes	0.12	Apples	0.12	Oranges
0.69	ES child	0.30	Oranges	0.14	Apples	0.14	Tomatoes
0.67	UK toddler	0.27	Oranges	0.21	Apples	0.08	Tomatoes
0.61	IE adult	0.14	Oranges	0.10	Apples	0.09	Pears
0.58	FR infant	0.30	Apples	0.13	Oranges	0.04	Leek
0.53	DK child	0.28	Apples	0.09	Pears	0.07	Tomatoes
0.52	NL (GP)	0.21	Oranges	0.14	Apples	0.06	Tomatoes
0.51	IT child/toddler	0.20	Tomatoes	0.11	Apples	0.07	Oranges
0.48	PT (GP)	0.13	Apples	0.12	Tomatoes	0.08	Oranges
0.48	ES adult	0.18	Oranges	0.11	Tomatoes	0.09	Apples
0.48	PL (GP)	0.25	Apples	0.12	Tomatoes	0.05	Table grapes
0.47	UK infant	0.19	Apples	0.18	Oranges	0.05	Tomatoes
0.47	SE (GP)	0.13	Apples	0.11	Tomatoes	0.10	Oranges
0.43	IT adult	0.16	Tomatoes	0.10	Apples	0.05	Oranges
0.39	WHO regional diet	0.15	Tomatoes	0.08	Apples	0.07	Oranges
0.36	WHO Cluster diet F	0.12	Oranges	0.09	Tomatoes	0.08	Apples
0.35	LT adult	0.23	Apples	0.09	Tomatoes	0.02	Pears
0.33	WHO cluster diet E	0.10	Apples	0.07	Tomatoes	0.06	Oranges
0.31	WHO cluster diet D	0.14	Tomatoes	0.08	Apples	0.03	Oranges
0.31	UK vegetarian	0.12	Oranges	0.09	Tomatoes	0.07	Apples
0.26	FI adult	0.13	Oranges	0.06	Tomatoes	0.05	Apples
0.25	FR (GP)	0.06	Tomatoes	0.06	Apples	0.04	Oranges
0.24	DK adult	0.10	Apples	0.06	Tomatoes	0.03	Pears
0.22	UK adult	0.08	Oranges	0.06	Tomatoes	0.05	Apples

## Acute risk assessment

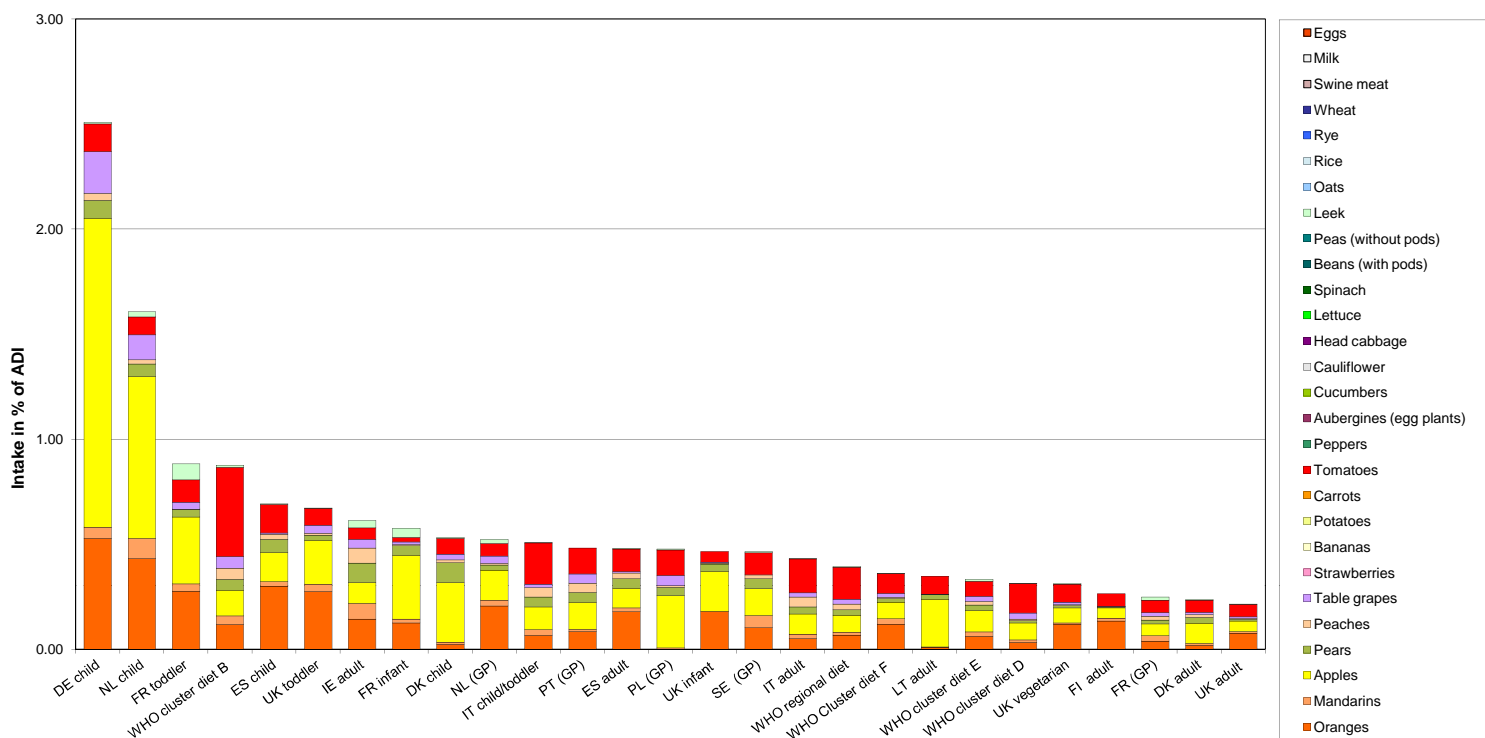
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.2	2250	3.20		0.16		34.83	UK infant	
2010	Peaches	0.05	1090	0.55	0.18	0.24		31.64	DE child	
2010	Strawberries	0.05	1698							
2010	Tomatoes	0.05	1783	0.06		0.01		1.81	BE child	
2010	Head cabbage	0.05	786							
2010	Lettuce	0.05	1649							
2010	Leek	0.05	666	0.15		0.02		2.10	BE child	
2010	Oats	0.05	98							
2010	Rye	0.05	329							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

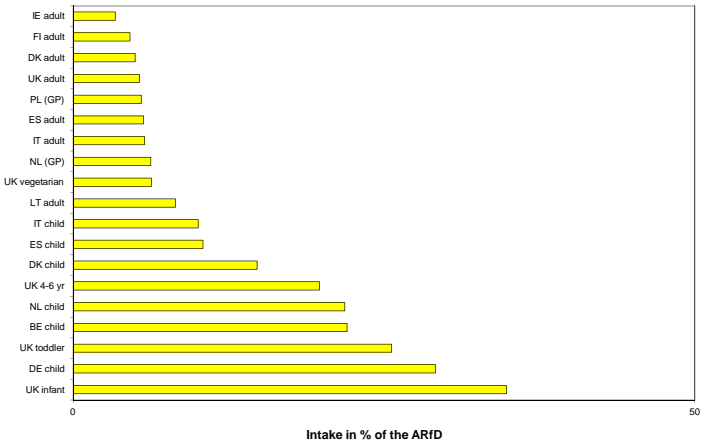
<sup>c)</sup> TRL: toxicological threshold level

## Chronic risk assessment: Phosmet

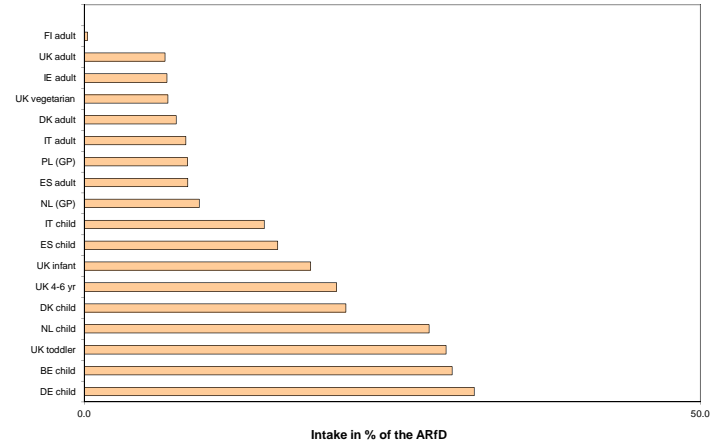


**Phosmet**

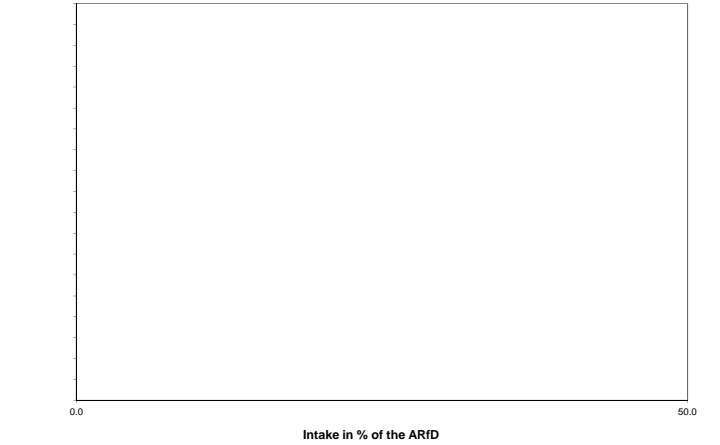
Acute exposure: Phosmet / Apples



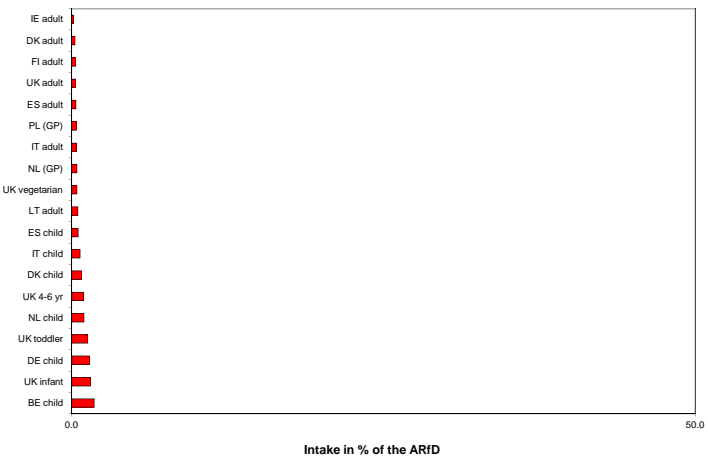
Acute exposure: Phosmet / Peaches



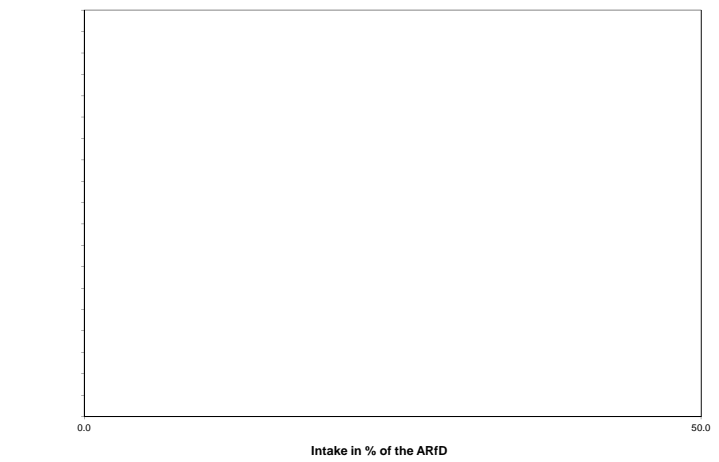
Acute exposure: Phosmet / Strawberries



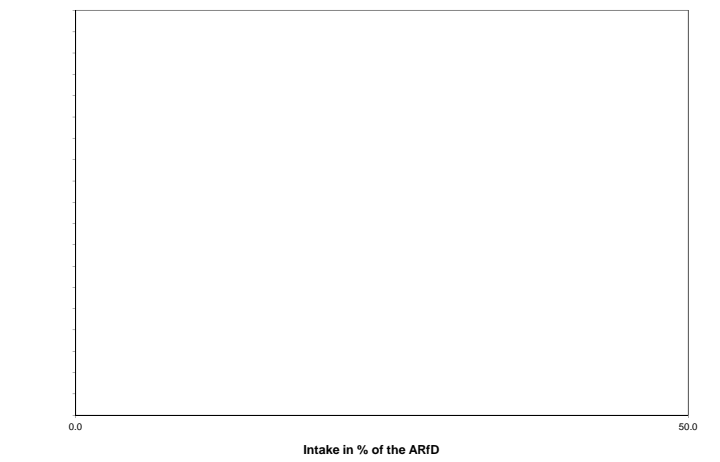
Acute exposure: Phosmet / Tomatoes



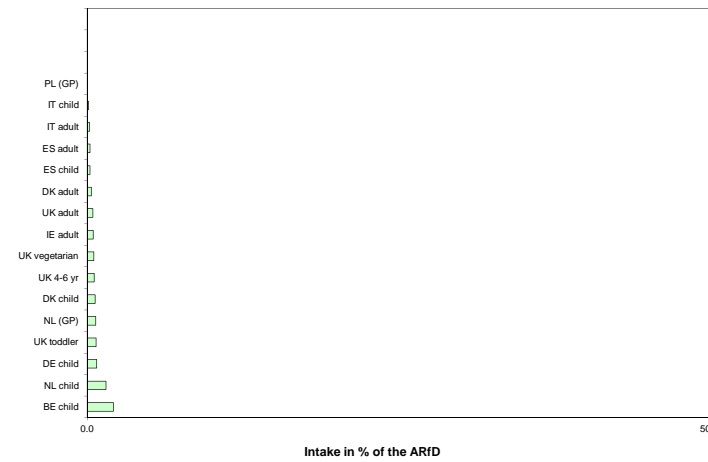
Acute exposure: Phosmet / Head cabbage



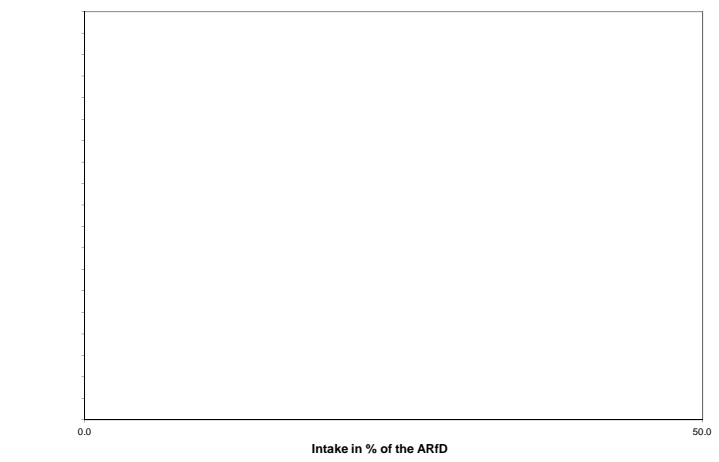
Acute exposure: Phosmet / Lettuce



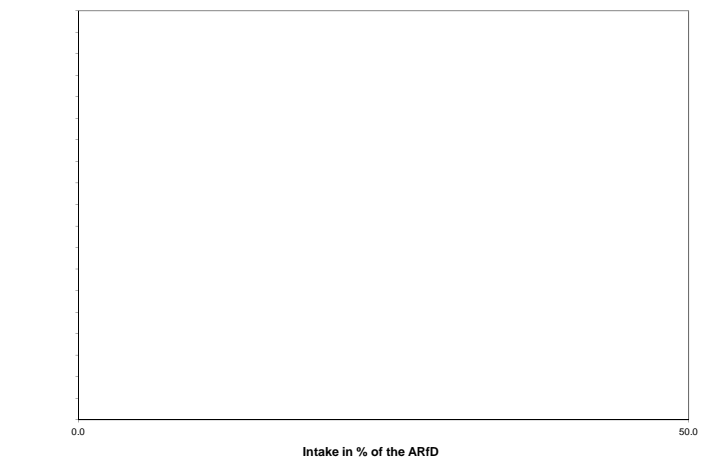
Acute exposure: Phosmet / Leek



Acute exposure: Phosmet / Oats



Acute exposure: Phosmet / Rye



Phoxim			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:	Yes	Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.00375	ARfD (mg/kg bw):	0.00375
Source of ADI:	EMEA	Source of ARfD:	
Year of evaluation:	2000	Year of evaluation:	

Active substance was not assessed regarding the setting of an ARfD by JMPR, no other evaluations for ARfD available. ADI is used as a surrogate.

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum					
		No of diets exceeding ADI:		---			
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.19	NL child	0.19	Mandarins		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.14	IE adult	0.14	Mandarins		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.11	SE (GP)	0.11	Mandarins		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.10	DE child	0.10	Mandarins		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.08	WHO cluster diet B	0.08	Mandarins		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.07	UK toddler	0.07	Mandarins		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.07	FR toddler	0.07	Mandarins		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.05	NL (GP)	0.05	Mandarins		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.05	IT child/toddler	0.05	Mandarins		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.05	WHO Cluster diet F	0.05	Mandarins		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.05	FR (GP)	0.05	Mandarins		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.04	ES child	0.04	Mandarins		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.04	WHO cluster diet E	0.04	Mandarins		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.04	IT adult	0.04	Mandarins		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.04	ES adult	0.04	Mandarins		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.03	FR infant	0.03	Mandarins		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.03	FI adult	0.03	Mandarins		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.03	WHO regional diet	0.03	Mandarins		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.02	WHO cluster diet D	0.02	Mandarins		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.02	DK child	0.02	Mandarins		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.02	PT (GP)	0.02	Mandarins		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.02	DK adult	0.02	Mandarins		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.01	UK adult	0.01	Mandarins		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.01	UK vegetarian	0.01	Mandarins		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.01	PL (GP)	0.01	Mandarins		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.00	LT adult	0.00	Mandarins		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
	UK infant		FRUIT (FRESH		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)

### Acute risk assessment

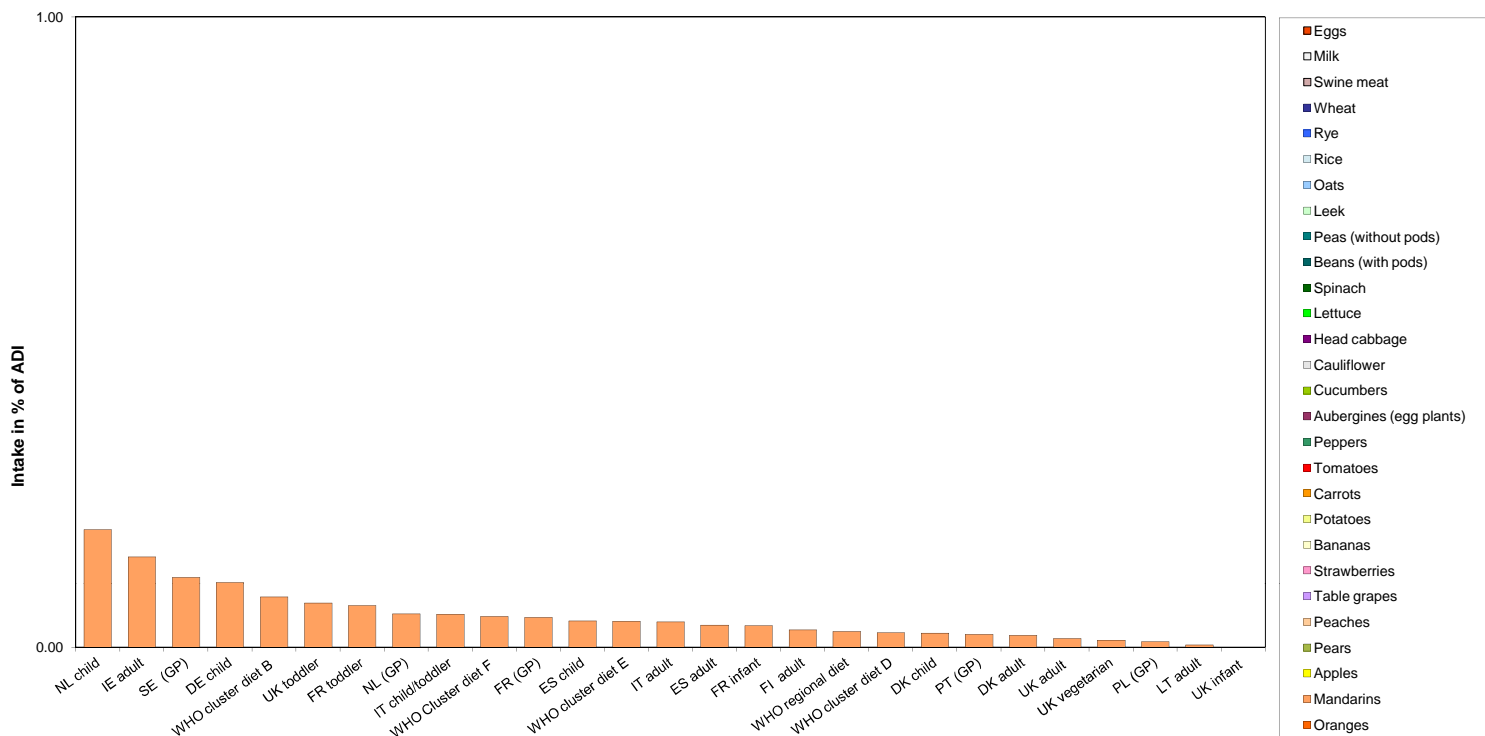
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.01	1342							
2010	Peaches	0.01	736							
2010	Strawberries	0.01	1113							
2010	Tomatoes	0.01	944							
2010	Head cabbage	0.01	611							
2010	Lettuce	0.01	1170							
2010	Leek	0.01	534							
2010	Oats	0.01	113							
2010	Rye	0.01	299							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Phoxim



**Phoxim**

Acute exposure: Phoxim / Apples



Intake in % of the ARfD

Acute exposure: Phoxim / Peaches



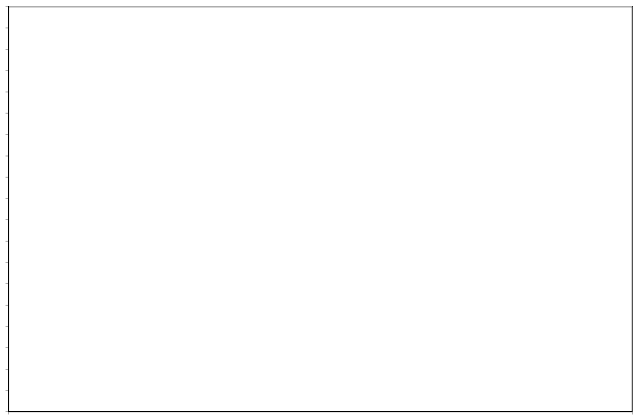
Intake in % of the ARfD

Acute exposure: Phoxim / Strawberries



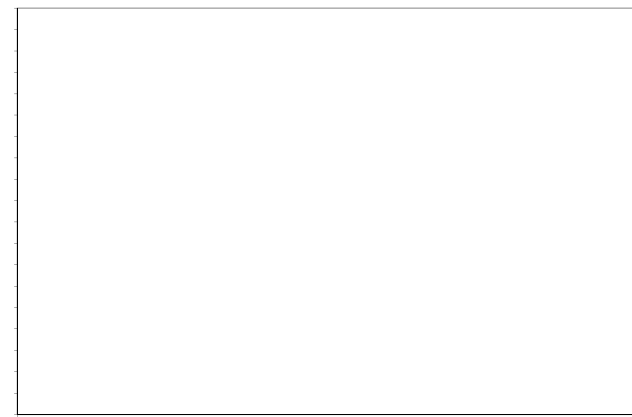
Intake in % of the ARfD

Acute exposure: Phoxim / Tomatoes



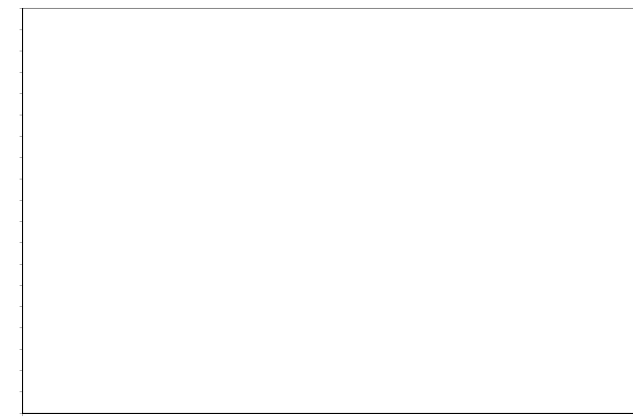
Intake in % of the ARfD

Acute exposure: Phoxim / Head cabbage



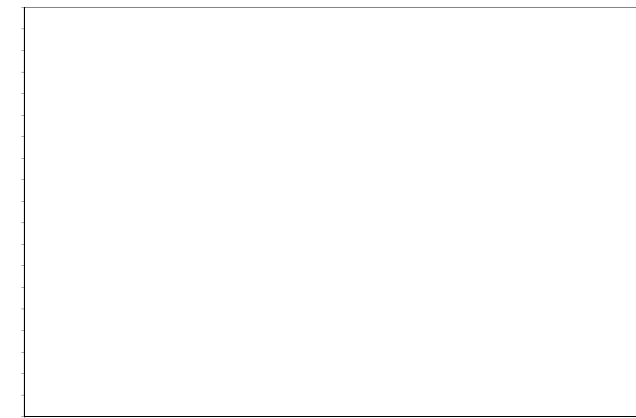
Intake in % of the ARfD

Acute exposure: Phoxim / Lettuce



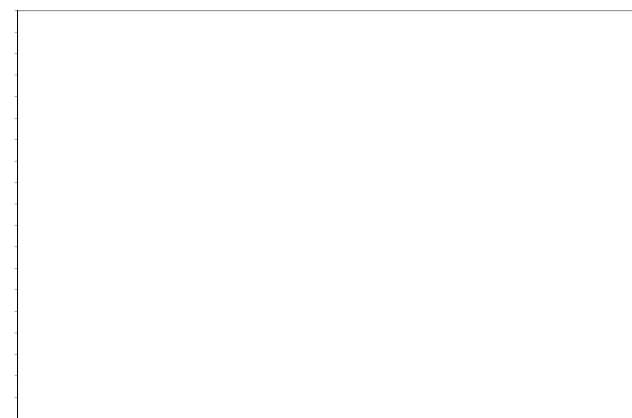
Intake in % of the ARfD

Acute exposure: Phoxim / Leek



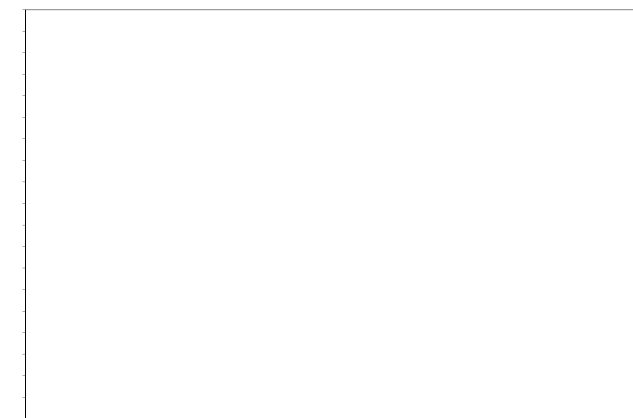
Intake in % of the ARfD

Acute exposure: Phoxim / Oats



Intake in % of the ARfD

Acute exposure: Phoxim / Rye



Intake in % of the ARfD

## Pirimicarb

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.035	ARfD (mg/kg bw):	0.1
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2006	Year of evaluation:	2006

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
1

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)		2nd contributor to MS diet (in % of ADI)		3rd contributor to MS diet (in % of ADI)	
		Commodity / group of commodities	Commodity / group of commodities	Commodity / group of commodities	Commodity / group of commodities		
0.85	DE child	0.55	Apples	0.12	Oranges	0.03	Cucumbers
0.52	NL child	0.29	Apples	0.10	Oranges	0.02	Mandarins
0.42	DK child	0.13	Rye	0.11	Apples	0.08	Cucumbers
0.36	FR toddler	0.12	Apples	0.07	Carrots	0.06	Oranges
0.29	FR infant	0.11	Apples	0.07	Carrots	0.03	Oranges
0.26	WHO cluster diet B	0.08	Tomatoes	0.05	Apples	0.03	Oranges
0.21	ES child	0.07	Oranges	0.05	Apples	0.03	Tomatoes
0.20	UK toddler	0.08	Apples	0.06	Oranges	0.02	Tomatoes
0.20	SE (GP)	0.05	Apples	0.02	Oranges	0.02	Carrots
0.18	LT adult	0.08	Apples	0.03	Rye	0.02	Cucumbers
0.18	IE adult	0.04	Apples	0.03	Oranges	0.03	Pears
0.18	UK infant	0.07	Apples	0.04	Oranges	0.04	Carrots
0.16	NL (GP)	0.05	Apples	0.05	Oranges	0.01	Tomatoes
0.15	PL (GP)	0.09	Apples	0.02	Tomatoes	0.01	Pears
0.15	ES adult	0.04	Oranges	0.03	Apples	0.02	Tomatoes
0.15	WHO Cluster diet F	0.03	Apples	0.03	Oranges	0.02	Rye
0.14	IT child/toddler	0.04	Apples	0.04	Tomatoes	0.02	Oranges
0.14	WHO regional diet	0.03	Apples	0.03	Tomatoes	0.02	Oranges
0.14	PT (GP)	0.05	Apples	0.02	Tomatoes	0.02	Oranges
0.13	WHO cluster diet E	0.04	Apples	0.01	Tomatoes	0.01	Oranges
0.13	IT adult	0.04	Apples	0.03	Tomatoes	0.01	Oranges
0.11	DK adult	0.04	Apples	0.02	Rye	0.01	Cucumbers
0.11	FI adult	0.03	Oranges	0.02	Rye	0.02	Apples
0.11	WHO cluster diet D	0.03	Apples	0.03	Tomatoes	0.01	Rye
0.10	UK vegetarian	0.03	Oranges	0.03	Apples	0.02	Tomatoes
0.08	FR (GP)	0.02	Apples	0.01	Tomatoes	0.01	Oranges
0.07	UK adult	0.02	Apples	0.02	Oranges	0.01	Tomatoes

## Acute risk assessment

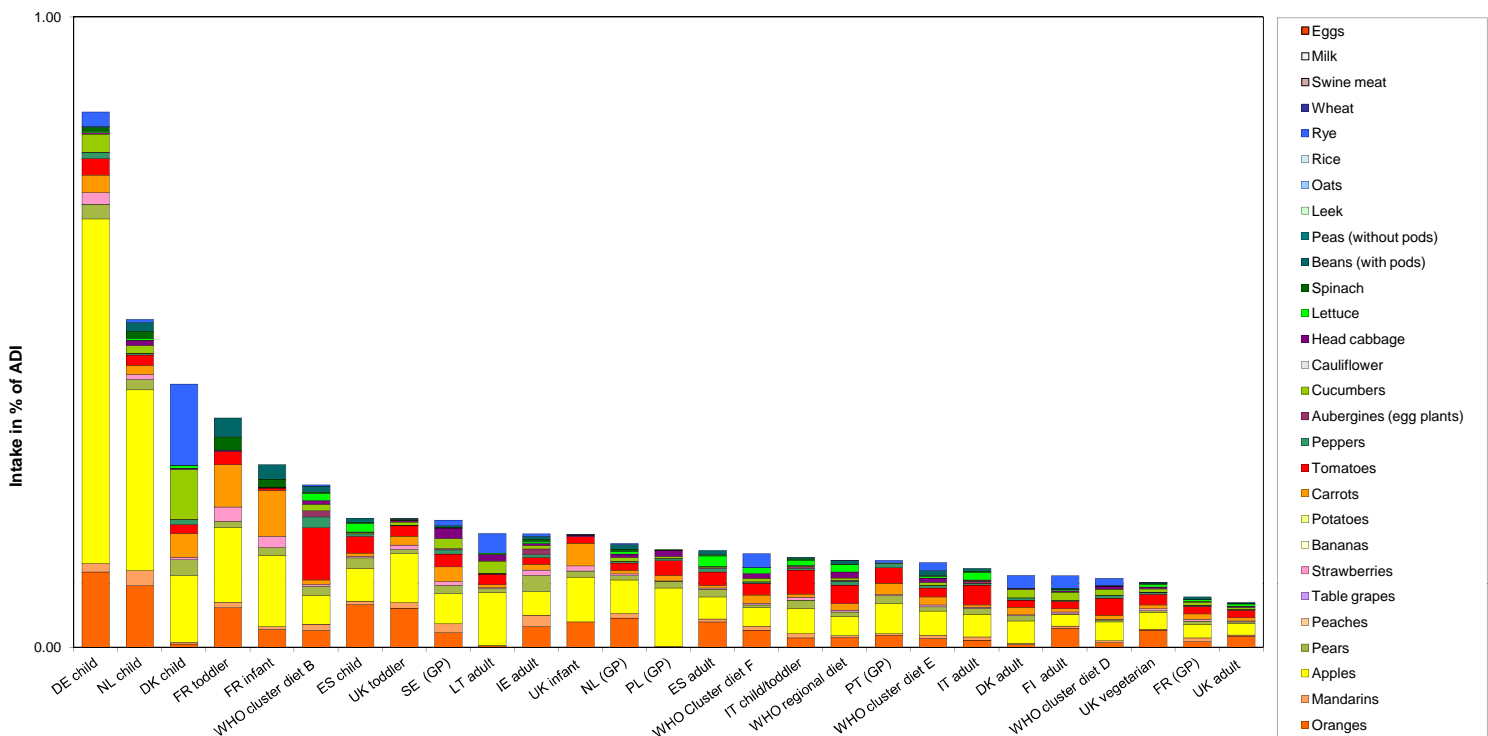
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	2	2314	12.14		0.22		21.75	UK infant	
2010	Peaches	2	1181	0.17		0.09		5.10	DE child	
2010	Strawberries	3	1804	3.05		0.46		7.17	DE child	
2010	Tomatoes	1	1895	0.16		0.10		5.76	BE child	
2010	Head cabbage	1	976	0.20		0.08		4.21	NL child	
2010	Lettuce	5	1788	2.91		0.47		12.59	DE child	
2010	Leek	1	735							
2010	Oats	0.5	204							
2010	Rye	0.5	392	0.51		0.04		0.22	UK infant	
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

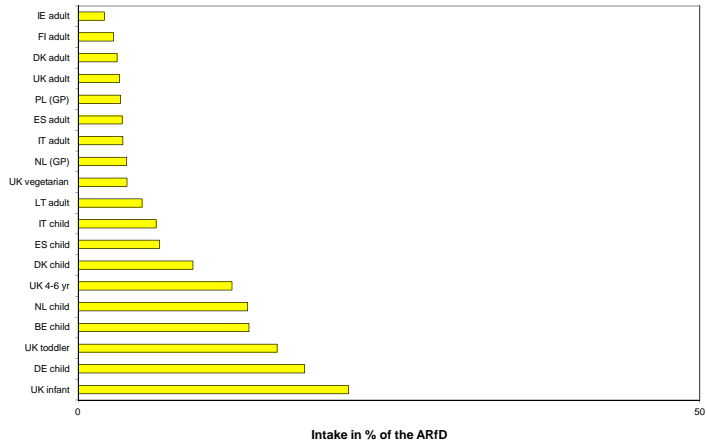
<sup>c)</sup> TRL: toxicological threshold level

## Chronic risk assessment: Pirimicarb

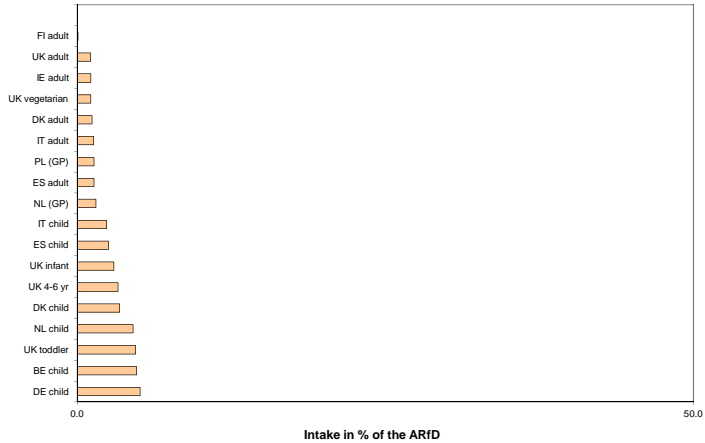


**Pirimicarb**

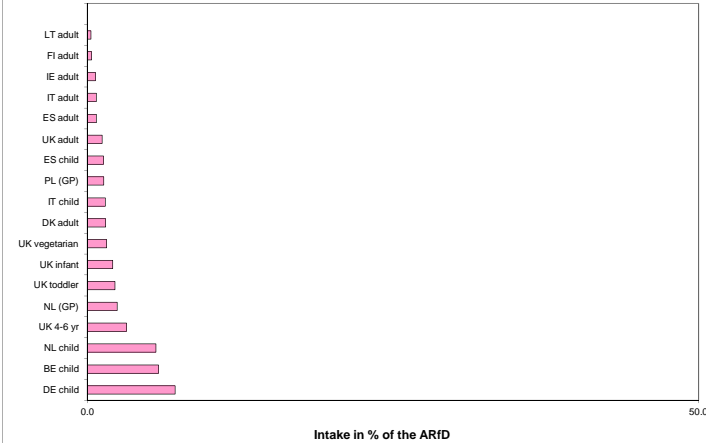
Acute exposure: Pirimicarb / Apples



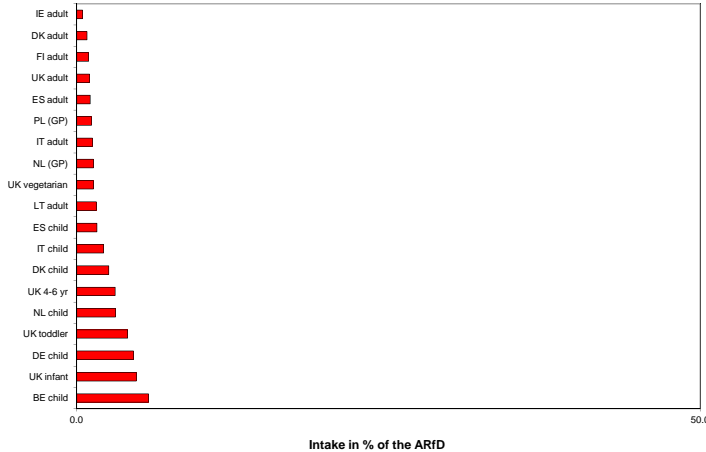
Acute exposure: Pirimicarb / Peaches



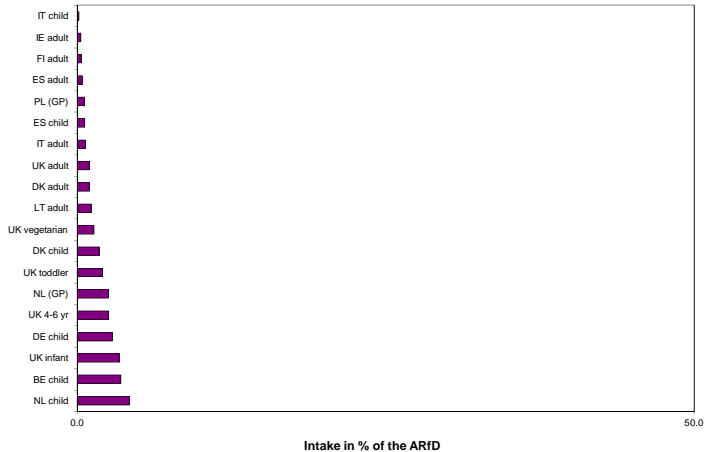
Acute exposure: Pirimicarb / Strawberries



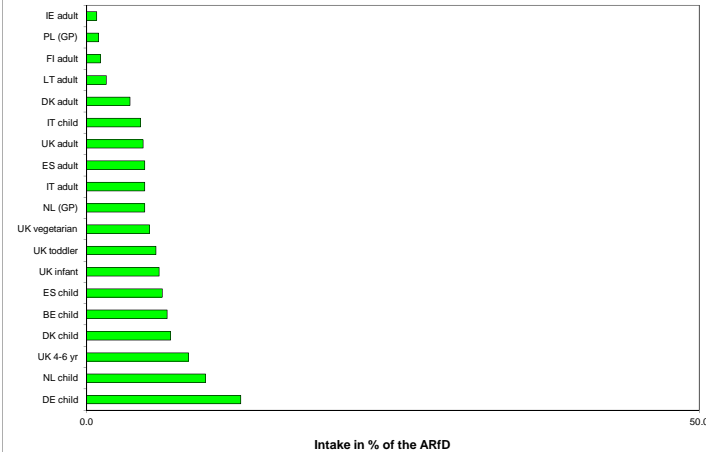
Acute exposure: Pirimicarb / Tomatoes



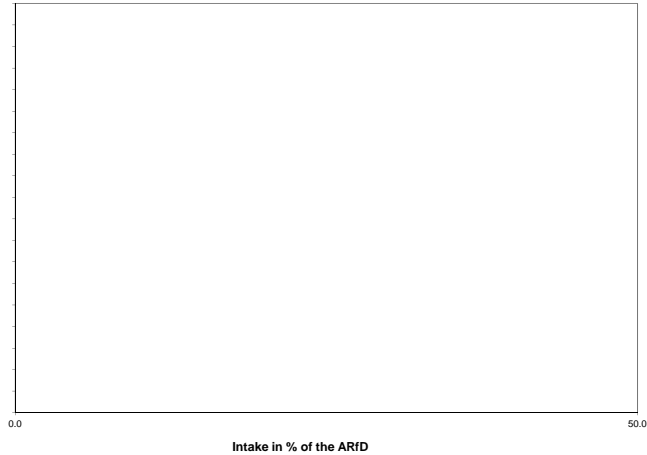
Acute exposure: Pirimicarb / Head cabbage



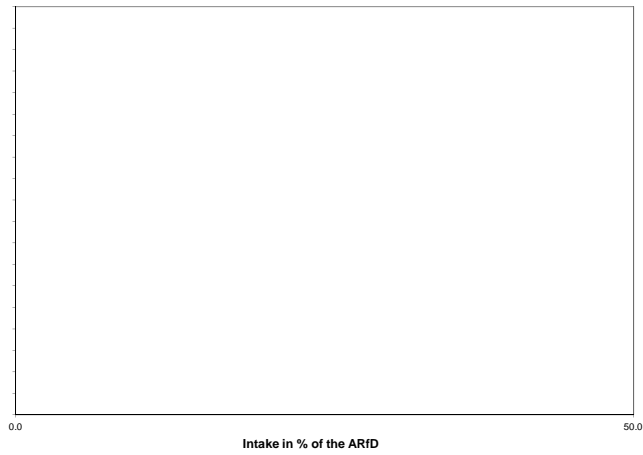
Acute exposure: Pirimicarb / Lettuce



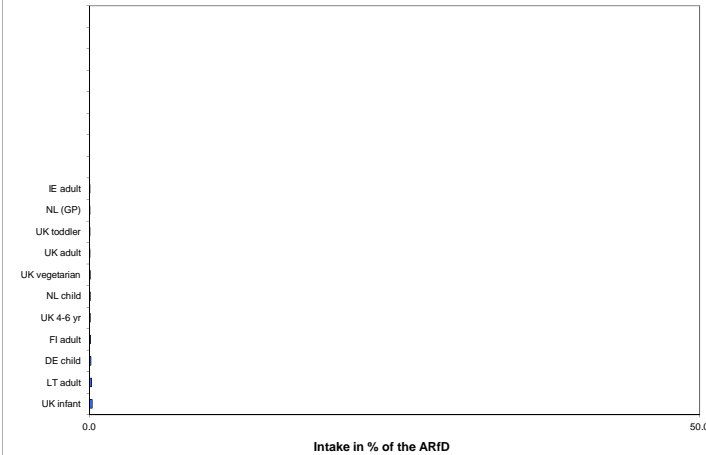
Acute exposure: Pirimicarb / Leek



Acute exposure: Pirimicarb / Oats



Acute exposure: Pirimicarb / Rye



Pirimiphos-methyl			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P and A
Toxicological end points			
ADI (mg/kg bw/day):	0.004	ARfD (mg/kg bw):	0.15
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2007	Year of evaluation:	2007

**Chronic risk assessment**

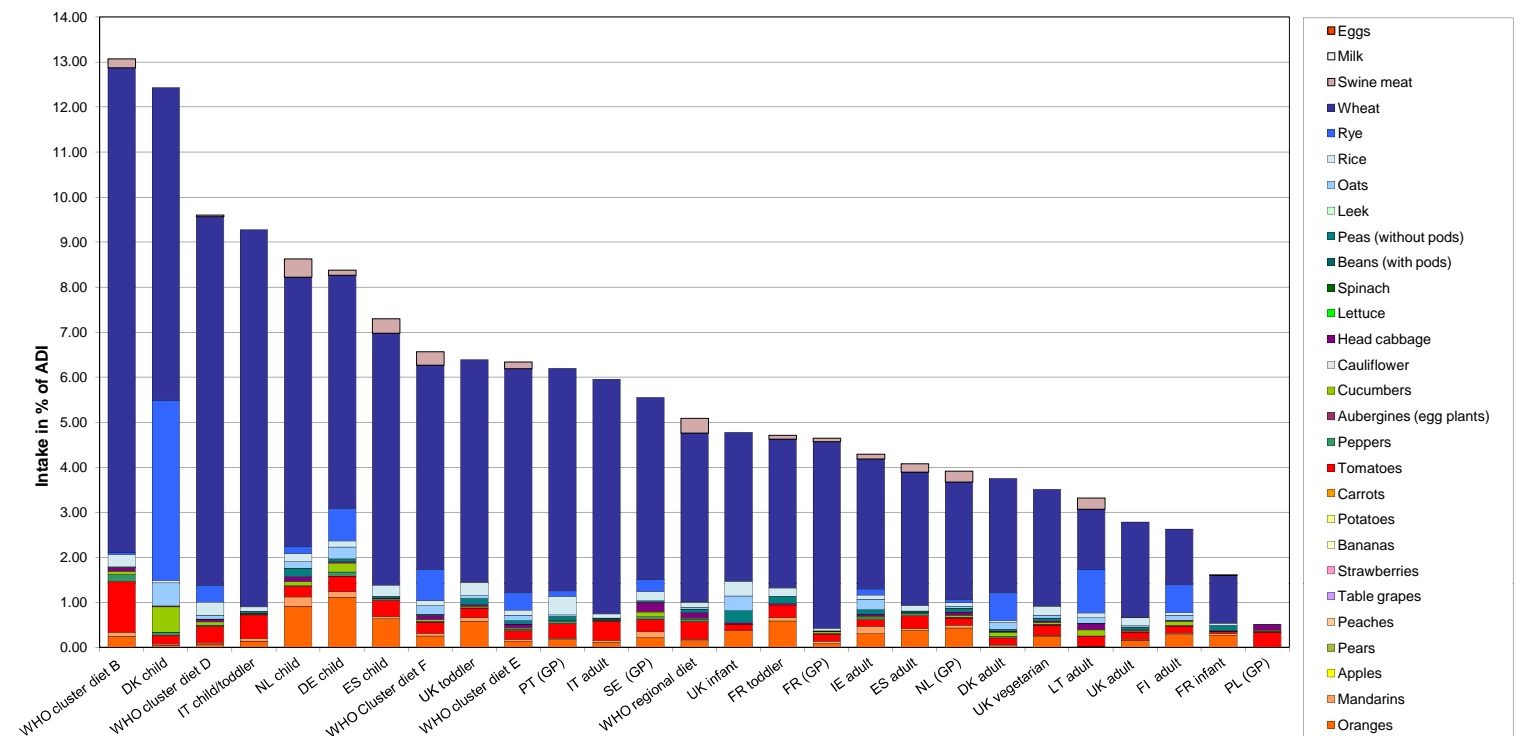
		Exposure (range) in % of ADI minimum - maximum					
		1	13				
No of diets exceeding ADI:		---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
13.07	WHO cluster diet B	10.76	Wheat	1.13	Tomatoes	0.27	Rice
12.43	DK child	6.94	Wheat	4.00	Rye	0.56	Cucumbers
9.60	WHO cluster diet D	8.19	Wheat	0.37	Tomatoes	0.37	Rye
9.27	IT child/toddler	8.38	Wheat	0.52	Tomatoes	0.14	Oranges
8.63	NL child	5.97	Wheat	0.91	Oranges	0.40	Swine meat
8.38	DE child	5.18	Wheat	1.12	Oranges	0.72	Rye
7.30	ES child	5.59	Wheat	0.64	Oranges	0.36	Tomatoes
6.57	WHO Cluster diet F	4.54	Wheat	0.69	Rye	0.30	Swine meat
6.39	UK toddler	4.94	Wheat	0.58	Oranges	0.30	Rice
6.34	WHO cluster diet E	4.97	Wheat	0.39	Rye	0.19	Tomatoes
6.20	PT (GP)	4.94	Wheat	0.41	Rice	0.33	Tomatoes
5.96	IT adult	5.21	Wheat	0.42	Tomatoes	0.11	Oranges
5.55	SE (GP)	4.03	Wheat	0.28	Tomatoes	0.27	Rye
5.09	WHO regional diet	3.74	Wheat	0.40	Tomatoes	0.33	Swine meat
4.78	UK infant	3.30	Wheat	0.38	Oranges	0.33	Rice
4.71	FR toddler	3.30	Wheat	0.59	Oranges	0.28	Tomatoes
4.65	FR (GP)	4.14	Wheat	0.16	Tomatoes	0.08	Oranges
4.29	IE adult	2.89	Wheat	0.31	Oranges	0.24	Oats
4.08	ES adult	2.96	Wheat	0.38	Oranges	0.29	Tomatoes
3.91	NL (GP)	2.61	Wheat	0.44	Oranges	0.24	Swine meat
3.75	DK adult	2.54	Wheat	0.62	Rye	0.15	Tomatoes
3.51	UK vegetarian	2.58	Wheat	0.25	Oranges	0.23	Tomatoes
3.32	LT adult	1.33	Wheat	0.98	Rye	0.25	Swine meat
2.79	UK adult	2.11	Wheat	0.19	Rice	0.16	Oranges
2.63	FI adult	1.24	Wheat	0.62	Rye	0.28	Oranges
1.61	FR infant	1.06	Wheat	0.27	Oranges	0.12	Peas (without pods)
0.51	PL (GP)	0.32	Tomatoes	0.12	Head cabbage	0.02	Cucumbers

**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	3135							
2010	Peaches	0.05	1479							
2010	Strawberries	0.05	2336							
2010	Tomatoes	1	2620	0.23		0.50		19.38	BE child	
2010	Head cabbage	0.05	1262	0.40		0.02		0.81	NL child	
2010	Lettuce	0.05	2428	0.04		0.03		0.52	DE child	
2010	Leek	0.05	976							
2010	Oats	5	268	13.43		4.10		10.88	DE child	
2010	Rye	5	469	9.38		3.20		13.49	UK infant	
2010	Swine Meat	0.05	559	0.18		0.00		0.01	DE child	
2010	Milk	0.05	721							

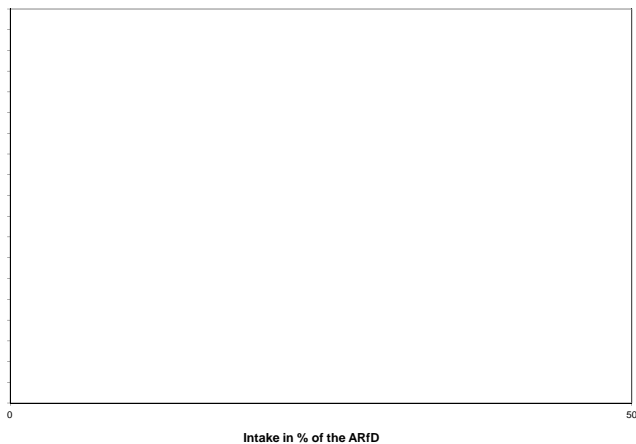
a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Pirimiphos-methyl**

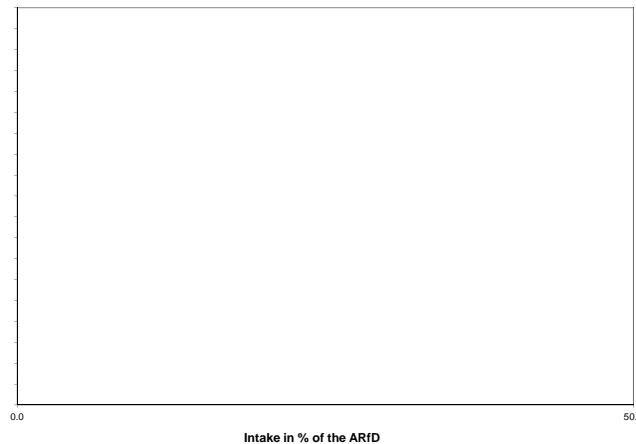


**Pirimiphos-methyl**

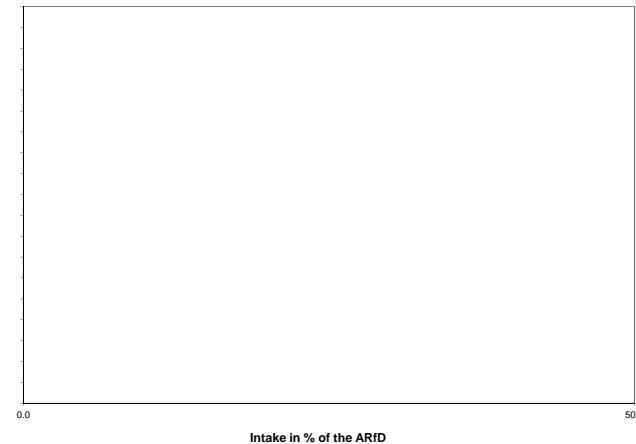
Acute exposure: Pirimiphos-methyl / Apples



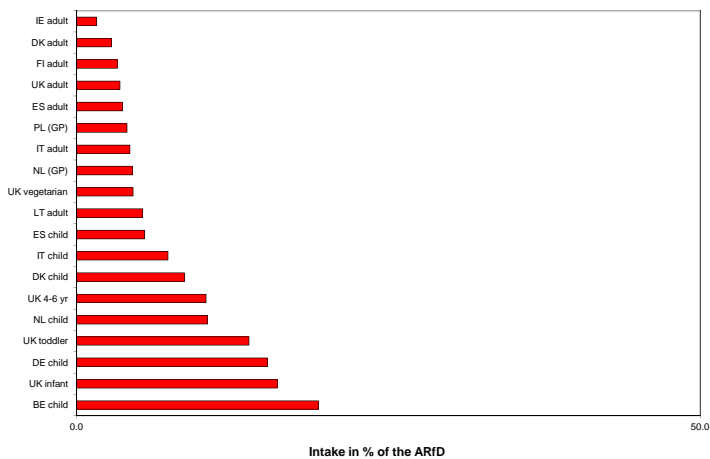
Acute exposure: Pirimiphos-methyl / Peaches



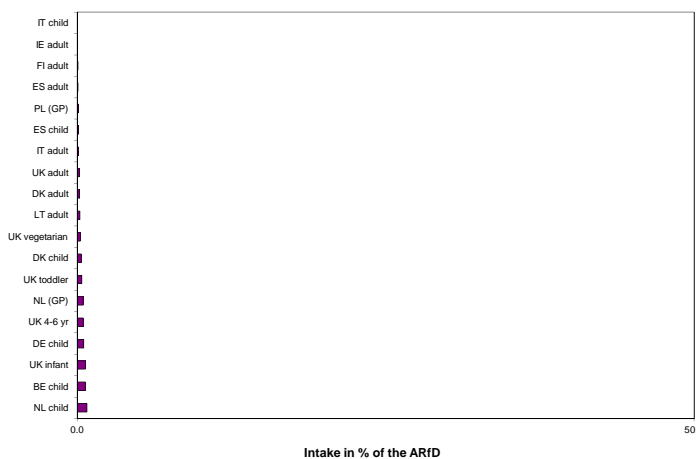
Acute exposure: Pirimiphos-methyl / Strawberries



Acute exposure: Pirimiphos-methyl / Tomatoes



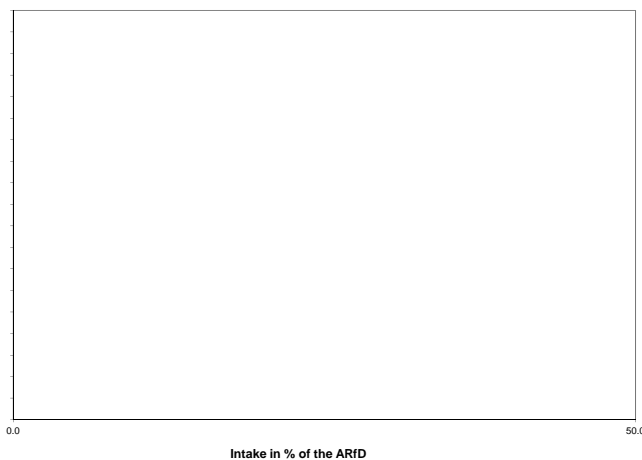
Acute exposure: Pirimiphos-methyl / Head cabbage



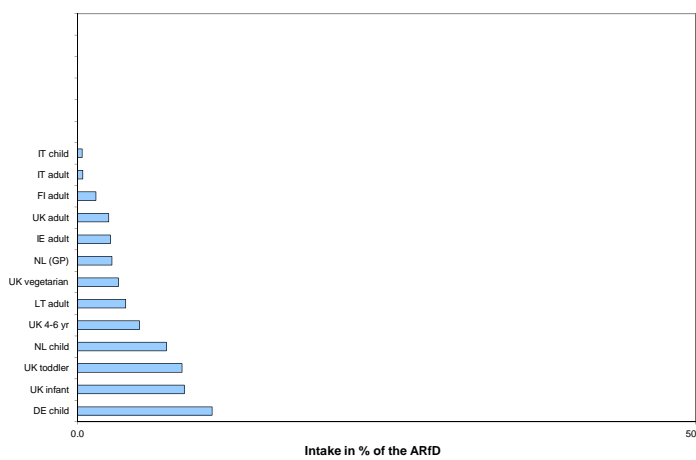
Acute exposure: Pirimiphos-methyl / Lettuce



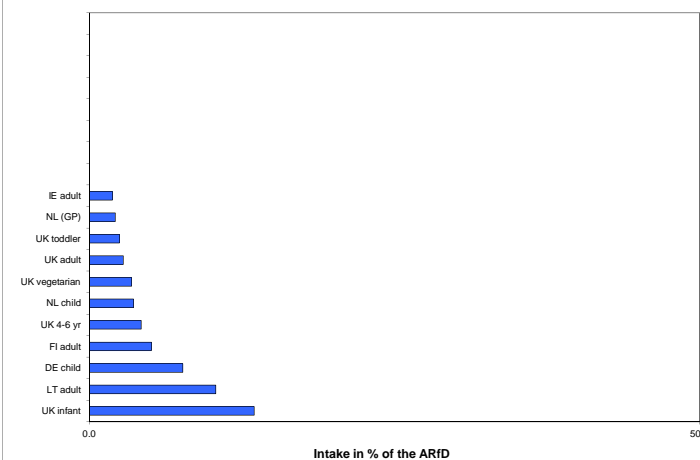
Acute exposure: Pirimiphos-methyl / Leek



Acute exposure: Pirimiphos-methyl / Oats



Acute exposure: Pirimiphos-methyl / Rye





## Prochloraz

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.01</b>	ARfD (mg/kg bw):	<b>0.025</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2011</b>	Year of evaluation:	<b>2011</b>

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum					
		1	5				
No of diets exceeding ADI:							
		---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
4.60	DE child	1.50	Oranges	1.36	Apples	0.85	Wheat
4.23	NL child	1.23	Oranges	0.98	Wheat	0.71	Apples
3.34	WHO cluster diet B	1.77	Wheat	0.37	Tomatoes	0.34	Oranges
2.91	FR toddler	0.79	Oranges	0.61	Potatoes	0.54	Wheat
2.61	UK toddler	0.81	Wheat	0.78	Oranges	0.42	Potatoes
2.47	ES child	0.92	Wheat	0.85	Oranges	0.22	Potatoes
2.34	WHO cluster diet D	1.35	Wheat	0.49	Potatoes	0.12	Tomatoes
2.25	PT (GP)	0.81	Wheat	0.64	Potatoes	0.24	Oranges
2.14	DK child	1.14	Wheat	0.29	Potatoes	0.26	Apples
2.14	SE (GP)	0.66	Wheat	0.50	Potatoes	0.29	Oranges
2.14	IT child/toddler	1.38	Wheat	0.19	Oranges	0.17	Tomatoes
2.00	UK infant	0.54	Wheat	0.51	Oranges	0.39	Potatoes
1.88	WHO Cluster diet F	0.75	Wheat	0.41	Potatoes	0.34	Oranges
1.83	FR infant	0.50	Potatoes	0.41	Carrots	0.36	Oranges
1.82	WHO cluster diet E	0.82	Wheat	0.46	Potatoes	0.18	Oranges
1.73	IE adult	0.48	Wheat	0.41	Oranges	0.28	Mandarins
1.71	NL (GP)	0.59	Oranges	0.43	Wheat	0.33	Potatoes
1.68	WHO regional diet	0.61	Wheat	0.48	Potatoes	0.20	Oranges
1.47	IT adult	0.86	Wheat	0.15	Oranges	0.14	Tomatoes
1.46	ES adult	0.51	Oranges	0.49	Wheat	0.11	Potatoes
1.22	UK vegetarian	0.42	Wheat	0.34	Oranges	0.17	Potatoes
1.21	FR (GP)	0.68	Wheat	0.14	Potatoes	0.11	Oranges
1.00	LT adult	0.38	Potatoes	0.22	Wheat	0.21	Apples
0.97	UK adult	0.35	Wheat	0.22	Oranges	0.17	Potatoes
0.94	FI adult	0.38	Oranges	0.20	Wheat	0.15	Potatoes
0.93	DK adult	0.42	Wheat	0.18	Potatoes	0.09	Apples
0.84	PL (GP)	0.41	Potatoes	0.23	Apples	0.11	Tomatoes

### Acute risk assessment

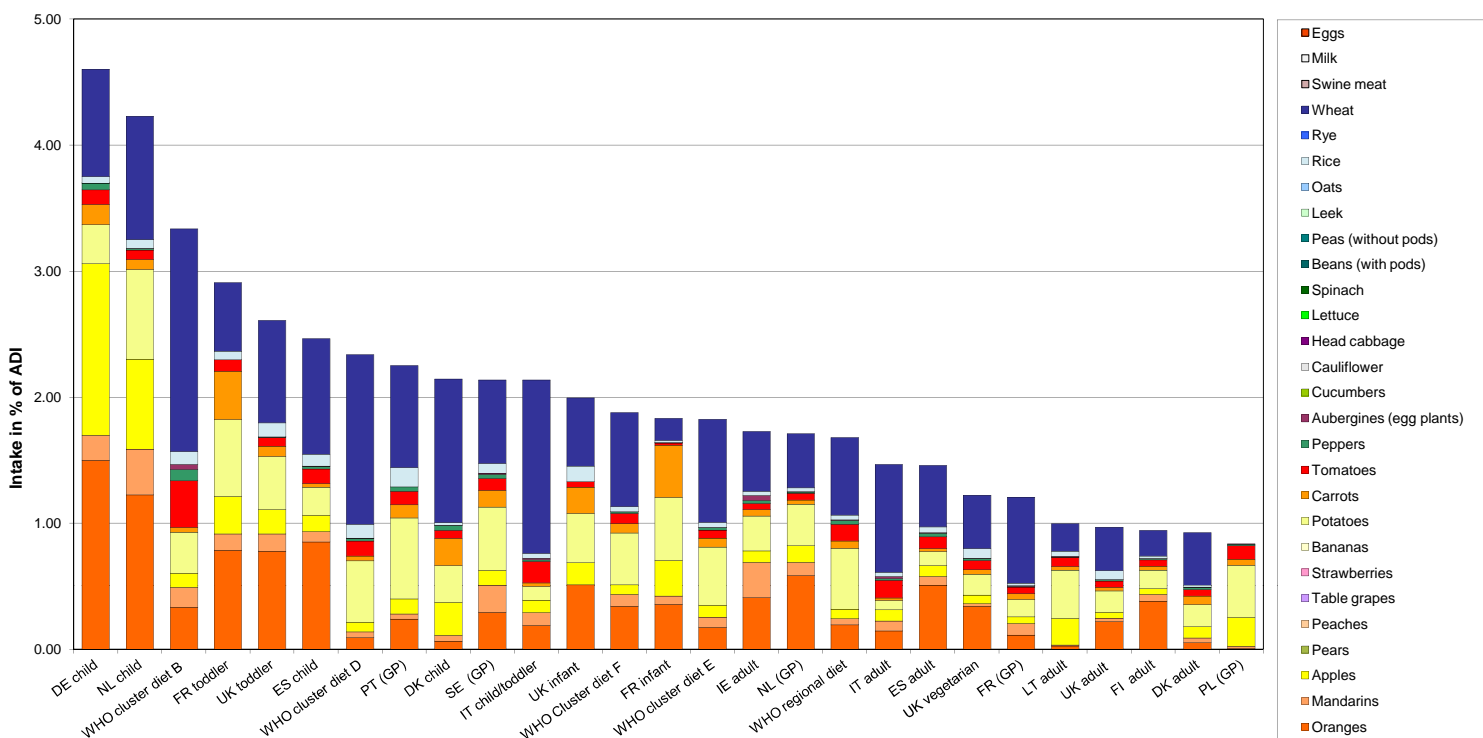
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	1572	0.19		0.03		10.58	UK infant	
2010	Peaches	0.05	733							
2010	Strawberries	0.05	940							
2010	Tomatoes	0.05	1320	0.23		0.02		4.65	BE child	
2010	Head cabbage	0.05	693							
2010	Lettuce	5	1394	0.07		0.02		2.15	DE child	
2010	Leek	0.05	491							
2010	Oats	1	131							
2010	Rye	0.5	214							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

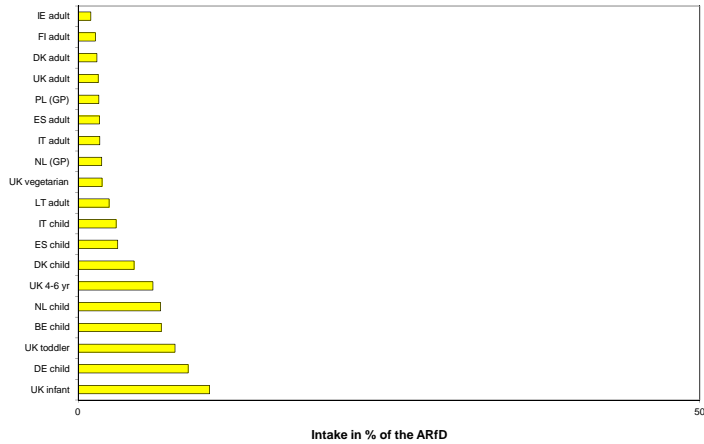
<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Prochloraz

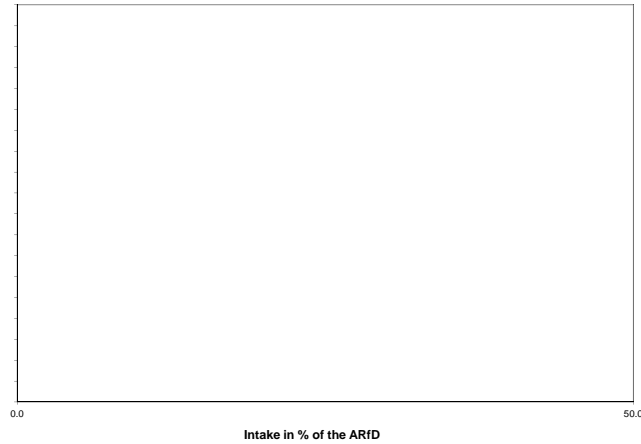


**Prochloraz**

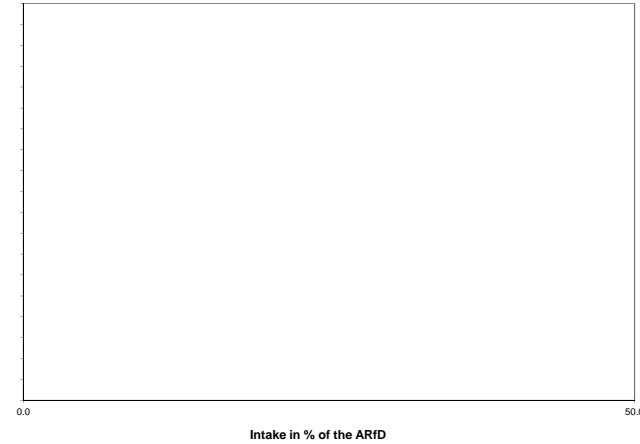
Acute exposure: Prochloraz / Apples



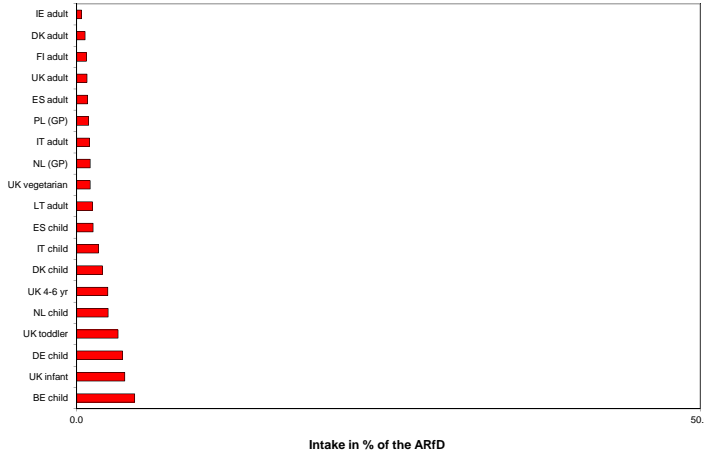
Acute exposure: Prochloraz / Peaches



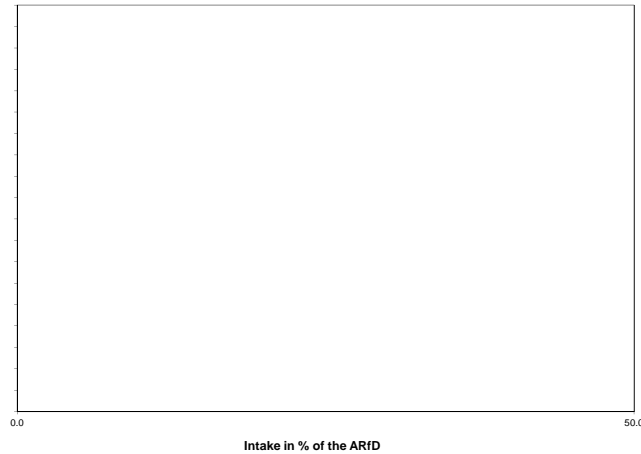
Acute exposure: Prochloraz / Strawberries



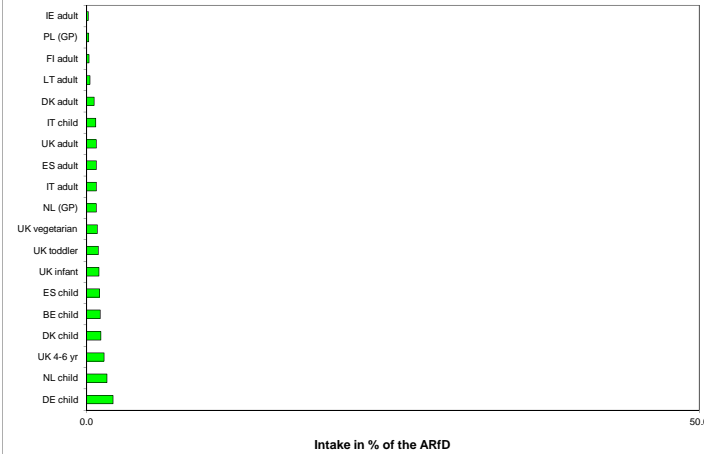
Acute exposure: Prochloraz / Tomatoes



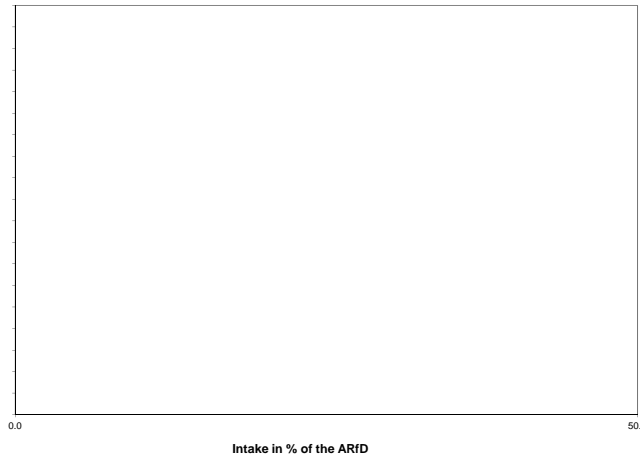
Acute exposure: Prochloraz / Head cabbage



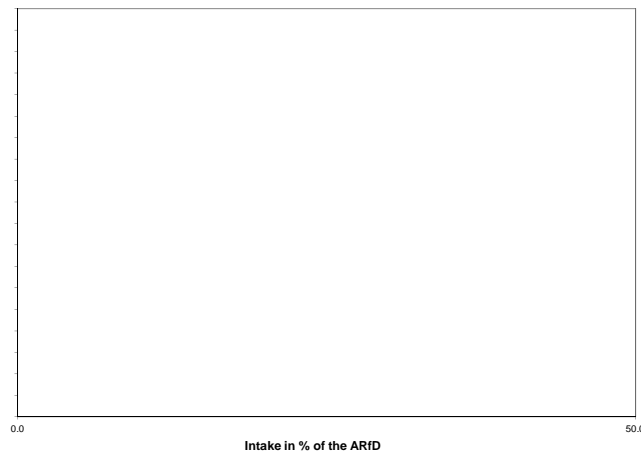
Acute exposure: Prochloraz / Lettuce



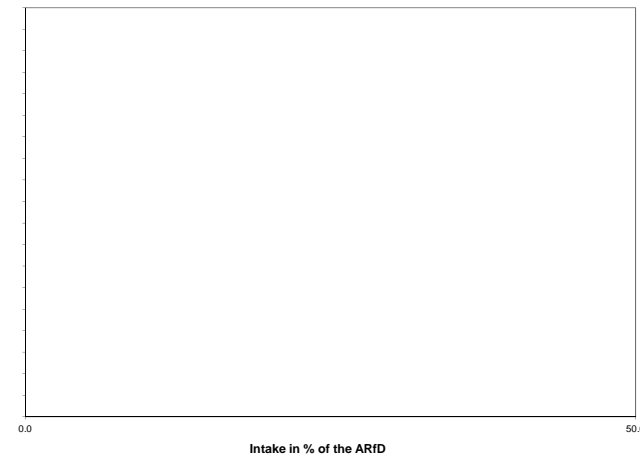
Acute exposure: Prochloraz / Leek



Acute exposure: Prochloraz / Oats



Acute exposure: Prochloraz / Rye



## Procymidone

Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.0028	ARfD (mg/kg bw):	0.012
Source of ADI:	DAR FR	Source of ARfD:	DAR FR
Year of evaluation:	2007	Year of evaluation:	2007

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
1 --- 10

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
10.38	DE child	5.93	Apples	1.16	Potatoes	0.87	Table grapes
8.05	NL child	3.11	Apples	2.67	Potatoes	0.52	Table grapes
6.54	FR toddler	2.29	Potatoes	1.29	Apples	1.09	Carrots
5.59	WHO cluster diet B	1.99	Tomatoes	1.21	Potatoes	0.50	Apples
5.45	FR infant	1.87	Potatoes	1.23	Apples	1.18	Carrots
4.89	DK child	1.14	Apples	1.10	Potatoes	0.86	Cucumbers
4.51	PT (GP)	2.41	Potatoes	0.58	Tomatoes	0.52	Apples
4.27	SE (GP)	1.89	Potatoes	0.52	Apples	0.49	Tomatoes
4.04	WHO regional diet	1.82	Potatoes	0.71	Tomatoes	0.33	Apples
3.93	PL (GP)	1.55	Potatoes	1.00	Apples	0.57	Tomatoes
3.60	UK toddler	1.58	Potatoes	0.84	Apples	0.38	Tomatoes
3.47	WHO cluster diet E	1.73	Potatoes	0.42	Apples	0.34	Tomatoes
3.44	UK infant	1.47	Potatoes	0.77	Apples	0.59	Carrots
3.41	WHO cluster diet D	1.84	Potatoes	0.65	Tomatoes	0.33	Apples
3.39	LT adult	1.44	Potatoes	0.92	Apples	0.40	Tomatoes
3.31	IE adult	1.04	Potatoes	0.40	Apples	0.34	Pears
3.12	WHO Cluster diet F	1.54	Potatoes	0.44	Tomatoes	0.32	Apples
3.00	ES child	0.83	Potatoes	0.64	Tomatoes	0.56	Apples
2.94	NL (GP)	1.24	Potatoes	0.58	Apples	0.28	Tomatoes
2.68	IT child/toddler	0.92	Tomatoes	0.44	Apples	0.41	Potatoes
2.35	IT adult	0.75	Tomatoes	0.39	Apples	0.27	Potatoes
2.30	ES adult	0.51	Tomatoes	0.42	Potatoes	0.38	Apples
1.99	DK adult	0.66	Potatoes	0.39	Apples	0.27	Tomatoes
1.85	UK vegetarian	0.62	Potatoes	0.40	Tomatoes	0.29	Apples
1.67	FR (GP)	0.51	Potatoes	0.28	Tomatoes	0.23	Apples
1.49	UK adult	0.63	Potatoes	0.28	Tomatoes	0.20	Apples
1.47	FI adult	0.55	Potatoes	0.28	Tomatoes	0.20	Apples

## Acute risk assessment

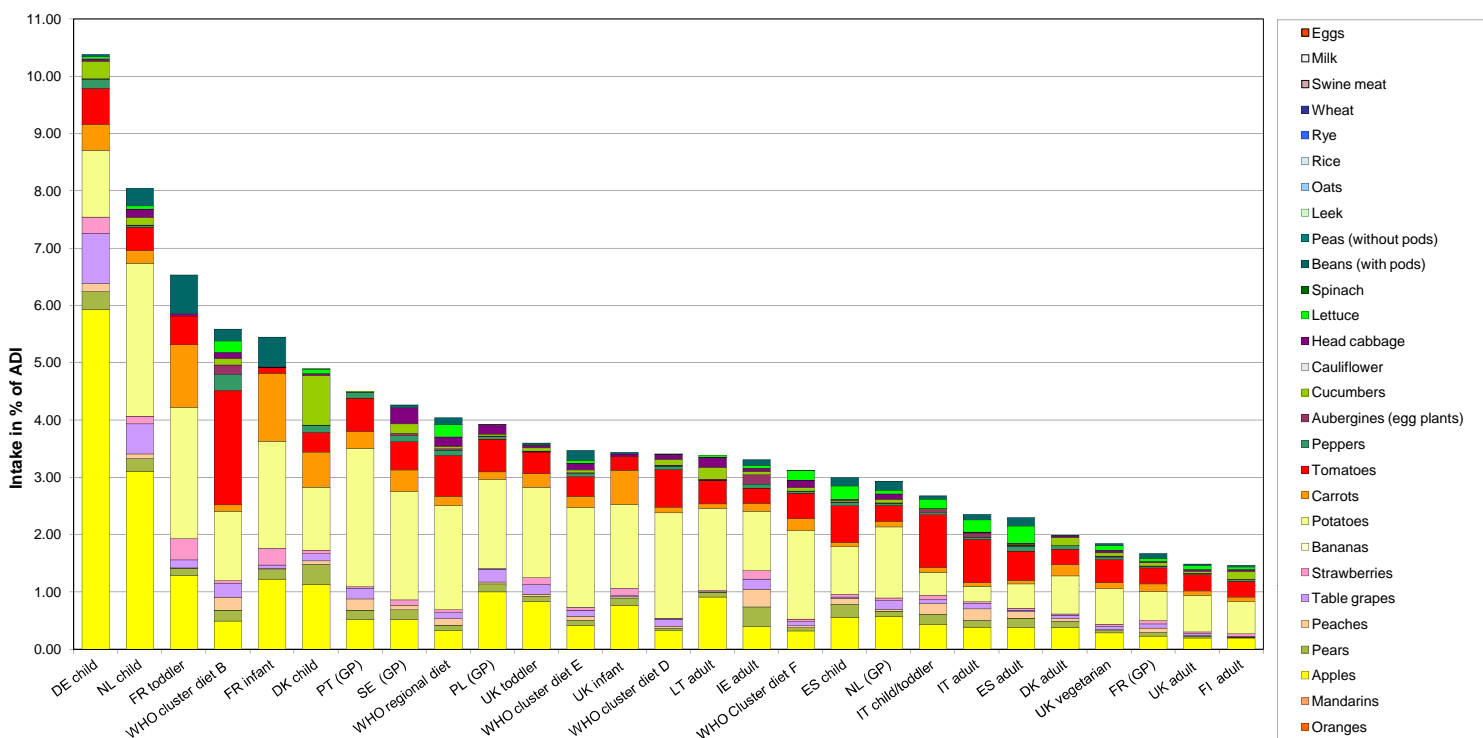
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.02	3217	0.03		0.02		16.33	UK infant	
2010	Peaches	2	1538	0.13	0.13	0.09		43.51	DE child	
2010	Strawberries	5	2362	0.68	0.13	0.59		76.66	DE child	
2010	Tomatoes	2	2639	1.71	0.08	0.47	3	227.74	BE child	
2010	Head cabbage	0.02	1290		0.08	0.02		9.21	NL child	
2010	Lettuce	5	2419	0.70	0.04	0.70	2	156.94	DE child	
2010	Leek	0.02	1025							
2010	Oats	0.02	267							
2010	Rye	0.02	459							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

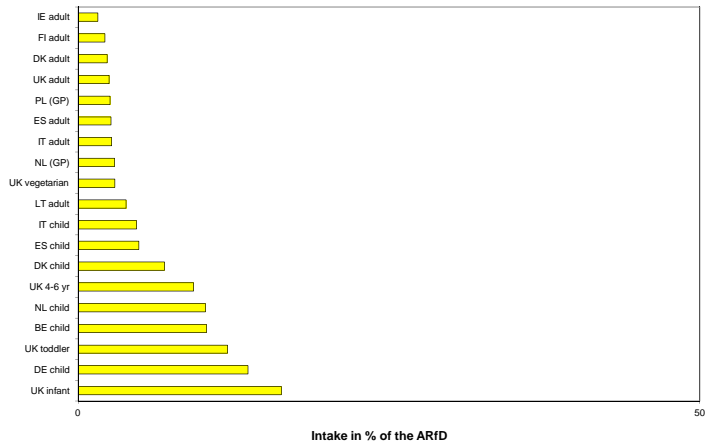
<sup>c)</sup> TRL: toxicological threshold level

## Chronic risk assessment: Procymidone

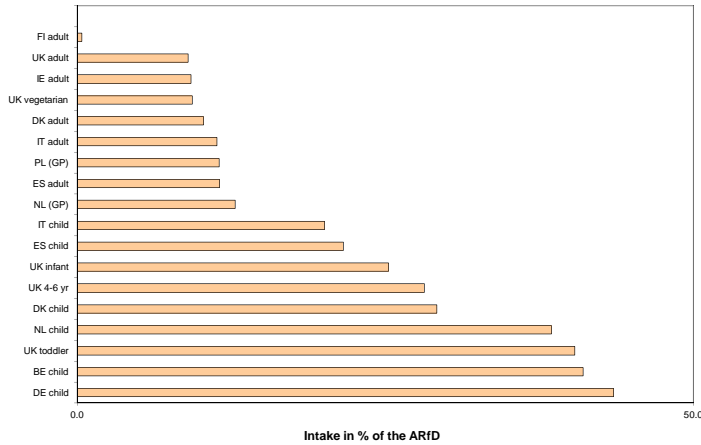


**Procymidone**

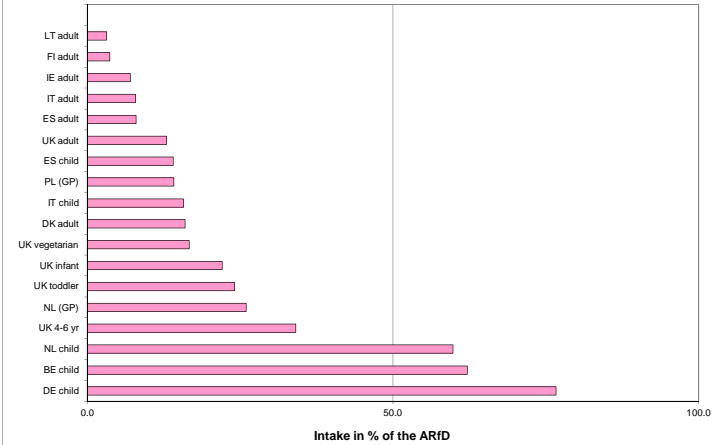
Acute exposure: Procymidone / Apples



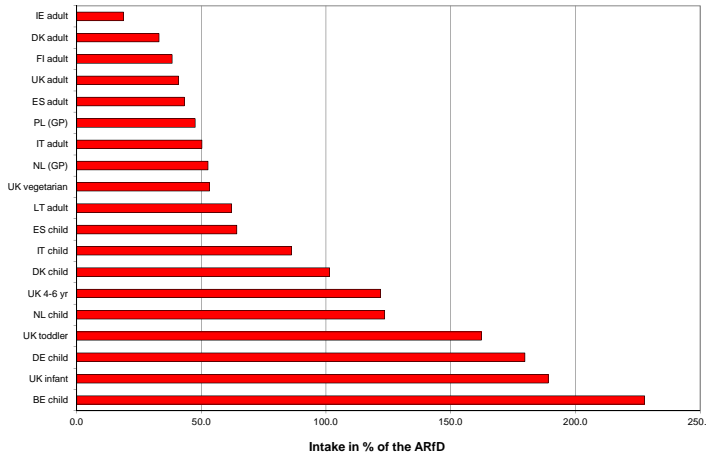
Acute exposure: Procymidone / Peaches



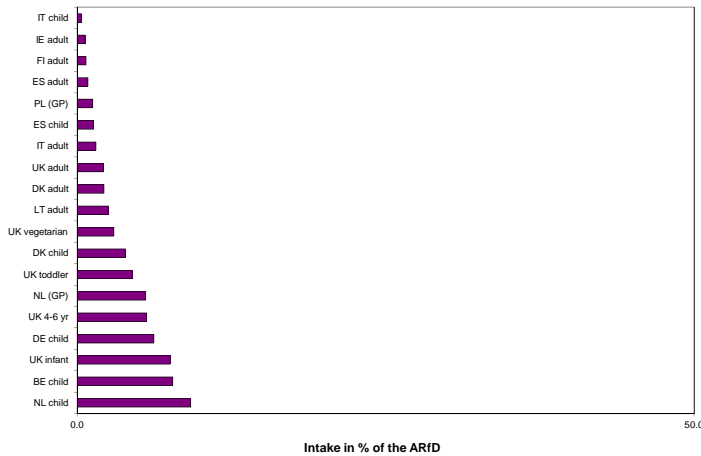
Acute exposure: Procymidone / Strawberries



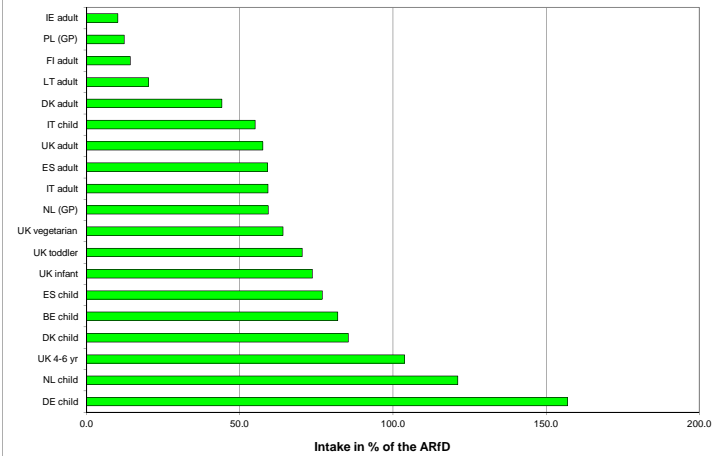
Acute exposure: Procymidone / Tomatoes



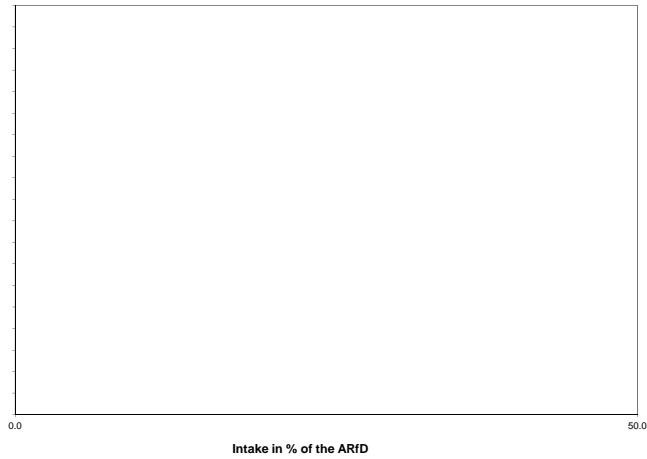
Acute exposure: Procymidone / Head cabbage



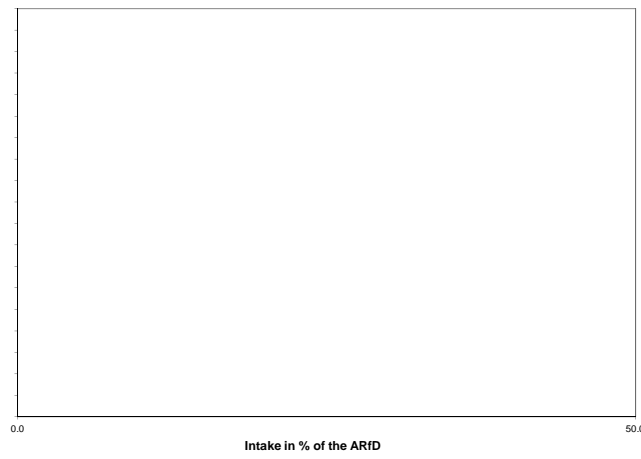
Acute exposure: Procymidone / Lettuce



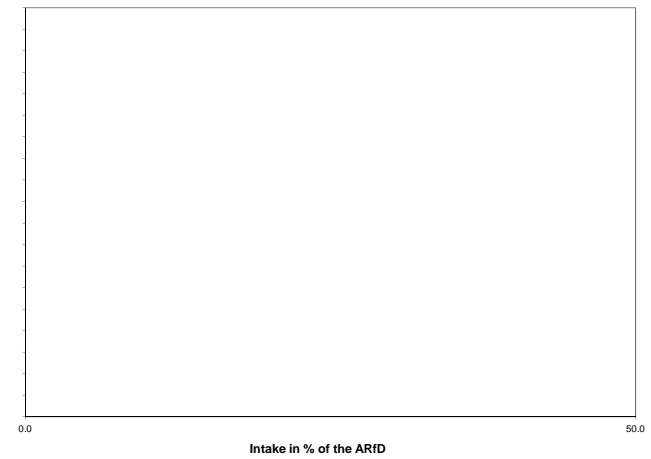
Acute exposure: Procymidone / Leek



Acute exposure: Procymidone / Oats



Acute exposure: Procymidone / Rye



## Profenofos

Status of the active substance:	<b>Excluded</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P and A</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.03</b>	ARfD (mg/kg bw):	<b>1</b>
Source of ADI:	<b>JMPR</b>	Source of ARfD:	<b>JMPR</b>
Year of evaluation:	<b>2007</b>	Year of evaluation:	<b>2007</b>

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum						
		No of diets exceeding ADI:		---				
	Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.21	DE child		0.15	Oranges	0.02	Strawberries	0.02	Peppers
0.19	NL child		0.13	Oranges	0.03	Mandarins	0.02	Beans (with pods)
0.16	FR toddler		0.08	Oranges	0.05	Beans (with pods)	0.03	Strawberries
0.12	ES child		0.09	Oranges	0.01	Beans (with pods)	0.01	Peppers
0.11	WHO cluster diet B		0.03	Oranges	0.03	Peppers	0.01	Beans (with pods)
0.10	UK toddler		0.08	Oranges	0.01	Mandarins	0.01	Strawberries
0.10	IE adult		0.04	Oranges	0.02	Mandarins	0.01	Aubergines (egg plants)
0.10	FR infant		0.04	Oranges	0.04	Beans (with pods)	0.02	Strawberries
0.09	NL (GP)		0.06	Oranges	0.01	Beans (with pods)	0.01	Mandarins
0.08	ES adult		0.05	Oranges	0.01	Beans (with pods)	0.01	Peppers
0.07	SE (GP)		0.03	Oranges	0.02	Mandarins	0.01	Peppers
0.06	UK infant		0.05	Oranges	0.01	Strawberries	0.00	Beans (with pods)
0.05	FI adult		0.04	Oranges	0.00	Mandarins	0.00	Strawberries
0.05	WHO Cluster diet F		0.04	Oranges	0.01	Mandarins	0.00	Peppers
0.05	UK vegetarian		0.04	Oranges	0.00	Peppers	0.00	Strawberries
0.05	WHO regional diet		0.02	Oranges	0.01	Peppers	0.01	Beans (with pods)
0.05	WHO cluster diet E		0.02	Oranges	0.01	Beans (with pods)	0.01	Mandarins
0.04	IT child/toddler		0.02	Oranges	0.01	Mandarins	0.00	Strawberries
0.04	PT (GP)		0.02	Oranges	0.01	Peppers	0.00	Mandarins
0.04	IT adult		0.02	Oranges	0.01	Mandarins	0.01	Beans (with pods)
0.03	FR (GP)		0.01	Oranges	0.01	Mandarins	0.01	Beans (with pods)
0.03	UK adult		0.02	Oranges	0.00	Peppers	0.00	Mandarins
0.03	DK child		0.01	Peppers	0.01	Oranges	0.00	Strawberries
0.02	WHO cluster diet D		0.01	Oranges	0.01	Peppers	0.00	Mandarins
0.02	DK adult		0.01	Peppers	0.01	Oranges	0.00	Mandarins
0.01	PL (GP)		0.00	Peppers	0.00	Mandarins	0.00	Strawberries
0.01	LT adult		0.00	Oranges	0.00	Strawberries	0.00	Peppers

### Acute risk assessment

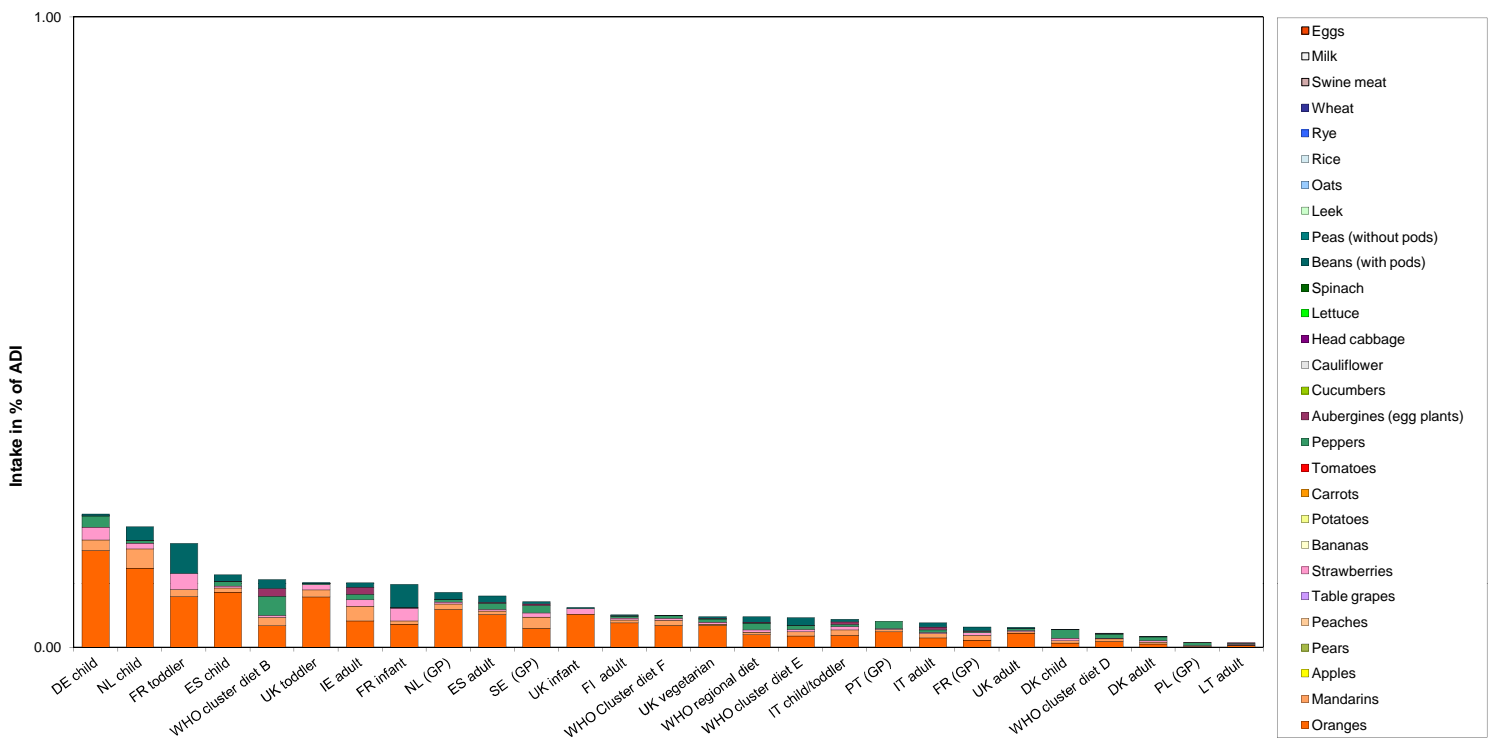
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	2861							
2010	Peaches	0.05	1351							
2010	Strawberries	0.05	2164	0.14	0.09	0.09		0.14	DE child	
2010	Tomatoes		2295							
2010	Head cabbage	0.05	1162							
2010	Lettuce	0.05	2202							
2010	Leek	0.05	895							
2010	Oats	0.05	145							
2010	Rye	0.05	368							
2010	Swine Meat	0.05	421							
2010	Milk	0.05	636							

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Profenofos



**Profenofos**

Acute exposure: Profenofos / Apples



Intake in % of the ARfD

Acute exposure: Profenofos / Peaches



Intake in % of the ARfD

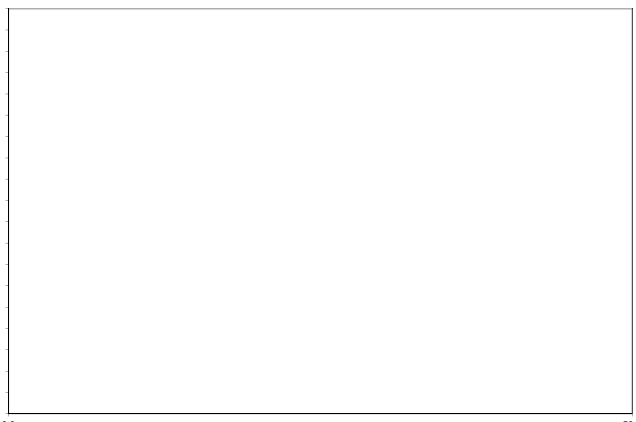
Acute exposure: Profenofos / Strawberries



- LT adult
- FI adult
- IE adult
- IT adult
- ES adult
- UK adult
- ES child
- PL (GP)
- IT child
- DK adult
- UK vegetarian
- UK infant
- UK toddler
- NL (GP)
- UK 4-6 yr
- NL child
- BE child
- DE child

Intake in % of the ARfD

Acute exposure: Profenofos / Tomatoes



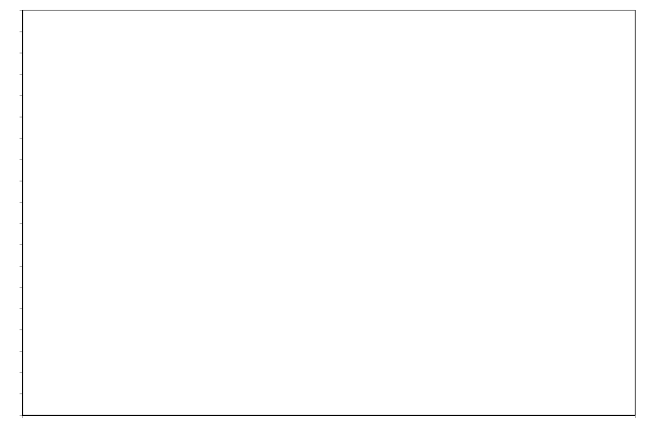
Intake in % of the ARfD

Acute exposure: Profenofos / Head cabbage



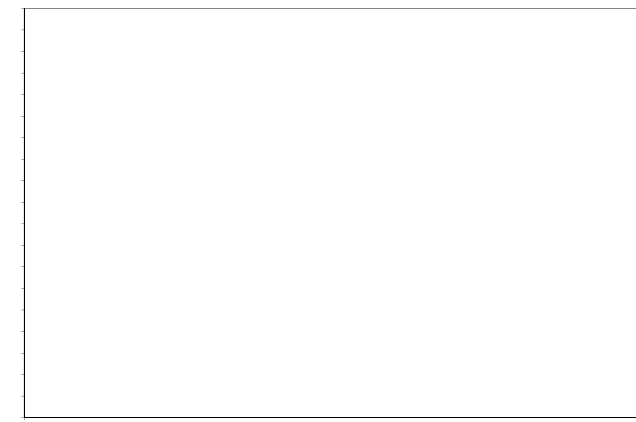
Intake in % of the ARfD

Acute exposure: Profenofos / Lettuce



Intake in % of the ARfD

Acute exposure: Profenofos / Leek



Intake in % of the ARfD

Acute exposure: Profenofos / Oats



Intake in % of the ARfD

Acute exposure: Profenofos / Rye



Intake in % of the ARfD

## Propamocarb

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:	<b>Yes</b>	Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.244</b>	ARfD (mg/kg bw):	<b>0.84</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2007</b>	Year of evaluation:	<b>2007</b>

The toxicological reference values which were derived for propamocarb hydrochloride were recalculated to propamocarb to match with the residue definition.

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum					
		No of diets exceeding ADI:		---			
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.13	WHO cluster diet B	0.04	Wheat	0.03	Lettuce	0.03	Tomatoes
0.11	DK child	0.04	Cucumbers	0.03	Wheat	0.01	Potatoes
0.10	NL child	0.03	Potatoes	0.02	Wheat	0.01	Bananas
0.09	DE child	0.02	Wheat	0.01	Cucumbers	0.01	Potatoes
0.09	WHO regional diet	0.03	Lettuce	0.02	Potatoes	0.01	Wheat
0.09	FR toddler	0.02	Potatoes	0.01	Wheat	0.01	Carrots
0.09	ES child	0.03	Lettuce	0.02	Wheat	0.01	Potatoes
0.08	IT child/toddler	0.03	Wheat	0.02	Lettuce	0.01	Tomatoes
0.08	WHO Cluster diet F	0.02	Lettuce	0.02	Wheat	0.02	Potatoes
0.08	ES adult	0.04	Lettuce	0.01	Wheat	0.01	Tomatoes
0.07	SE (GP)	0.02	Potatoes	0.02	Wheat	0.01	Bananas
0.07	IT adult	0.03	Lettuce	0.02	Wheat	0.01	Tomatoes
0.07	WHO cluster diet D	0.03	Wheat	0.02	Potatoes	0.01	Tomatoes
0.06	PT (GP)	0.03	Potatoes	0.02	Wheat	0.01	Tomatoes
0.06	WHO cluster diet E	0.02	Wheat	0.02	Potatoes	0.01	Lettuce
0.06	UK toddler	0.02	Wheat	0.02	Potatoes	0.01	Bananas
0.06	FR infant	0.02	Potatoes	0.01	Carrots	0.00	Wheat
0.06	IE adult	0.01	Wheat	0.01	Potatoes	0.01	Lettuce
0.05	NL (GP)	0.01	Potatoes	0.01	Wheat	0.01	Lettuce
0.05	UK infant	0.02	Potatoes	0.01	Wheat	0.01	Bananas
0.04	LT adult	0.02	Potatoes	0.01	Cucumbers	0.01	Wheat
0.04	UK vegetarian	0.01	Lettuce	0.01	Wheat	0.01	Potatoes
0.04	FR (GP)	0.02	Wheat	0.01	Lettuce	0.01	Potatoes
0.04	PL (GP)	0.02	Potatoes	0.01	Tomatoes	0.00	Head cabbage
0.03	UK adult	0.01	Lettuce	0.01	Wheat	0.01	Potatoes
0.03	DK adult	0.01	Wheat	0.01	Potatoes	0.01	Cucumbers
0.03	FI adult	0.01	Lettuce	0.01	Potatoes	0.01	Cucumbers

### Acute risk assessment

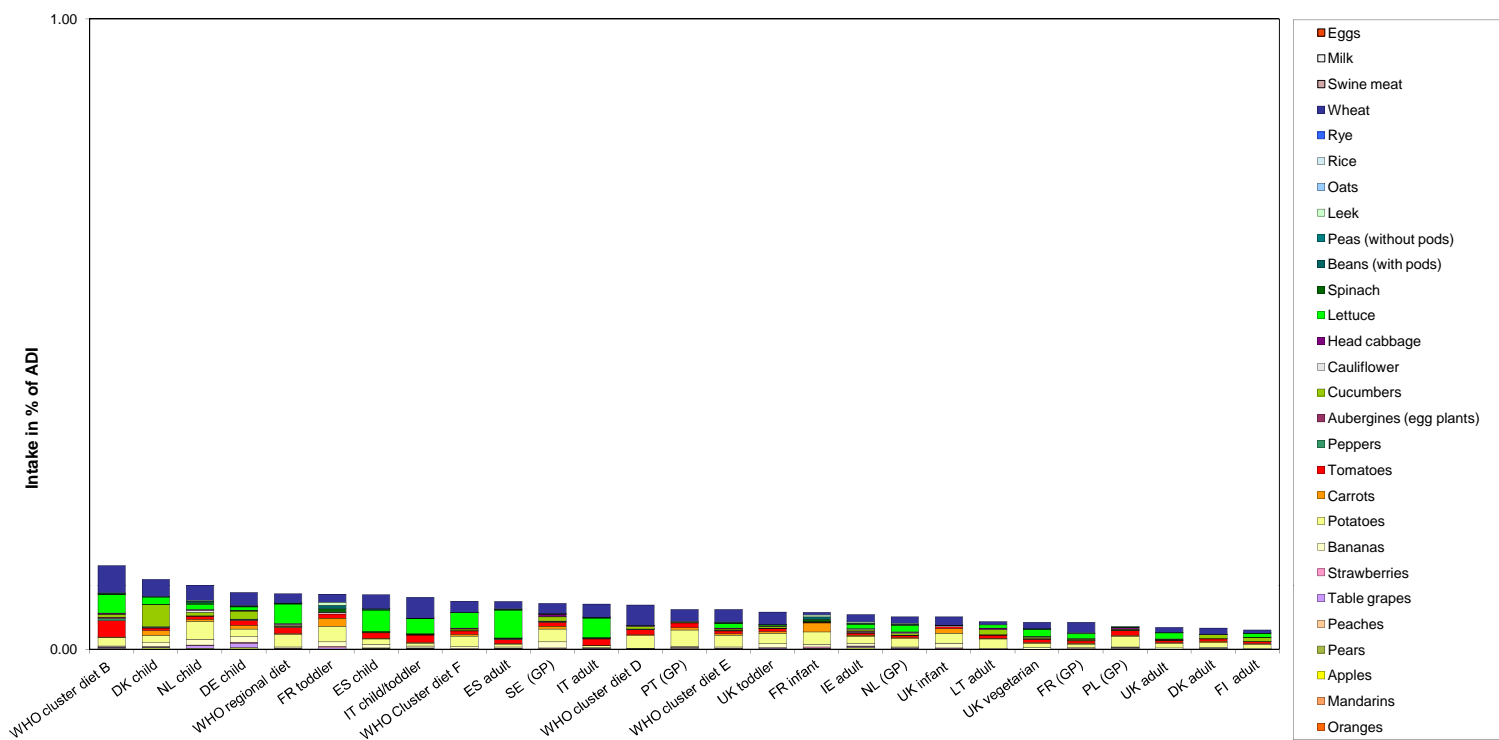
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	10	2008							
2010	Peaches	0.1	1017	0.10		0.03		0.23	DE child	
2010	Strawberries	10	1667	0.24		0.07		0.13	DE child	
2010	Tomatoes	10	1539	5.78		0.80		5.54	BE child	
2010	Head cabbage	10	817	0.98		0.66		4.14	NL child	
2010	Lettuce	50	1496	16.78		17.10		54.77	DE child	
2010	Leek	10	631	4.91		0.80		5.61	BE child	
2010	Oats	0.1	91							
2010	Rye	0.1	289							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

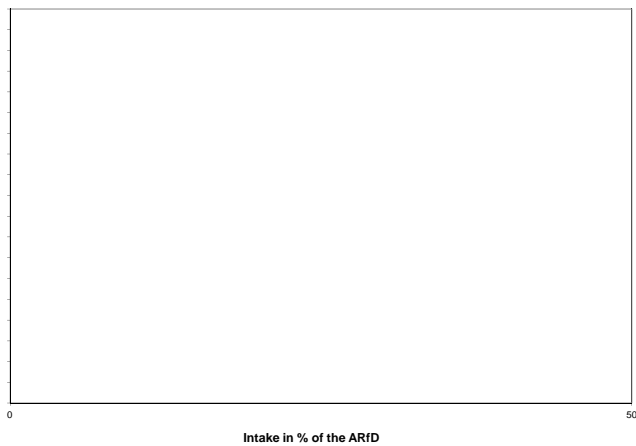
<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Propamocarb

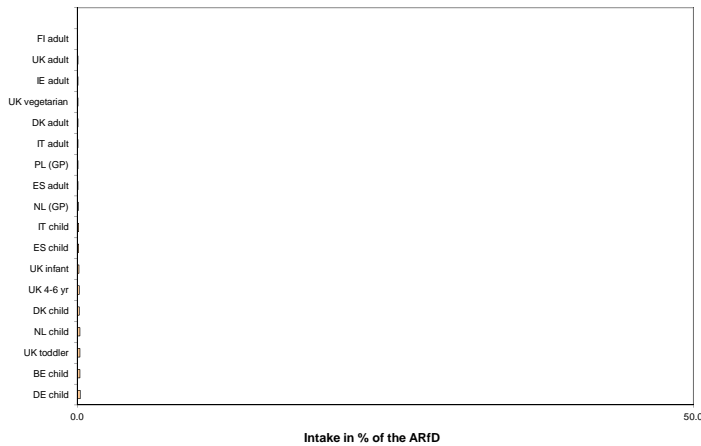


**Propamocarb**

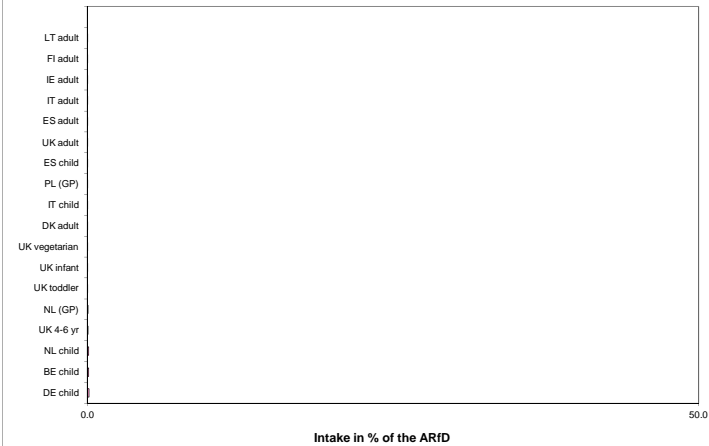
Acute exposure: Propamocarb / Apples



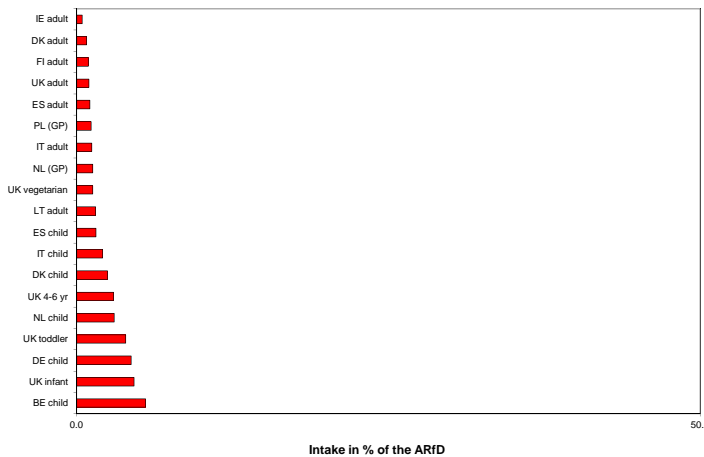
Acute exposure: Propamocarb / Peaches



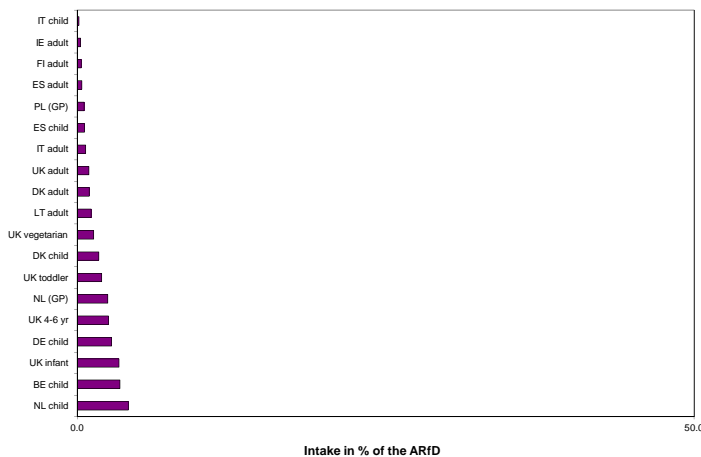
Acute exposure: Propamocarb / Strawberries



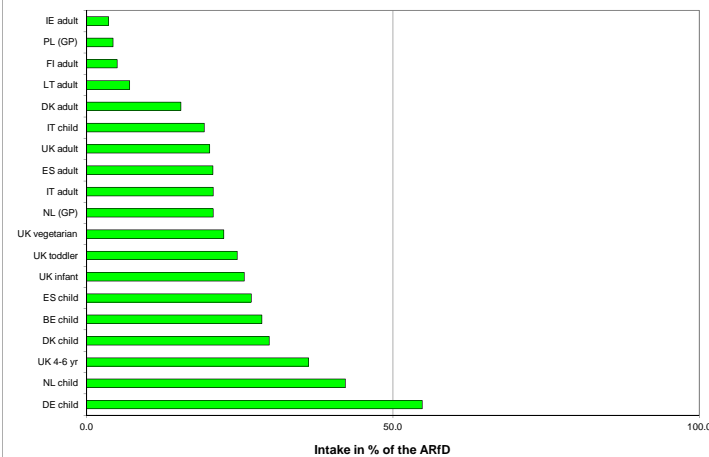
Acute exposure: Propamocarb / Tomatoes



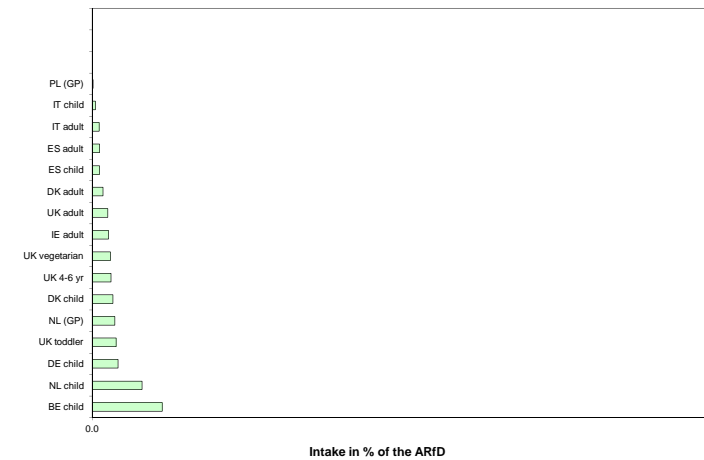
Acute exposure: Propamocarb / Head cabbage



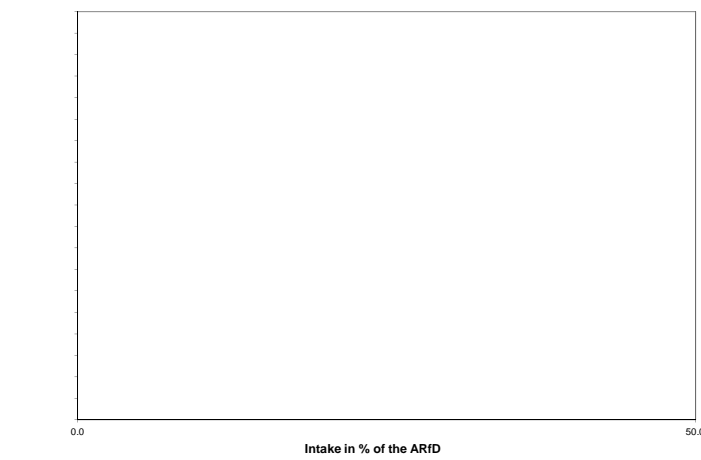
Acute exposure: Propamocarb / Lettuce



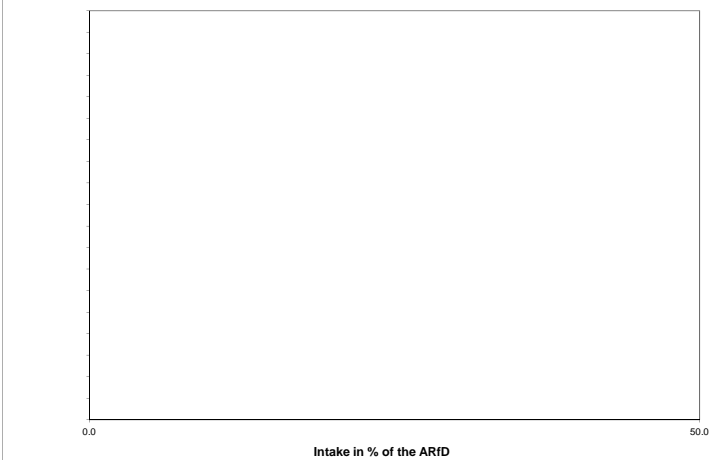
Acute exposure: Propamocarb / Leek



Acute exposure: Propamocarb / Oats



Acute exposure: Propamocarb / Rye





Propargite			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):		ARfD (mg/kg bw):	
Source of ADI:	EFSA	Source of ARfD:	EFSA
Year of evaluation:	2011	Year of evaluation:	2011

EFSA conclusion: unable to allocate ADI/ARfD due to data gaps. PPDB: ADI 0.007; ARfD 0.0225, <http://sitem.herts.ac.uk/aeru/iupac/Reports/547.htm>

**Chronic risk assessment**

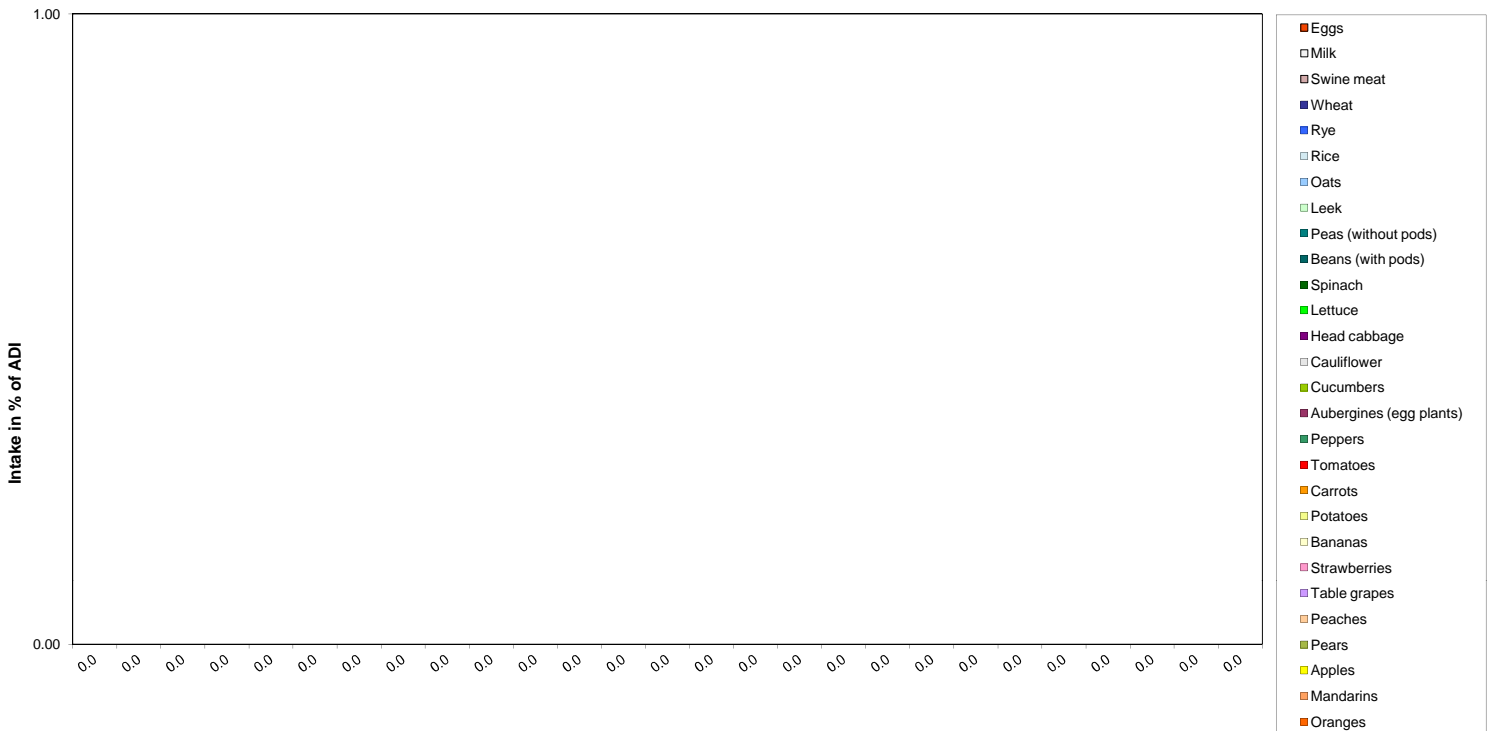
Exposure (range) in % of ADI minimum - maximum #DIV/0! #DIV/0!		No of diets exceeding ADI: ---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities

**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	3	2790	3.33	0.04	7.35				
2010	Peaches	4	1306	2.45		1.60				
2010	Strawberries	0.01	2017		0.05	0.02				
2010	Tomatoes	2	2107	0.47		0.86				
2010	Head cabbage	0.01	1082							
2010	Lettuce	0.01	2168							
2010	Leek	0.01	821							
2010	Oats	0.01	156							
2010	Rye	0.01	341							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Propargite**



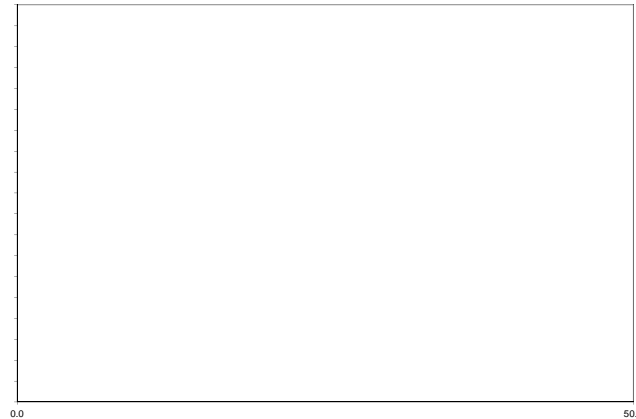
**Propargite**

Acute exposure: Propargite / Apples



Intake in % of the ARfD

Acute exposure: Propargite / Peaches



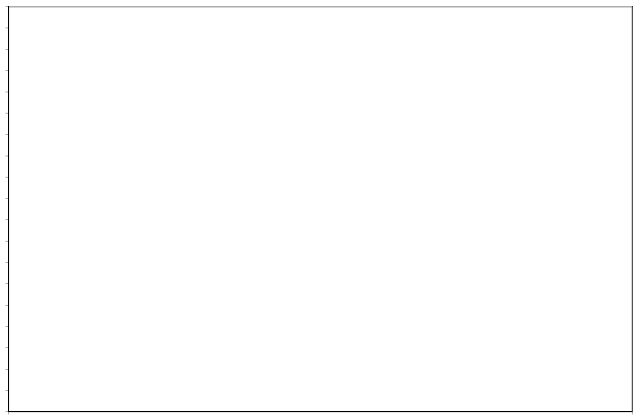
Intake in % of the ARfD

Acute exposure: Propargite / Strawberries



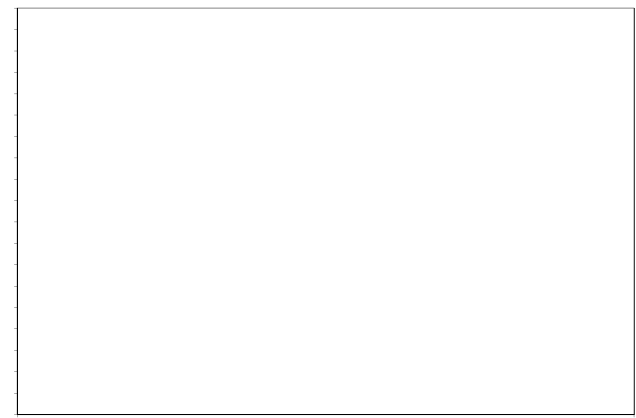
Intake in % of the ARfD

Acute exposure: Propargite / Tomatoes



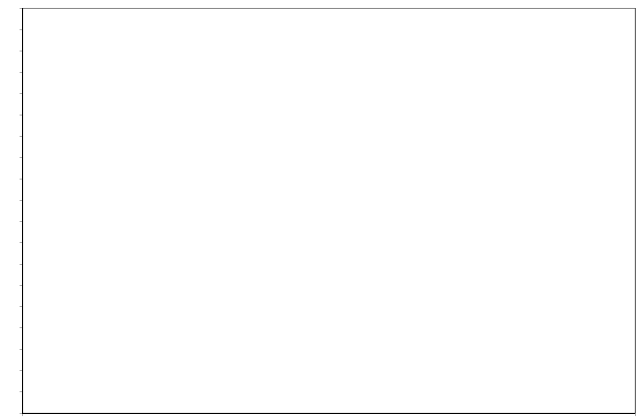
Intake in % of the ARfD

Acute exposure: Propargite / Head cabbage



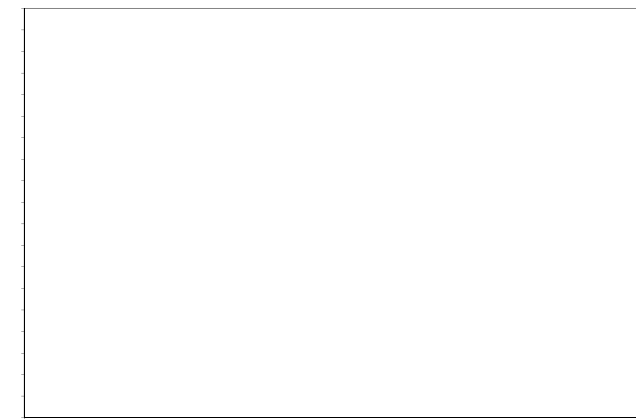
Intake in % of the ARfD

Acute exposure: Propargite / Lettuce



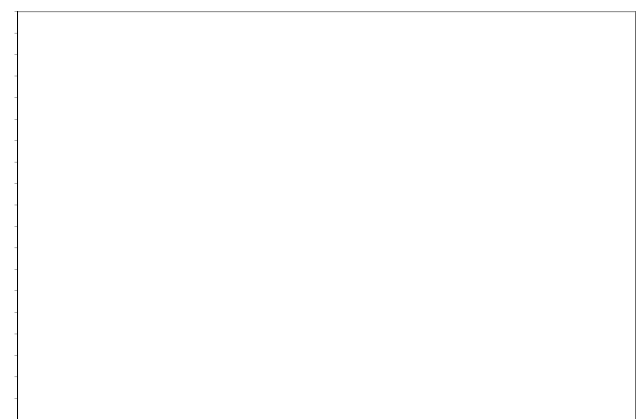
Intake in % of the ARfD

Acute exposure: Propargite / Leek



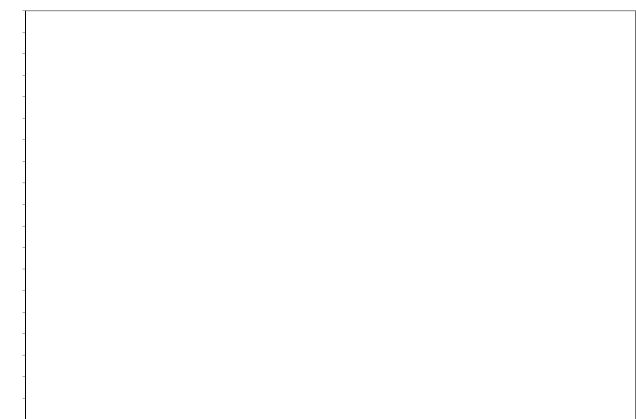
Intake in % of the ARfD

Acute exposure: Propargite / Oats



Intake in % of the ARfD

Acute exposure: Propargite / Rye



Intake in % of the ARfD

## Propiconazole

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.04</b>	ARfD (mg/kg bw):	<b>0.3</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2003</b>	Year of evaluation:	<b>2003</b>

### Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum

**No of diets exceeding ADI:** ---

	Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.31	DE child		0.11	Oranges	0.05	Bananas	0.04	Table grapes
0.27	NL child		0.09	Oranges	0.05	Bananas	0.03	Table grapes
0.27	FR toddler		0.08	Carrots	0.06	Oranges	0.04	Bananas
0.20	FR infant		0.08	Carrots	0.03	Oranges	0.02	Beans (with pods)
0.16	SE (GP)		0.06	Bananas	0.03	Carrots	0.02	Oranges
0.16	UK infant		0.05	Bananas	0.04	Carrots	0.04	Oranges
0.16	ES child		0.06	Oranges	0.03	Bananas	0.02	Pears
0.16	UK toddler		0.06	Oranges	0.03	Bananas	0.02	Rice
0.15	IE adult		0.03	Oranges	0.03	Bananas	0.02	Pears
0.14	WHO cluster diet B		0.03	Oranges	0.02	Peppers	0.02	Rice
0.13	DK child		0.04	Carrots	0.04	Bananas	0.02	Pears
0.11	PT (GP)		0.02	Rice	0.02	Carrots	0.02	Oranges
0.10	NL (GP)		0.04	Oranges	0.01	Bananas	0.01	Table grapes
0.10	ES adult		0.04	Oranges	0.01	Bananas	0.01	Pears
0.08	WHO Cluster diet F		0.03	Oranges	0.02	Bananas	0.01	Carrots
0.08	IT child/toddler		0.02	Bananas	0.01	Oranges	0.01	Pears
0.08	WHO cluster diet E		0.01	Carrots	0.01	Oranges	0.01	Bananas
0.08	WHO regional diet		0.01	Oranges	0.01	Bananas	0.01	Carrots
0.07	UK vegetarian		0.03	Oranges	0.01	Bananas	0.01	Rice
0.07	IT adult		0.01	Peaches	0.01	Oranges	0.01	Pears
0.05	FI adult		0.03	Oranges	0.01	Bananas	0.01	Carrots
0.05	UK adult		0.02	Oranges	0.01	Bananas	0.01	Rice
0.05	FR (GP)		0.01	Carrots	0.01	Oranges	0.01	Bananas
0.05	WHO cluster diet D		0.02	Rice	0.01	Carrots	0.01	Oranges
0.05	DK adult		0.01	Carrots	0.01	Bananas	0.01	Pears
0.04	PL (GP)		0.01	Table grapes	0.01	Pears	0.01	Carrots
0.02	LT adult		0.01	Rice	0.01	Carrots	0.01	Pears

### Acute risk assessment

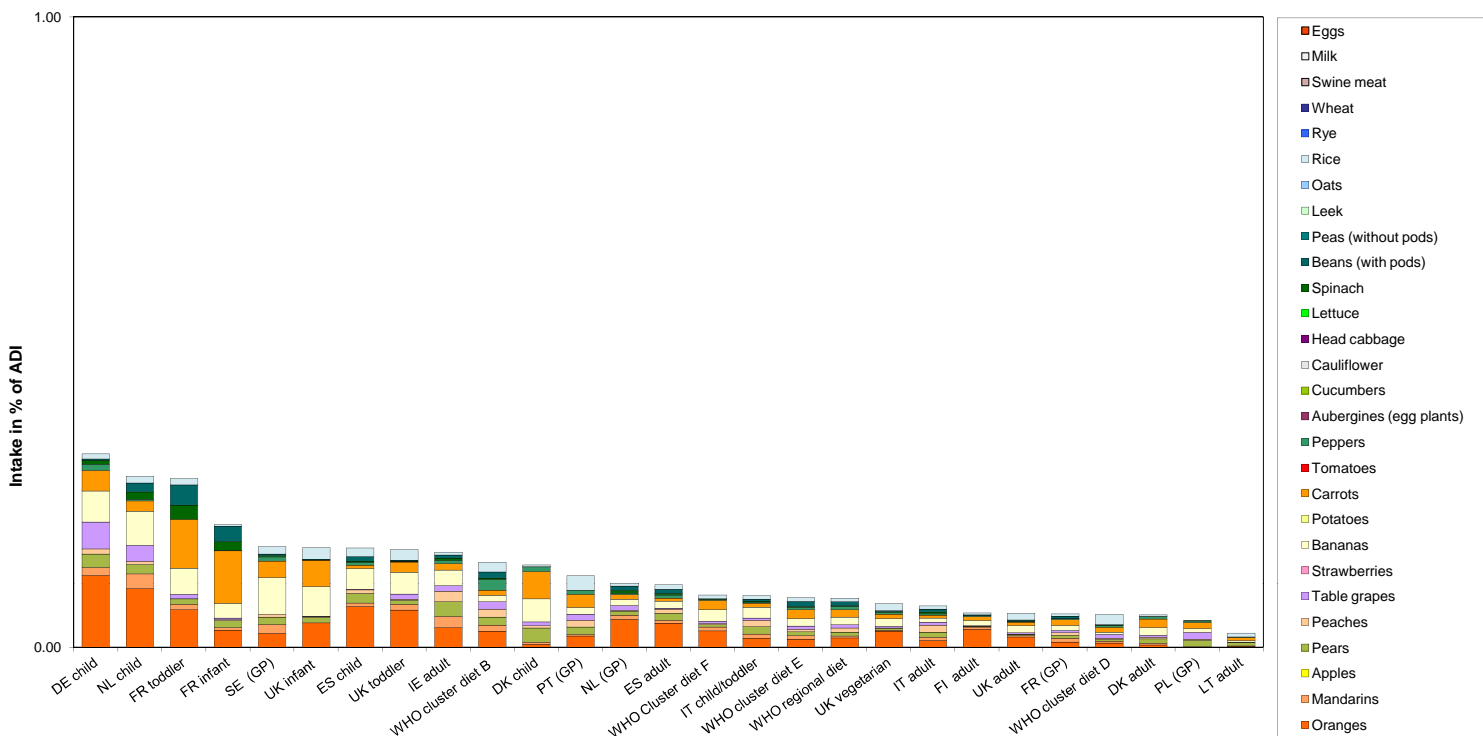
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	2944							
2010	Peaches	0.2	1398			0.04		0.69	DE child	
2010	Strawberries	0.05	2224							
2010	Tomatoes	0.05	2381	0.04		0.01		0.21	BE child	
2010	Head cabbage	0.05	1142							
2010	Lettuce	0.05	2293							
2010	Leek	0.1	904							
2010	Oats	0.2	264							
2010	Rye	0.05	418							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

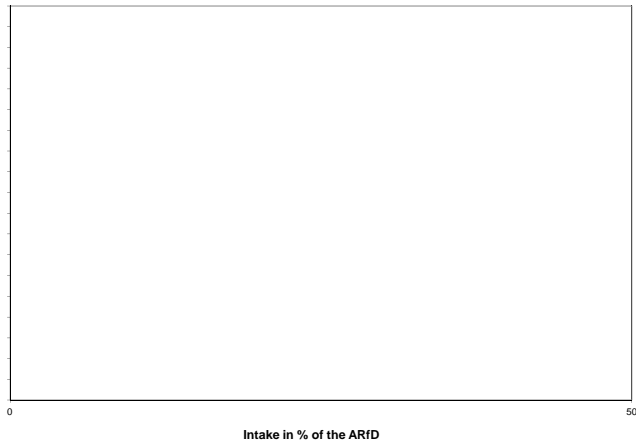
<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Propiconazole

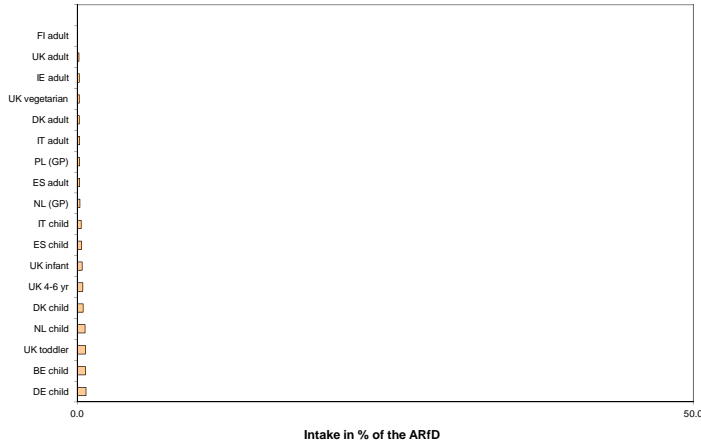


**Propiconazole**

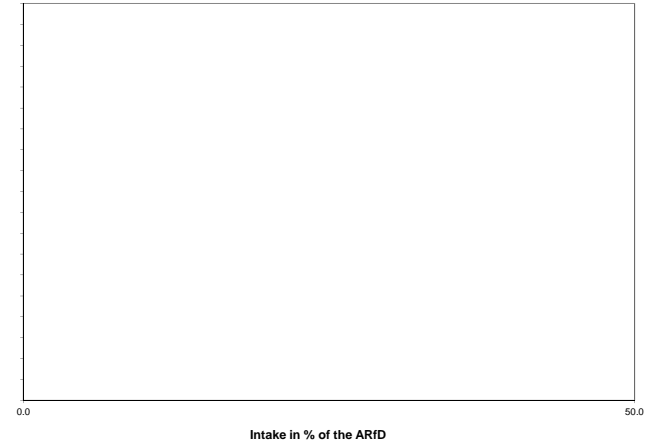
Acute exposure: Propiconazole / Apples



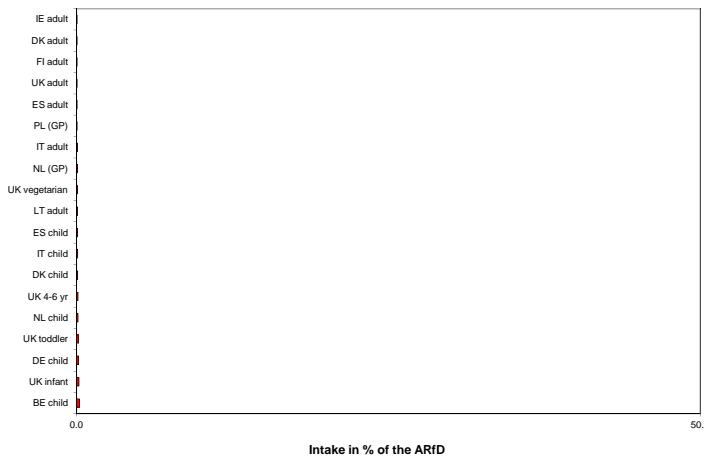
Acute exposure: Propiconazole / Peaches



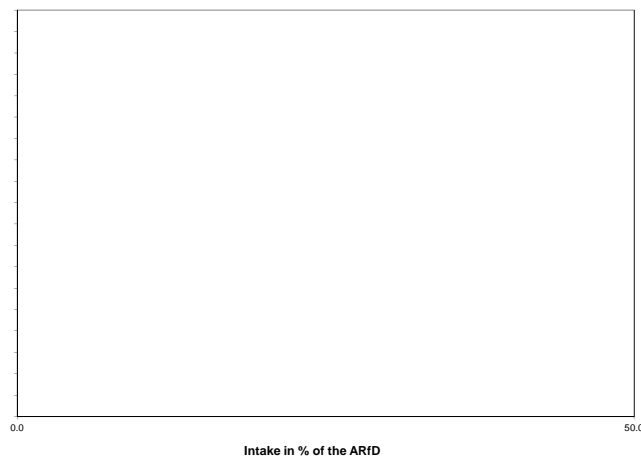
Acute exposure: Propiconazole / Strawberries



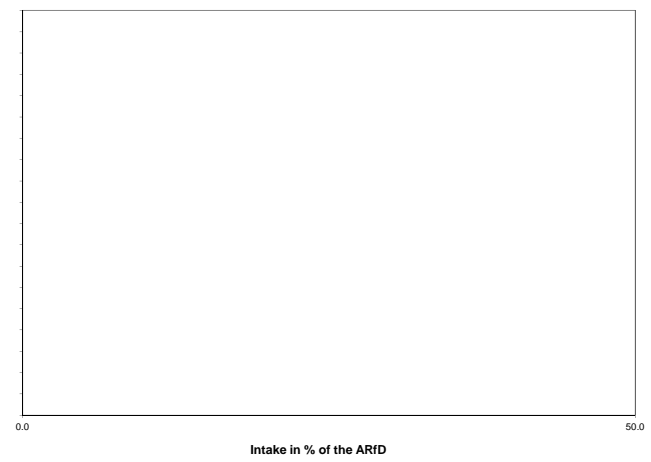
Acute exposure: Propiconazole / Tomatoes



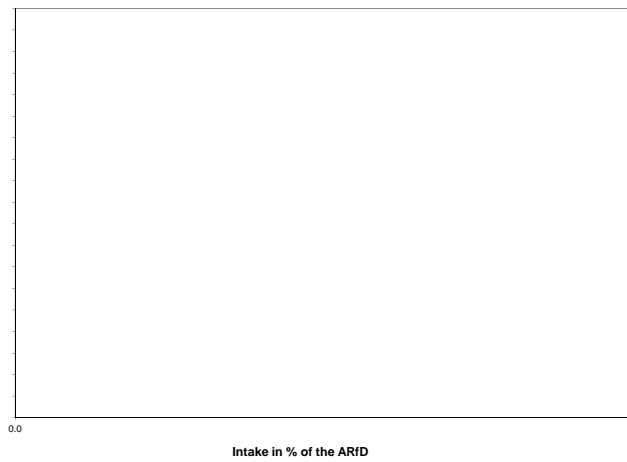
Acute exposure: Propiconazole / Head cabbage



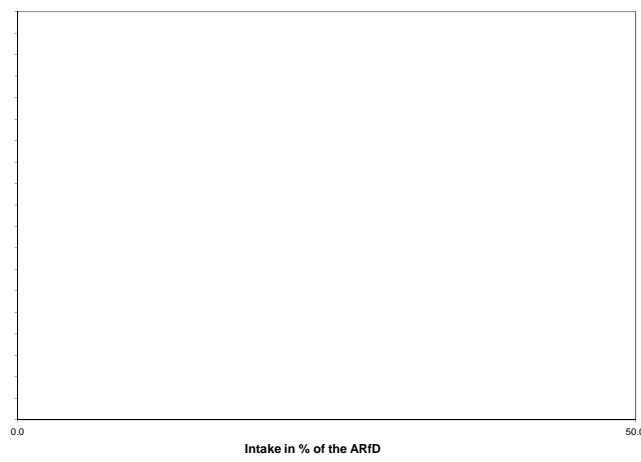
Acute exposure: Propiconazole / Lettuce



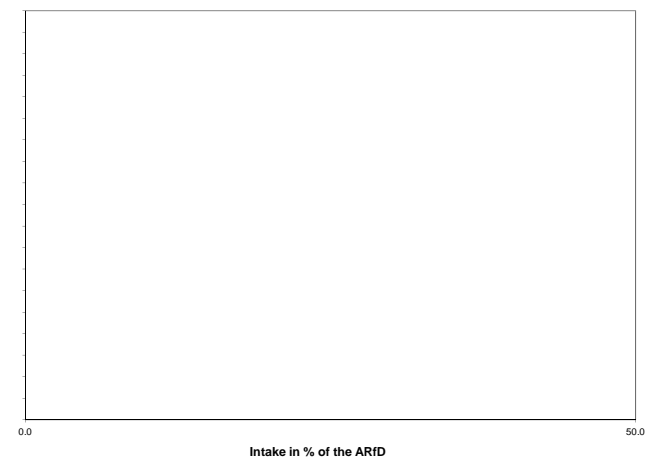
Acute exposure: Propiconazole / Leek



Acute exposure: Propiconazole / Oats



Acute exposure: Propiconazole / Rye



## Propyzamide

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.02</b>	ARfD (mg/kg bw):	<b>n.n.</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2003</b>	Year of evaluation:	<b>2003</b>

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum						
		No of diets exceeding ADI:		---				
	Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.34	DE child		0.22	Oranges	0.06	Tomatoes	0.04	Pears
0.29	WHO cluster diet B		0.19	Tomatoes	0.05	Oranges	0.02	Lettuce
0.26	NL child		0.18	Oranges	0.04	Tomatoes	0.02	Pears
0.24	ES child		0.12	Oranges	0.06	Tomatoes	0.03	Lettuce
0.21	FR toddler		0.11	Oranges	0.05	Tomatoes	0.04	Strawberries
0.18	ES adult		0.07	Oranges	0.05	Tomatoes	0.04	Lettuce
0.17	UK toddler		0.11	Oranges	0.04	Tomatoes	0.01	Strawberries
0.16	IT child/toddler		0.09	Tomatoes	0.03	Oranges	0.02	Lettuce
0.14	IE adult		0.06	Oranges	0.04	Pears	0.02	Tomatoes
0.14	WHO regional diet		0.07	Tomatoes	0.03	Oranges	0.03	Lettuce
0.14	IT adult		0.07	Tomatoes	0.03	Lettuce	0.02	Oranges
0.13	NL (GP)		0.08	Oranges	0.03	Tomatoes	0.01	Pears
0.12	UK infant		0.07	Oranges	0.02	Tomatoes	0.01	Pears
0.12	WHO Cluster diet F		0.05	Oranges	0.04	Tomatoes	0.02	Lettuce
0.12	SE (GP)		0.05	Tomatoes	0.04	Oranges	0.02	Pears
0.11	PT (GP)		0.06	Tomatoes	0.03	Oranges	0.02	Pears
0.11	FR infant		0.05	Oranges	0.03	Strawberries	0.02	Pears
0.11	UK vegetarian		0.05	Oranges	0.04	Tomatoes	0.01	Lettuce
0.10	DK child		0.04	Pears	0.03	Tomatoes	0.01	Lettuce
0.09	FI adult		0.06	Oranges	0.03	Tomatoes	0.01	Lettuce
0.08	WHO cluster diet D		0.06	Tomatoes	0.01	Oranges	0.00	Pears
0.08	WHO cluster diet E		0.03	Tomatoes	0.03	Oranges	0.01	Pears
0.07	PL (GP)		0.05	Tomatoes	0.02	Pears	0.00	Strawberries
0.07	UK adult		0.03	Oranges	0.03	Tomatoes	0.01	Lettuce
0.06	FR (GP)		0.03	Tomatoes	0.02	Oranges	0.01	Pears
0.06	LT adult		0.04	Tomatoes	0.01	Pears	0.00	Lettuce
0.05	DK adult		0.03	Tomatoes	0.01	Pears	0.01	Oranges

### Acute risk assessment

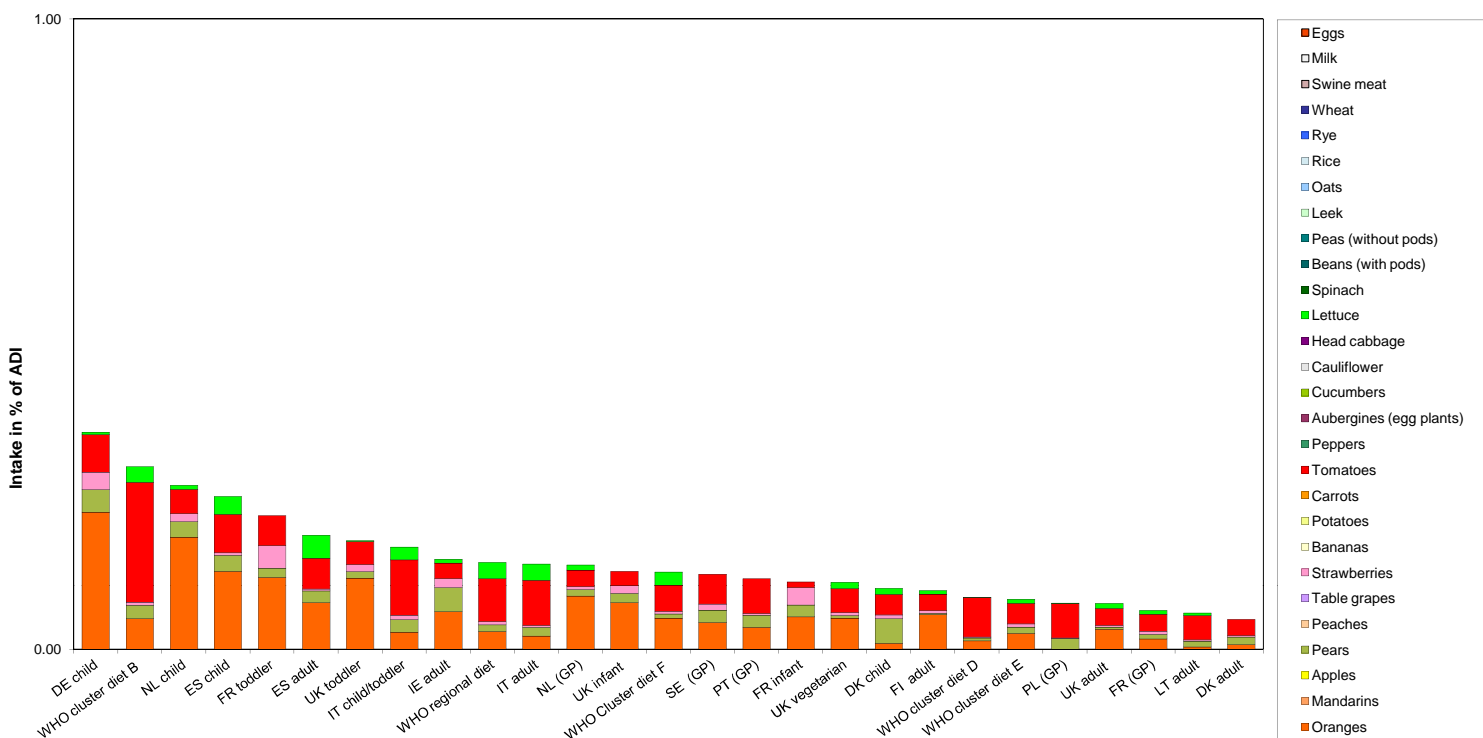
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.02	2927							
2010	Peaches	0.02	1434							
2010	Strawberries	0.02	2226	0.13		0.02				
2010	Tomatoes	0.02	2372	0.04		0.00				
2010	Head cabbage	0.02	1186							
2010	Lettuce	1	2333	4.07		0.69				
2010	Leek	0.02	940							
2010	Oats	0.02	183							
2010	Rye	0.02	473							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Propyzamide



**Propyzamide**

Acute exposure: Propyzamide / Apples



Intake in % of the ARfD

Acute exposure: Propyzamide / Peaches



Intake in % of the ARfD

Acute exposure: Propyzamide / Strawberries



Intake in % of the ARfD

Acute exposure: Propyzamide / Tomatoes



Intake in % of the ARfD

Acute exposure: Propyzamide / Head cabbage



Intake in % of the ARfD

Acute exposure: Propyzamide / Lettuce



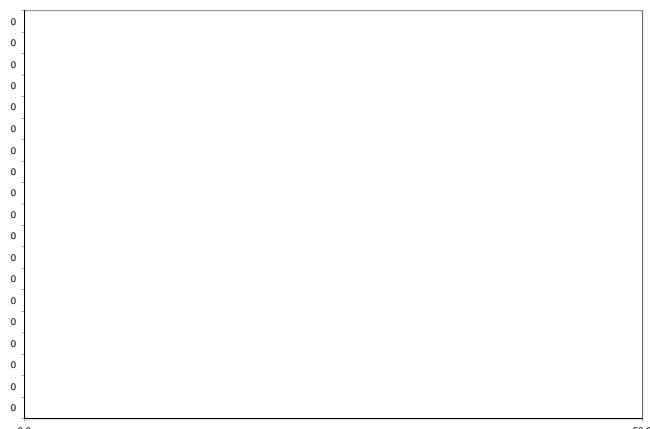
Intake in % of the ARfD

Acute exposure: Propyzamide / Leek



Intake in % of the ARfD

Acute exposure: Propyzamide / Oats



Intake in % of the ARfD

Acute exposure: Propyzamide / Rye



Intake in % of the ARfD



**Prothioconazole**

Acute exposure: Prothioconazole / Apples



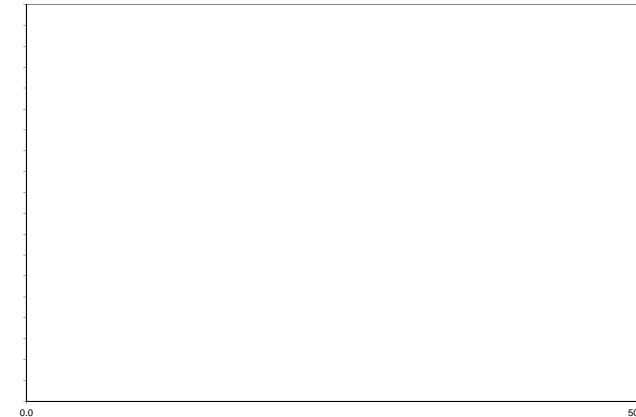
Intake in % of the ARfD

Acute exposure: Prothioconazole / Peaches



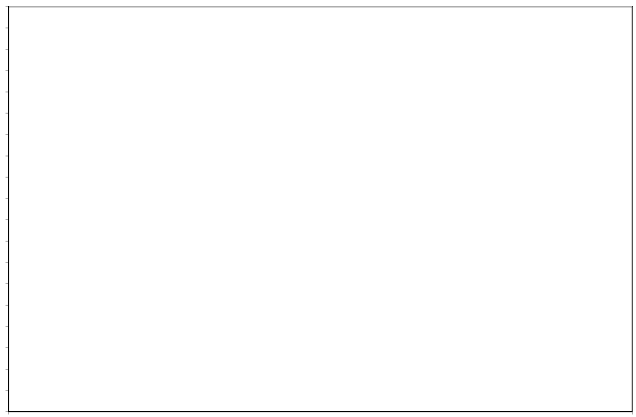
Intake in % of the ARfD

Acute exposure: Prothioconazole / Strawberries



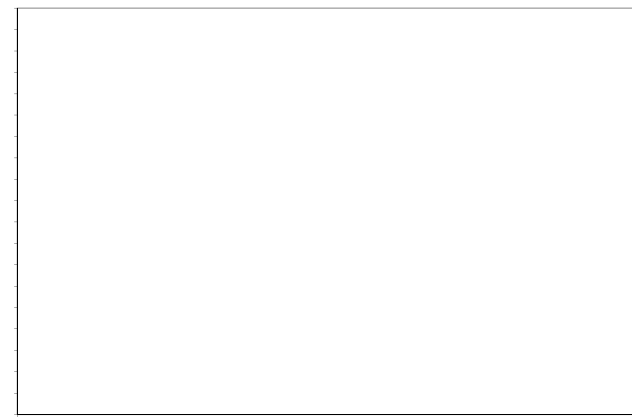
Intake in % of the ARfD

Acute exposure: Prothioconazole / Tomatoes



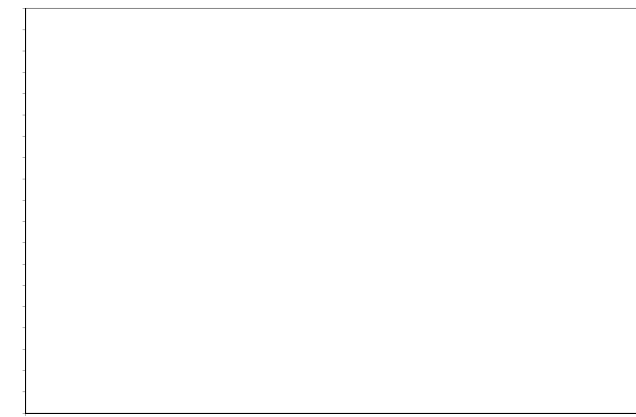
Intake in % of the ARfD

Acute exposure: Prothioconazole / Head cabbage



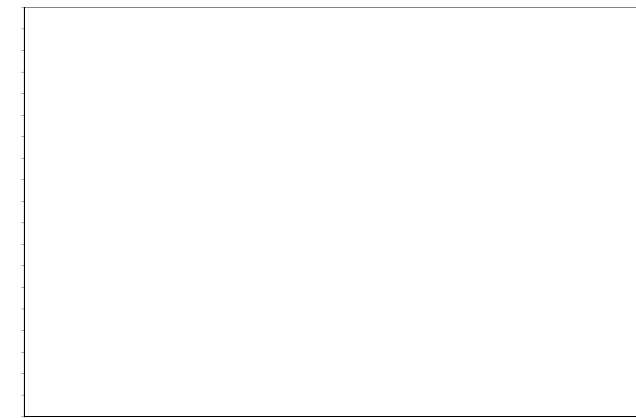
Intake in % of the ARfD

Acute exposure: Prothioconazole / Lettuce



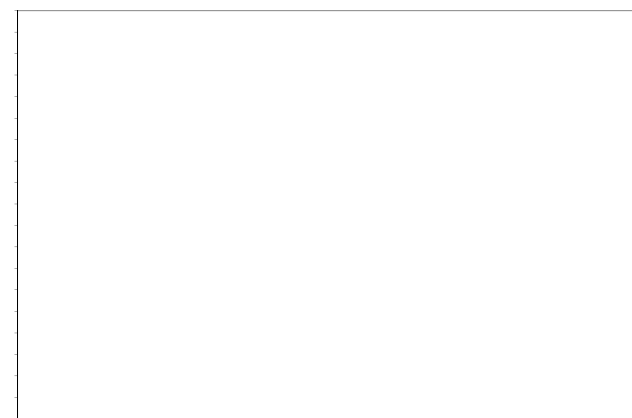
Intake in % of the ARfD

Acute exposure: Prothioconazole / Leek



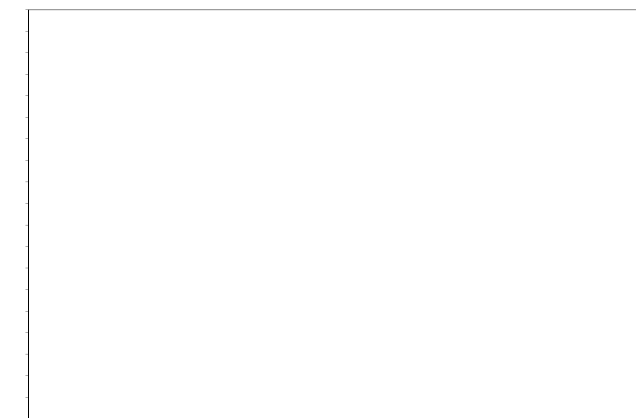
Intake in % of the ARfD

Acute exposure: Prothioconazole / Oats



Intake in % of the ARfD

Acute exposure: Prothioconazole / Rye



Intake in % of the ARfD



## Pyraclostrobin

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.03</b>	ARfD (mg/kg bw):	<b>0.03</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2004</b>	Year of evaluation:	<b>2004</b>

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum		1				
		No of diets exceeding ADI:		---				
	Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
1.22	DE child	MS Diet	0.74	Apples	0.17	Oranges	0.07	Table grapes
0.76	NL child		0.39	Apples	0.14	Oranges	0.04	Table grapes
0.55	FR toddler		0.16	Apples	0.09	Carrots	0.09	Oranges
0.44	WHO cluster diet B		0.17	Tomatoes	0.06	Apples	0.04	Oranges
0.42	FR infant		0.15	Apples	0.10	Carrots	0.04	Oranges
0.34	DK child		0.14	Apples	0.05	Carrots	0.05	Pears
0.32	ES child		0.10	Oranges	0.07	Apples	0.06	Tomatoes
0.31	IE adult		0.05	Apples	0.05	Oranges	0.04	Pears
0.31	UK toddler		0.10	Apples	0.09	Oranges	0.03	Tomatoes
0.28	SE (GP)		0.06	Apples	0.04	Tomatoes	0.03	Oranges
0.27	UK infant		0.10	Apples	0.06	Oranges	0.05	Carrots
0.25	IT child/toddler		0.08	Tomatoes	0.05	Apples	0.02	Pears
0.25	PL (GP)		0.13	Apples	0.05	Tomatoes	0.02	Pears
0.25	NL (GP)		0.07	Apples	0.07	Oranges	0.02	Tomatoes
0.25	ES adult		0.06	Oranges	0.05	Apples	0.04	Tomatoes
0.24	PT (GP)		0.06	Apples	0.05	Tomatoes	0.03	Oranges
0.24	WHO regional diet		0.06	Tomatoes	0.04	Apples	0.02	Lettuce
0.23	IT adult		0.07	Tomatoes	0.05	Apples	0.02	Lettuce
0.21	WHO Cluster diet F		0.04	Apples	0.04	Oranges	0.04	Tomatoes
0.20	LT adult		0.11	Apples	0.04	Tomatoes	0.02	Head cabbage
0.19	WHO cluster diet E		0.05	Apples	0.03	Tomatoes	0.02	Oranges
0.16	UK vegetarian		0.04	Oranges	0.04	Apples	0.04	Tomatoes
0.16	WHO cluster diet D		0.06	Tomatoes	0.04	Apples	0.01	Oranges
0.14	DK adult		0.05	Apples	0.02	Tomatoes	0.02	Carrots
0.13	FR (GP)		0.03	Apples	0.02	Tomatoes	0.01	Oranges
0.13	FI adult		0.04	Oranges	0.02	Apples	0.02	Tomatoes
0.11	UK adult		0.03	Oranges	0.03	Apples	0.02	Tomatoes

### Acute risk assessment

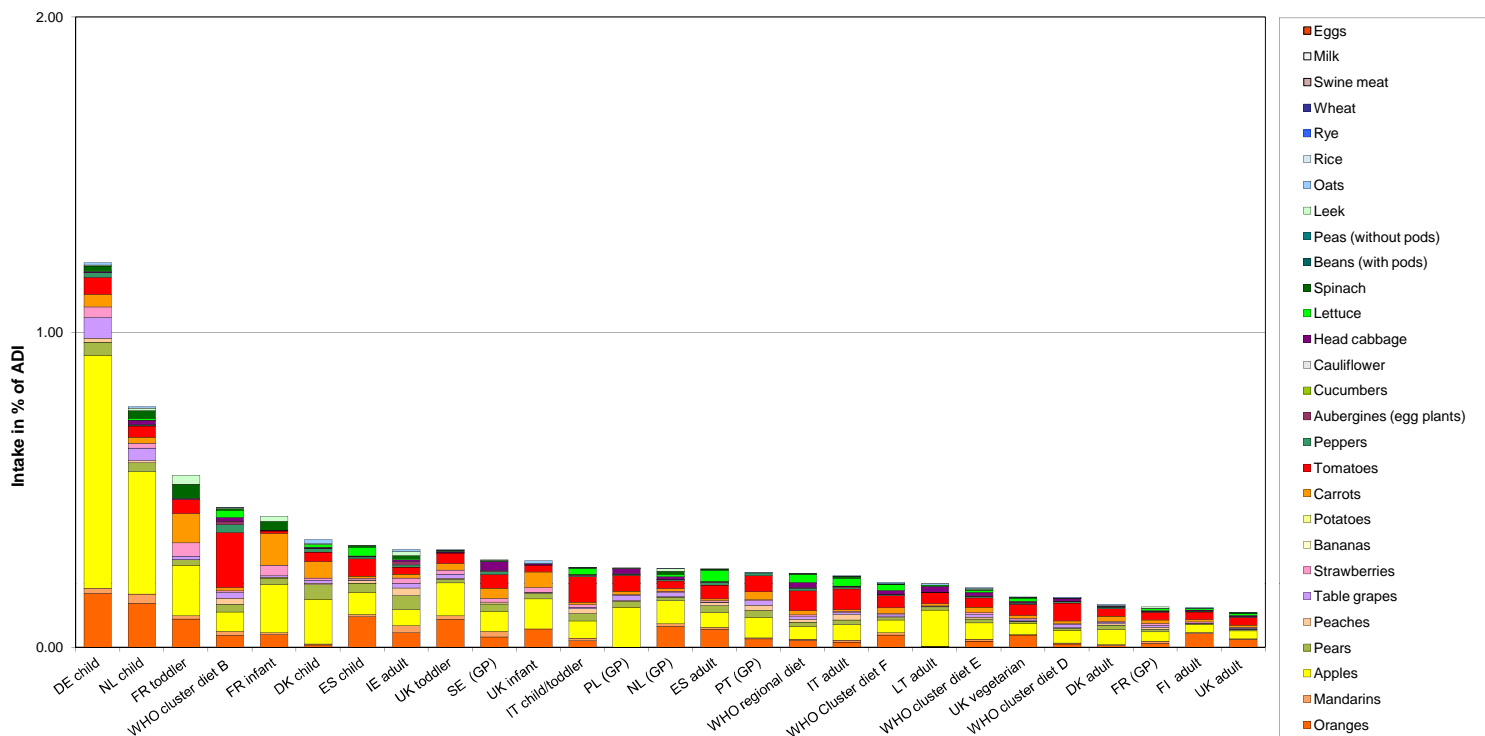
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.3	2603	9.87		0.20		65.31	UK infant	
2010	Peaches	0.2	1228	3.34		0.18		35.60	DE child	
2010	Strawberries	0.5	1933	17.54		0.47		24.43	DE child	
2010	Tomatoes	0.2	1964	3.51	0.15	0.36		69.78	BE child	
2010	Head cabbage	0.2	1003	0.50		0.07		12.28	NL child	
2010	Lettuce	2	1873	8.54		1.20	1	107.62	DE child	
2010	Leek	0.5	764	6.28		0.07		13.56	BE child	
2010	Oats	0.3	229	1.31		0.01		0.16	DE child	
2010	Rye	0.1	383							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

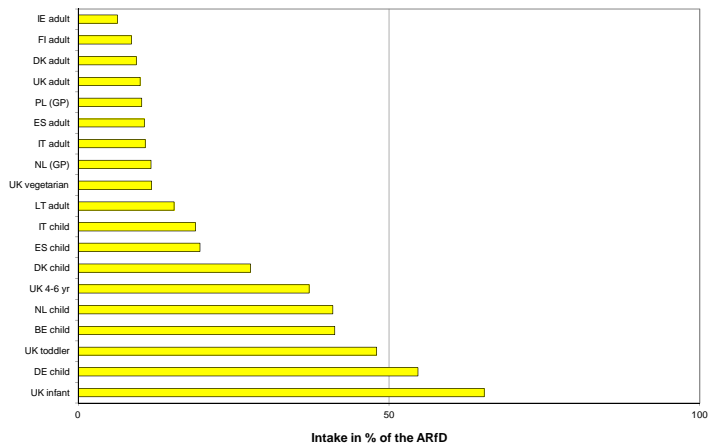
<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Pyraclostrobin

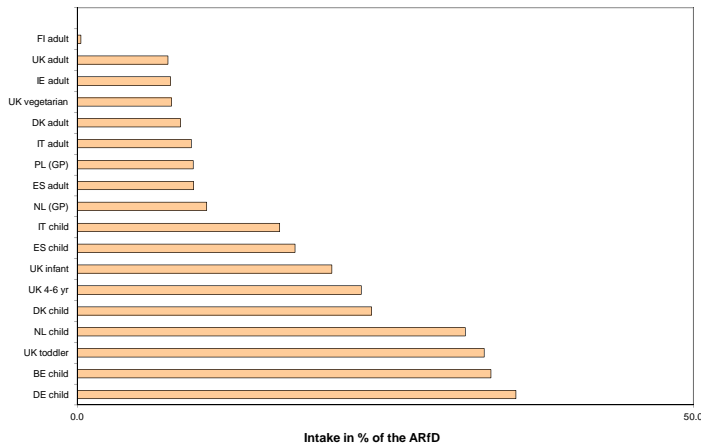


**Pyraclostrobin**

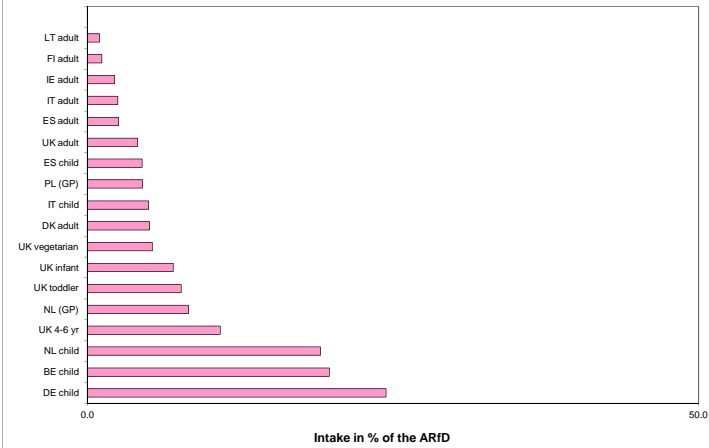
Acute exposure: Pyraclostrobin / Apples



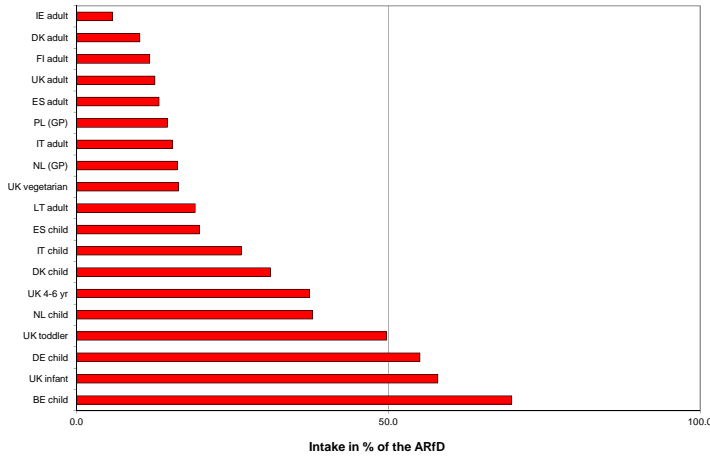
Acute exposure: Pyraclostrobin / Peaches



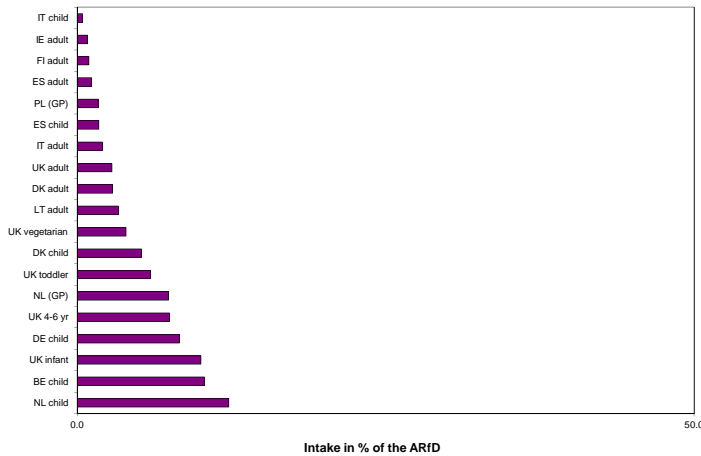
Acute exposure: Pyraclostrobin / Strawberries



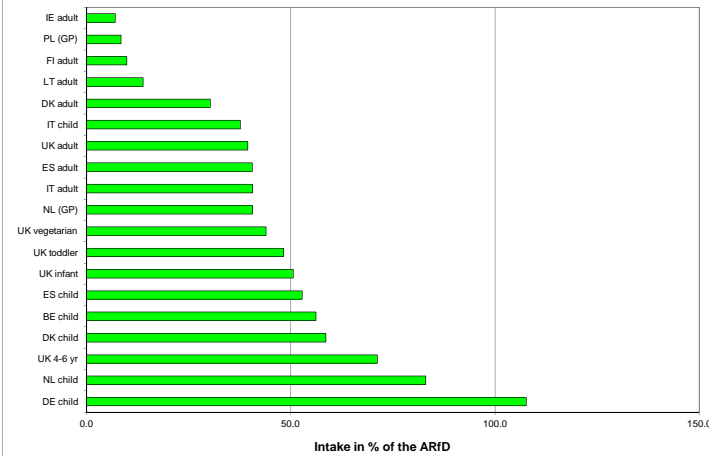
Acute exposure: Pyraclostrobin / Tomatoes



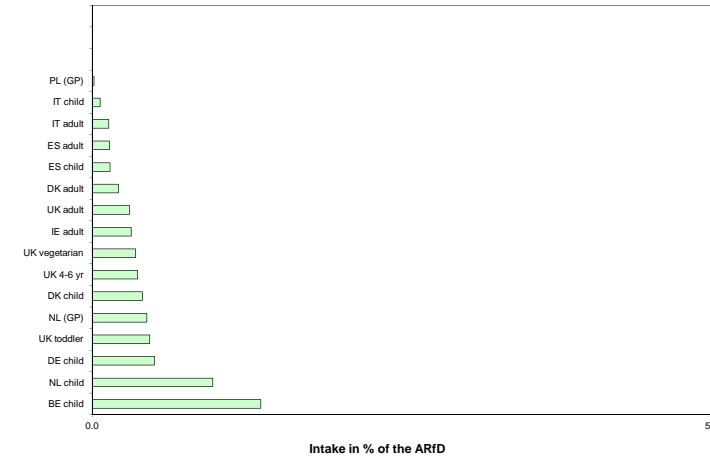
Acute exposure: Pyraclostrobin / Head cabbage



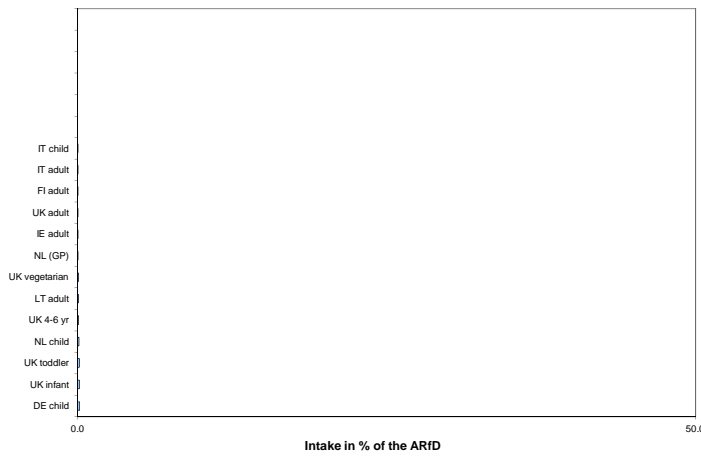
Acute exposure: Pyraclostrobin / Lettuce



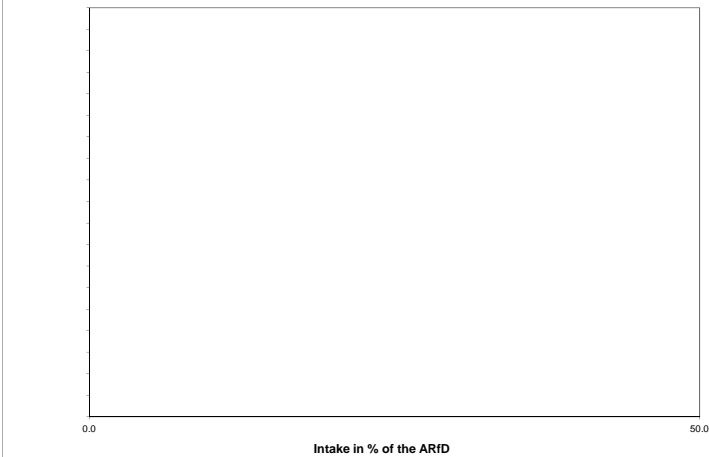
Acute exposure: Pyraclostrobin / Leek



Acute exposure: Pyraclostrobin / Oats



Acute exposure: Pyraclostrobin / Rye



Pyrazophos			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	A
Toxicological end points			
ADI (mg/kg bw/day):	0.001	ARfD (mg/kg bw):	0.001
Source of ADI:	ECCO 73	Source of ARfD:	DE
Year of evaluation:	1999	Year of evaluation:	1998

**Chronic risk assessment**

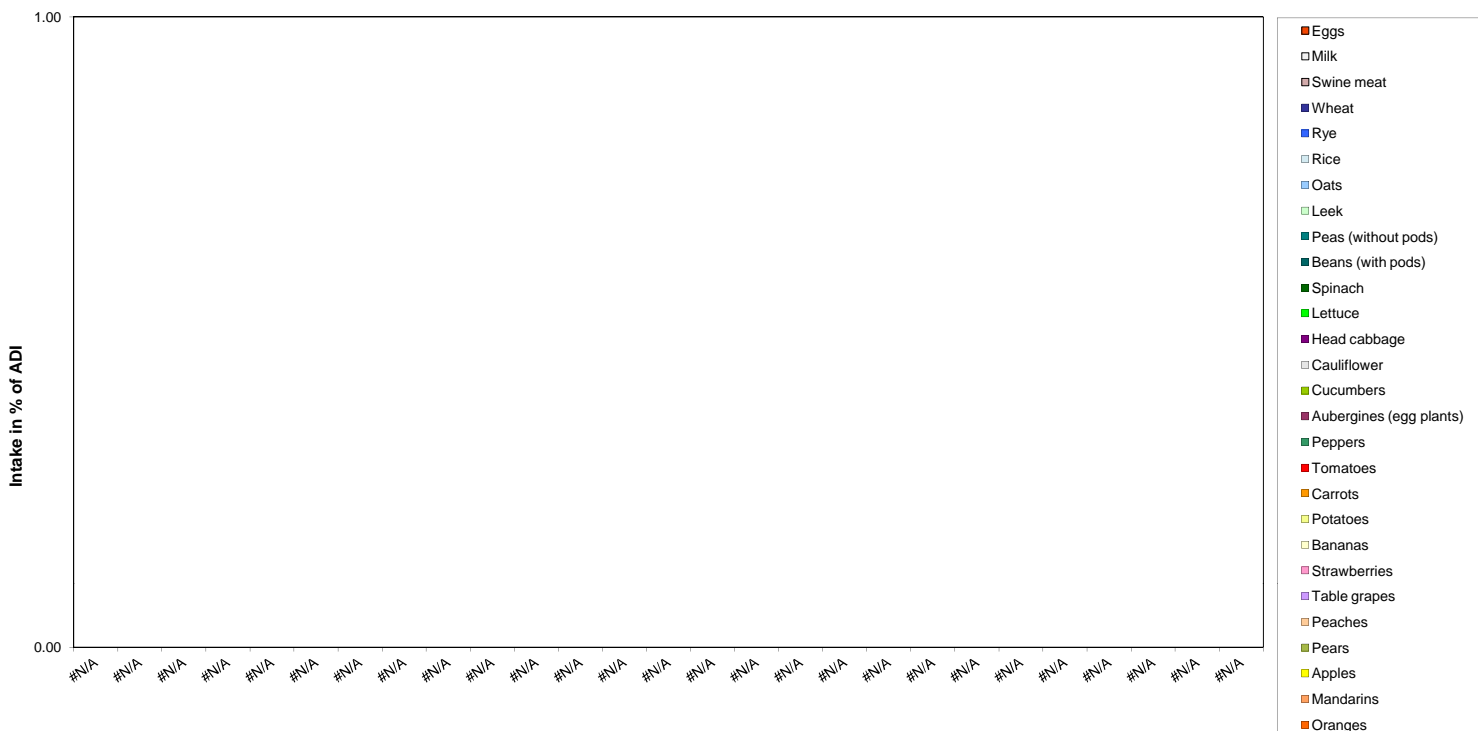
Highest calculated exposure in % of ADI		MS Diet		Highest contributor to MS diet (in % of ADI)		Commodity / group of commodities		2nd contributor to MS diet (in % of ADI)		Commodity / group of commodities		3rd contributor to MS diet (in % of ADI)		Commodity / group of commodities	
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
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**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples									
2010	Peaches									
2010	Strawberries									
2010	Tomatoes									
2010	Head cabbage									
2010	Lettuce									
2010	Leek									
2010	Oats									
2010	Rye									
2010	Swine Meat	0.02	374							
2010	Milk	0.02	590							

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Pyrazophos**



**Pyrazophos**

Acute exposure: Pyrazophos / Apples



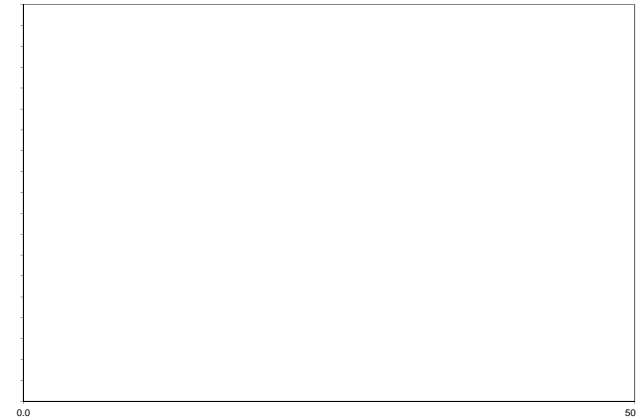
Intake in % of the ARfD

Acute exposure: Pyrazophos / Peaches



Intake in % of the ARfD

Acute exposure: Pyrazophos / Strawberries



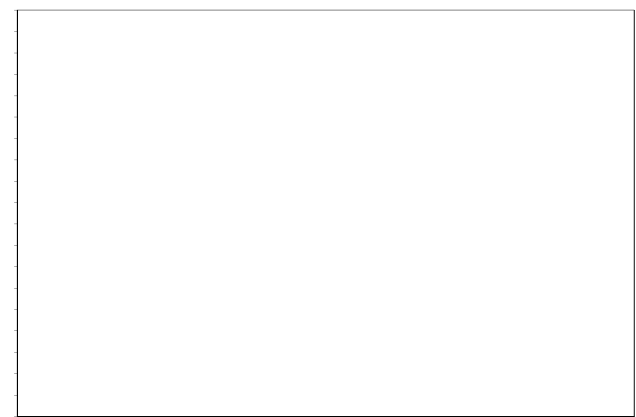
Intake in % of the ARfD

Acute exposure: Pyrazophos / Tomatoes



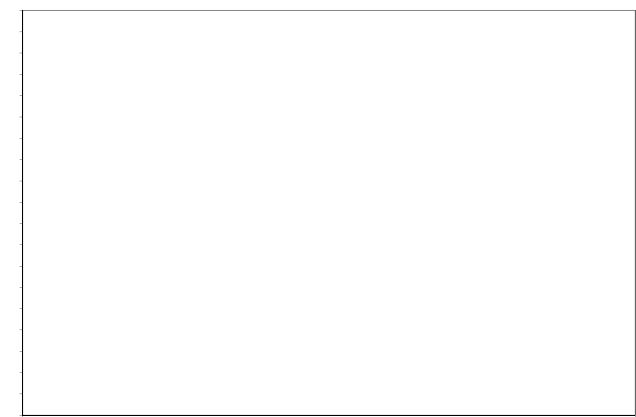
Intake in % of the ARfD

Acute exposure: Pyrazophos / Head cabbage



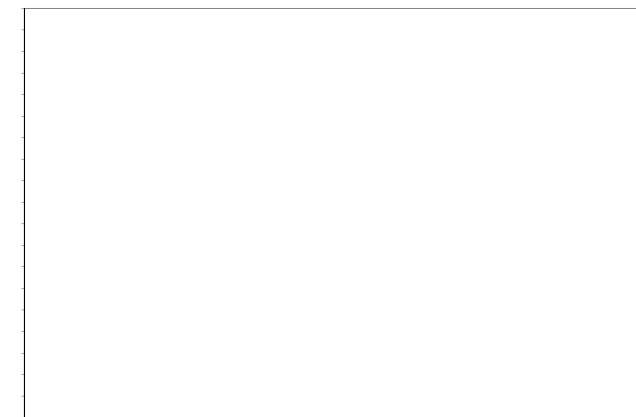
Intake in % of the ARfD

Acute exposure: Pyrazophos / Lettuce



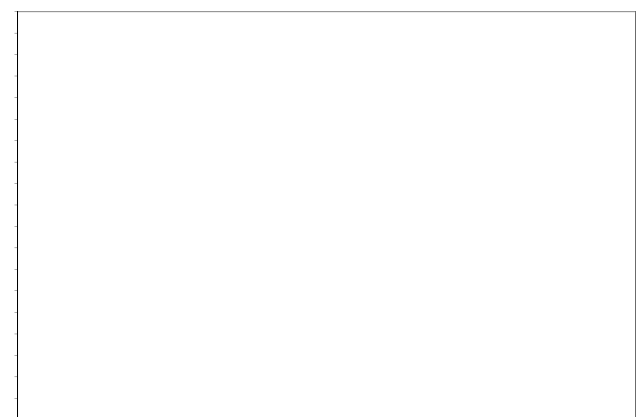
Intake in % of the ARfD

Acute exposure: Pyrazophos / Leek



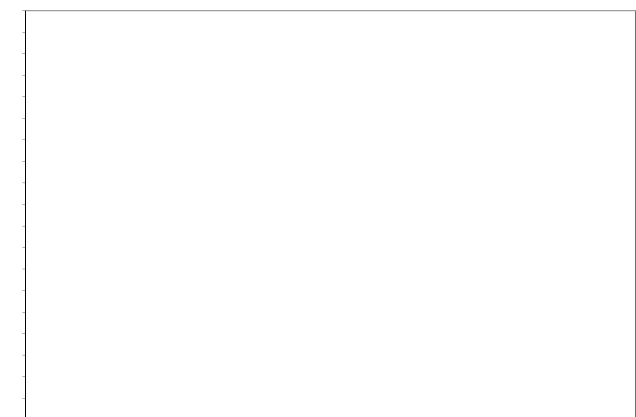
Intake in % of the ARfD

Acute exposure: Pyrazophos / Oats



Intake in % of the ARfD

Acute exposure: Pyrazophos / Rye



Intake in % of the ARfD

Pyrethrins			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:	Yes	Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.04	ARfD (mg/kg bw):	0.2
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2008	Year of evaluation:	2008

Under discussion in PRAS expert meeting; the RMS proposal correspond to the COM values; the EFSA conclusion will confirm the values. .

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum					
		2					
		No of diets exceeding ADI: ---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
2.01	WHO cluster diet B	1.32	Wheat	0.39	Peppers	0.26	Lettuce
1.35	IT child/toddler	1.03	Wheat	0.21	Lettuce	0.07	Strawberries
1.19	DE child	0.64	Wheat	0.28	Strawberries	0.23	Peppers
1.19	DK child	0.85	Wheat	0.17	Peppers	0.10	Lettuce
1.12	ES child	0.69	Wheat	0.30	Lettuce	0.09	Peppers
1.11	WHO cluster diet D	1.01	Wheat	0.08	Peppers	0.02	Strawberries
0.99	IT adult	0.64	Wheat	0.27	Lettuce	0.05	Peppers
0.99	NL child	0.73	Wheat	0.13	Strawberries	0.07	Lettuce
0.91	WHO regional diet	0.46	Wheat	0.27	Lettuce	0.13	Peppers
0.90	ES adult	0.38	Lettuce	0.36	Wheat	0.12	Peppers
0.86	WHO Cluster diet F	0.56	Wheat	0.21	Lettuce	0.05	Peppers
0.81	WHO cluster diet E	0.61	Wheat	0.08	Peppers	0.07	Lettuce
0.78	PT (GP)	0.61	Wheat	0.15	Peppers	0.02	Strawberries
0.76	FR toddler	0.41	Wheat	0.36	Strawberries		FRUIT (FRESH OR FROZEN)
0.75	UK toddler	0.61	Wheat	0.11	Strawberries	0.02	Peppers
0.74	SE (GP)	0.50	Wheat	0.15	Peppers	0.09	Strawberries
0.67	IE adult	0.36	Wheat	0.14	Strawberries	0.11	Peppers
0.65	FR (GP)	0.51	Wheat	0.07	Lettuce	0.05	Strawberries
0.53	UK infant	0.41	Wheat	0.13	Strawberries		FRUIT (FRESH OR FROZEN)
0.52	UK vegetarian	0.32	Wheat	0.10	Lettuce	0.06	Peppers
0.50	NL (GP)	0.32	Wheat	0.09	Lettuce	0.05	Peppers
0.42	DK adult	0.31	Wheat	0.08	Peppers	0.02	Strawberries
0.42	FR infant	0.28	Strawberries	0.13	Wheat	0.01	Peppers
0.40	UK adult	0.26	Wheat	0.08	Lettuce	0.03	Peppers
0.29	FI adult	0.15	Wheat	0.06	Lettuce	0.04	Strawberries
0.25	LT adult	0.16	Wheat	0.05	Lettuce	0.02	Strawberries
0.08	PL (GP)	0.06	Peppers	0.01	Strawberries	0.01	Lettuce

### Acute risk assessment

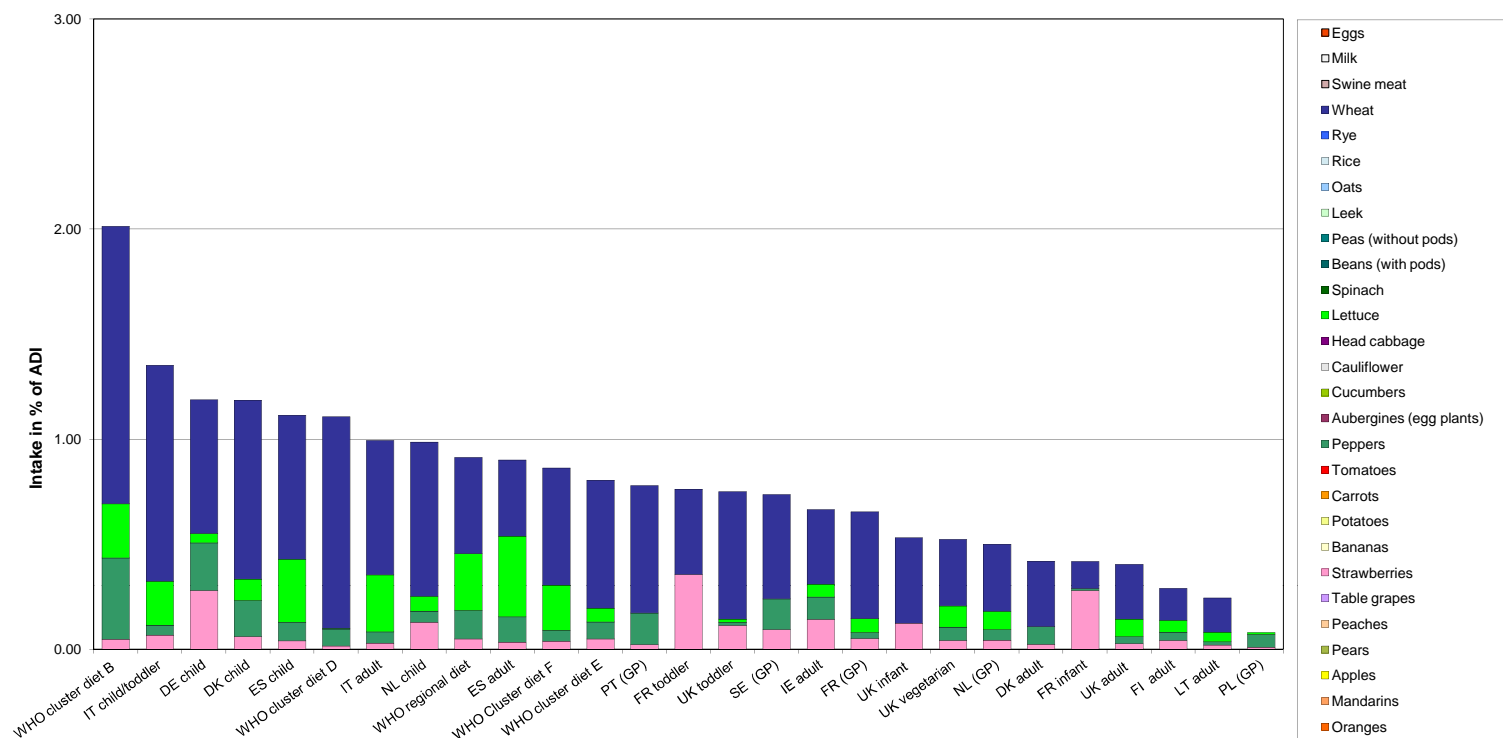
Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	1	1135	0.09		0.02		1.13	UK infant	
2010	Peaches	1	574							
2010	Strawberries	1	798	0.13		0.02		0.16	DE child	
2010	Tomatoes	1	835	0.12		0.07		2.09	BE child	
2010	Head cabbage	1	460							
2010	Lettuce	1	891	0.22		0.37		4.98	DE child	
2010	Leek	1	422							
2010	Oats	3	50							
2010	Rye	3	196							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

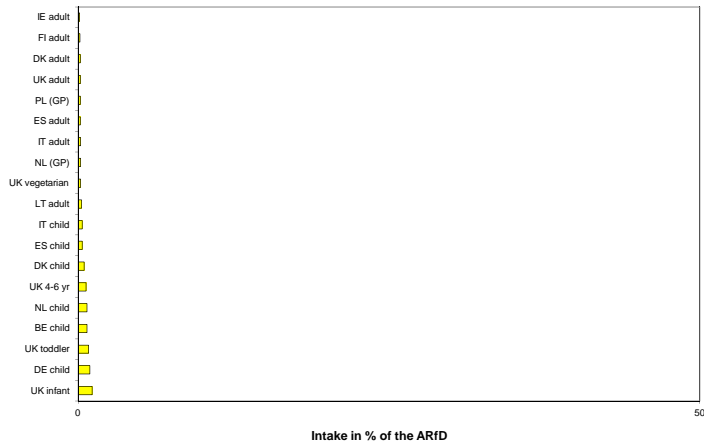
c) TRL: toxicological threshold level

### Chronic risk assessment: Pyrethrins

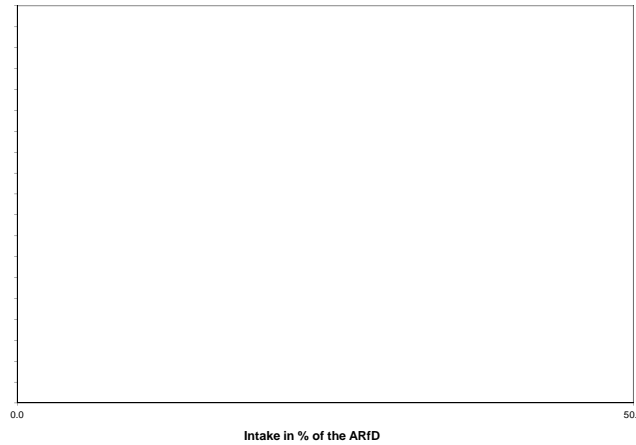


**Pyrethrins**

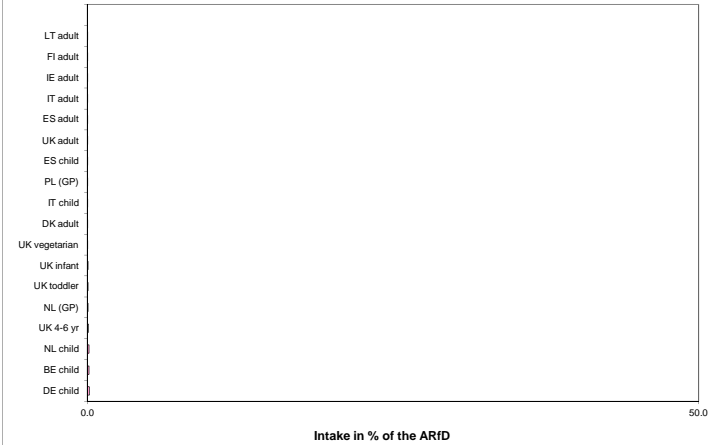
Acute exposure: Pyrethrins / Apples



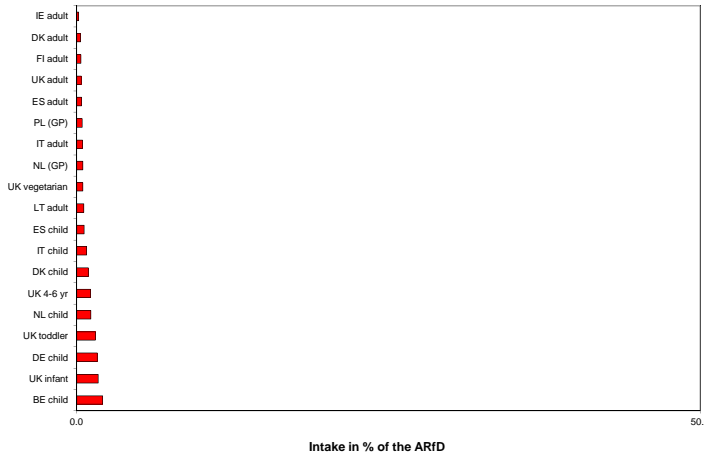
Acute exposure: Pyrethrins / Peaches



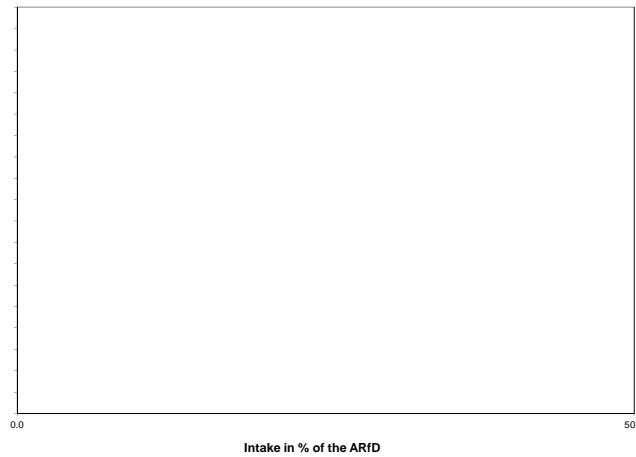
Acute exposure: Pyrethrins / Strawberries



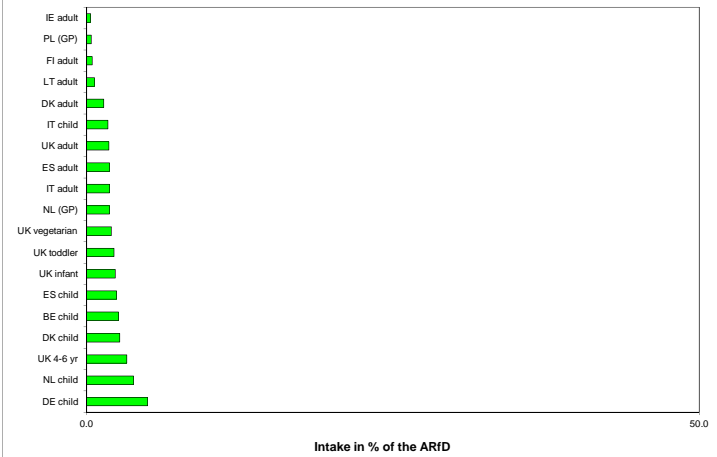
Acute exposure: Pyrethrins / Tomatoes



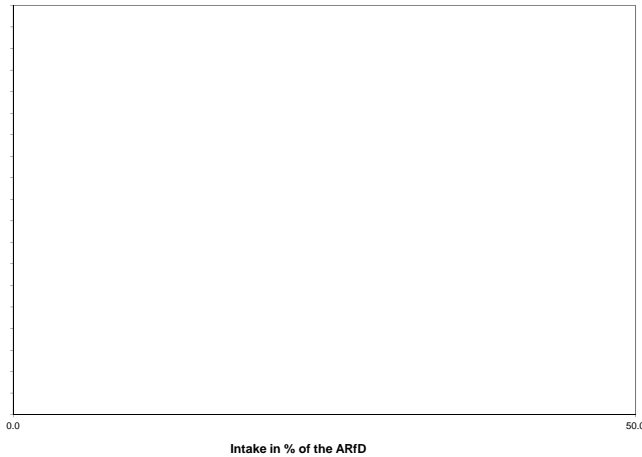
Acute exposure: Pyrethrins / Head cabbage



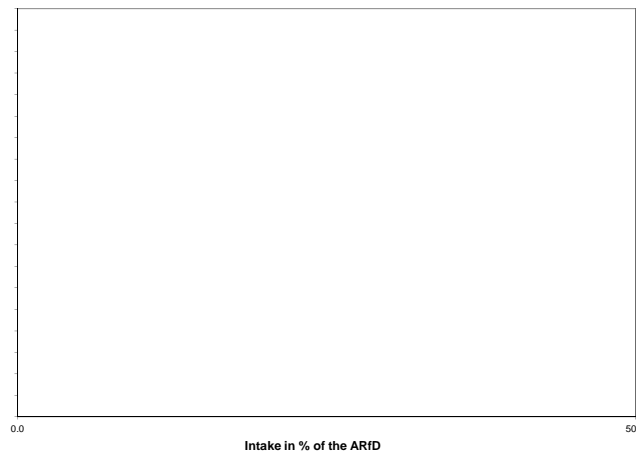
Acute exposure: Pyrethrins / Lettuce



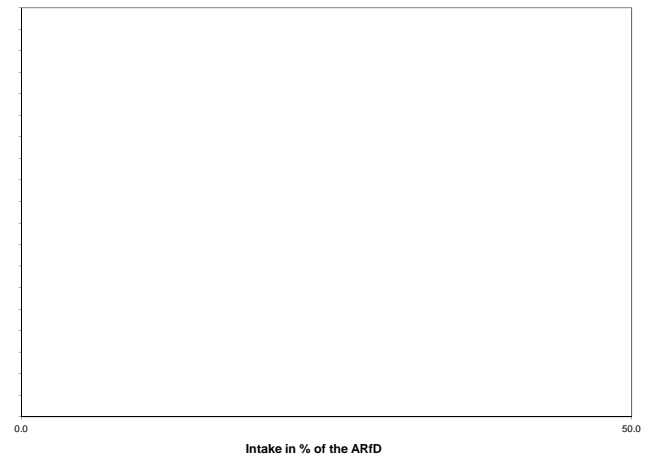
Acute exposure: Pyrethrins / Leek



Acute exposure: Pyrethrins / Oats



Acute exposure: Pyrethrins / Rye



## Pyridaben

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.01</b>	ARfD (mg/kg bw):	<b>0.05</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2010</b>	Year of evaluation:	<b>2010</b>

### Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
3

**No of diets exceeding ADI:** ---

	Highest calculated exposure in % of ADI		Highest contributor to MS diet (in % of ADI)		2nd contributor to MS diet (in % of ADI)		3rd contributor to MS diet (in % of ADI)	
	MS Diet	Commodity / group of commodities	MS diet (in % of ADI)	Commodity / group of commodities	MS diet (in % of ADI)	Commodity / group of commodities	MS diet (in % of ADI)	Commodity / group of commodities
2.84	DE child	Apples	1.58	Apples	0.45	Oranges	0.20	Bananas
1.87	NL child	Apples	0.83	Apples	0.37	Oranges	0.23	Bananas
1.13	FR toddler	Apples	0.34	Apples	0.24	Oranges	0.17	Bananas
1.05	WHO cluster diet B	Tomatoes	0.44	Tomatoes	0.13	Apples	0.10	Oranges
0.90	DK child	Apples	0.30	Apples	0.18	Cucumbers	0.15	Bananas
0.83	ES child	Oranges	0.26	Oranges	0.15	Apples	0.14	Tomatoes
0.82	UK toddler	Oranges	0.24	Oranges	0.22	Apples	0.14	Bananas
0.78	SE (GP)	Bananas	0.24	Bananas	0.14	Apples	0.11	Tomatoes
0.77	FR infant	Apples	0.33	Apples	0.11	Oranges	0.09	Bananas
0.75	IE adult	Oranges	0.12	Oranges	0.11	Apples	0.10	Bananas
0.67	UK infant	Apples	0.20	Apples	0.19	Bananas	0.15	Oranges
0.61	IT child/toddler	Tomatoes	0.20	Tomatoes	0.12	Apples	0.07	Bananas
0.57	NL (GP)	Oranges	0.18	Oranges	0.15	Apples	0.06	Tomatoes
0.56	ES adult	Oranges	0.15	Oranges	0.11	Tomatoes	0.10	Apples
0.54	PT (GP)	Apples	0.14	Apples	0.13	Tomatoes	0.07	Oranges
0.52	PL (GP)	Apples	0.27	Apples	0.13	Tomatoes	0.04	Table grapes
0.49	IT adult	Tomatoes	0.16	Tomatoes	0.10	Apples	0.05	Peaches
0.49	WHO regional diet	Tomatoes	0.16	Tomatoes	0.09	Apples	0.06	Oranges
0.45	WHO Cluster diet F	Oranges	0.10	Oranges	0.10	Tomatoes	0.09	Apples
0.42	WHO cluster diet E	Apples	0.11	Apples	0.07	Tomatoes	0.05	Oranges
0.42	LT adult	Apples	0.24	Apples	0.09	Tomatoes	0.04	Cucumbers
0.39	UK vegetarian	Oranges	0.10	Oranges	0.09	Tomatoes	0.08	Apples
0.36	WHO cluster diet D	Tomatoes	0.14	Tomatoes	0.09	Apples	0.03	Oranges
0.33	DK adult	Apples	0.10	Apples	0.06	Tomatoes	0.05	Bananas
0.33	FI adult	Oranges	0.12	Oranges	0.06	Tomatoes	0.05	Apples
0.30	FR (GP)	Apples	0.06	Apples	0.06	Tomatoes	0.03	Oranges
0.27	UK adult	Oranges	0.07	Oranges	0.06	Tomatoes	0.05	Apples

### Acute risk assessment

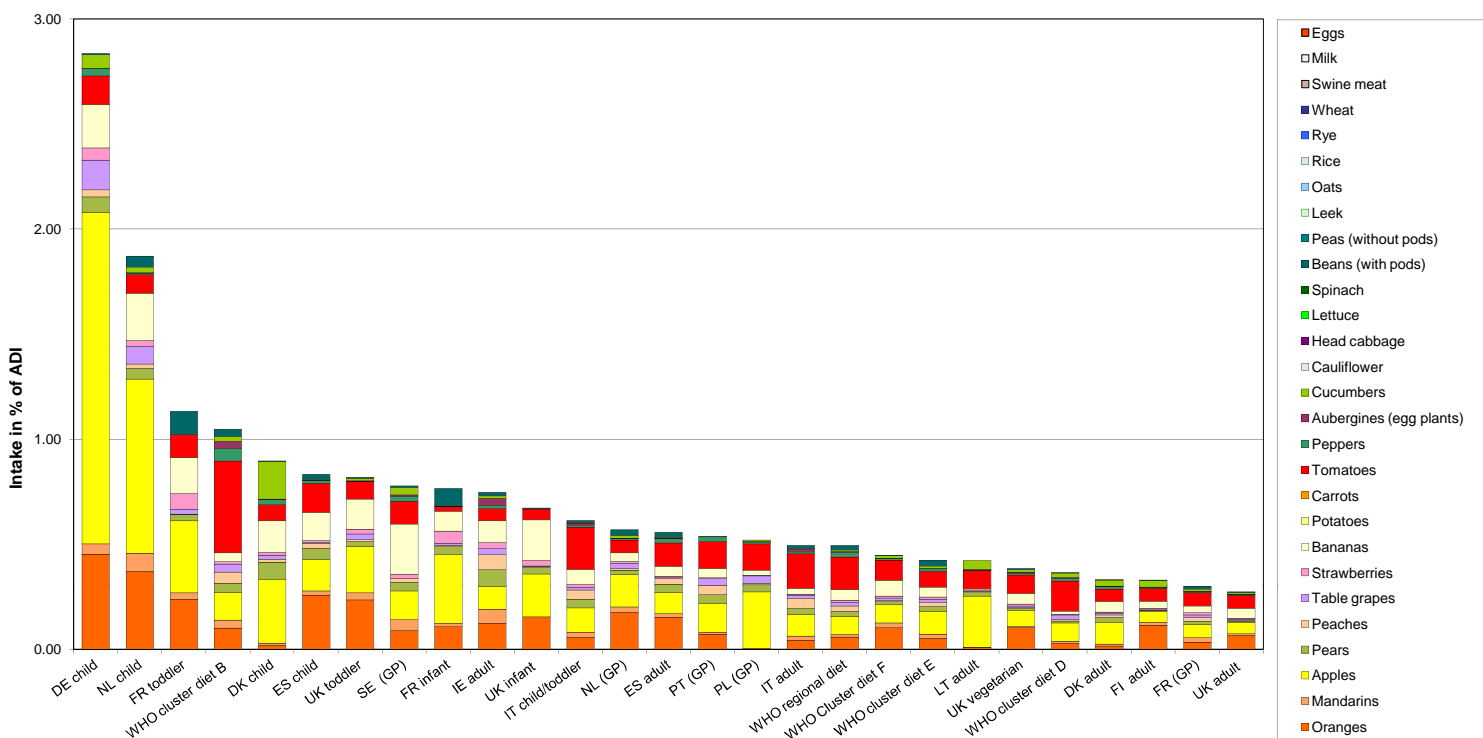
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.5	2479	0.28		0.03		5.88	UK infant	
2010	Peaches	0.5	1240	0.56		0.13		15.43	DE child	
2010	Strawberries	1	1997	0.25		0.05		1.56	DE child	
2010	Tomatoes	0.3	2031	1.67		0.06		6.40	BE child	
2010	Head cabbage	0.05	1022							
2010	Lettuce	0.05	2100							
2010	Leek	0.05	809							
2010	Oats	0.05	170							
2010	Rye	0.05	354							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Pyridaben



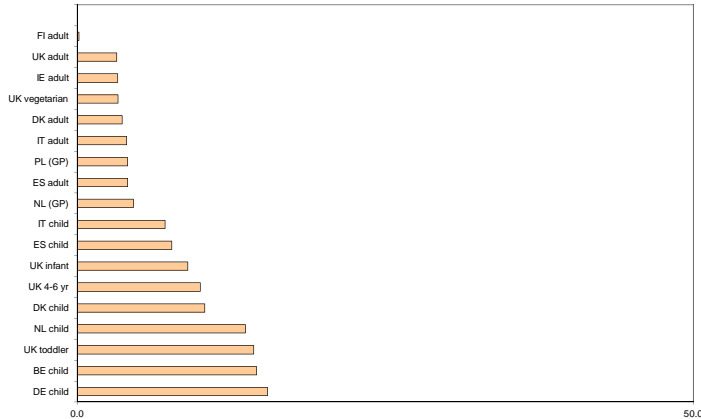
**Pyridaben**

Acute exposure: Pyridaben / Apples



Intake in % of the ARfD

Acute exposure: Pyridaben / Peaches



Intake in % of the ARfD

Acute exposure: Pyridaben / Strawberries



Intake in % of the ARfD

Acute exposure: Pyridaben / Tomatoes



Intake in % of the ARfD

Acute exposure: Pyridaben / Head cabbage



Intake in % of the ARfD

Acute exposure: Pyridaben / Lettuce



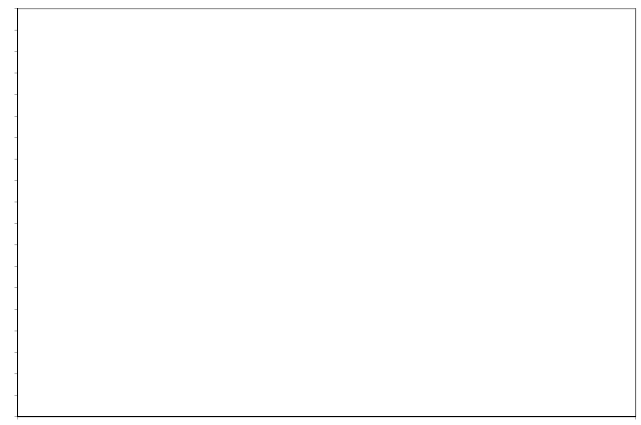
Intake in % of the ARfD

Acute exposure: Pyridaben / Leek



Intake in % of the ARfD

Acute exposure: Pyridaben / Oats



Intake in % of the ARfD

Acute exposure: Pyridaben / Rye



Intake in % of the ARfD



## Pyrimethanil

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.17</b>	ARfD (mg/kg bw):	<b>n.n.</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>EFSA</b>
Year of evaluation:	<b>2006</b>	Year of evaluation:	<b>2006</b>

### Chronic risk assessment

Highest calculated exposure in % of ADI		MS Diet		Exposure (range) in % of ADI minimum - maximum		No of diets exceeding ADI:									
				1		---									
Highest calculated exposure in % of ADI		MS Diet		Highest contributor to MS diet (in % of ADI)		Commodity / group of commodities		2nd contributor to MS diet (in % of ADI)		Commodity / group of commodities		3rd contributor to MS diet (in % of ADI)		Commodity / group of commodities	
0.50	DE child	0.34	Apples	0.04	Oranges	0.04	Table grapes								
0.32	NL child	0.18	Apples	0.04	Oranges	0.02	Table grapes								
0.19	FR toddler	0.07	Apples	0.02	Oranges	0.02	Carrots								
0.15	FR infant	0.07	Apples	0.02	Carrots	0.01	Oranges								
0.14	DK child	0.07	Apples	0.02	Pears	0.01	Cucumbers								
0.12	WHO cluster diet B	0.03	Apples	0.03	Tomatoes	0.01	Oranges								
0.12	UK toddler	0.05	Apples	0.02	Oranges	0.01	Bananas								
0.11	IE adult	0.02	Apples	0.02	Pears	0.02	Mandarins								
0.11	ES child	0.03	Apples	0.03	Oranges	0.01	Pears								
0.10	SE (GP)	0.03	Apples	0.01	Bananas	0.01	Mandarins								
0.10	UK infant	0.04	Apples	0.02	Oranges	0.01	Bananas								
0.09	PL (GP)	0.06	Apples	0.01	Table grapes	0.01	Tomatoes								
0.09	NL (GP)	0.03	Apples	0.02	Oranges	0.01	Table grapes								
0.08	IT child/toddler	0.03	Apples	0.01	Tomatoes	0.01	Pears								
0.08	PT (GP)	0.03	Apples	0.01	Pears	0.01	Table grapes								
0.08	ES adult	0.02	Apples	0.02	Oranges	0.01	Pears								
0.07	LT adult	0.05	Apples	0.01	Tomatoes	0.00	Pears								
0.07	WHO regional diet	0.02	Apples	0.01	Tomatoes	0.01	Oranges								
0.07	IT adult	0.02	Apples	0.01	Tomatoes	0.01	Pears								
0.07	WHO cluster diet E	0.02	Apples	0.01	Oranges	0.00	Pears								
0.06	WHO Cluster diet F	0.02	Apples	0.01	Oranges	0.01	Tomatoes								
0.05	UK vegetarian	0.02	Apples	0.01	Oranges	0.01	Tomatoes								
0.05	DK adult	0.02	Apples	0.01	Pears	0.00	Tomatoes								
0.05	WHO cluster diet D	0.02	Apples	0.01	Tomatoes	0.01	Table grapes								
0.05	FR (GP)	0.01	Apples	0.01	Mandarins	0.00	Tomatoes								
0.04	FI adult	0.01	Apples	0.01	Oranges	0.00	Tomatoes								
0.04	UK adult	0.01	Apples	0.01	Oranges	0.00	Tomatoes								

### Acute risk assessment

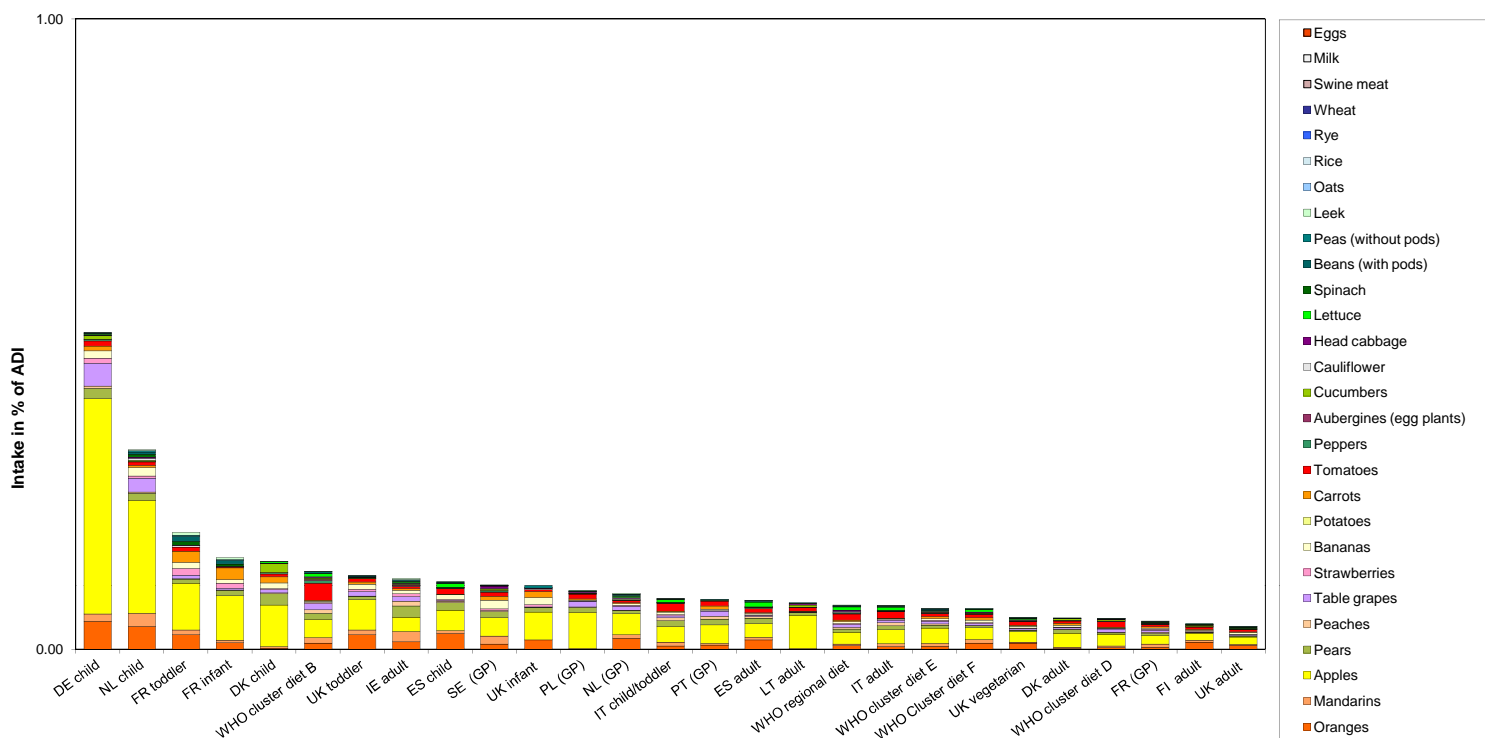
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	5	2996	6.58	0.03	7.70				
2010	Peaches	10	1451	1.10		1.80				
2010	Strawberries	5	2268	7.10		1.90				
2010	Tomatoes	1	2404	6.36		0.96				
2010	Head cabbage	0.05	1179	0.08		0.00				
2010	Lettuce	10	2349	1.70		2.70				
2010	Leek	1	922	0.33		0.02				
2010	Oats	0.05	254							
2010	Rye	0.05	405							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Pyrimethanil



**Pyrimethanil**

Acute exposure: Pyrimethanil / Apples



Intake in % of the ARfD

Acute exposure: Pyrimethanil / Peaches



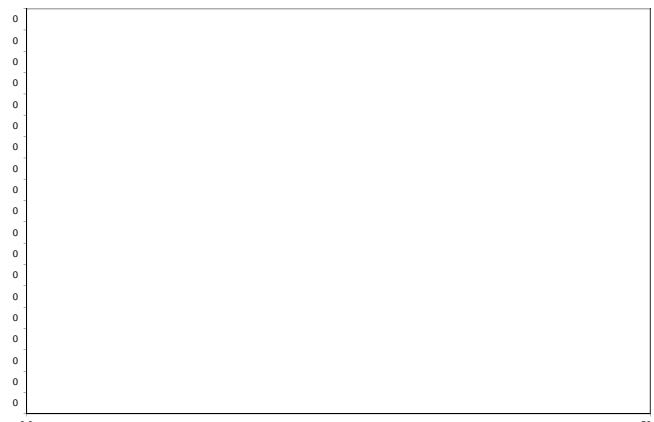
Intake in % of the ARfD

Acute exposure: Pyrimethanil / Strawberries



Intake in % of the ARfD

Acute exposure: Pyrimethanil / Tomatoes



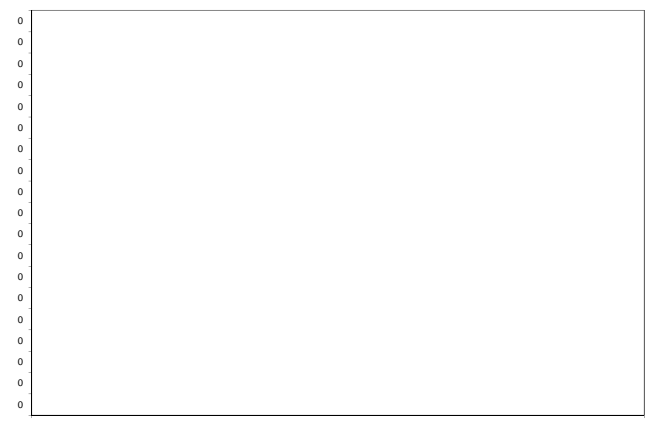
Intake in % of the ARfD

Acute exposure: Pyrimethanil / Head cabbage



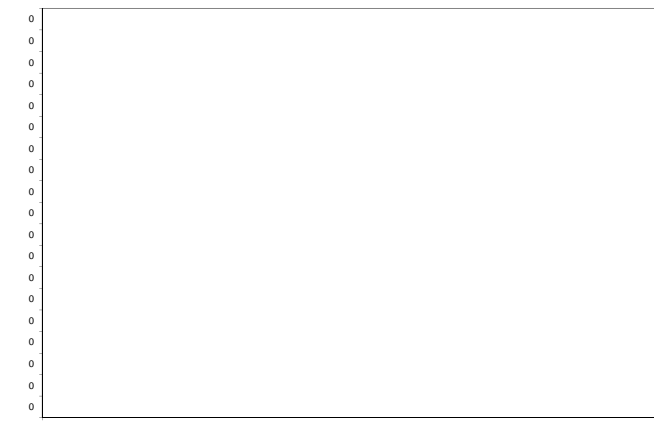
Intake in % of the ARfD

Acute exposure: Pyrimethanil / Lettuce



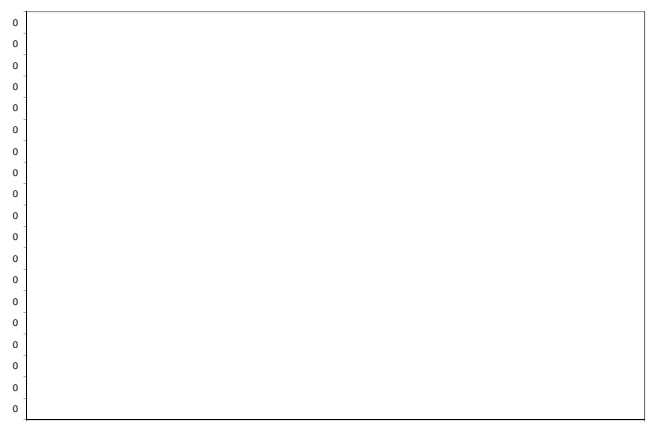
Intake in % of the ARfD

Acute exposure: Pyrimethanil / Leek



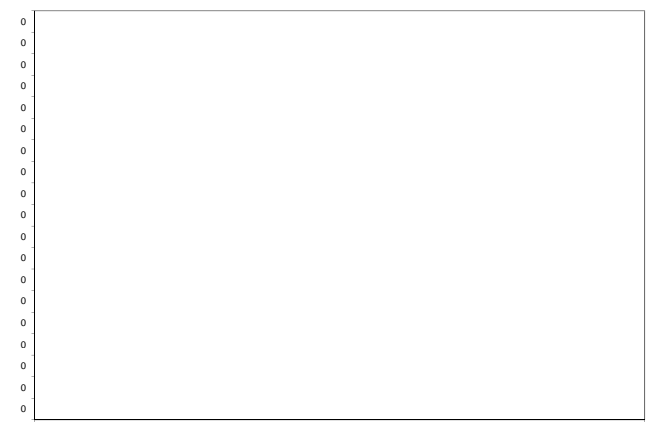
Intake in % of the ARfD

Acute exposure: Pyrimethanil / Oats



Intake in % of the ARfD

Acute exposure: Pyrimethanil / Rye



Intake in % of the ARfD

## Pyriproxyfen

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.1</b>	ARfD (mg/kg bw):	<b>10</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2008</b>	Year of evaluation:	<b>2008</b>

### Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum

**No of diets exceeding ADI:** ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.10	DE child	0.05	Oranges	0.02	Bananas	0.01	Tomatoes
0.09	NL child	0.04	Oranges	0.02	Bananas	0.01	Mandarins
0.08	FR toddler	0.03	Carrots	0.03	Oranges	0.02	Bananas
0.07	WHO cluster diet B	0.04	Tomatoes	0.01	Oranges	0.01	Peppers
0.06	ES child	0.03	Oranges	0.01	Bananas	0.01	Tomatoes
0.06	SE (GP)	0.02	Bananas	0.01	Oranges	0.01	Carrots
0.06	UK toddler	0.03	Oranges	0.01	Bananas	0.01	Tomatoes
0.05	FR infant	0.03	Carrots	0.01	Oranges	0.01	Bananas
0.05	UK infant	0.02	Bananas	0.02	Oranges	0.01	Carrots
0.05	IE adult	0.01	Oranges	0.01	Bananas	0.01	Mandarins
0.04	DK child	0.02	Carrots	0.01	Bananas	0.01	Tomatoes
0.04	ES adult	0.02	Oranges	0.01	Tomatoes	0.01	Lettuce
0.04	IT child/toddler	0.02	Tomatoes	0.01	Oranges	0.01	Bananas
0.04	WHO Cluster diet F	0.01	Oranges	0.01	Tomatoes	0.01	Bananas
0.04	WHO regional diet	0.01	Tomatoes	0.01	Oranges	0.00	Bananas
0.04	NL (GP)	0.02	Oranges	0.01	Tomatoes	0.00	Bananas
0.03	PT (GP)	0.01	Tomatoes	0.01	Oranges	0.01	Carrots
0.03	IT adult	0.01	Tomatoes	0.00	Oranges	0.00	Lettuce
0.03	UK vegetarian	0.01	Oranges	0.01	Tomatoes	0.00	Bananas
0.03	WHO cluster diet E	0.01	Tomatoes	0.01	Oranges	0.01	Carrots
0.03	FI adult	0.01	Oranges	0.01	Tomatoes	0.00	Bananas
0.02	WHO cluster diet D	0.01	Tomatoes	0.00	Oranges	0.00	Carrots
0.02	UK adult	0.01	Oranges	0.01	Tomatoes	0.00	Bananas
0.02	FR (GP)	0.01	Tomatoes	0.00	Oranges	0.00	Carrots
0.02	DK adult	0.00	Tomatoes	0.00	Carrots	0.00	Bananas
0.02	PL (GP)	0.01	Tomatoes	0.00	Carrots	0.00	Bananas
0.01	LT adult	0.01	Tomatoes	0.00	Carrots	0.00	Oranges

### Acute risk assessment

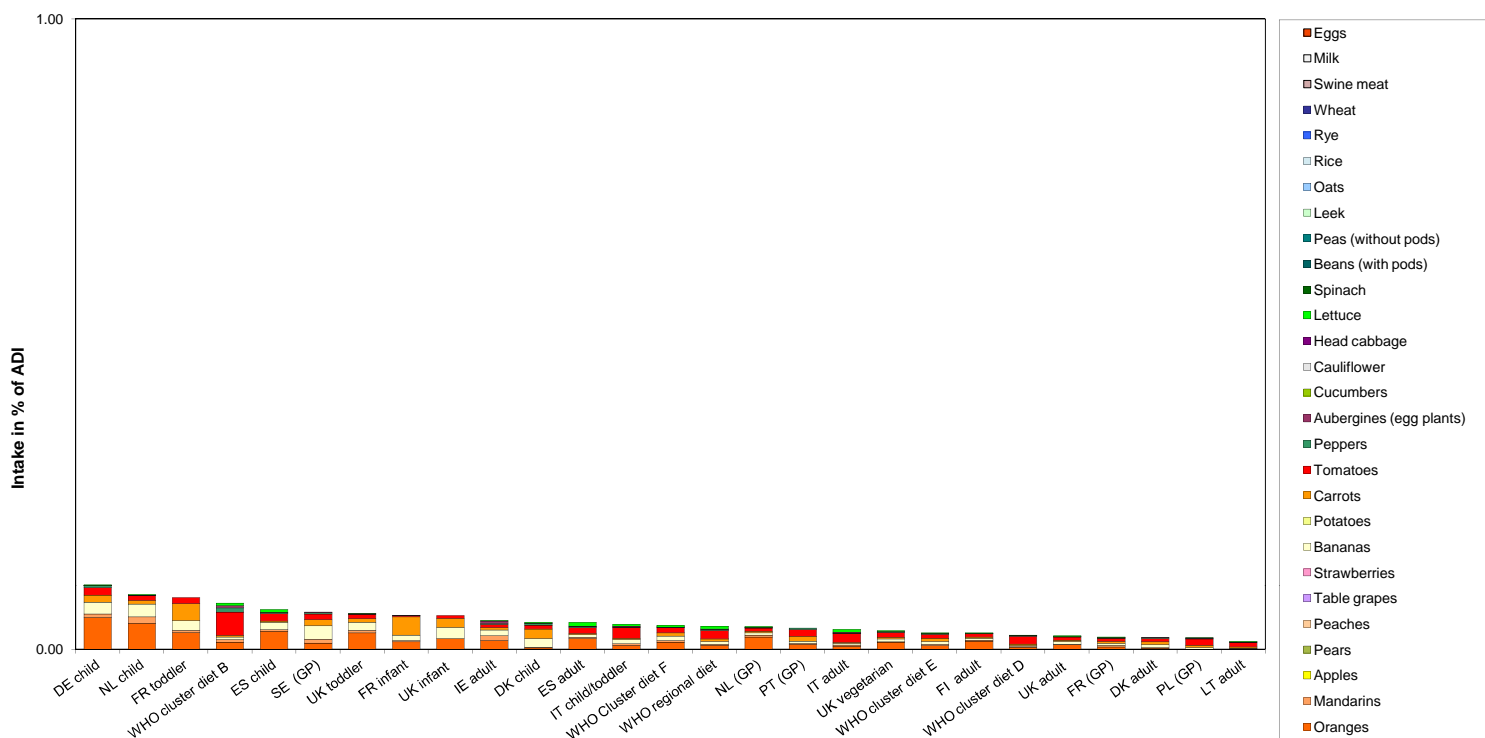
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.2	2532							
2010	Peaches	0.5	1292							
2010	Strawberries	0.05	2009							
2010	Tomatoes	1	2025	2.91		0.15		0.09	BE child	
2010	Head cabbage	0.05	1046						DE child	
2010	Lettuce	0.05	2176	0.05		0.02		0.00		
2010	Leek	0.05	815							
2010	Oats	0.05	181							
2010	Rye	0.05	386							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

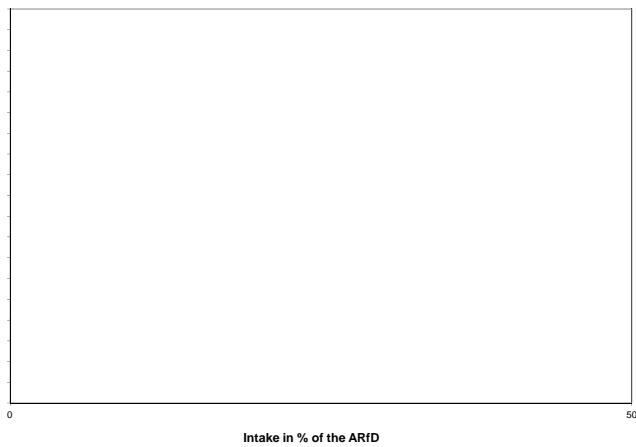
<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Pyriproxyfen

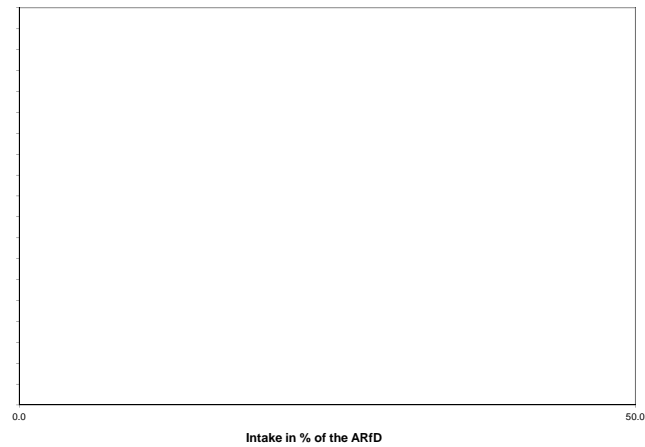


## Pyriproxyfen

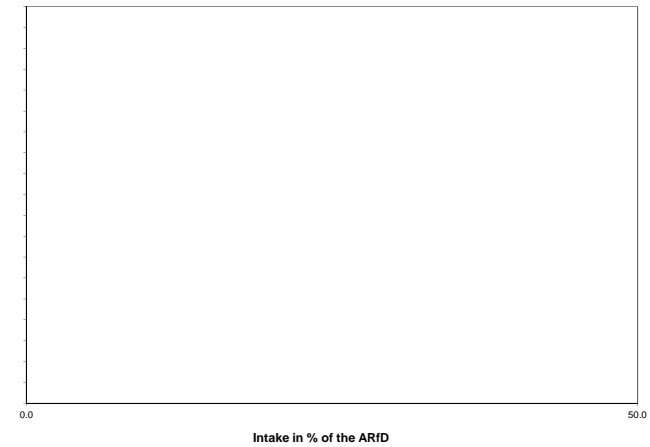
Acute exposure: Pyriproxyfen / Apples



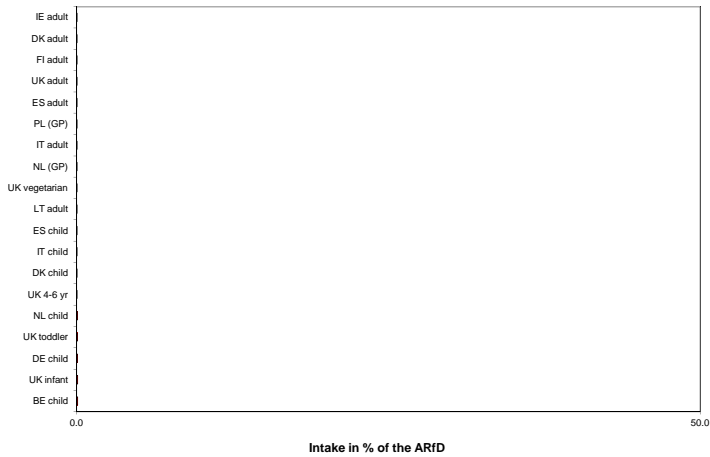
Acute exposure: Pyriproxyfen / Peaches



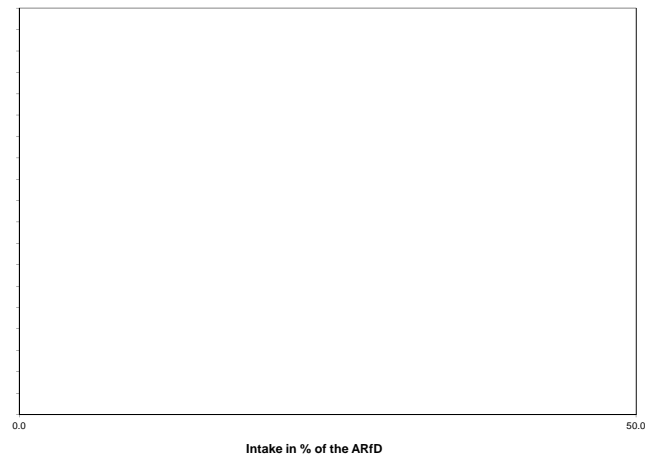
Acute exposure: Pyriproxyfen / Strawberries



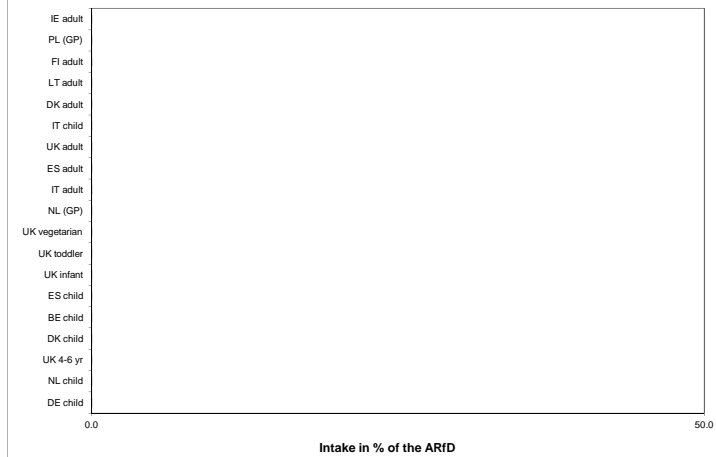
Acute exposure: Pyriproxyfen / Tomatoes



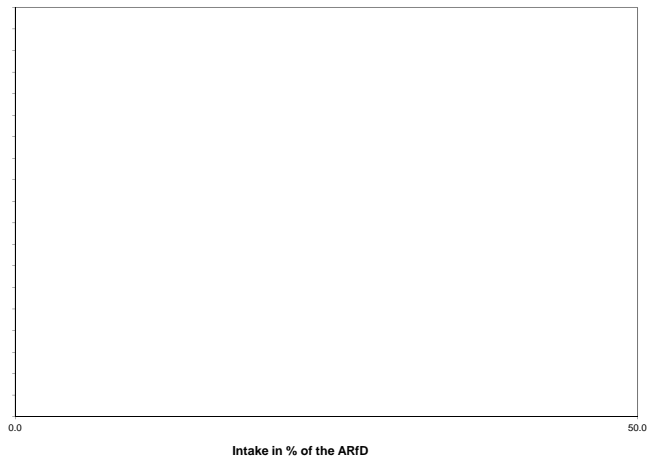
Acute exposure: Pyriproxyfen / Head cabbage



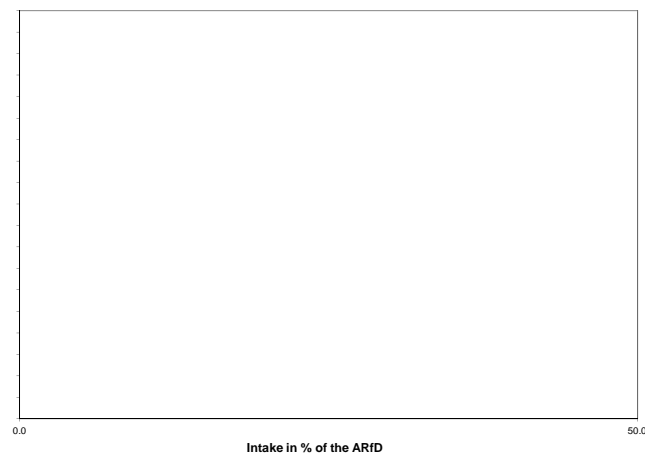
Acute exposure: Pyriproxyfen / Lettuce



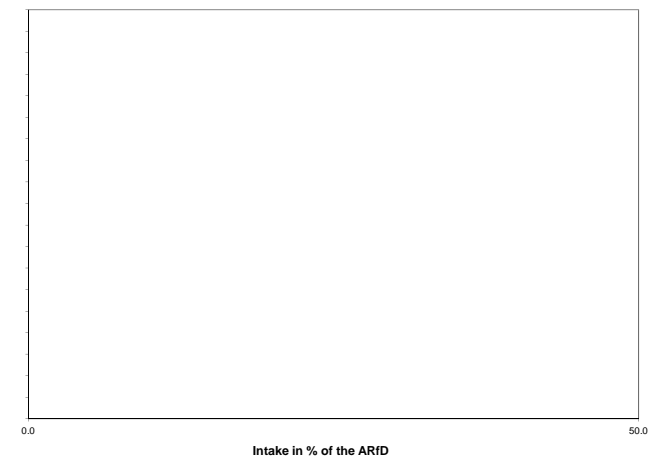
Acute exposure: Pyriproxyfen / Leek



Acute exposure: Pyriproxyfen / Oats



Acute exposure: Pyriproxyfen / Rye



Quinoxifen			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.2	ARfD (mg/kg bw):	n.n.
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2004	Year of evaluation:	2003

### Chronic risk assessment

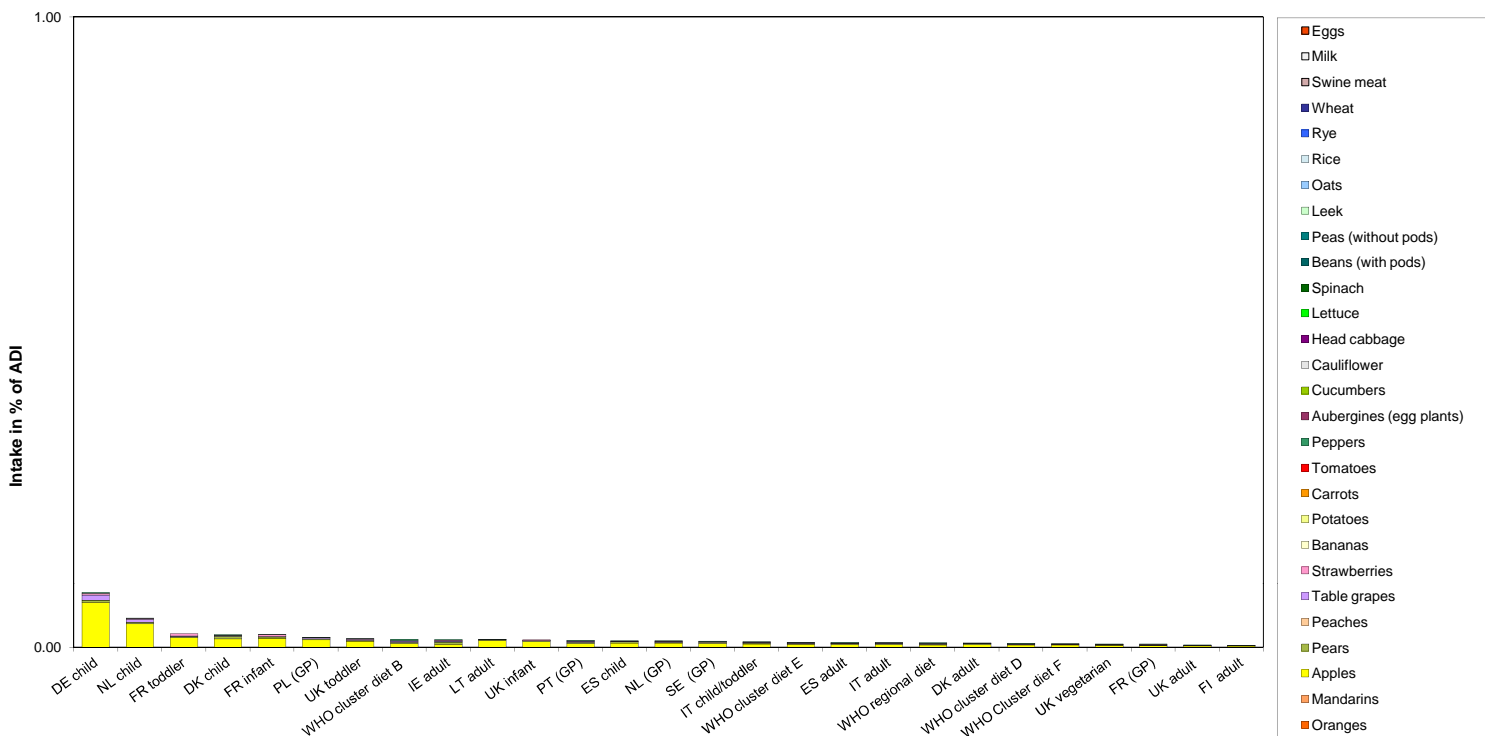
Highest calculated exposure in % of ADI		MS Diet		Exposure (range) in % of ADI minimum - maximum		No of diets exceeding ADI:	
Highest contributor to MS diet (in % of ADI)		Commodity / group of commodities		2nd contributor to MS diet (in % of ADI)		Commodity / group of commodities	
3rd contributor to MS diet (in % of ADI)		Commodity / group of commodities		3rd contributor to MS diet (in % of ADI)		Commodity / group of commodities	
0.09	DE child	0.07	Apples	0.01	Table grapes	0.00	Pears
0.05	NL child	0.04	Apples	0.00	Table grapes	0.00	Pears
0.02	FR toddler	0.02	Apples	0.00	Strawberries	0.00	Pears
0.02	DK child	0.01	Apples	0.00	Pears	0.00	Peppers
0.02	FR infant	0.01	Apples	0.00	Strawberries	0.00	Pears
0.02	PL (GP)	0.01	Apples	0.00	Table grapes	0.00	Pears
0.01	UK toddler	0.01	Apples	0.00	Table grapes	0.00	Strawberries
0.01	WHO cluster diet B	0.01	Apples	0.00	Peppers	0.00	Table grapes
0.01	IE adult	0.00	Apples	0.00	Pears	0.00	Table grapes
0.01	LT adult	0.01	Apples	0.00	Pears	0.00	Strawberries
0.01	UK infant	0.01	Apples	0.00	Pears	0.00	Strawberries
0.01	PT (GP)	0.01	Apples	0.00	Pears	0.00	Table grapes
0.01	ES child	0.01	Apples	0.00	Pears	0.00	Peppers
0.01	NL (GP)	0.01	Apples	0.00	Table grapes	0.00	Pears
0.01	SE (GP)	0.01	Apples	0.00	Pears	0.00	Peppers
0.01	IT child/toddler	0.01	Apples	0.00	Pears	0.00	Strawberries
0.01	WHO cluster diet E	0.01	Apples	0.00	Pears	0.00	Table grapes
0.01	ES adult	0.00	Apples	0.00	Pears	0.00	Peppers
0.01	IT adult	0.00	Apples	0.00	Pears	0.00	Table grapes
0.01	WHO regional diet	0.00	Apples	0.00	Pears	0.00	Table grapes
0.01	DK adult	0.00	Apples	0.00	Pears	0.00	Peppers
0.01	WHO cluster diet D	0.00	Apples	0.00	Table grapes	0.00	Peppers
0.01	WHO Cluster diet F	0.00	Apples	0.00	Table grapes	0.00	Pears
0.01	UK vegetarian	0.00	Apples	0.00	Table grapes	0.00	Strawberries
0.00	FR (GP)	0.00	Apples	0.00	Pears	0.00	Table grapes
0.00	UK adult	0.00	Apples	0.00	Pears	0.00	Table grapes
0.00	FI adult	0.00	Apples	0.00	Strawberries	0.00	Peppers

### Acute risk assessment

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	2724	0.04		0.02				
2010	Peaches	0.05	1268							
2010	Strawberries	0.3	2042	3.04		0.18				
2010	Tomatoes	0.02	2193							
2010	Head cabbage	0.02	1053							
2010	Lettuce	0.02	2223							
2010	Leek	0.02	777							
2010	Oats	0.2	161							
2010	Rye	0.02	366							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

### Chronic risk assessment: Quinoxifen



**Quinoxifen**

Acute exposure: Quinoxifen / Apples



Intake in % of the ARfD

Acute exposure: Quinoxifen / Peaches



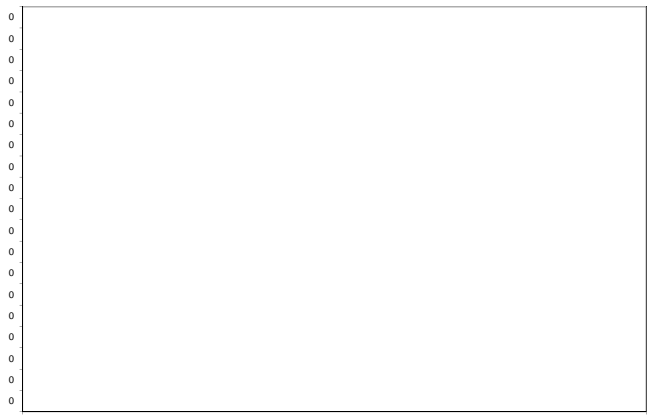
Intake in % of the ARfD

Acute exposure: Quinoxifen / Strawberries



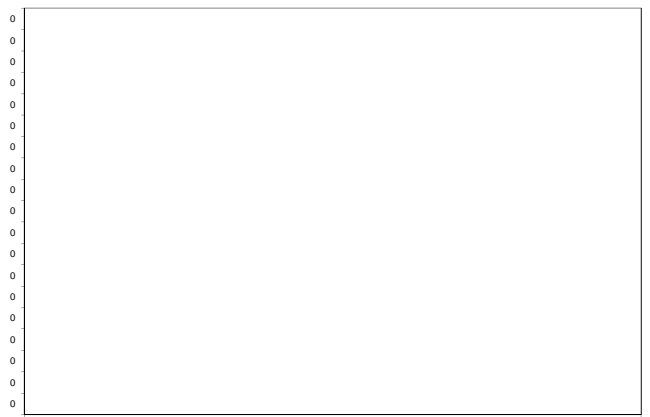
Intake in % of the ARfD

Acute exposure: Quinoxifen / Tomatoes



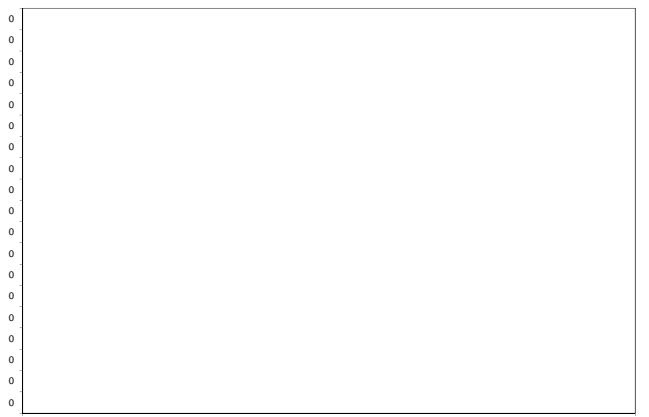
Intake in % of the ARfD

Acute exposure: Quinoxifen / Head cabbage



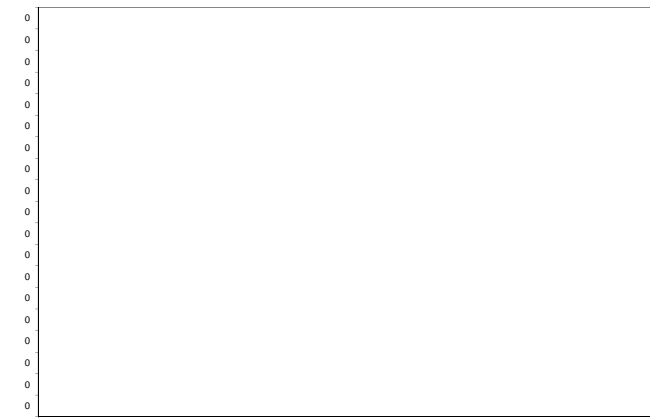
Intake in % of the ARfD

Acute exposure: Quinoxifen / Lettuce



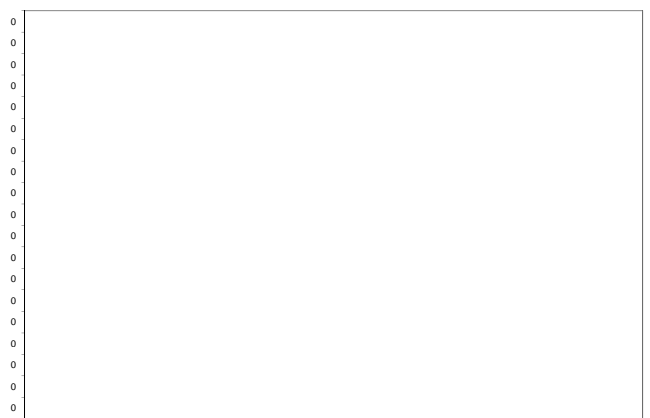
Intake in % of the ARfD

Acute exposure: Quinoxifen / Leek



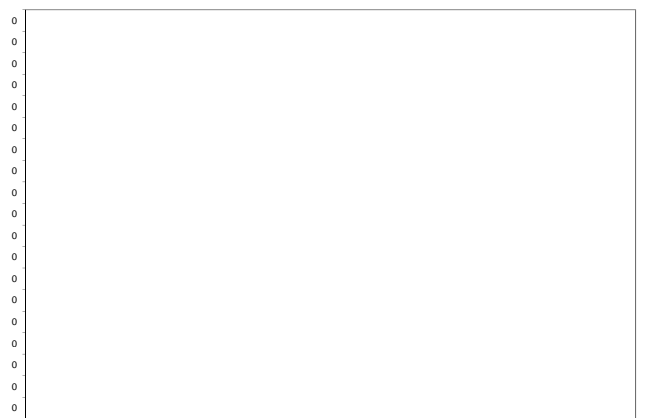
Intake in % of the ARfD

Acute exposure: Quinoxifen / Oats



Intake in % of the ARfD

Acute exposure: Quinoxifen / Rye

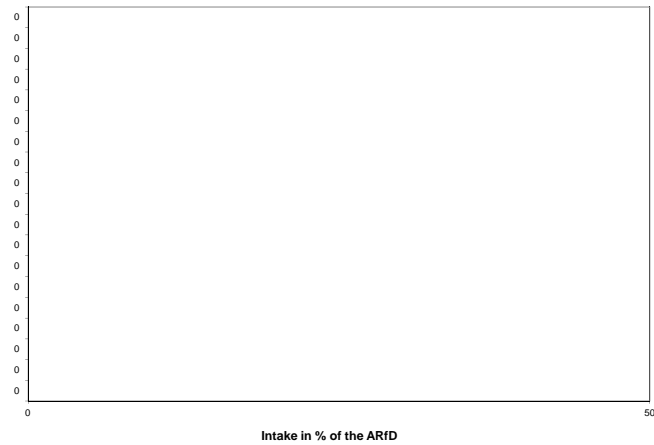


Intake in % of the ARfD

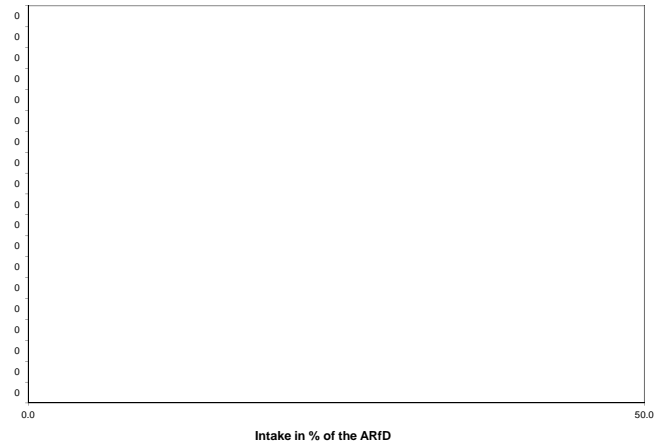


**Quintozene**

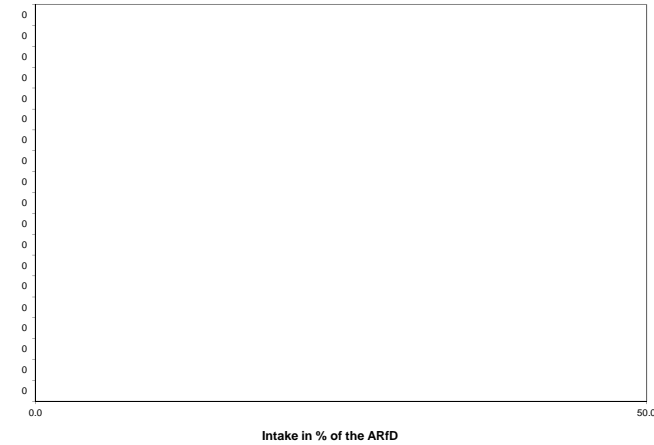
Acute exposure: Quintozene / Apples



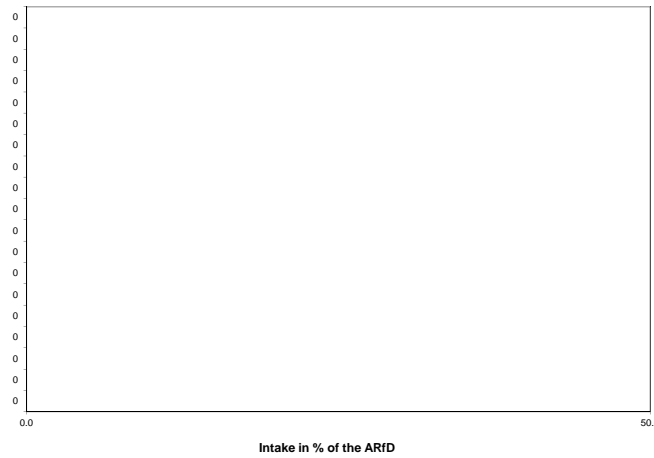
Acute exposure: Quintozene / Peaches



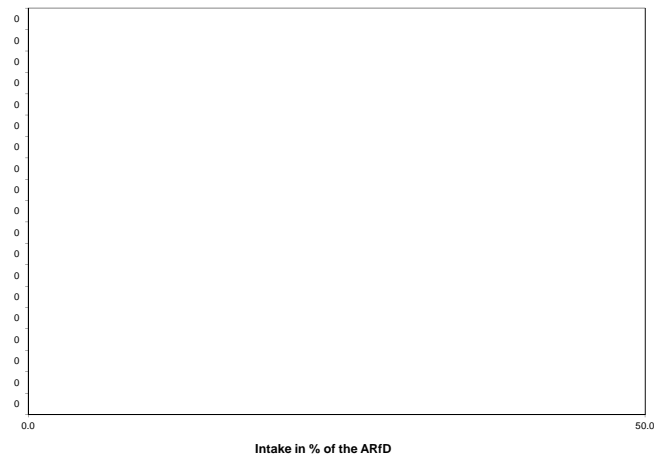
Acute exposure: Quintozene / Strawberries



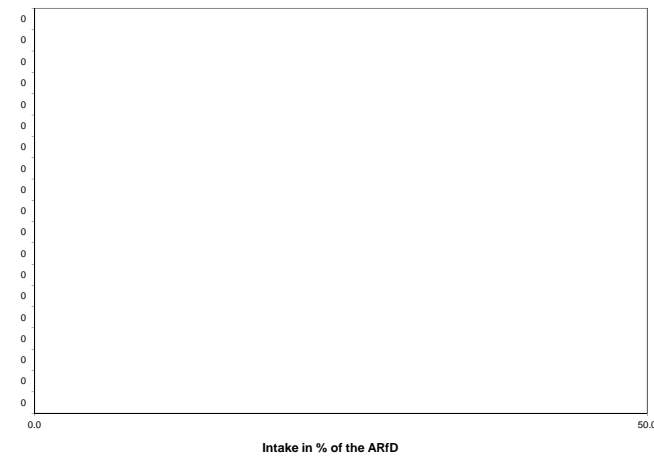
Acute exposure: Quintozene / Tomatoes



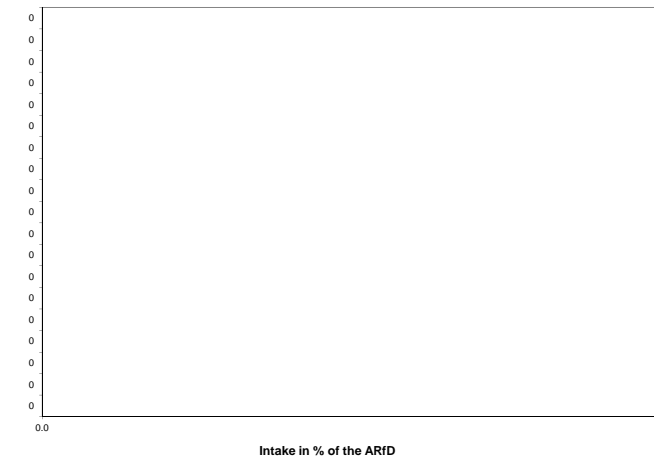
Acute exposure: Quintozene / Head cabbage



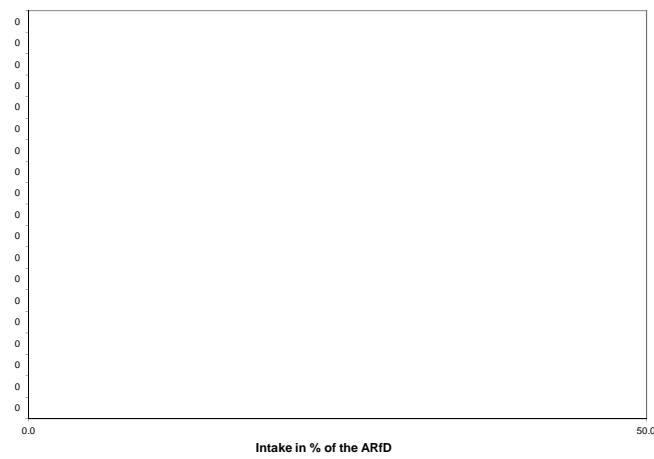
Acute exposure: Quintozene / Lettuce



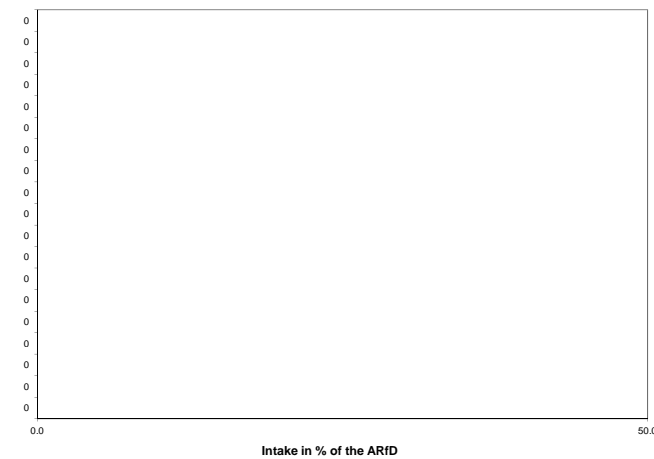
Acute exposure: Quintozene / Leek



Acute exposure: Quintozene / Oats



Acute exposure: Quintozene / Rye







**Resmethrin**

Acute exposure: Resmethrin / Apples



Intake in % of the ARfD

Acute exposure: Resmethrin / Peaches



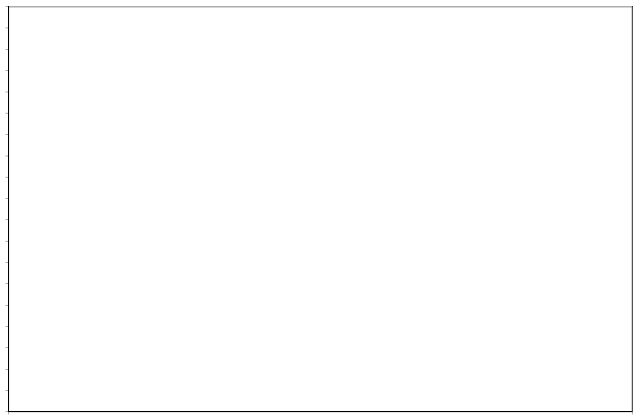
Intake in % of the ARfD

Acute exposure: Resmethrin / Strawberries



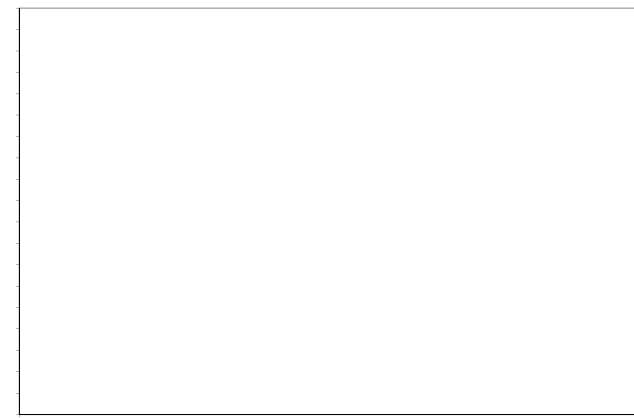
Intake in % of the ARfD

Acute exposure: Resmethrin / Tomatoes



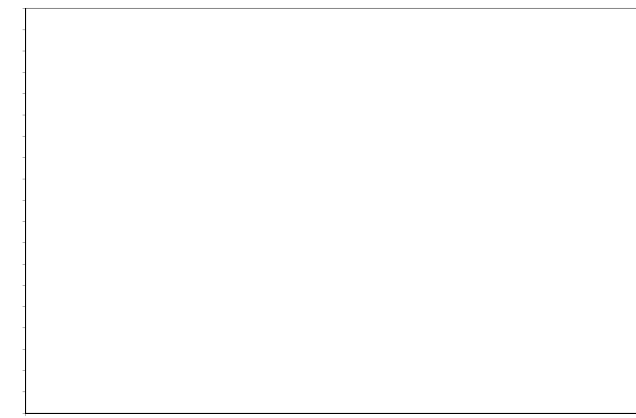
Intake in % of the ARfD

Acute exposure: Resmethrin / Head cabbage



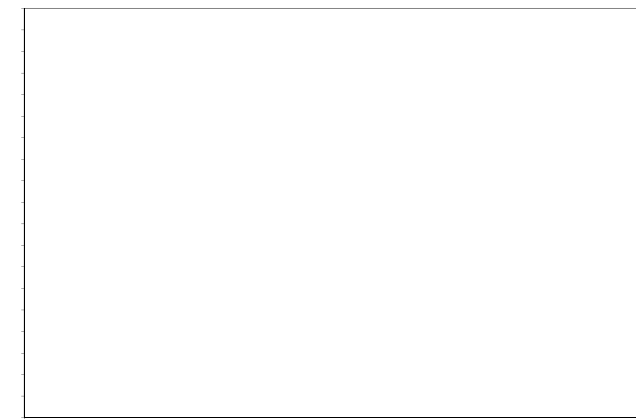
Intake in % of the ARfD

Acute exposure: Resmethrin / Lettuce



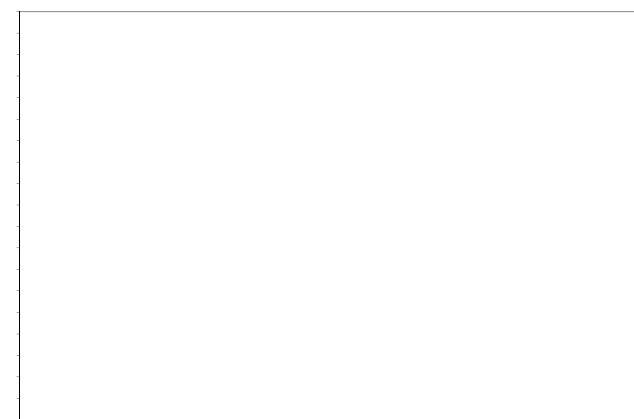
Intake in % of the ARfD

Acute exposure: Resmethrin / Leek



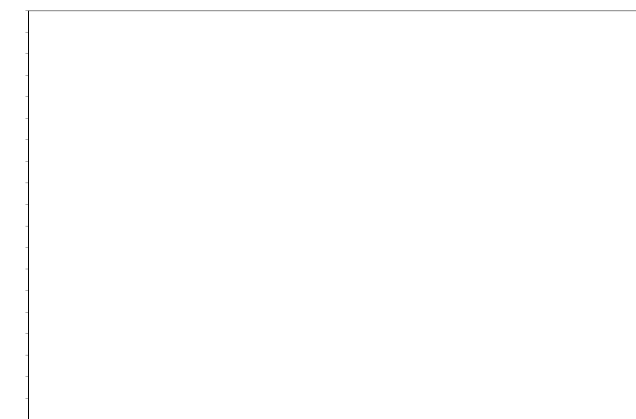
Intake in % of the ARfD

Acute exposure: Resmethrin / Oats



Intake in % of the ARfD

Acute exposure: Resmethrin / Rye



Intake in % of the ARfD

## Spinosad

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.024	ARfD (mg/kg bw):	n.n.
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2007	Year of evaluation:	2006

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
1

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.74	DE child	0.49	Apples	0.06	Table grapes	0.04	Tomatoes
0.47	NL child	0.26	Apples	0.03	Table grapes	0.03	Mandarins
0.35	WHO cluster diet B	0.13	Tomatoes	0.04	Apples	0.03	Lettuce
0.34	FR toddler	0.11	Apples	0.06	Beans (with pods)	0.04	Strawberries
0.27	DK child	0.09	Apples	0.07	Cucumbers	0.03	Pears
0.25	FR infant	0.10	Apples	0.05	Beans (with pods)	0.03	Strawberries
0.22	IE adult	0.03	Apples	0.03	Peaches	0.03	Pears
0.19	ES child	0.05	Apples	0.04	Tomatoes	0.04	Lettuce
0.19	IT child/toddler	0.06	Tomatoes	0.04	Apples	0.02	Lettuce
0.18	IT adult	0.05	Tomatoes	0.03	Apples	0.03	Lettuce
0.17	ES adult	0.05	Lettuce	0.03	Tomatoes	0.03	Apples
0.17	WHO regional diet	0.05	Tomatoes	0.03	Lettuce	0.03	Apples
0.16	PL (GP)	0.08	Apples	0.04	Tomatoes	0.01	Table grapes
0.16	SE (GP)	0.04	Apples	0.03	Tomatoes	0.02	Mandarins
0.15	UK toddler	0.07	Apples	0.03	Tomatoes	0.01	Strawberries
0.15	NL (GP)	0.05	Apples	0.02	Tomatoes	0.01	Beans (with pods)
0.14	PT (GP)	0.04	Apples	0.04	Tomatoes	0.02	Peaches
0.14	LT adult	0.08	Apples	0.03	Tomatoes	0.02	Cucumbers
0.13	WHO cluster diet E	0.03	Apples	0.02	Tomatoes	0.02	Beans (with pods)
0.12	WHO Cluster diet F	0.03	Tomatoes	0.03	Apples	0.03	Lettuce
0.11	UK infant	0.06	Apples	0.02	Tomatoes	0.01	Strawberries
0.11	WHO cluster diet D	0.04	Tomatoes	0.03	Apples	0.01	Cucumbers
0.10	FR (GP)	0.02	Apples	0.02	Tomatoes	0.01	Beans (with pods)
0.09	UK vegetarian	0.03	Tomatoes	0.02	Apples	0.01	Lettuce
0.09	DK adult	0.03	Apples	0.02	Tomatoes	0.01	Cucumbers
0.07	FI adult	0.02	Tomatoes	0.02	Apples	0.01	Cucumbers
0.07	UK adult	0.02	Tomatoes	0.02	Apples	0.01	Lettuce

## Acute risk assessment

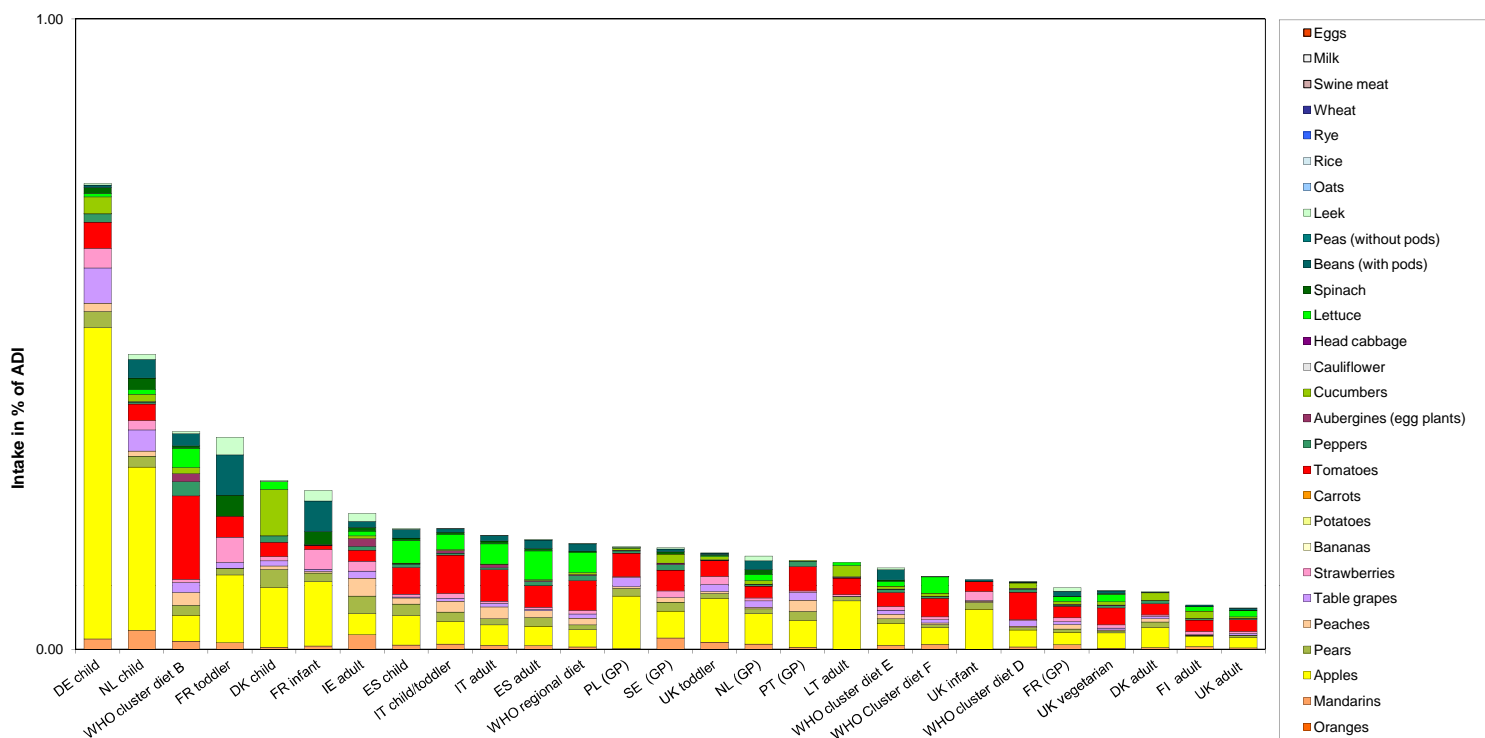
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	1	2396	0.17		0.02				
2010	Peaches	1	1145	13.36		0.15				
2010	Strawberries	0.3	1776	6.08	0.23	0.56				
2010	Tomatoes	1	1670	3.23		0.20				
2010	Head cabbage	2	933							
2010	Lettuce	10	1653	3.02		5.70				
2010	Leek	0.5	779	1.67		0.03				
2010	Oats	1	147							
2010	Rye	1	382							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

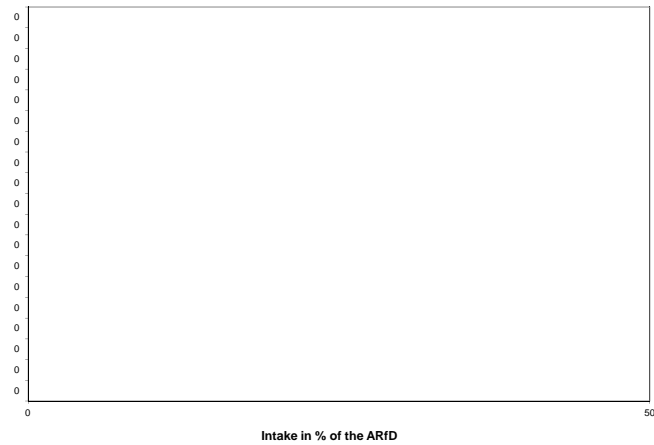
c) TRL: toxicological threshold level

## Chronic risk assessment: Spinosad

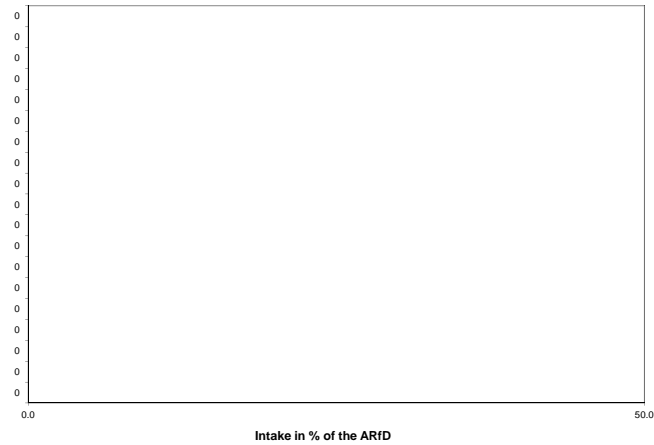


**Spinosad**

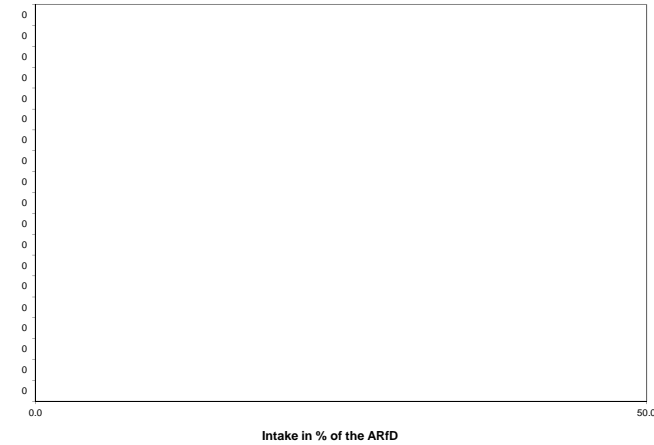
Acute exposure: Spinosad / Apples



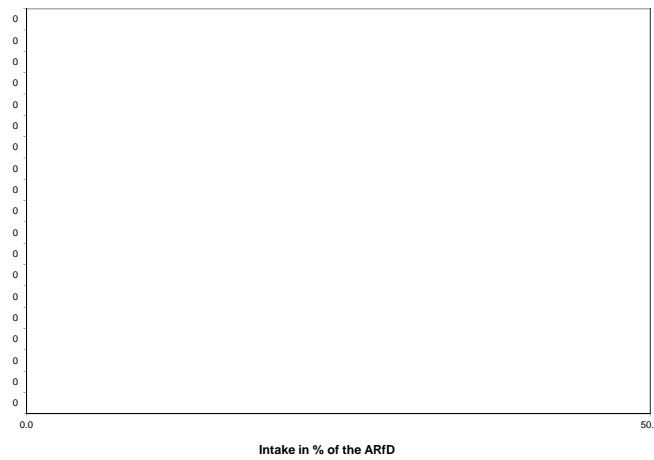
Acute exposure: Spinosad / Peaches



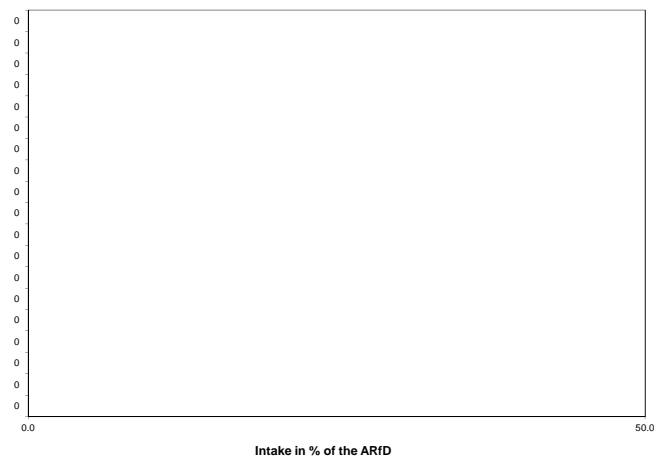
Acute exposure: Spinosad / Strawberries



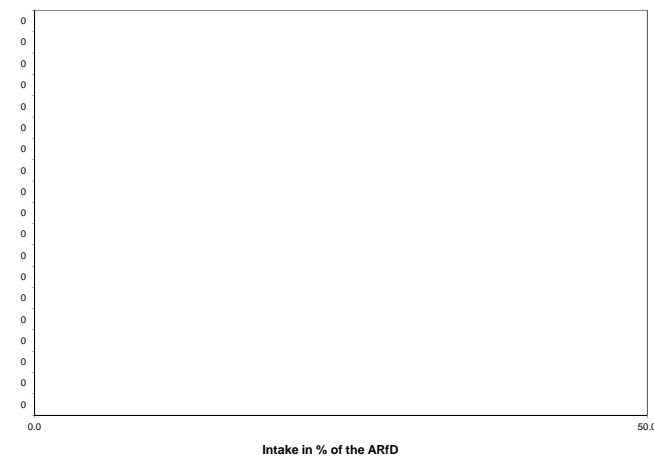
Acute exposure: Spinosad / Tomatoes



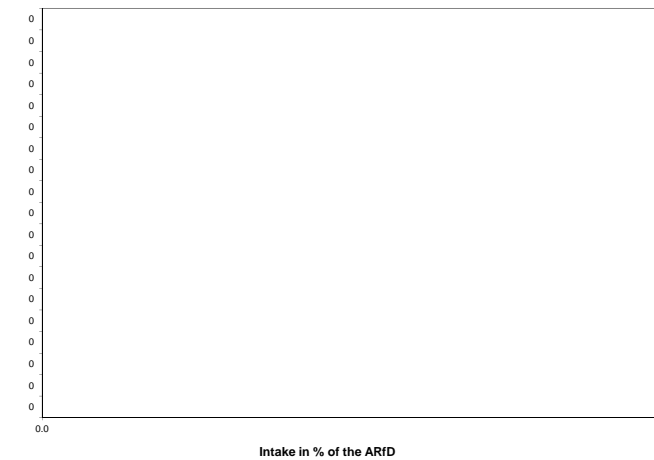
Acute exposure: Spinosad / Head cabbage



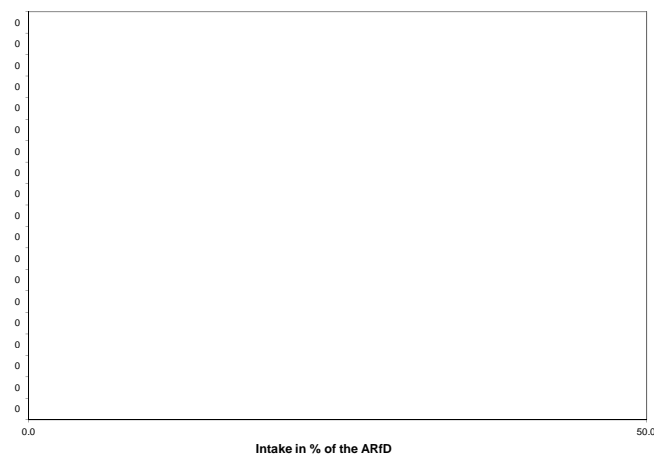
Acute exposure: Spinosad / Lettuce



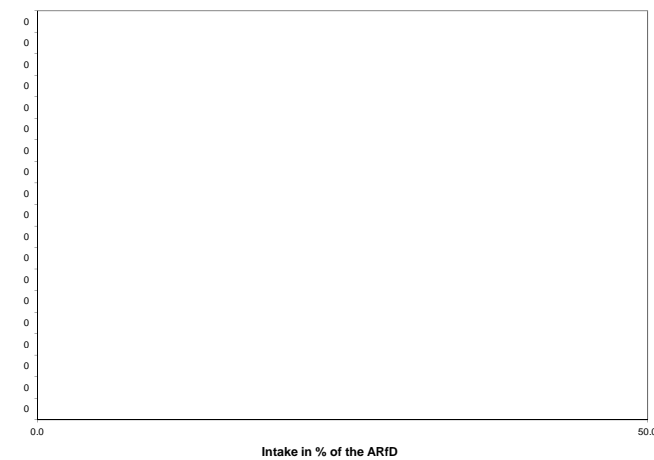
Acute exposure: Spinosad / Leek



Acute exposure: Spinosad / Oats



Acute exposure: Spinosad / Rye



Spiroxamine			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.025	ARfD (mg/kg bw):	0.1
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	1999	Year of evaluation:	2011

### Chronic risk assessment

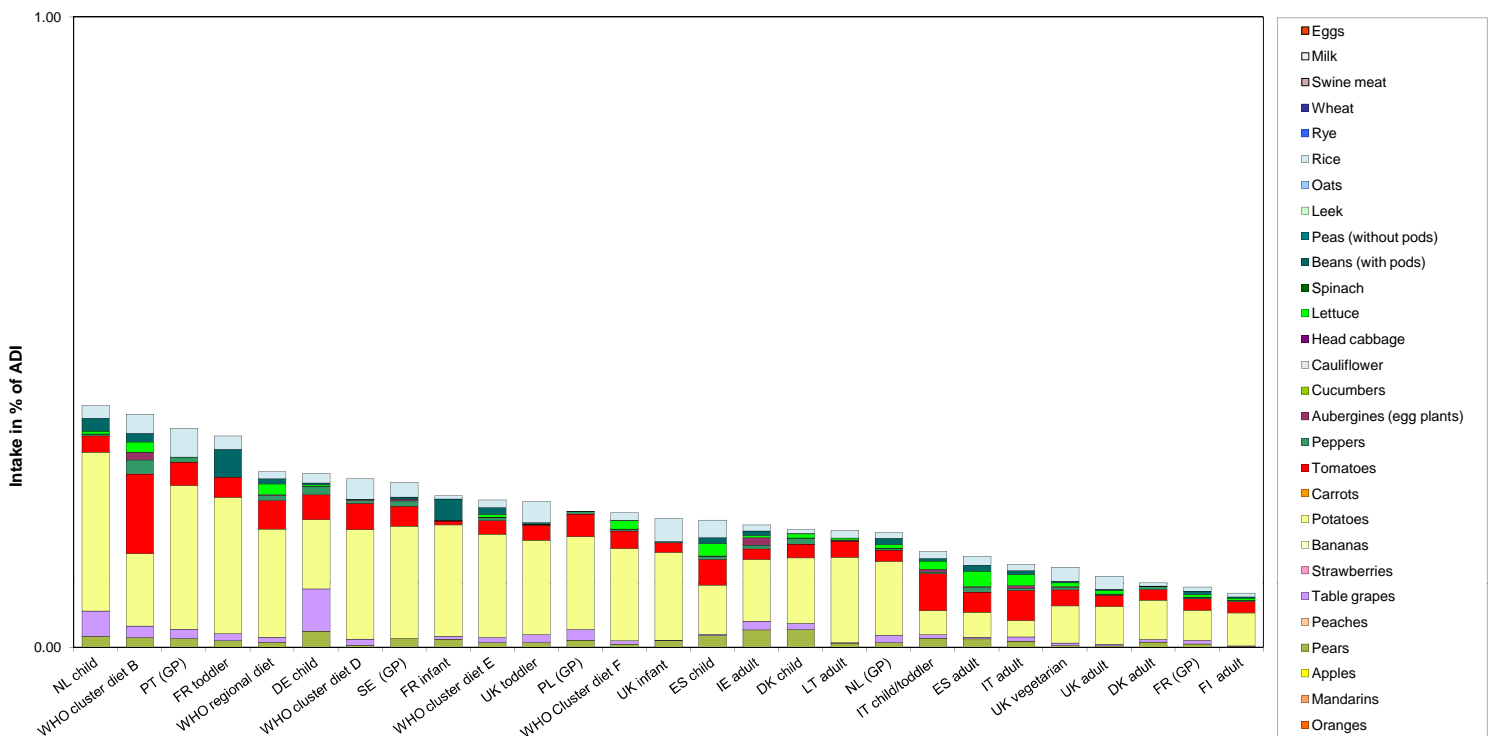
		Exposure (range) in % of ADI minimum - maximum					
		No of diets exceeding ADI: ---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.38	NL child	0.25	Potatoes	0.04	Table grapes	0.03	Tomatoes
0.37	WHO cluster diet B	0.13	Tomatoes	0.11	Potatoes	0.03	Rice
0.35	PT (GP)	0.23	Potatoes	0.05	Rice	0.04	Tomatoes
0.34	FR toddler	0.22	Potatoes	0.04	Beans (with pods)	0.03	Tomatoes
0.28	WHO regional diet	0.17	Potatoes	0.05	Tomatoes	0.02	Lettuce
0.28	DE child	0.11	Potatoes	0.07	Table grapes	0.04	Tomatoes
0.27	WHO cluster diet D	0.17	Potatoes	0.04	Tomatoes	0.03	Rice
0.26	SE (GP)	0.18	Potatoes	0.03	Tomatoes	0.02	Rice
0.24	FR infant	0.18	Potatoes	0.03	Beans (with pods)	0.01	Pears
0.23	WHO cluster diet E	0.16	Potatoes	0.02	Tomatoes	0.01	Rice
0.23	UK toddler	0.15	Potatoes	0.03	Rice	0.02	Tomatoes
0.22	PL (GP)	0.15	Potatoes	0.04	Tomatoes	0.02	Table grapes
0.21	WHO Cluster diet F	0.15	Potatoes	0.03	Tomatoes	0.01	Lettuce
0.20	UK infant	0.14	Potatoes	0.04	Rice	0.02	Tomatoes
0.20	ES child	0.08	Potatoes	0.04	Tomatoes	0.03	Rice
0.19	IE adult	0.10	Potatoes	0.03	Pears	0.02	Tomatoes
0.19	DK child	0.10	Potatoes	0.03	Pears	0.02	Tomatoes
0.19	LT adult	0.14	Potatoes	0.03	Tomatoes	0.01	Rice
0.18	NL (GP)	0.12	Potatoes	0.02	Tomatoes	0.01	Table grapes
0.15	IT child/toddler	0.06	Tomatoes	0.04	Potatoes	0.01	Pears
0.14	ES adult	0.04	Potatoes	0.03	Tomatoes	0.02	Lettuce
0.13	IT adult	0.05	Tomatoes	0.03	Potatoes	0.02	Lettuce
0.13	UK vegetarian	0.06	Potatoes	0.03	Tomatoes	0.02	Rice
0.11	UK adult	0.06	Potatoes	0.02	Rice	0.02	Tomatoes
0.10	DK adult	0.06	Potatoes	0.02	Tomatoes	0.01	Pears
0.10	FR (GP)	0.05	Potatoes	0.02	Tomatoes	0.01	Rice
0.09	FI adult	0.05	Potatoes	0.02	Tomatoes	0.01	Rice

### Acute risk assessment

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	2556	0.04		0.00		0.10	UK infant	
2010	Peaches	0.05	1302							
2010	Strawberries	0.05	2028							
2010	Tomatoes	0.05	1956	0.05	0.10	0.06		3.26	BE child	
2010	Head cabbage	0.05	1042							
2010	Lettuce	0.05	2062	0.10		0.00		0.08	DE child	
2010	Leek	0.05	862							
2010	Oats	0.3	250							
2010	Rye	0.05	406							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

### Chronic risk assessment: Spiroxamine



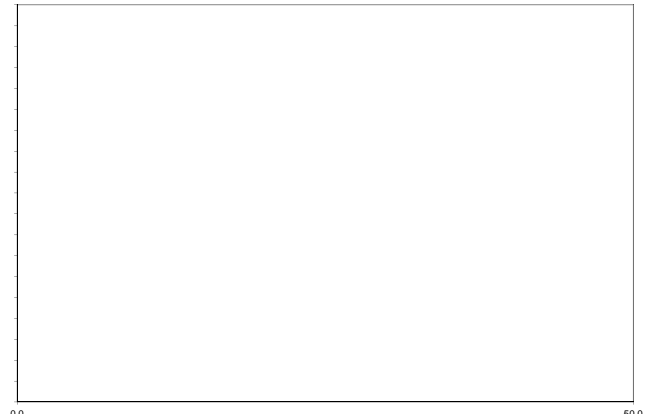
**Spiroxamine**

Acute exposure: Spiroxamine / Apples



Intake in % of the ARfD

Acute exposure: Spiroxamine / Peaches



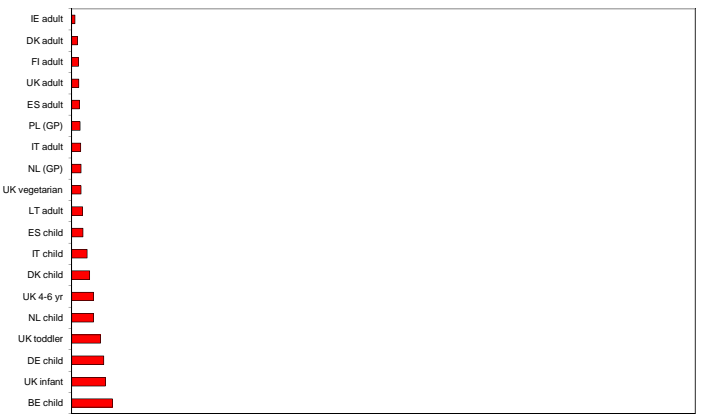
Intake in % of the ARfD

Acute exposure: Spiroxamine / Strawberries



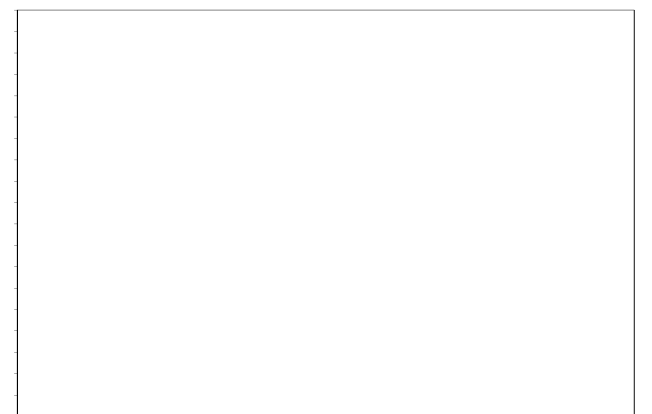
Intake in % of the ARfD

Acute exposure: Spiroxamine / Tomatoes



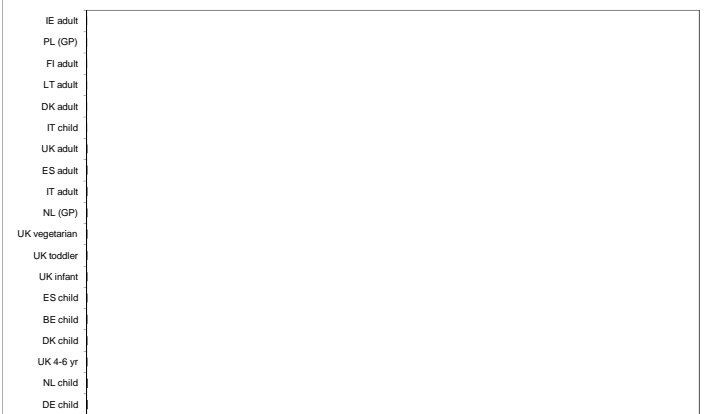
Intake in % of the ARfD

Acute exposure: Spiroxamine / Head cabbage



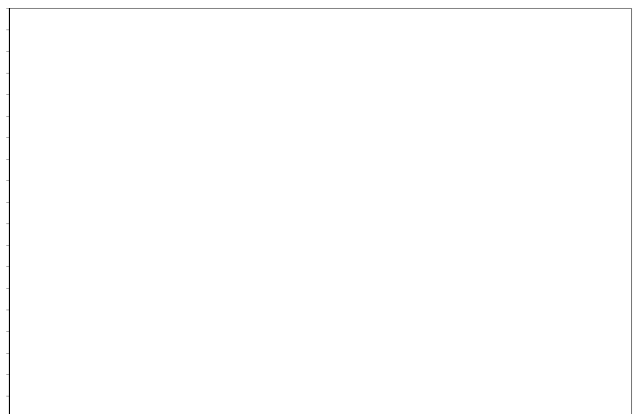
Intake in % of the ARfD

Acute exposure: Spiroxamine / Lettuce



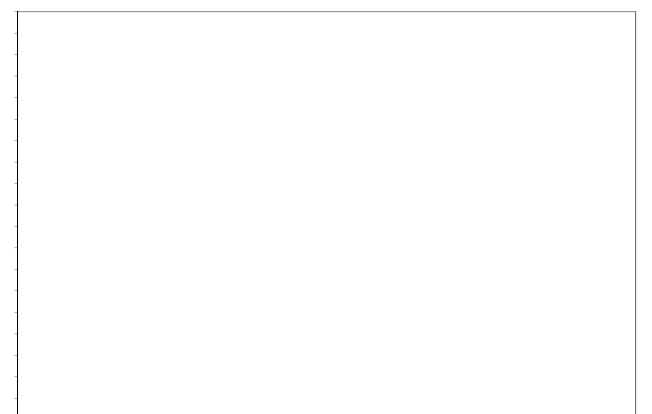
Intake in % of the ARfD

Acute exposure: Spiroxamine / Leek



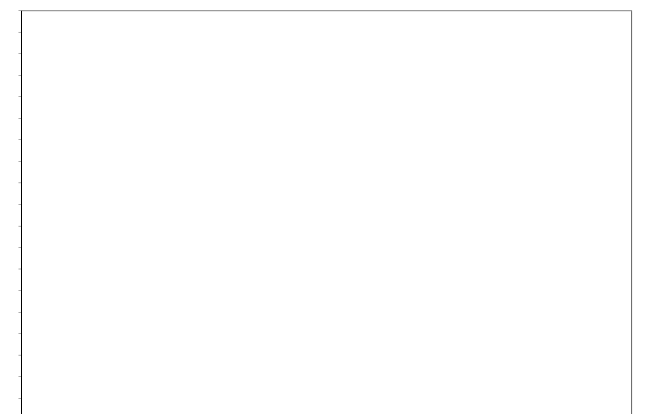
Intake in % of the ARfD

Acute exposure: Spiroxamine / Oats



Intake in % of the ARfD

Acute exposure: Spiroxamine / Rye



Intake in % of the ARfD

tau-Fluvalinate			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.005	ARfD (mg/kg bw):	0.05
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2010	Year of evaluation:	2010

### Chronic risk assessment

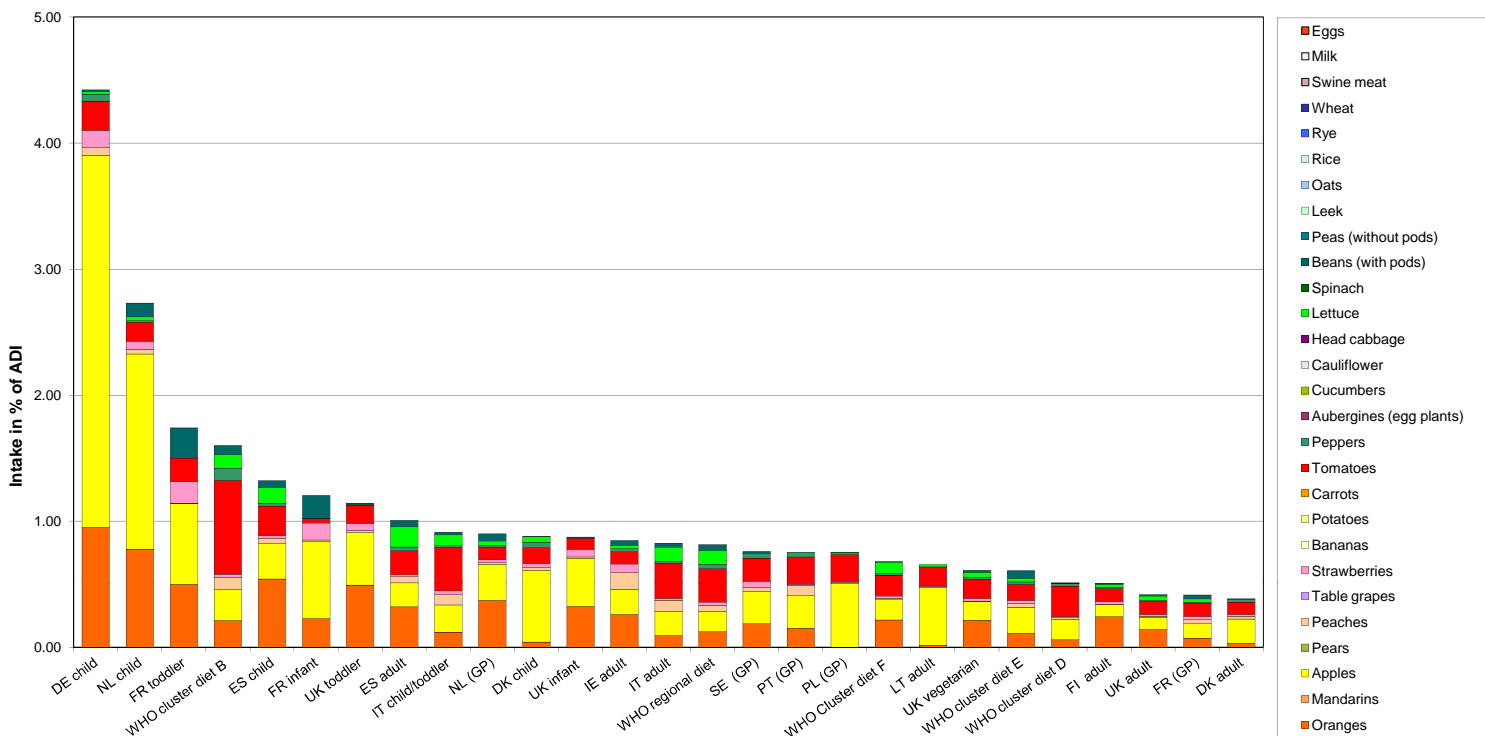
		Exposure (range) in % of ADI minimum - maximum					
		4					
		No of diets exceeding ADI: ---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
4.42	DE child	2.95	Apples	0.95	Oranges	0.23	Tomatoes
2.73	NL child	1.55	Apples	0.78	Oranges	0.15	Tomatoes
1.74	FR toddler	0.64	Apples	0.50	Oranges	0.24	Beans (with pods)
1.60	WHO cluster diet B	0.74	Tomatoes	0.25	Apples	0.21	Oranges
1.32	ES child	0.54	Oranges	0.28	Apples	0.24	Tomatoes
1.21	FR infant	0.61	Apples	0.23	Oranges	0.18	Beans (with pods)
1.14	UK toddler	0.49	Oranges	0.42	Apples	0.14	Tomatoes
1.01	ES adult	0.32	Oranges	0.19	Tomatoes	0.19	Apples
0.91	IT child/toddler	0.34	Tomatoes	0.22	Apples	0.12	Oranges
0.90	NL (GP)	0.37	Oranges	0.29	Apples	0.10	Tomatoes
0.88	DK child	0.57	Apples	0.13	Tomatoes	0.04	Peppers
0.88	UK infant	0.38	Apples	0.32	Oranges	0.09	Tomatoes
0.85	IE adult	0.26	Oranges	0.20	Apples	0.13	Peaches
0.83	IT adult	0.28	Tomatoes	0.19	Apples	0.11	Lettuce
0.81	WHO regional diet	0.27	Tomatoes	0.16	Apples	0.12	Oranges
0.76	SE (GP)	0.26	Apples	0.19	Oranges	0.18	Tomatoes
0.76	PT (GP)	0.26	Apples	0.22	Tomatoes	0.15	Oranges
0.76	PL (GP)	0.50	Apples	0.21	Tomatoes	0.02	Peppers
0.68	WHO Cluster diet F	0.22	Oranges	0.16	Tomatoes	0.16	Apples
0.66	LT adult	0.46	Apples	0.15	Tomatoes	0.02	Lettuce
0.61	UK vegetarian	0.22	Oranges	0.15	Tomatoes	0.14	Apples
0.61	WHO cluster diet E	0.21	Apples	0.13	Tomatoes	0.11	Oranges
0.51	WHO cluster diet D	0.24	Tomatoes	0.16	Apples	0.06	Oranges
0.51	FI adult	0.24	Oranges	0.10	Tomatoes	0.10	Apples
0.42	UK adult	0.14	Oranges	0.11	Tomatoes	0.10	Apples
0.42	FR (GP)	0.12	Apples	0.10	Tomatoes	0.07	Oranges
0.38	DK adult	0.19	Apples	0.10	Tomatoes	0.03	Oranges

### Acute risk assessment

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.1	2142	0.23		0.03		6.66	UK infant	
2010	Peaches	0.1	984	0.10		0.01		1.19	DE child	
2010	Strawberries	0.5	1664	0.06		0.02		0.69	DE child	
2010	Tomatoes	0.1	1578	0.06		0.01		1.16	BE child	
2010	Head cabbage	0.2	894							
2010	Lettuce	0.3	1854	0.05	0.05	2.80	1	150.66	DE child	
2010	Leek	0.1	687							
2010	Oats	0.5	153							
2010	Rye	0.05	314							
2010	Swine Meat									
2010	Milk									

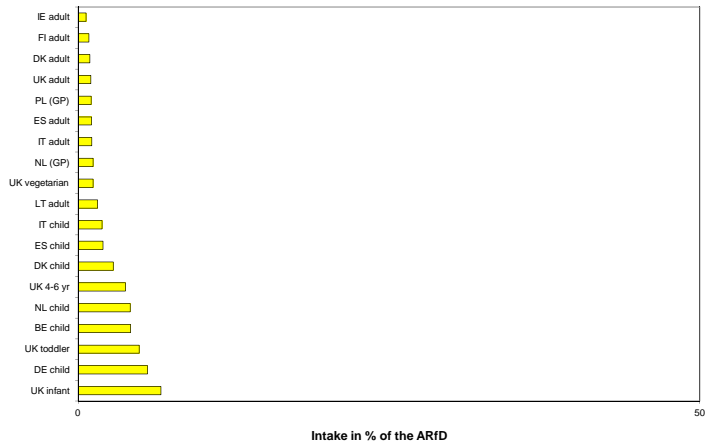
a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

### Chronic risk assessment: tau-Fluvalinate

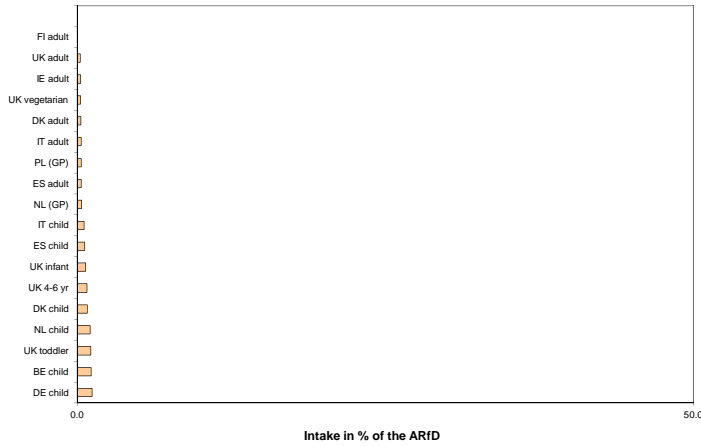


**tau-Fluvalinate**

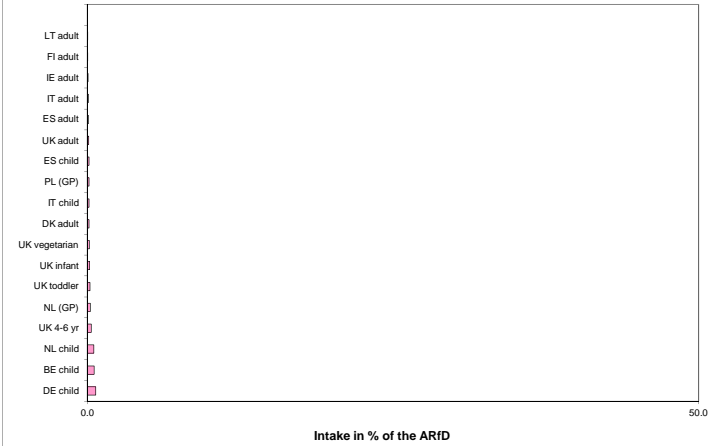
Acute exposure: tau-Fluvalinate / Apples



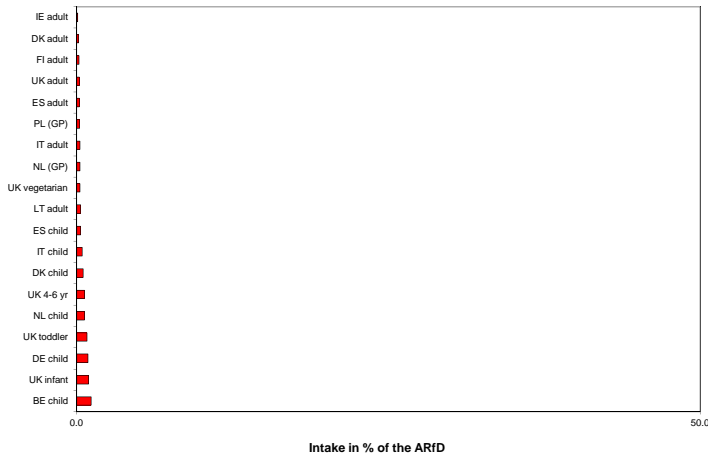
Acute exposure: tau-Fluvalinate / Peaches



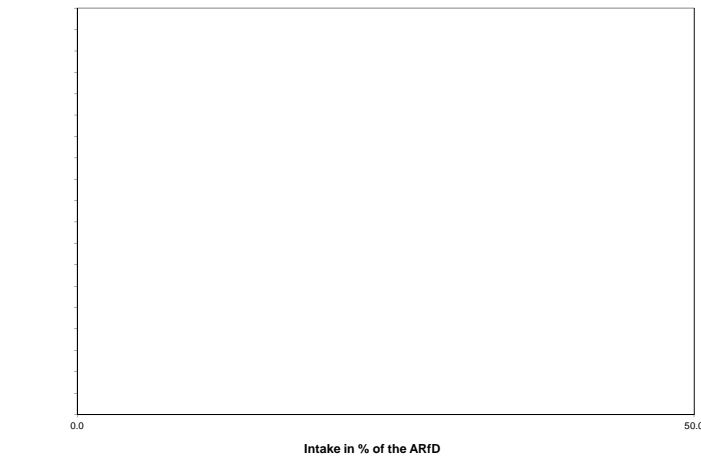
Acute exposure: tau-Fluvalinate / Strawberries



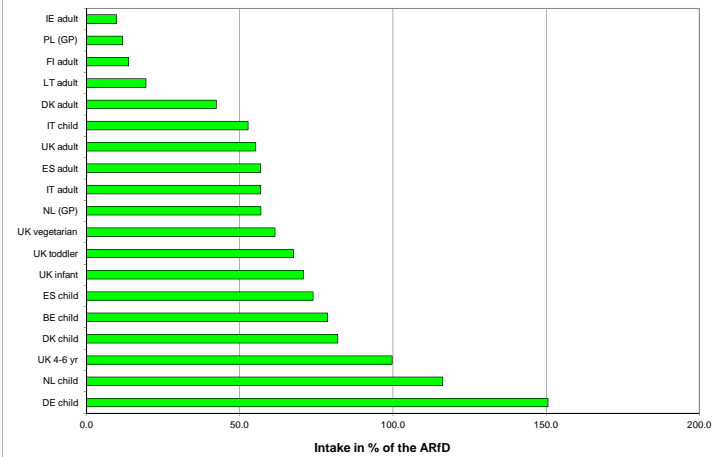
Acute exposure: tau-Fluvalinate / Tomatoes



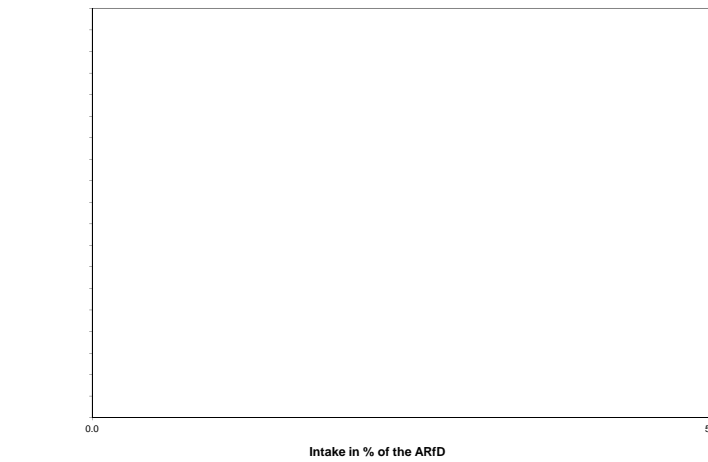
Acute exposure: tau-Fluvalinate / Head cabbage



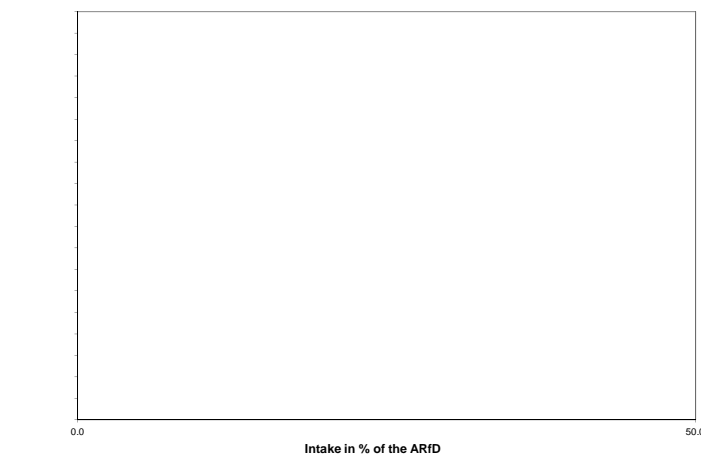
Acute exposure: tau-Fluvalinate / Lettuce



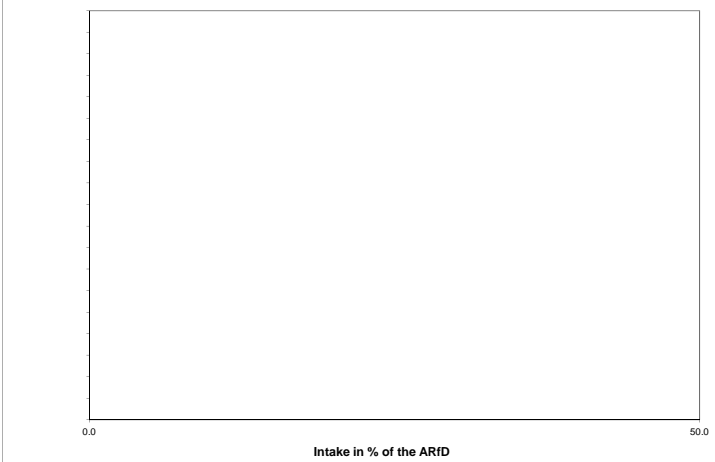
Acute exposure: tau-Fluvalinate / Leek



Acute exposure: tau-Fluvalinate / Oats



Acute exposure: tau-Fluvalinate / Rye





## Tebuconazole

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.03</b>	ARfD (mg/kg bw):	<b>0.03</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2008</b>	Year of evaluation:	<b>2008</b>

### Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
1

**No of diets exceeding ADI:** ---

	Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
1.43	DE child		0.57	Apples	0.27	Wheat	0.17	Oranges
1.09	NL child		0.31	Wheat	0.30	Apples	0.14	Oranges
1.08	WHO cluster diet B		0.56	Wheat	0.16	Tomatoes	0.07	Rice
1.01	DK child		0.36	Wheat	0.25	Rye	0.11	Apples
0.78	FR toddler		0.17	Wheat	0.12	Apples	0.10	Carrots
0.70	IT child/toddler		0.43	Wheat	0.07	Tomatoes	0.04	Apples
0.68	WHO cluster diet D		0.42	Wheat	0.08	Rice	0.05	Tomatoes
0.66	ES child		0.29	Wheat	0.10	Oranges	0.07	Rice
0.63	UK toddler		0.25	Wheat	0.09	Oranges	0.08	Rice
0.60	PT (GP)		0.25	Wheat	0.11	Rice	0.05	Apples
0.56	SE (GP)		0.21	Wheat	0.06	Rice	0.05	Apples
0.52	UK infant		0.17	Wheat	0.09	Rice	0.07	Apples
0.51	IT adult		0.27	Wheat	0.06	Tomatoes	0.04	Apples
0.51	IE adult		0.15	Wheat	0.05	Oranges	0.04	Peaches
0.50	WHO cluster diet E		0.26	Wheat	0.04	Apples	0.03	Rice
0.50	WHO Cluster diet F		0.23	Wheat	0.04	Rye	0.04	Oranges
0.48	FR infant		0.12	Apples	0.11	Carrots	0.05	Wheat
0.46	WHO regional diet		0.19	Wheat	0.06	Tomatoes	0.03	Apples
0.42	ES adult		0.15	Wheat	0.06	Oranges	0.04	Tomatoes
0.42	NL (GP)		0.13	Wheat	0.07	Oranges	0.06	Apples
0.37	FR (GP)		0.21	Wheat	0.02	Tomatoes	0.02	Apples
0.35	LT adult		0.09	Apples	0.07	Wheat	0.06	Rye
0.35	UK vegetarian		0.13	Wheat	0.05	Rice	0.04	Oranges
0.32	DK adult		0.13	Wheat	0.04	Rye	0.04	Apples
0.27	UK adult		0.11	Wheat	0.05	Rice	0.03	Oranges
0.25	FI adult		0.06	Wheat	0.04	Oranges	0.04	Rye
0.23	PL (GP)		0.10	Apples	0.05	Tomatoes	0.02	Table grapes

### Acute risk assessment

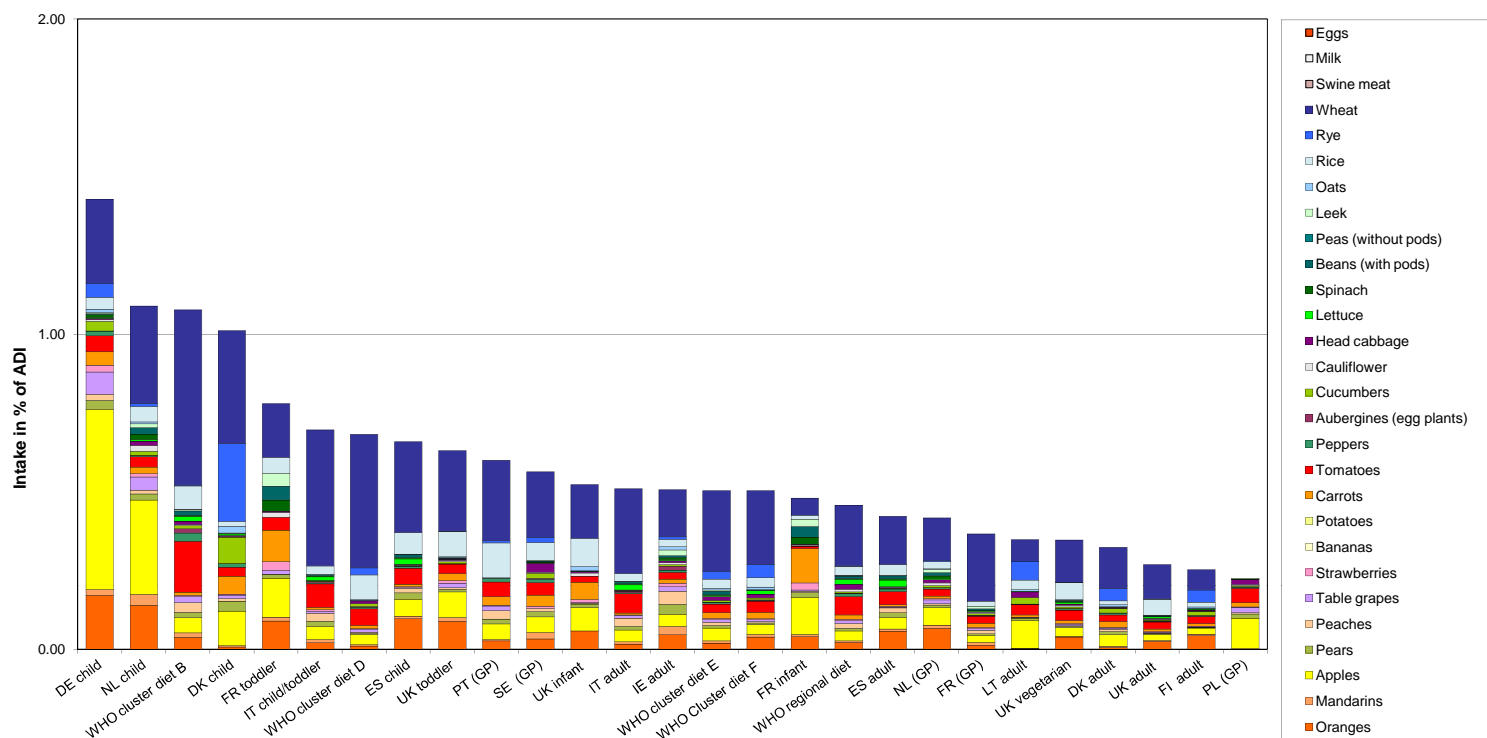
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	1	2900	1.10		1.00	2	326.55	UK infant	
2010	Peaches	1	1425	19.93		0.60	1	118.66	DE child	
2010	Strawberries	0.05	2191	0.05	0.05	0.06		3.17	DE child	
2010	Tomatoes	1	2416	3.35		0.29		56.21	BE child	
2010	Head cabbage	1	1162	1.38		0.30		52.63	NL child	
2010	Lettuce	0.05	2370	0.13		0.04		3.14	DE child	
2010	Leek	1	886	16.93		0.17		32.82	BE child	
2010	Oats	2	265	1.89		0.10		1.33	DE child	
2010	Rye	0.2	426	0.47		0.03		0.61	UK infant	
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

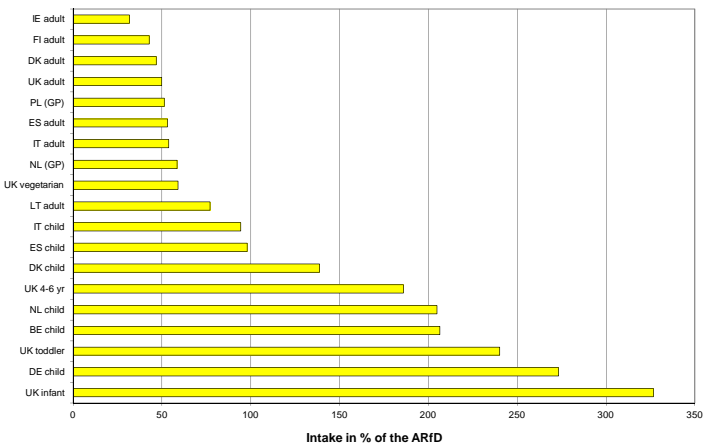
<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Tebuconazole

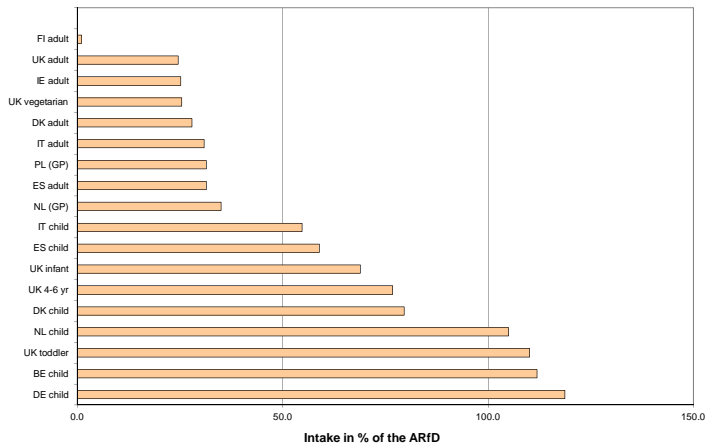


**Tebuconazole**

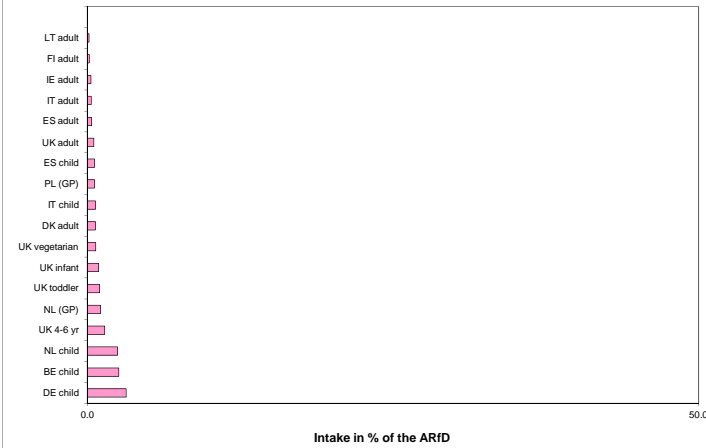
Acute exposure: Tebuconazole / Apples



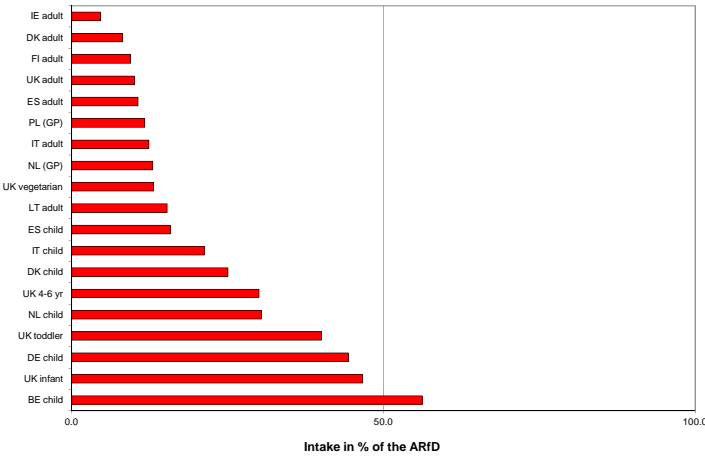
Acute exposure: Tebuconazole / Peaches



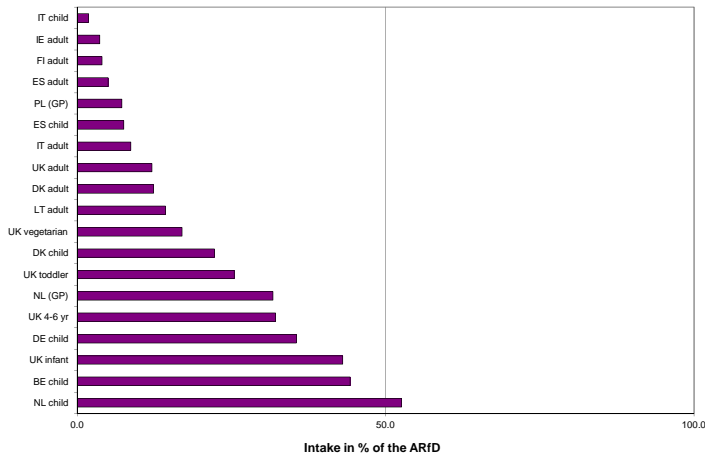
Acute exposure: Tebuconazole / Strawberries



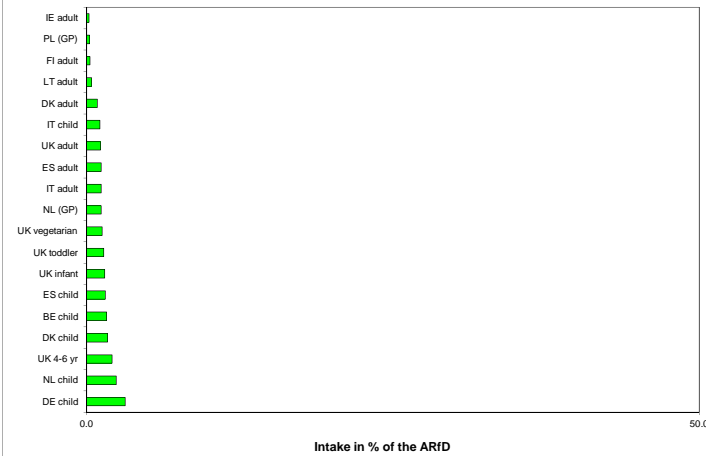
Acute exposure: Tebuconazole / Tomatoes



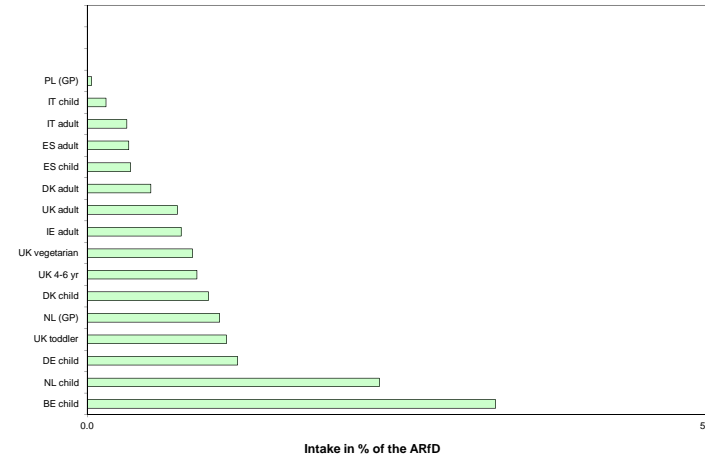
Acute exposure: Tebuconazole / Head cabbage



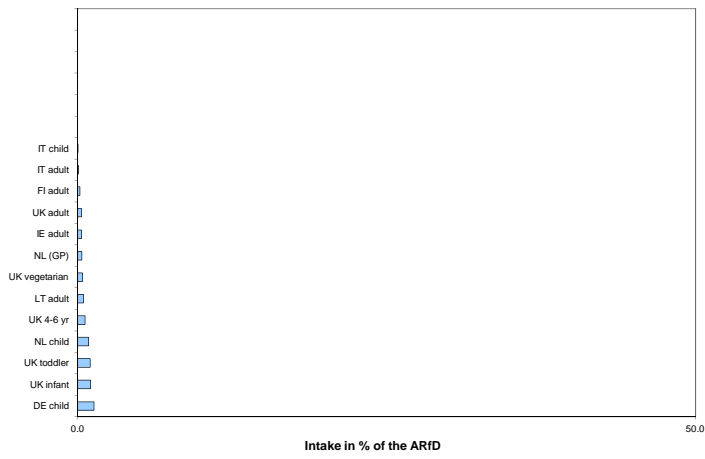
Acute exposure: Tebuconazole / Lettuce



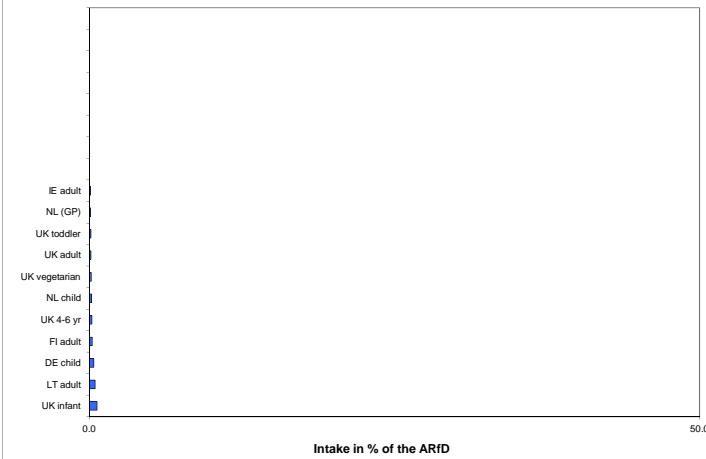
Acute exposure: Tebuconazole / Leek



Acute exposure: Tebuconazole / Oats



Acute exposure: Tebuconazole / Rye



## Tebufenozide

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.02</b>	ARfD (mg/kg bw):	<b>n.n.</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2011</b>	Year of evaluation:	<b>2011</b>

### Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
1

**No of diets exceeding ADI:** ---

	Highest calculated exposure in % of ADI		Highest contributor to MS diet (in % of ADI)		2nd contributor to MS diet (in % of ADI)		3rd contributor to MS diet (in % of ADI)	
	MS Diet		Commodity / group of commodities		Commodity / group of commodities		Commodity / group of commodities	
0.88	DE child		0.64	Apples	0.07	Table grapes	0.05	Tomatoes
0.53	NL child		0.34	Apples	0.04	Table grapes	0.04	Mandarins
0.39	WHO cluster diet B		0.17	Tomatoes	0.05	Apples	0.03	Peppers
0.28	FR toddler		0.14	Apples	0.04	Tomatoes	0.04	Leek
0.24	DK child		0.12	Apples	0.04	Pears	0.03	Tomatoes
0.22	ES child		0.06	Apples	0.05	Tomatoes	0.03	Lettuce
0.22	IE adult		0.04	Apples	0.04	Pears	0.03	Mandarins
0.21	PT (GP)		0.06	Apples	0.05	Tomatoes	0.04	Rice
0.21	IT child/toddler		0.08	Tomatoes	0.05	Apples	0.02	Pears
0.20	PL (GP)		0.11	Apples	0.05	Tomatoes	0.02	Table grapes
0.20	FR infant		0.13	Apples	0.02	Leek	0.02	Pears
0.20	UK toddler		0.09	Apples	0.03	Tomatoes	0.03	Rice
0.19	IT adult		0.06	Tomatoes	0.04	Apples	0.02	Lettuce
0.18	SE (GP)		0.06	Apples	0.04	Tomatoes	0.02	Mandarins
0.18	ES adult		0.04	Tomatoes	0.04	Apples	0.03	Lettuce
0.18	WHO regional diet		0.06	Tomatoes	0.04	Apples	0.02	Lettuce
0.16	LT adult		0.10	Apples	0.03	Tomatoes	0.01	Rice
0.15	NL (GP)		0.06	Apples	0.02	Tomatoes	0.01	Table grapes
0.15	UK infant		0.08	Apples	0.03	Rice	0.02	Tomatoes
0.15	WHO cluster diet D		0.06	Tomatoes	0.04	Apples	0.03	Rice
0.14	WHO cluster diet E		0.05	Apples	0.03	Tomatoes	0.01	Rice
0.13	WHO Cluster diet F		0.04	Tomatoes	0.03	Apples	0.02	Lettuce
0.11	UK vegetarian		0.03	Tomatoes	0.03	Apples	0.02	Rice
0.10	DK adult		0.04	Apples	0.02	Tomatoes	0.01	Pears
0.10	FR (GP)		0.03	Apples	0.02	Tomatoes	0.01	Mandarins
0.09	UK adult		0.02	Tomatoes	0.02	Apples	0.02	Rice
0.07	FI adult		0.02	Tomatoes	0.02	Apples	0.01	Mandarins

### Acute risk assessment

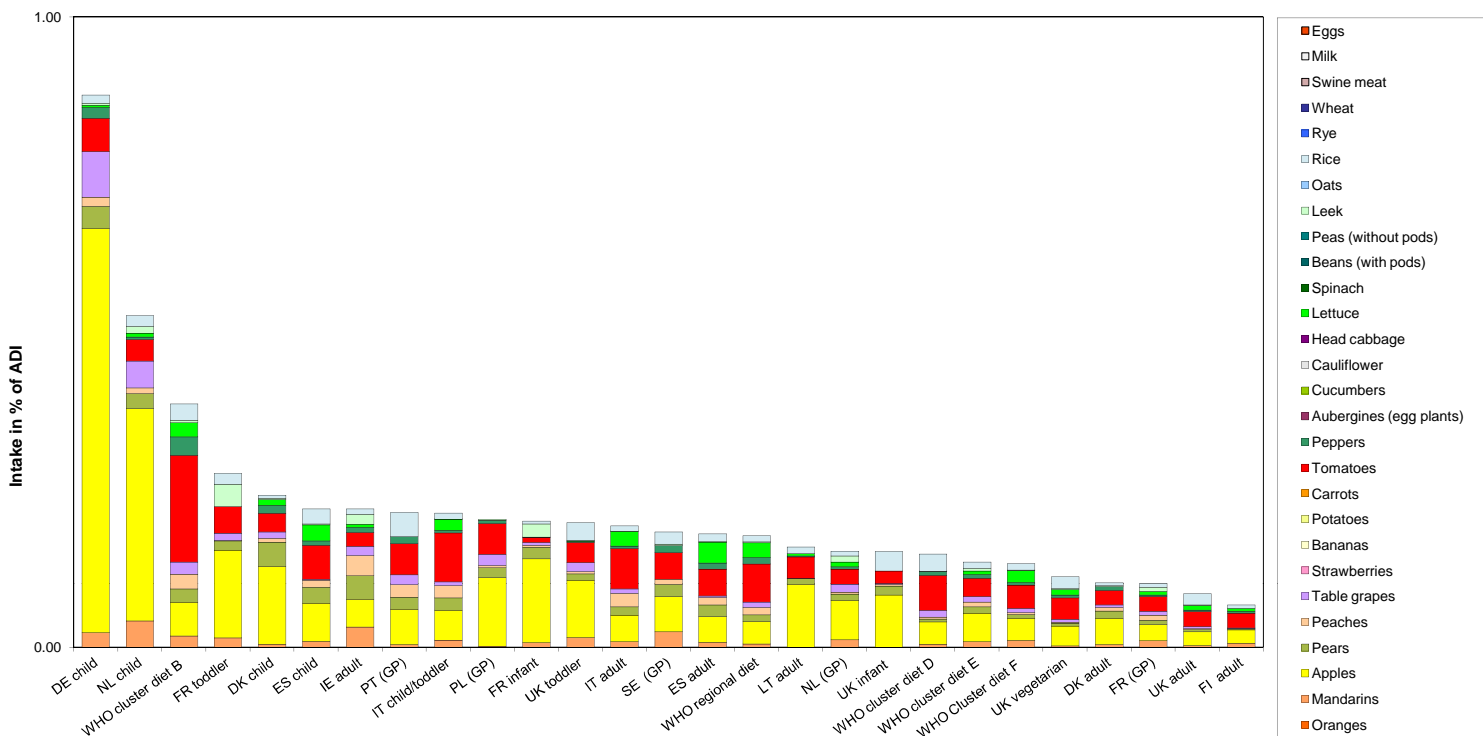
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	1	2441	1.80		0.51				
2010	Peaches	0.5	1238	0.16		0.15				
2010	Strawberries	0.05	1936							
2010	Tomatoes	1	1873	0.16		0.15				
2010	Head cabbage	5	967							
2010	Lettuce	10	1972	0.05		0.02				
2010	Leek	0.05	785	0.13		0.02				
2010	Oats	0.05	212							
2010	Rye	0.05	360							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Tebufenozide



**Tebufenozide**

Acute exposure: Tebufenozide / Apples



Intake in % of the ARfD

Acute exposure: Tebufenozide / Peaches



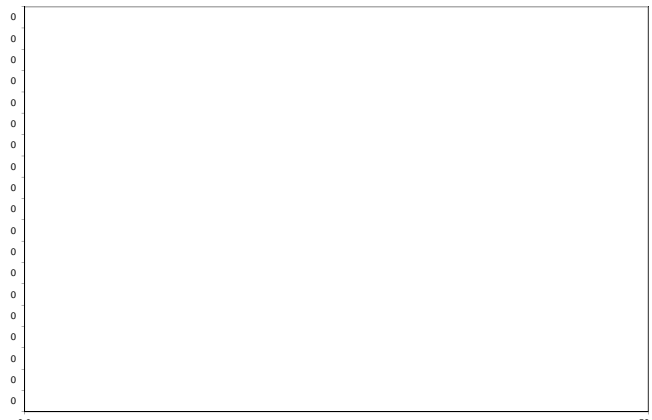
Intake in % of the ARfD

Acute exposure: Tebufenozide / Strawberries



Intake in % of the ARfD

Acute exposure: Tebufenozide / Tomatoes



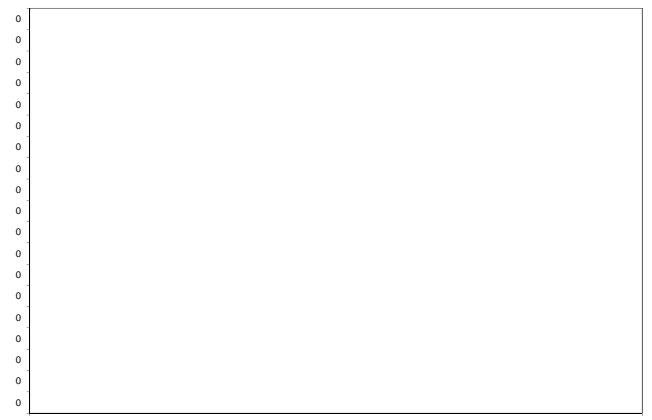
Intake in % of the ARfD

Acute exposure: Tebufenozide / Head cabbage



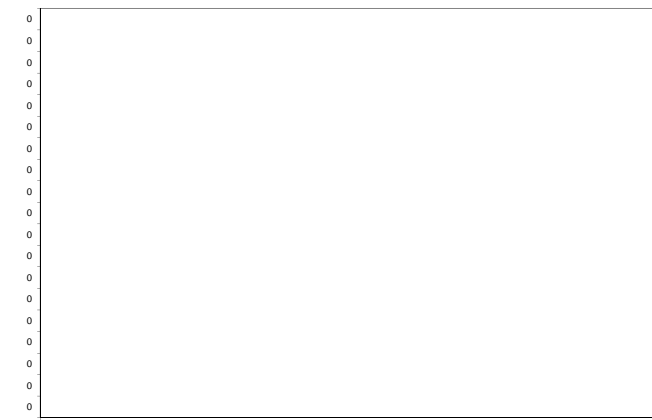
Intake in % of the ARfD

Acute exposure: Tebufenozide / Lettuce



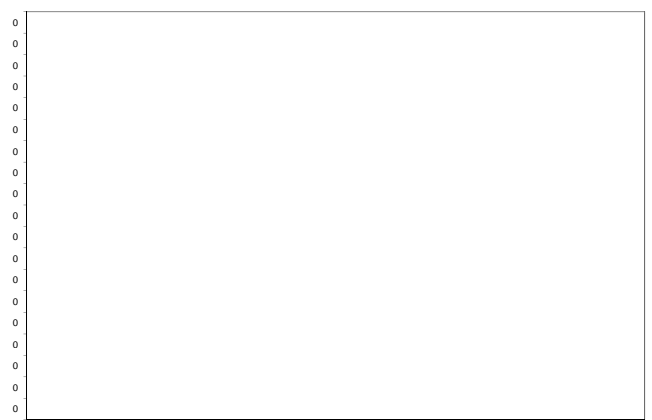
Intake in % of the ARfD

Acute exposure: Tebufenozide / Leek



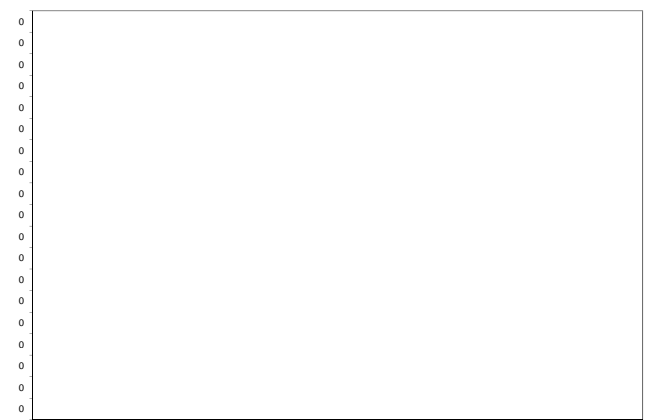
Intake in % of the ARfD

Acute exposure: Tebufenozide / Oats



Intake in % of the ARfD

Acute exposure: Tebufenozide / Rye



Intake in % of the ARfD

## Tebufenpyrad

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.01</b>	ARfD (mg/kg bw):	<b>0.02</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2009</b>	Year of evaluation:	<b>2009</b>

### Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
2

**No of diets exceeding ADI:** ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
1.51	NL child	0.73	Apples	0.39	Oranges	0.09	Mandarins
0.87	FR toddler	0.30	Apples	0.25	Oranges	0.09	Tomatoes
0.81	WHO cluster diet B	0.35	Tomatoes	0.12	Apples	0.11	Oranges
0.62	UK toddler	0.25	Oranges	0.20	Apples	0.07	Tomatoes
0.60	ES child	0.27	Oranges	0.13	Apples	0.11	Tomatoes
0.56	FR infant	0.29	Apples	0.11	Oranges	0.06	Strawberries
0.51	IE adult	0.13	Oranges	0.09	Apples	0.07	Mandarins
0.49	SE (GP)	0.12	Apples	0.09	Oranges	0.09	Tomatoes
0.49	NL (GP)	0.19	Oranges	0.14	Apples	0.05	Tomatoes
0.44	DK child	0.27	Apples	0.06	Tomatoes	0.03	Peppers
0.44	PL (GP)	0.24	Apples	0.10	Tomatoes	0.04	Head cabbage
0.43	IT child/toddler	0.16	Tomatoes	0.10	Apples	0.06	Oranges
0.43	UK infant	0.18	Apples	0.16	Oranges	0.04	Tomatoes
0.43	ES adult	0.16	Oranges	0.09	Tomatoes	0.09	Apples
0.41	PT (GP)	0.12	Apples	0.10	Tomatoes	0.08	Oranges
0.39	WHO regional diet	0.13	Tomatoes	0.08	Apples	0.06	Oranges
0.38	IT adult	0.13	Tomatoes	0.09	Apples	0.05	Oranges
0.35	WHO Cluster diet F	0.11	Oranges	0.08	Tomatoes	0.08	Apples
0.35	LT adult	0.22	Apples	0.07	Tomatoes	0.04	Head cabbage
0.32	WHO cluster diet E	0.10	Apples	0.06	Tomatoes	0.06	Oranges
0.30	UK vegetarian	0.11	Oranges	0.07	Tomatoes	0.07	Apples
0.30	WHO cluster diet D	0.12	Tomatoes	0.08	Apples	0.03	Oranges
0.26	FI adult	0.12	Oranges	0.05	Tomatoes	0.05	Apples
0.21	FR (GP)	0.05	Apples	0.05	Tomatoes	0.04	Oranges
0.21	DK adult	0.09	Apples	0.05	Tomatoes	0.02	Oranges
0.20	UK adult	0.07	Oranges	0.05	Tomatoes	0.05	Apples

### Acute risk assessment

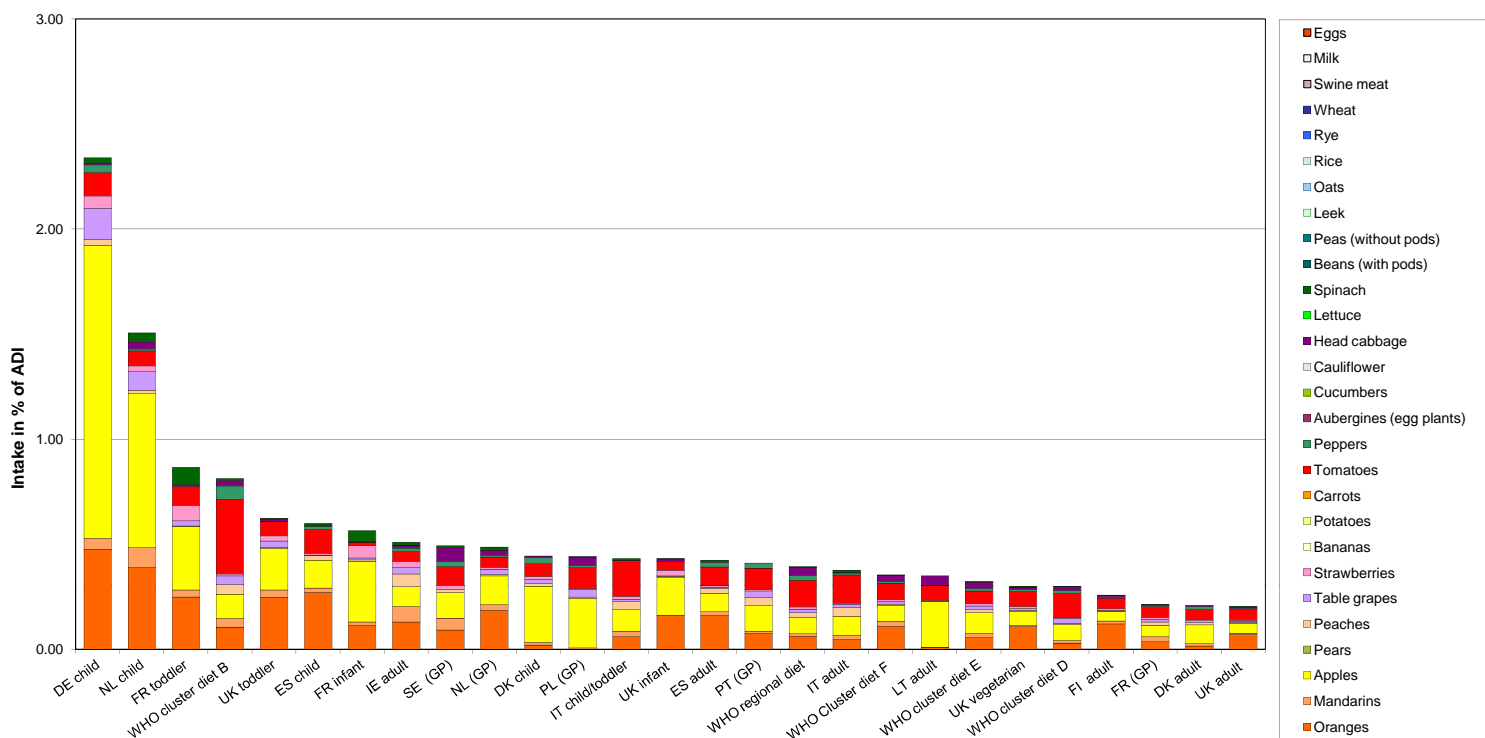
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.2	2563	0.94		0.09		44.08	UK infant	
2010	Peaches	0.3	1292	0.46		0.05		14.83	DE child	
2010	Strawberries	0.5	2037	1.67		0.43		33.44	DE child	
2010	Tomatoes	0.5	2026	0.59		0.11		31.98	BE child	
2010	Head cabbage	0.05	1040	0.29		0.01		3.68	NL child	
2010	Lettuce	0.05	2056							
2010	Leek	0.05	870							
2010	Oats	0.05	170							
2010	Rye	0.05	381							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

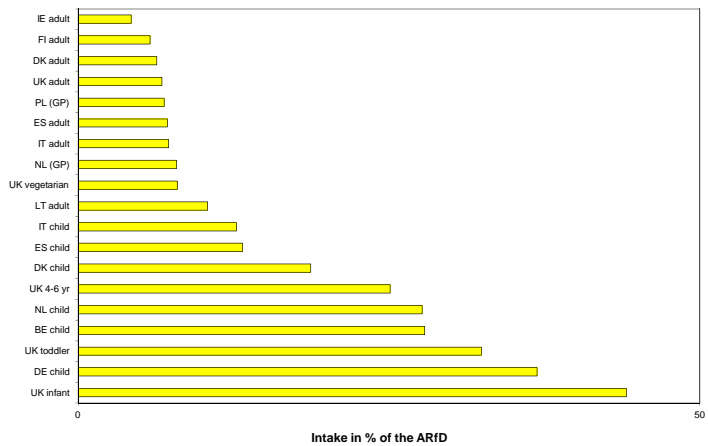
<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Tebufenpyrad

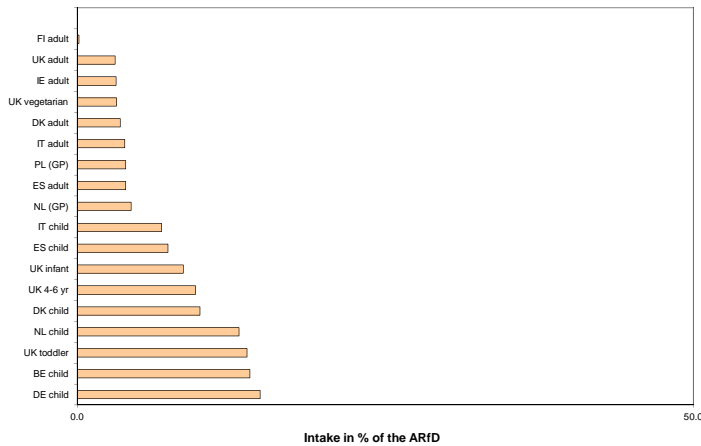


**Tebufenpyrad**

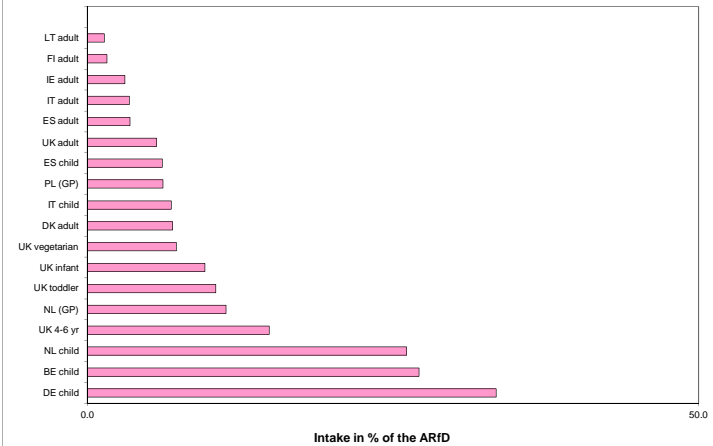
Acute exposure: Tebufenpyrad / Apples



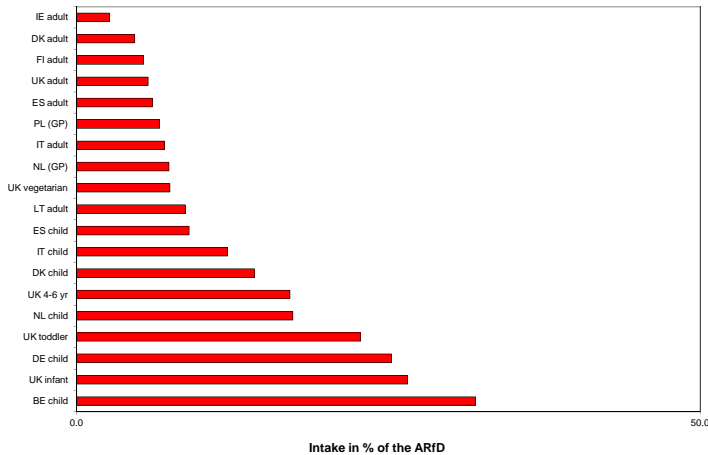
Acute exposure: Tebufenpyrad / Peaches



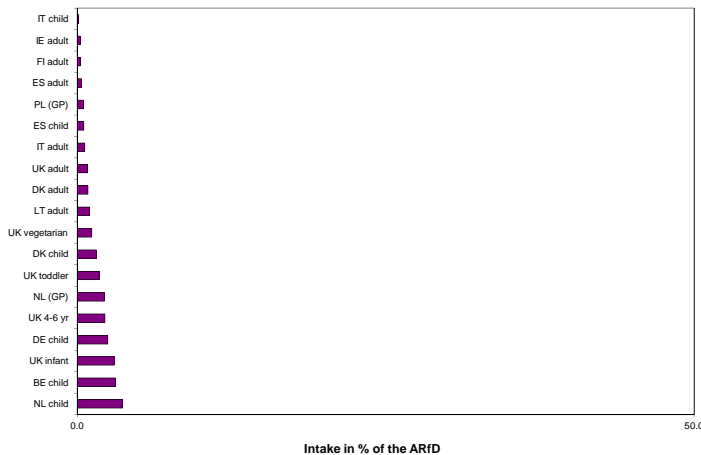
Acute exposure: Tebufenpyrad / Strawberries



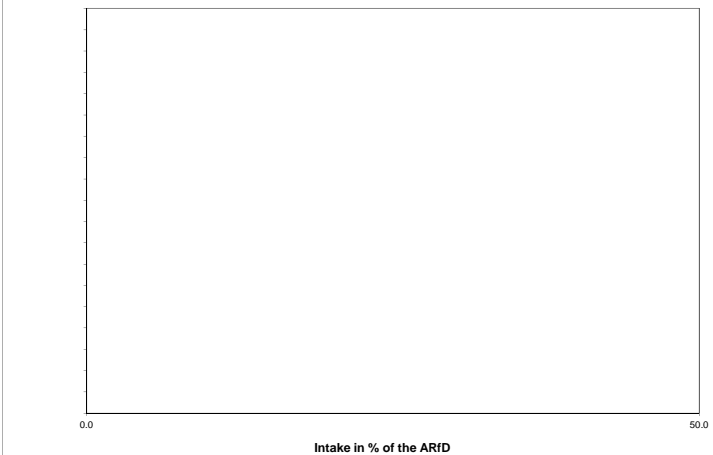
Acute exposure: Tebufenpyrad / Tomatoes



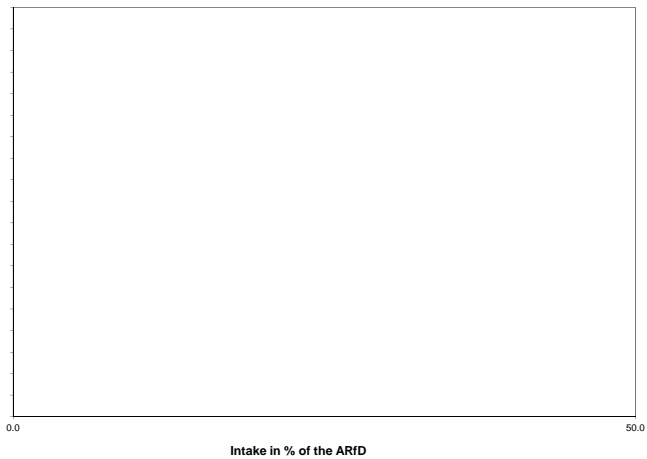
Acute exposure: Tebufenpyrad / Head cabbage



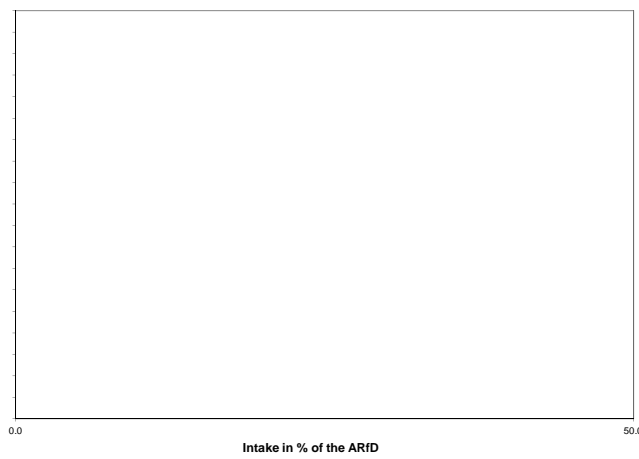
Acute exposure: Tebufenpyrad / Lettuce



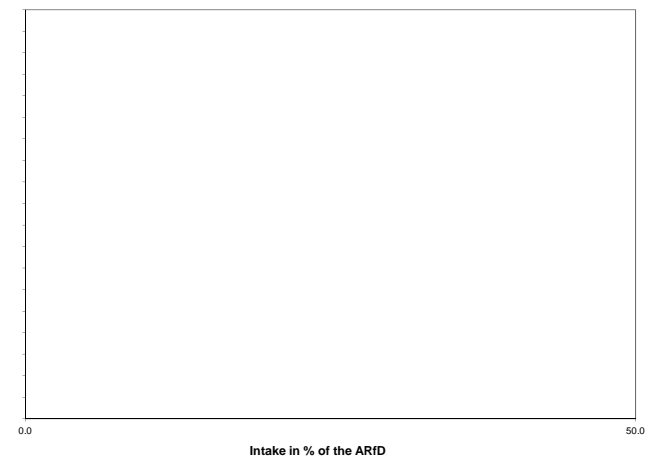
Acute exposure: Tebufenpyrad / Leek



Acute exposure: Tebufenpyrad / Oats



Acute exposure: Tebufenpyrad / Rye





**Tecnazene**

Acute exposure: Tecnazene / Apples



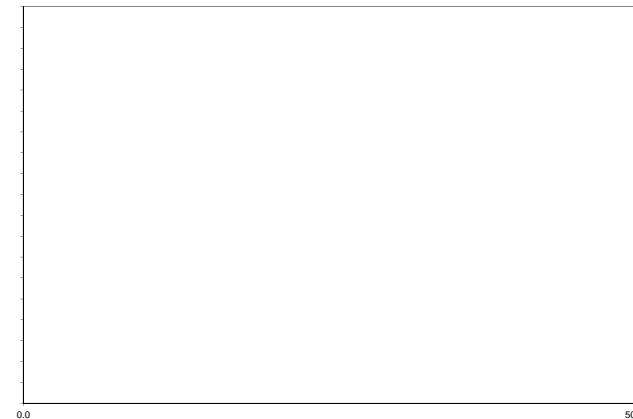
Intake in % of the ARfD

Acute exposure: Tecnazene / Peaches



Intake in % of the ARfD

Acute exposure: Tecnazene / Strawberries



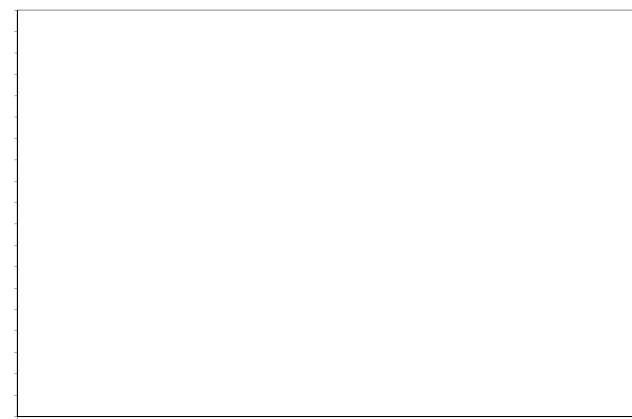
Intake in % of the ARfD

Acute exposure: Tecnazene / Tomatoes



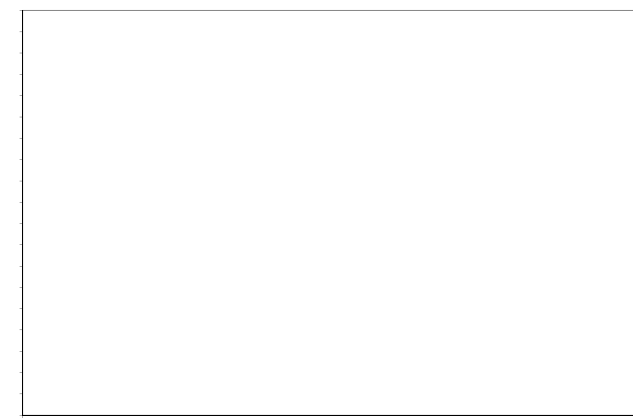
Intake in % of the ARfD

Acute exposure: Tecnazene / Head cabbage



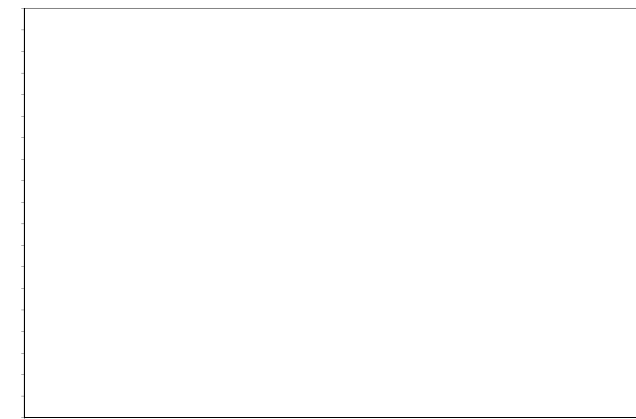
Intake in % of the ARfD

Acute exposure: Tecnazene / Lettuce



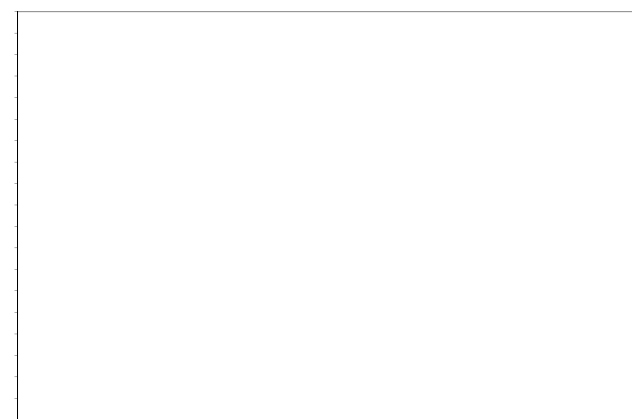
Intake in % of the ARfD

Acute exposure: Tecnazene / Leek



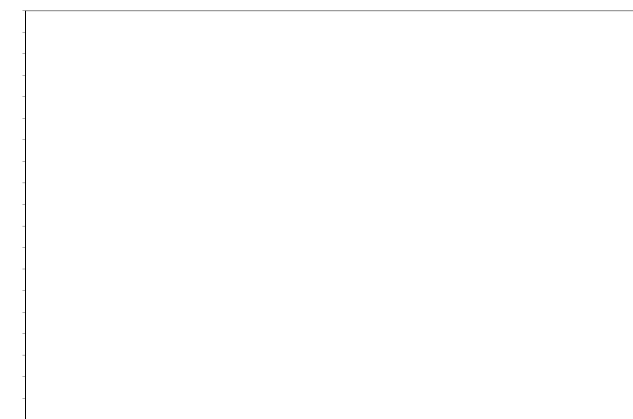
Intake in % of the ARfD

Acute exposure: Tecnazene / Oats



Intake in % of the ARfD

Acute exposure: Tecnazene / Rye



Intake in % of the ARfD



Teflubenzuron			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.01	ARfD (mg/kg bw):	n.n.
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2008	Year of evaluation:	2008

**Chronic risk assessment**

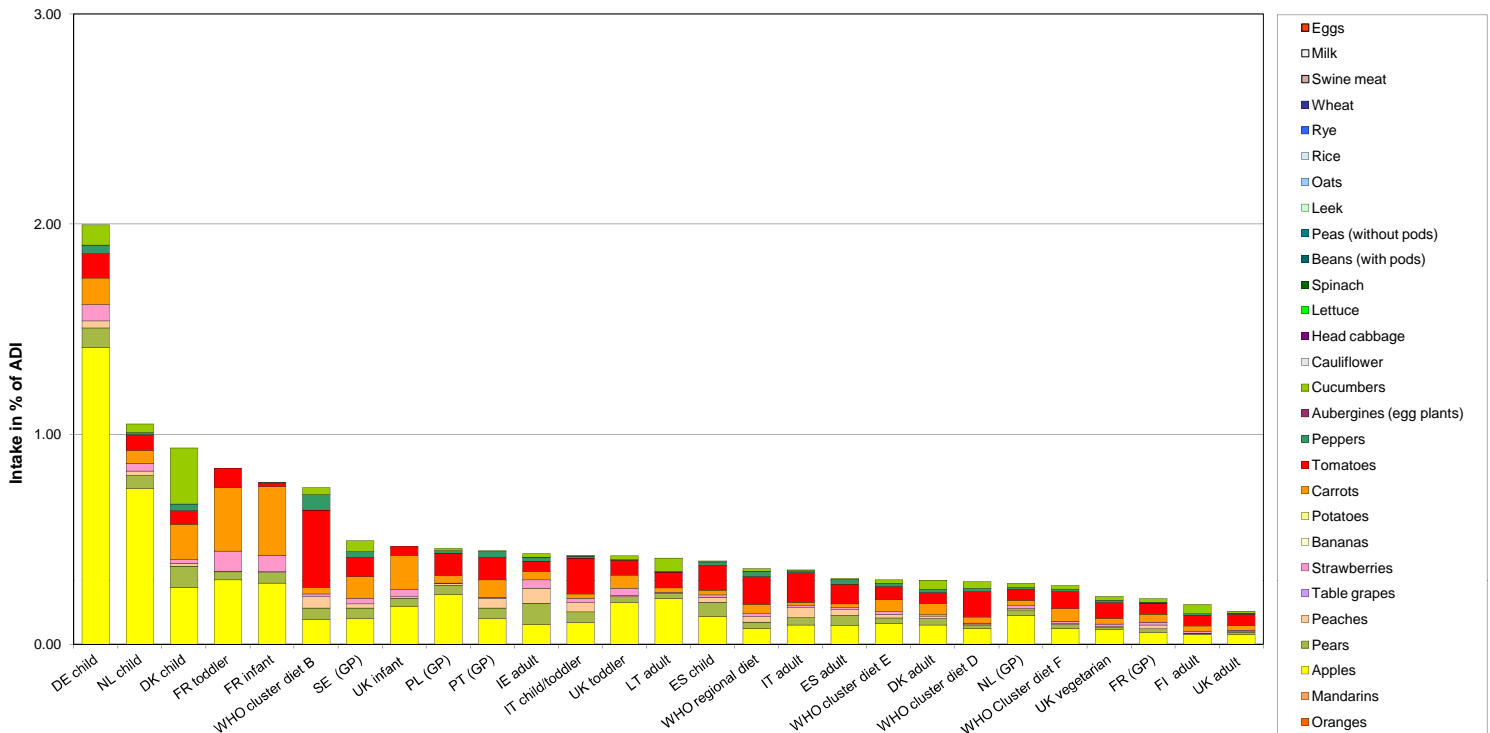
Exposure (range) in % of ADI minimum - maximum		2					
No of diets exceeding ADI:		---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
2.00	DE child	1.41	Apples	0.13	Carrots	0.12	Tomatoes
1.05	NL child	0.74	Apples	0.07	Tomatoes	0.06	Pears
0.94	DK child	0.27	Apples	0.27	Cucumbers	0.17	Carrots
0.84	FR toddler	0.31	Apples	0.30	Carrots	0.10	Strawberries
0.77	FR infant	0.33	Carrots	0.29	Apples	0.08	Strawberries
0.75	WHO cluster diet B	0.37	Tomatoes	0.12	Apples	0.07	Peppers
0.49	SE (GP)	0.12	Apples	0.10	Carrots	0.09	Tomatoes
0.47	UK infant	0.18	Apples	0.16	Carrots	0.04	Tomatoes
0.46	PL (GP)	0.24	Apples	0.11	Tomatoes	0.04	Pears
0.45	PT (GP)	0.12	Apples	0.11	Tomatoes	0.08	Carrots
0.43	IE adult	0.10	Pears	0.10	Apples	0.07	Peaches
0.42	IT child/toddler	0.17	Tomatoes	0.10	Apples	0.05	Pears
0.42	UK toddler	0.20	Apples	0.07	Tomatoes	0.06	Carrots
0.41	LT adult	0.22	Apples	0.07	Tomatoes	0.06	Cucumbers
0.40	ES child	0.13	Apples	0.12	Tomatoes	0.07	Pears
0.36	WHO regional diet	0.13	Tomatoes	0.08	Apples	0.05	Carrots
0.35	IT adult	0.14	Tomatoes	0.09	Apples	0.05	Peaches
0.31	ES adult	0.09	Tomatoes	0.09	Apples	0.05	Pears
0.31	WHO cluster diet E	0.10	Apples	0.06	Tomatoes	0.06	Carrots
0.31	DK adult	0.09	Apples	0.05	Carrots	0.05	Tomatoes
0.30	WHO cluster diet D	0.12	Tomatoes	0.08	Apples	0.03	Cucumbers
0.29	NL (GP)	0.14	Apples	0.05	Tomatoes	0.03	Carrots
0.28	WHO Cluster diet F	0.08	Tomatoes	0.08	Apples	0.06	Carrots
0.23	UK vegetarian	0.07	Tomatoes	0.07	Apples	0.03	Carrots
0.22	FR (GP)	0.06	Apples	0.05	Tomatoes	0.04	Carrots
0.19	FI adult	0.05	Tomatoes	0.05	Apples	0.04	Cucumbers
0.16	UK adult	0.05	Tomatoes	0.05	Apples	0.02	Carrots

**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	1	2183	0.64		0.13				
2010	Peaches	1	1093	2.38		0.05				
2010	Strawberries	0.2	1690	0.18		0.09				
2010	Tomatoes	1	1700	1.35		0.14				
2010	Head cabbage	0.5	933							
2010	Lettuce	0.05	1733							
2010	Leek	0.05	742							
2010	Oats	0.1	151							
2010	Rye	0.1	336							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Teflubenzuron**



**Teflubenzuron**

Acute exposure: Teflubenzuron / Apples



Intake in % of the ARfD

Acute exposure: Teflubenzuron / Peaches



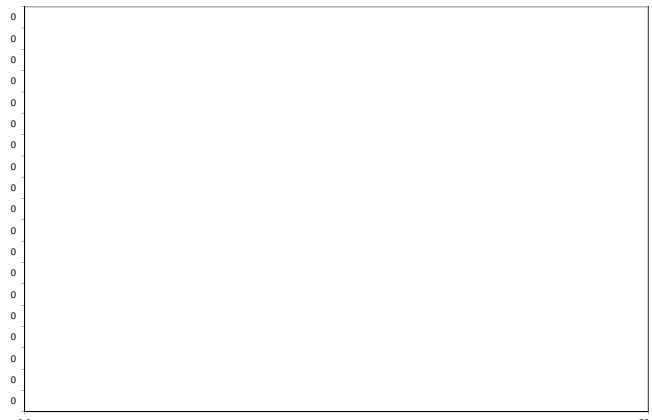
Intake in % of the ARfD

Acute exposure: Teflubenzuron / Strawberries



Intake in % of the ARfD

Acute exposure: Teflubenzuron / Tomatoes



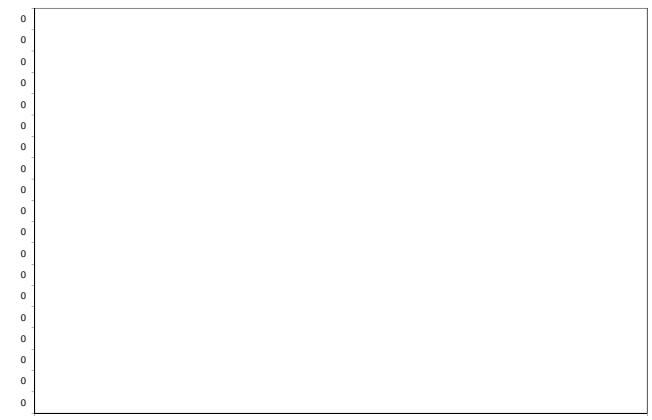
Intake in % of the ARfD

Acute exposure: Teflubenzuron / Head cabbage



Intake in % of the ARfD

Acute exposure: Teflubenzuron / Lettuce



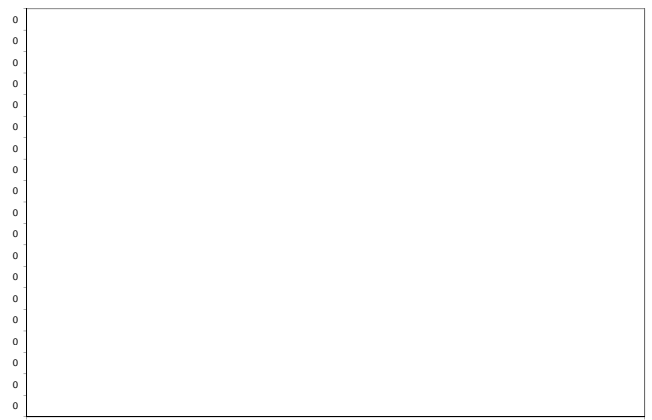
Intake in % of the ARfD

Acute exposure: Teflubenzuron / Leek



Intake in % of the ARfD

Acute exposure: Teflubenzuron / Oats



Intake in % of the ARfD

Acute exposure: Teflubenzuron / Rye



Intake in % of the ARfD

Tefluthrin			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:	Yes	Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.005	ARfD (mg/kg bw):	0.005
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2010	Year of evaluation:	2010

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum

2

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
1.40	FR infant	0.75	Potatoes	0.66	Carrots		FRUIT (FRESH OR FROZEN)
1.19	NL child	1.06	Potatoes	0.12	Carrots		FRUIT (FRESH OR FROZEN)
1.13	PT (GP)	0.96	Potatoes	0.17	Carrots		FRUIT (FRESH OR FROZEN)
0.96	SE (GP)	0.75	Potatoes	0.21	Carrots		FRUIT (FRESH OR FROZEN)
0.92	UK infant	0.59	Potatoes	0.33	Carrots		FRUIT (FRESH OR FROZEN)
0.82	WHO regional diet	0.72	Potatoes	0.09	Carrots		FRUIT (FRESH OR FROZEN)
0.80	WHO cluster diet E	0.69	Potatoes	0.11	Carrots		FRUIT (FRESH OR FROZEN)
0.79	WHO cluster diet D	0.73	Potatoes	0.06	Carrots		FRUIT (FRESH OR FROZEN)
0.78	DK child	0.44	Potatoes	0.34	Carrots		FRUIT (FRESH OR FROZEN)
0.76	UK toddler	0.63	Potatoes	0.13	Carrots		FRUIT (FRESH OR FROZEN)
0.73	WHO Cluster diet F	0.62	Potatoes	0.12	Carrots		FRUIT (FRESH OR FROZEN)
0.72	DE child	0.46	Potatoes	0.26	Carrots		FRUIT (FRESH OR FROZEN)
0.70	PL (GP)	0.62	Potatoes	0.08	Carrots		FRUIT (FRESH OR FROZEN)
0.62	LT adult	0.57	Potatoes	0.04	Carrots		FRUIT (FRESH OR FROZEN)
0.55	NL (GP)	0.49	Potatoes	0.05	Carrots		FRUIT (FRESH OR FROZEN)
0.55	WHO cluster diet B	0.48	Potatoes	0.06	Carrots		FRUIT (FRESH OR FROZEN)
0.49	IE adult	0.41	Potatoes	0.08	Carrots		FRUIT (FRESH OR FROZEN)
0.38	ES child	0.33	Potatoes	0.04	Carrots		FRUIT (FRESH OR FROZEN)
0.37	DK adult	0.26	Potatoes	0.11	Carrots		FRUIT (FRESH OR FROZEN)
0.30	UK vegetarian	0.25	Potatoes	0.06	Carrots		FRUIT (FRESH OR FROZEN)
0.30	UK adult	0.25	Potatoes	0.05	Carrots		FRUIT (FRESH OR FROZEN)
0.28	FR (GP)	0.20	Potatoes	0.07	Carrots		FRUIT (FRESH OR FROZEN)
0.27	FI adult	0.22	Potatoes	0.05	Carrots		FRUIT (FRESH OR FROZEN)
0.21	IT child/toddler	0.16	Potatoes	0.05	Carrots		FRUIT (FRESH OR FROZEN)
0.20	ES adult	0.17	Potatoes	0.04	Carrots		FRUIT (FRESH OR FROZEN)
0.14	IT adult	0.11	Potatoes	0.04	Carrots		FRUIT (FRESH OR FROZEN)

## Acute risk assessment

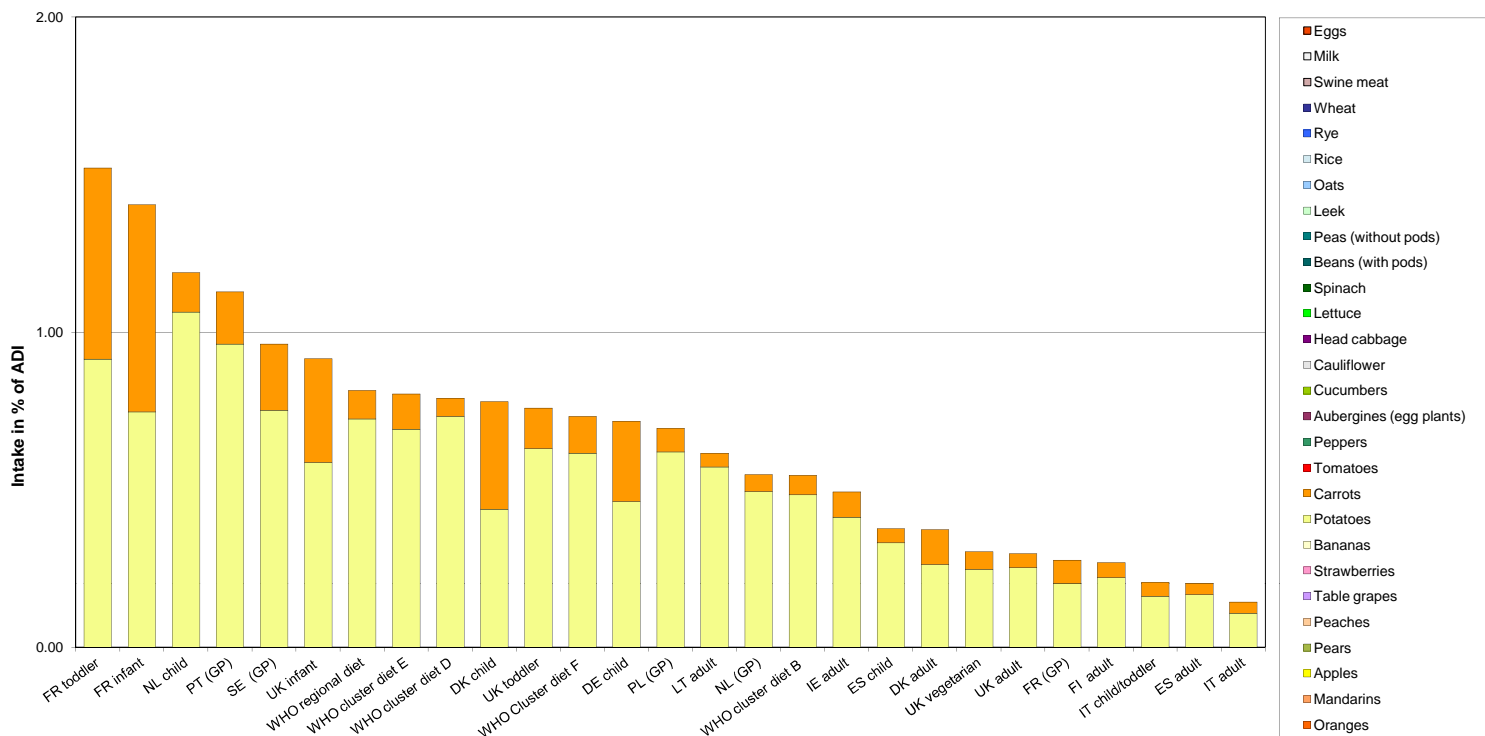
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	2055							
2010	Peaches	0.05	1057							
2010	Strawberries	0.05	1686							
2010	Tomatoes	0.05	1683	0.06		0.03		33.72	BE child	
2010	Head cabbage	0.05	878							
2010	Lettuce	0.05	1775							
2010	Leek	0.05	671							
2010	Oats	0.05	121							
2010	Rye	0.05	321							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

<sup>c)</sup> TRL: toxicological threshold level

## Chronic risk assessment: Tefluthrin



**Tefluthrin**

Acute exposure: Tefluthrin / Apples



Intake in % of the ARfD

Acute exposure: Tefluthrin / Peaches



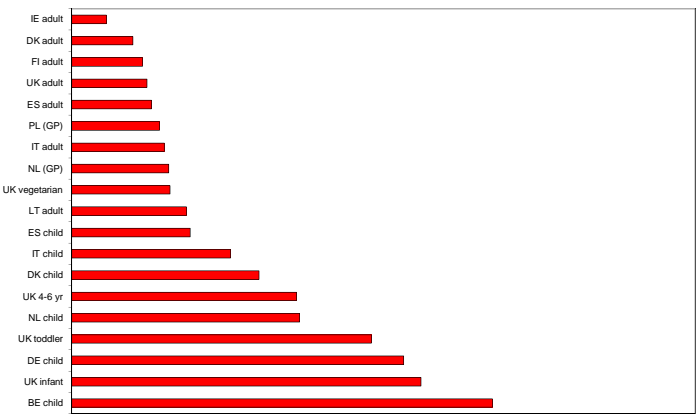
Intake in % of the ARfD

Acute exposure: Tefluthrin / Strawberries



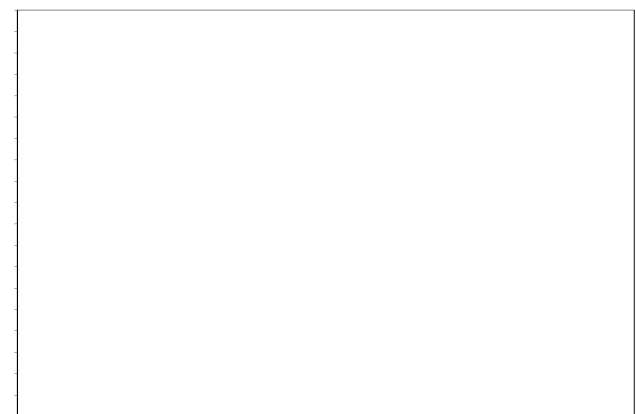
Intake in % of the ARfD

Acute exposure: Tefluthrin / Tomatoes



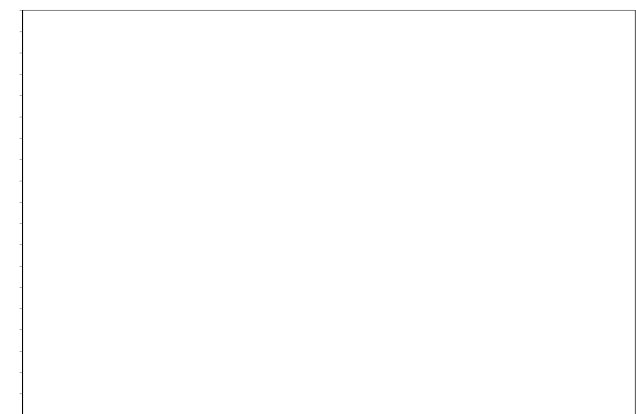
Intake in % of the ARfD

Acute exposure: Tefluthrin / Head cabbage



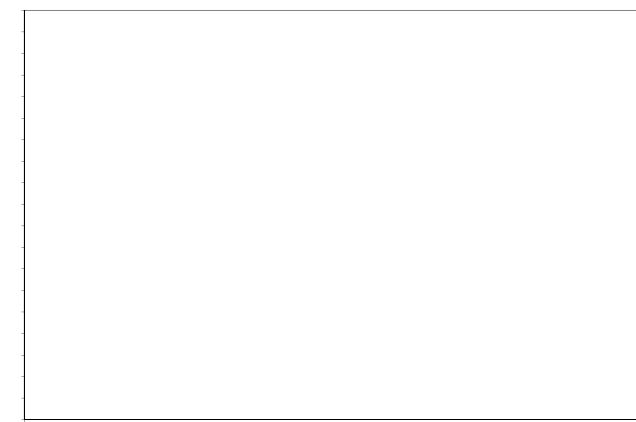
Intake in % of the ARfD

Acute exposure: Tefluthrin / Lettuce



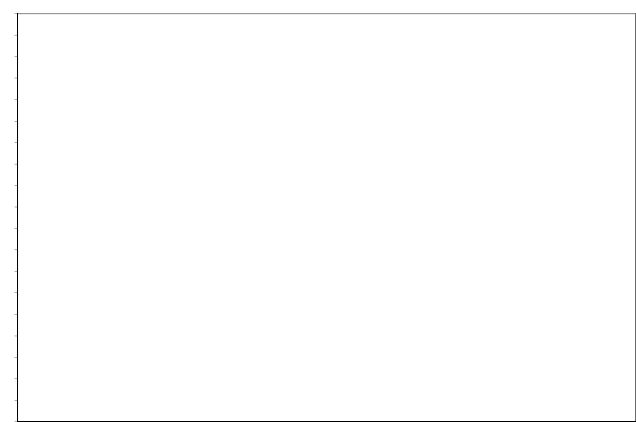
Intake in % of the ARfD

Acute exposure: Tefluthrin / Leek



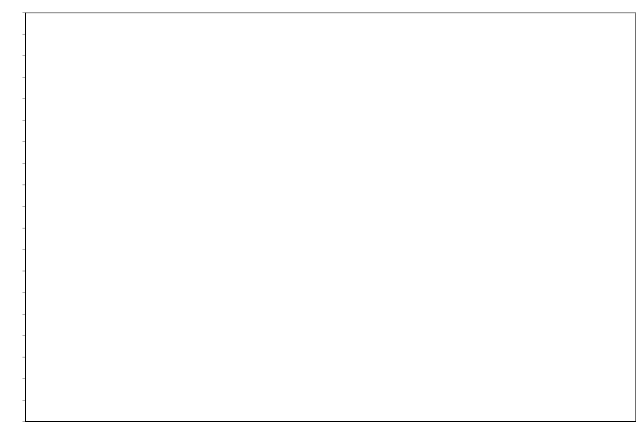
Intake in % of the ARfD

Acute exposure: Tefluthrin / Oats



Intake in % of the ARfD

Acute exposure: Tefluthrin / Rye



Intake in % of the ARfD

## Tetraconazole

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.004	ARfD (mg/kg bw):	0.05
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2008	Year of evaluation:	2008

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
5

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
2.72	NL child	1.83	Apples	0.22	Table grapes	0.19	Tomatoes
2.05	DK child	0.67	Apples	0.46	Cucumbers	0.35	Carrots
1.94	FR toddler	0.76	Apples	0.63	Carrots	0.23	Tomatoes
1.92	WHO cluster diet B	0.92	Tomatoes	0.29	Apples	0.14	Peppers
1.73	FR infant	0.72	Apples	0.68	Carrots	0.15	Strawberries
1.17	PL (GP)	0.59	Apples	0.26	Tomatoes	0.09	Table grapes
1.10	IT child/toddler	0.42	Tomatoes	0.26	Apples	0.10	Peaches
1.10	PT (GP)	0.30	Apples	0.27	Tomatoes	0.17	Carrots
1.08	SE (GP)	0.30	Apples	0.23	Tomatoes	0.22	Carrots
1.06	UK infant	0.45	Apples	0.34	Carrots	0.11	Tomatoes
1.05	UK toddler	0.49	Apples	0.18	Tomatoes	0.13	Carrots
1.04	ES child	0.33	Apples	0.29	Tomatoes	0.13	Pears
1.04	IE adult	0.24	Apples	0.19	Pears	0.17	Peaches
0.97	WHO regional diet	0.33	Tomatoes	0.19	Apples	0.10	Lettuce
0.97	IT adult	0.35	Tomatoes	0.23	Apples	0.11	Peaches
0.96	LT adult	0.54	Apples	0.18	Tomatoes	0.11	Cucumbers
0.88	ES adult	0.23	Tomatoes	0.22	Apples	0.15	Lettuce
0.76	NL (GP)	0.34	Apples	0.13	Tomatoes	0.07	Table grapes
0.76	WHO cluster diet E	0.24	Apples	0.16	Tomatoes	0.12	Carrots
0.75	WHO Cluster diet F	0.20	Tomatoes	0.19	Apples	0.12	Carrots
0.74	WHO cluster diet D	0.30	Tomatoes	0.19	Apples	0.06	Carrots
0.69	DK adult	0.23	Apples	0.12	Tomatoes	0.11	Carrots
0.58	UK vegetarian	0.19	Tomatoes	0.17	Apples	0.06	Carrots
0.54	FR (GP)	0.14	Apples	0.13	Tomatoes	0.08	Carrots
0.44	FI adult	0.13	Tomatoes	0.12	Apples	0.08	Cucumbers
0.41	UK adult	0.13	Tomatoes	0.12	Apples	0.05	Carrots

## Acute risk assessment

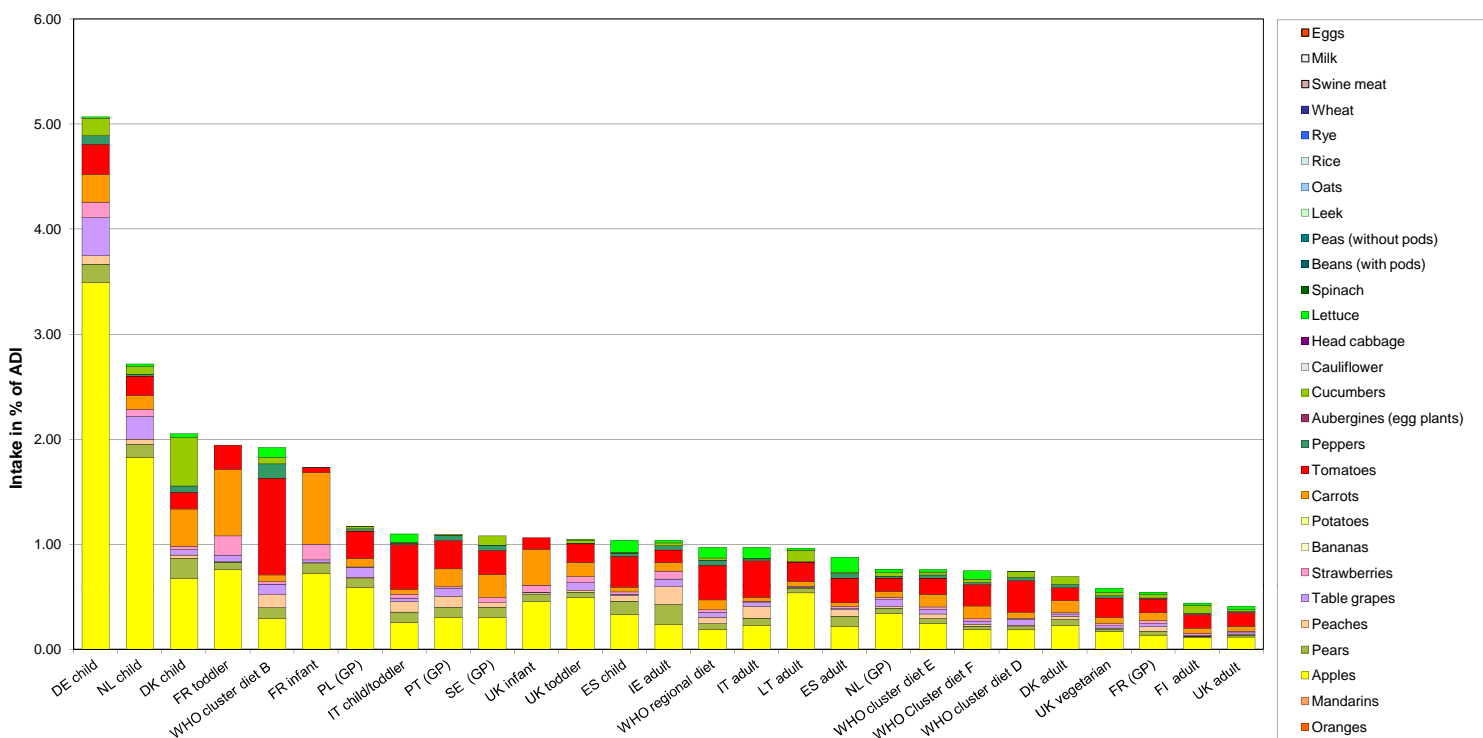
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.3	2608	0.77		0.11		21.55	UK infant	
2010	Peaches	0.1	1279	1.49		0.09		10.68	DE child	
2010	Strawberries	0.2	2037	0.98		0.15		4.68	DE child	
2010	Tomatoes	0.1	2092	0.96		0.06		6.63	BE child	
2010	Head cabbage	0.02	1053							
2010	Lettuce	0.02	2138	0.09		0.01		0.70	DE child	
2010	Leek	0.02	850							
2010	Oats	0.1	166							
2010	Rye	0.05	344							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

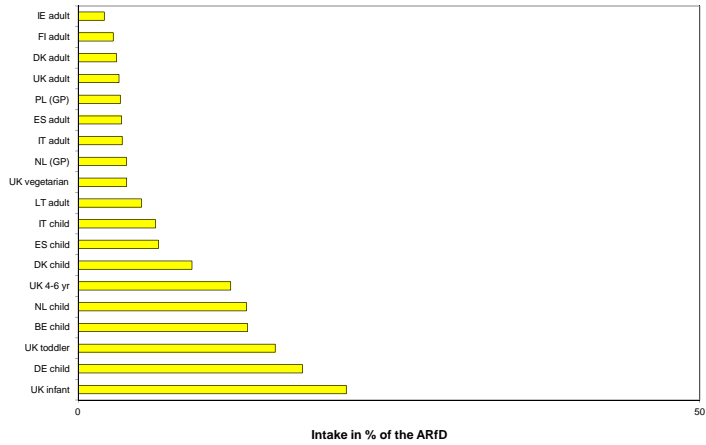
<sup>c)</sup> TRL: toxicological threshold level

## Chronic risk assessment: Tetraconazole

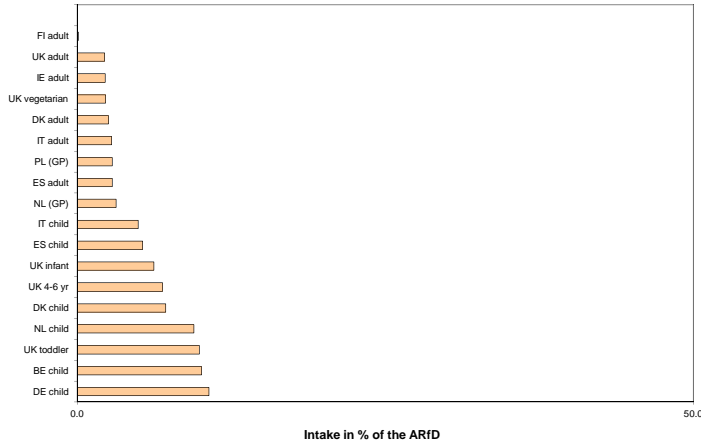


**Tetraconazole**

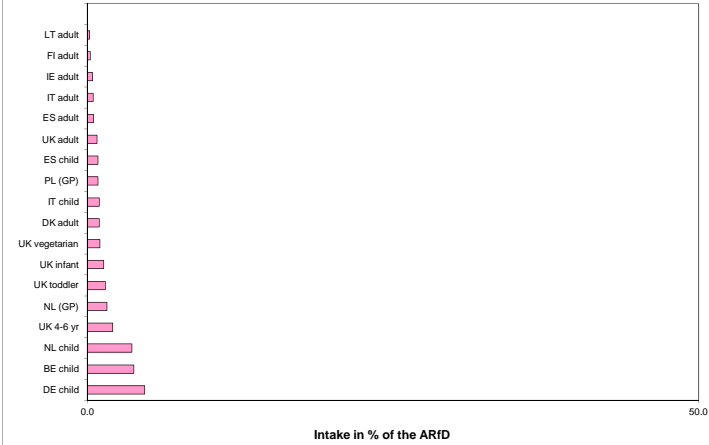
Acute exposure: Tetraconazole / Apples



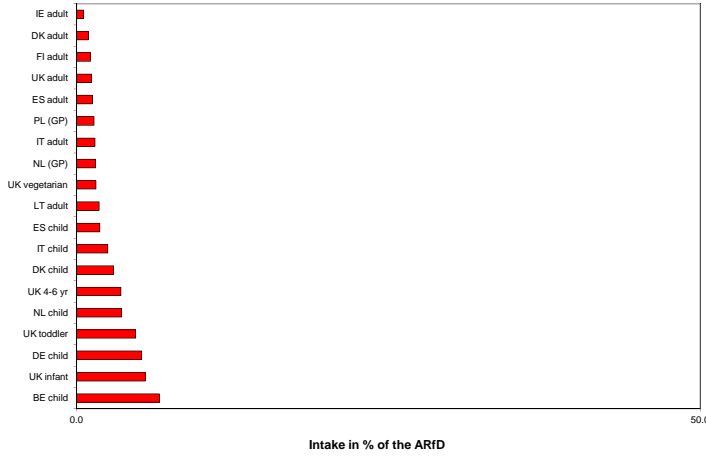
Acute exposure: Tetraconazole / Peaches



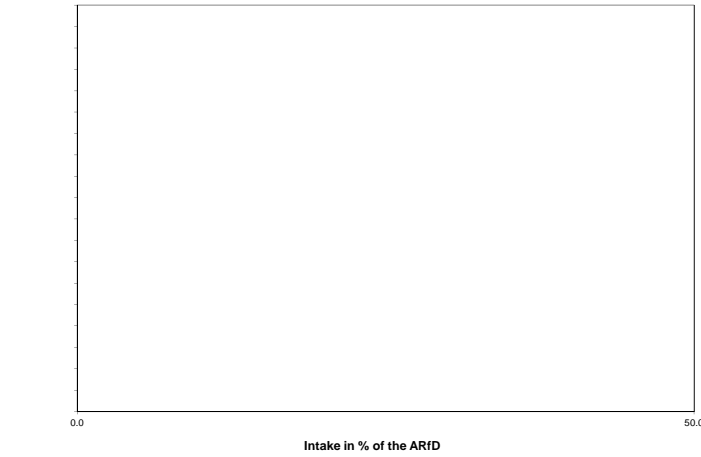
Acute exposure: Tetraconazole / Strawberries



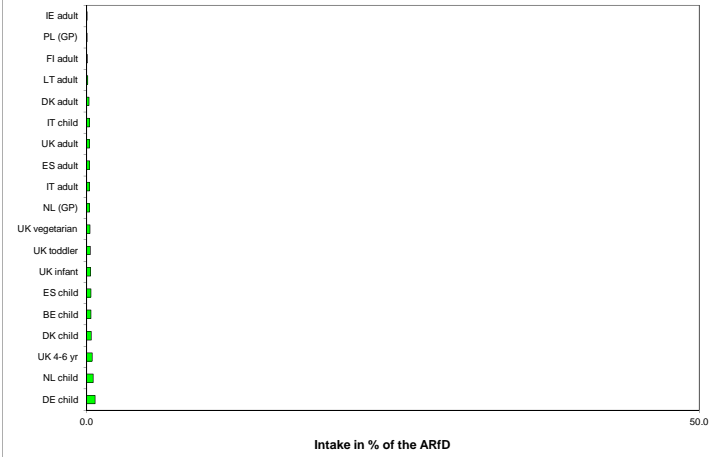
Acute exposure: Tetraconazole / Tomatoes



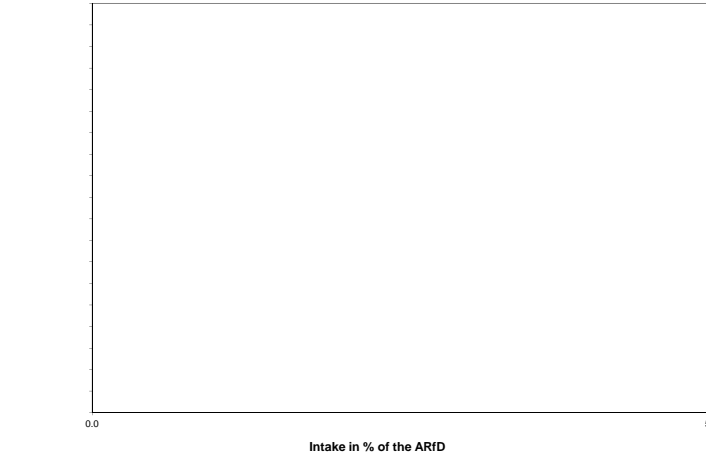
Acute exposure: Tetraconazole / Head cabbage



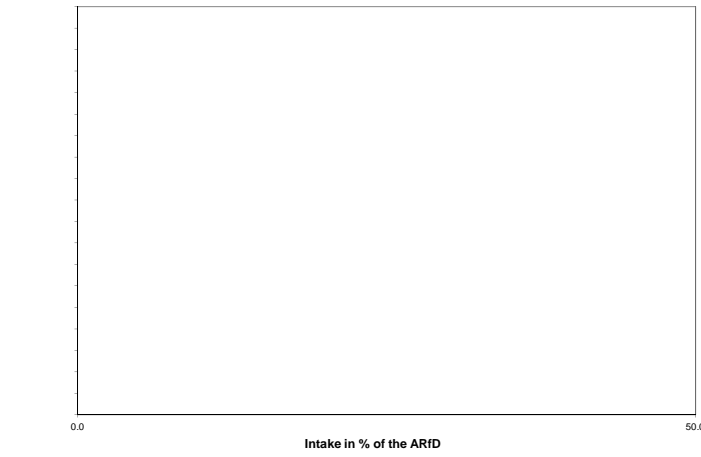
Acute exposure: Tetraconazole / Lettuce



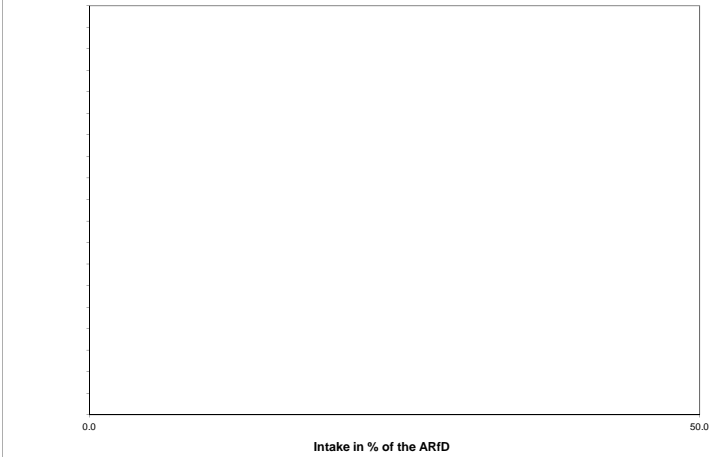
Acute exposure: Tetraconazole / Leek



Acute exposure: Tetraconazole / Oats



Acute exposure: Tetraconazole / Rye



Tetradifon			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.015	ARfD (mg/kg bw):	n.n.
Source of ADI:	DE	Source of ARfD:	DE
Year of evaluation:	2001	Year of evaluation:	2002

No EU evaluation available.

**Chronic risk assessment**

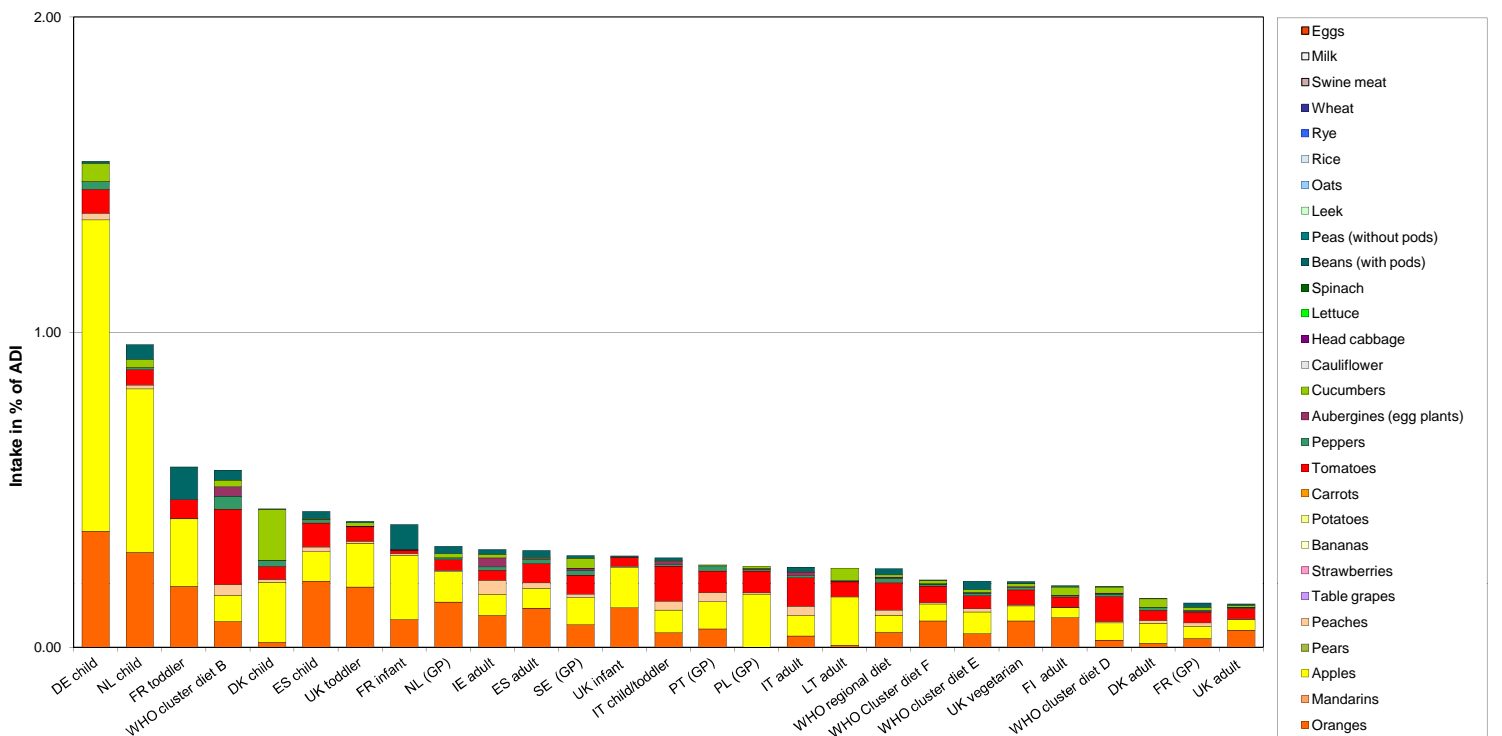
		Exposure (range) in % of ADI minimum - maximum					
		2					
No of diets exceeding ADI:		---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
1.54	DE child	0.99	Apples	0.37	Oranges	0.08	Tomatoes
0.96	NL child	0.52	Apples	0.30	Oranges	0.05	Tomatoes
0.57	FR toddler	0.21	Apples	0.19	Oranges	0.10	Beans (with pods)
0.56	WHO cluster diet B	0.24	Tomatoes	0.08	Apples	0.08	Oranges
0.44	DK child	0.19	Apples	0.16	Cucumbers	0.04	Tomatoes
0.43	ES child	0.21	Oranges	0.09	Apples	0.08	Tomatoes
0.40	UK toddler	0.19	Oranges	0.14	Apples	0.05	Tomatoes
0.39	FR infant	0.20	Apples	0.09	Oranges	0.08	Beans (with pods)
0.32	NL (GP)	0.14	Oranges	0.10	Apples	0.03	Tomatoes
0.31	IE adult	0.10	Oranges	0.07	Apples	0.04	Peaches
0.31	ES adult	0.12	Oranges	0.06	Apples	0.06	Tomatoes
0.29	SE (GP)	0.09	Apples	0.07	Oranges	0.06	Tomatoes
0.29	UK infant	0.13	Apples	0.13	Oranges	0.03	Tomatoes
0.28	IT child/toddler	0.11	Tomatoes	0.07	Apples	0.05	Oranges
0.26	PT (GP)	0.09	Apples	0.07	Tomatoes	0.06	Oranges
0.26	PL (GP)	0.17	Apples	0.07	Tomatoes	0.01	Cucumbers
0.26	IT adult	0.09	Tomatoes	0.07	Apples	0.04	Oranges
0.25	LT adult	0.15	Apples	0.05	Tomatoes	0.04	Cucumbers
0.25	WHO regional diet	0.09	Tomatoes	0.05	Apples	0.05	Oranges
0.21	WHO Cluster diet F	0.08	Oranges	0.05	Apples	0.05	Tomatoes
0.21	WHO cluster diet E	0.07	Apples	0.04	Oranges	0.04	Tomatoes
0.21	UK vegetarian	0.08	Oranges	0.05	Apples	0.05	Tomatoes
0.20	FI adult	0.09	Oranges	0.03	Tomatoes	0.03	Apples
0.19	WHO cluster diet D	0.08	Tomatoes	0.05	Apples	0.02	Oranges
0.16	DK adult	0.06	Apples	0.03	Tomatoes	0.03	Cucumbers
0.14	FR (GP)	0.04	Apples	0.03	Tomatoes	0.03	Oranges
0.14	UK adult	0.05	Oranges	0.03	Tomatoes	0.03	Apples

**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.02	2877	0.03		0.02				
2010	Peaches	0.02	1433	0.07		0.01				
2010	Strawberries	0.02	2222							
2010	Tomatoes	0.02	2366	0.08		0.07				
2010	Head cabbage	0.02	1146							
2010	Lettuce	0.02	2320							
2010	Leek	0.02	982							
2010	Oats	0.02	185							
2010	Rye	0.02	382							
2010	Swine Meat									
2010	Milk									

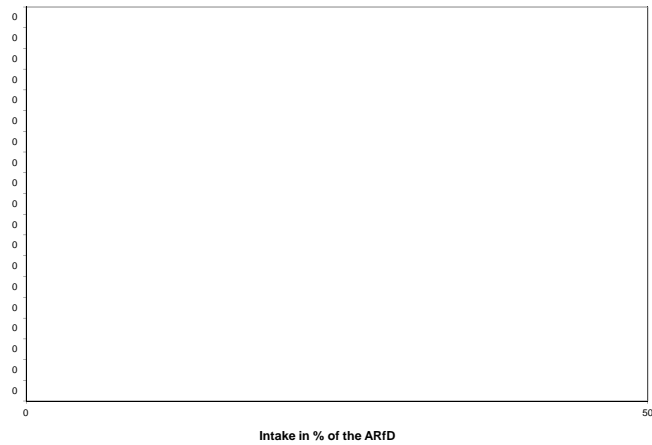
a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Tetradifon**

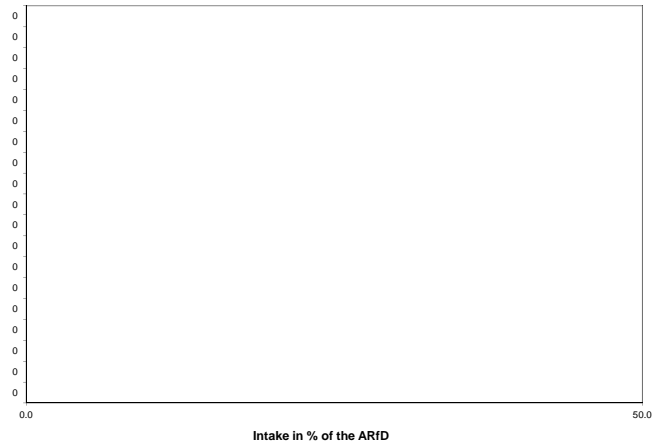


**Tetradifon**

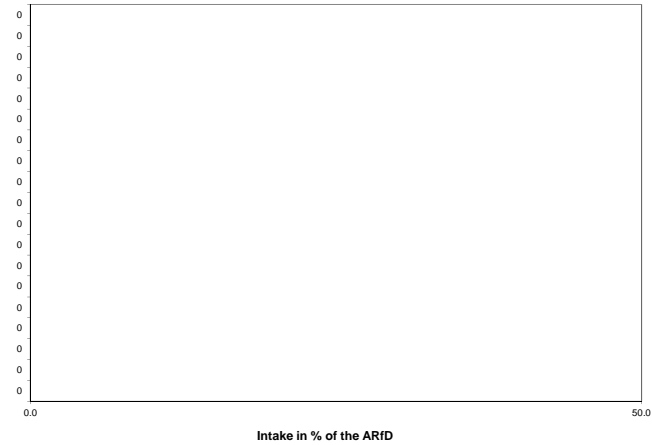
Acute exposure: Tetradifon / Apples



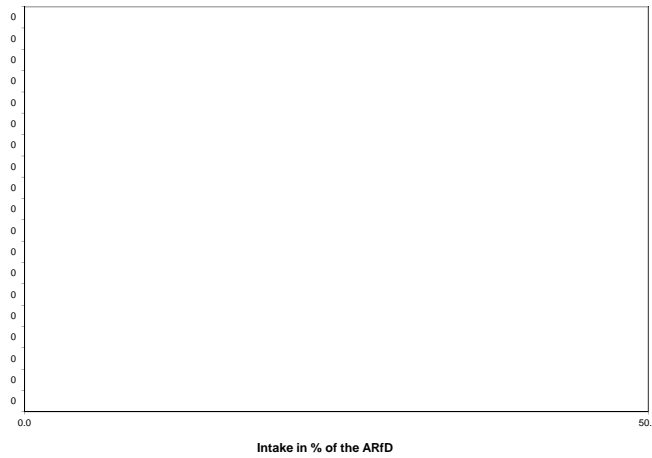
Acute exposure: Tetradifon / Peaches



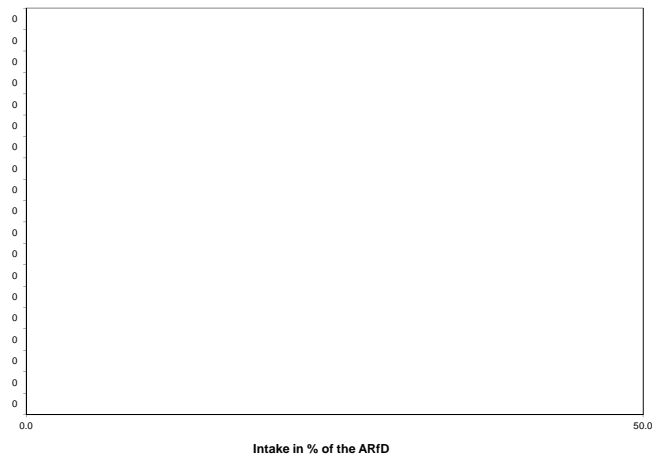
Acute exposure: Tetradifon / Strawberries



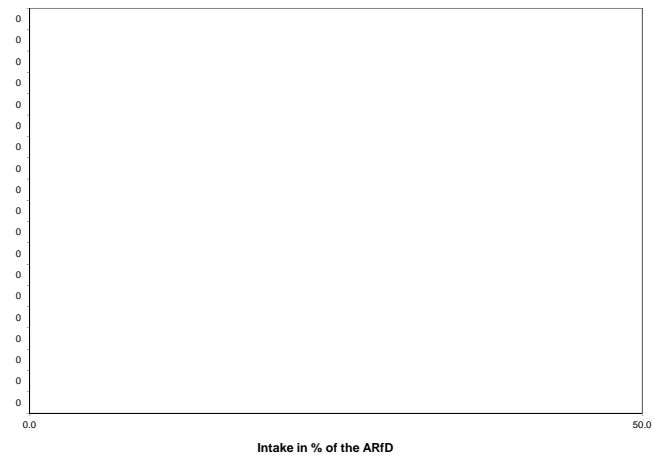
Acute exposure: Tetradifon / Tomatoes



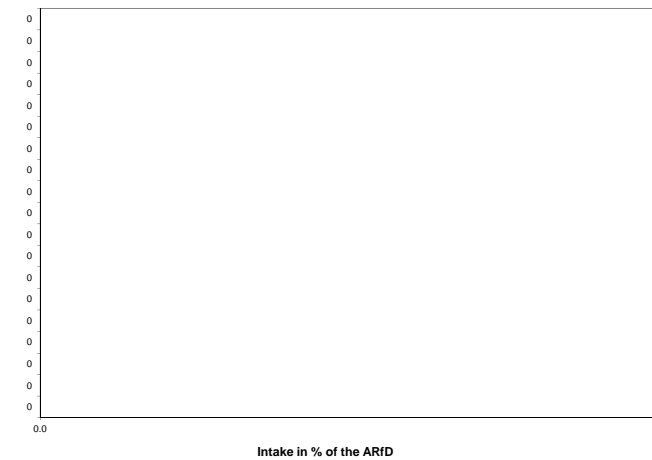
Acute exposure: Tetradifon / Head cabbage



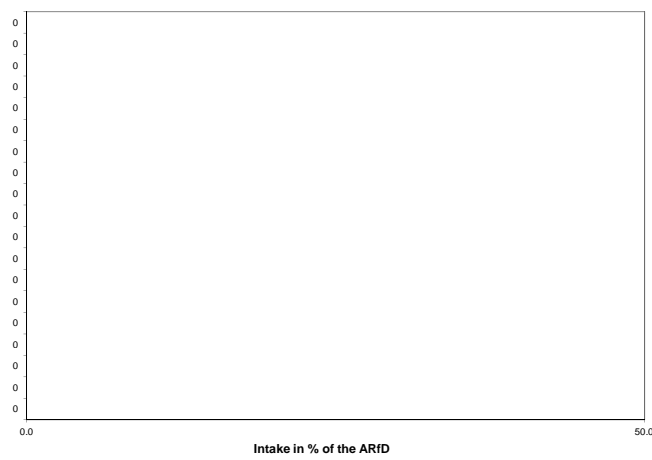
Acute exposure: Tetradifon / Lettuce



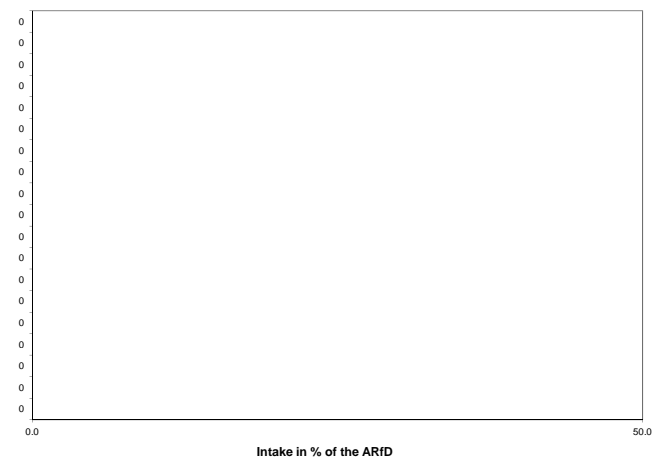
Acute exposure: Tetradifon / Leek



Acute exposure: Tetradifon / Oats



Acute exposure: Tetradifon / Rye





Thiabendazole			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.1	ARfD (mg/kg bw):	n.n.
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2001	Year of evaluation:	2001

**Chronic risk assessment**

		Exposure (range) in % of ADI minimum - maximum					
		3					
No of diets exceeding ADI:		---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
2.55	DE child	1.15	Oranges	0.95	Apples	0.16	Bananas
2.06	NL child	0.94	Oranges	0.50	Apples	0.21	Mandarins
1.20	FR toddler	0.60	Oranges	0.21	Apples	0.13	Bananas
1.07	UK toddler	0.60	Oranges	0.13	Apples	0.11	Bananas
1.03	ES child	0.65	Oranges	0.10	Bananas	0.09	Apples
0.79	UK infant	0.39	Oranges	0.15	Bananas	0.12	Apples
0.78	SE (GP)	0.22	Oranges	0.18	Bananas	0.13	Mandarins
0.76	IE adult	0.31	Oranges	0.16	Mandarins	0.08	Bananas
0.74	NL (GP)	0.45	Oranges	0.09	Apples	0.06	Mandarins
0.71	FR infant	0.27	Oranges	0.20	Apples	0.08	Potatoes
0.70	WHO cluster diet B	0.26	Oranges	0.13	Wheat	0.09	Mandarins
0.61	ES adult	0.39	Oranges	0.06	Apples	0.04	Mandarins
0.57	DK child	0.18	Apples	0.11	Bananas	0.09	Wheat
0.56	WHO Cluster diet F	0.26	Oranges	0.06	Potatoes	0.06	Bananas
0.52	PT (GP)	0.18	Oranges	0.10	Potatoes	0.08	Apples
0.48	IT child/toddler	0.14	Oranges	0.10	Wheat	0.07	Apples
0.44	WHO cluster diet E	0.13	Oranges	0.07	Potatoes	0.07	Apples
0.43	UK vegetarian	0.26	Oranges	0.05	Apples	0.04	Bananas
0.43	FI adult	0.29	Oranges	0.03	Mandarins	0.03	Apples
0.42	WHO regional diet	0.15	Oranges	0.07	Potatoes	0.05	Apples
0.36	WHO cluster diet D	0.10	Wheat	0.07	Potatoes	0.07	Oranges
0.34	IT adult	0.11	Oranges	0.07	Wheat	0.06	Apples
0.32	UK adult	0.17	Oranges	0.04	Bananas	0.03	Apples
0.29	FR (GP)	0.09	Oranges	0.05	Mandarins	0.05	Wheat
0.28	PL (GP)	0.16	Apples	0.06	Potatoes	0.02	Bananas
0.28	LT adult	0.15	Apples	0.06	Potatoes	0.02	Oranges
0.24	DK adult	0.06	Apples	0.04	Oranges	0.04	Bananas

**Acute risk assessment**

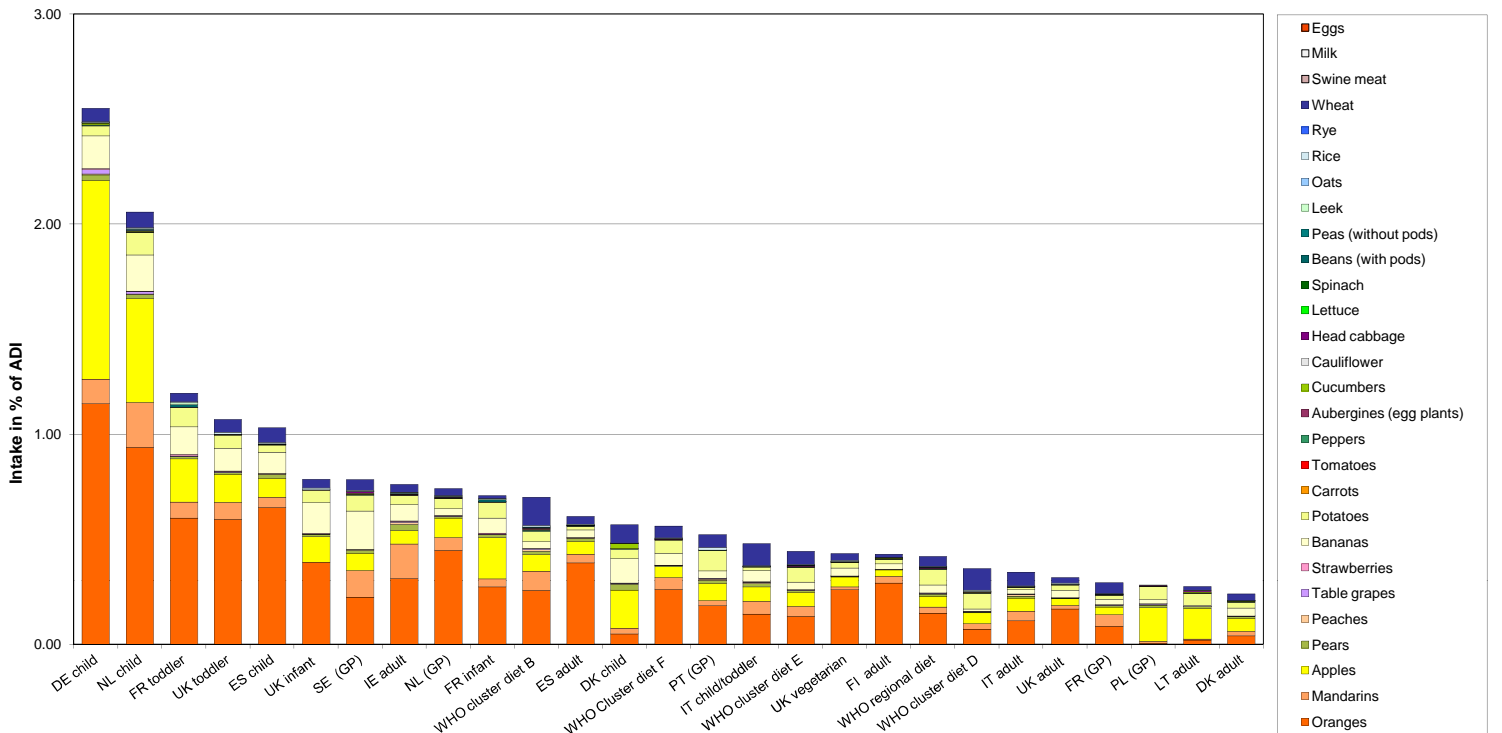
Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	5	2893	8.99		4.50				
2010	Peaches	0.05	1406	1.21		0.04				
2010	Strawberries	0.05	2160	0.14		0.02				
2010	Tomatoes	0.05	2286	0.09		0.05				
2010	Head cabbage	0.05	1174	0.26		0.05				
2010	Lettuce	0.05	2209	0.05		0.03				
2010	Leek	0.05	913		0.11	0.15				
2010	Oats	0.05	247							
2010	Rye	0.05	449							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

c) TRL: toxicological threshold level

**Chronic risk assessment: Thiabendazole**



**Thiabendazole**

Acute exposure: Thiabendazole / Apples



Intake in % of the ARfD

Acute exposure: Thiabendazole / Peaches



Intake in % of the ARfD

Acute exposure: Thiabendazole / Strawberries



Intake in % of the ARfD

Acute exposure: Thiabendazole / Tomatoes



Intake in % of the ARfD

Acute exposure: Thiabendazole / Head cabbage



Intake in % of the ARfD

Acute exposure: Thiabendazole / Lettuce



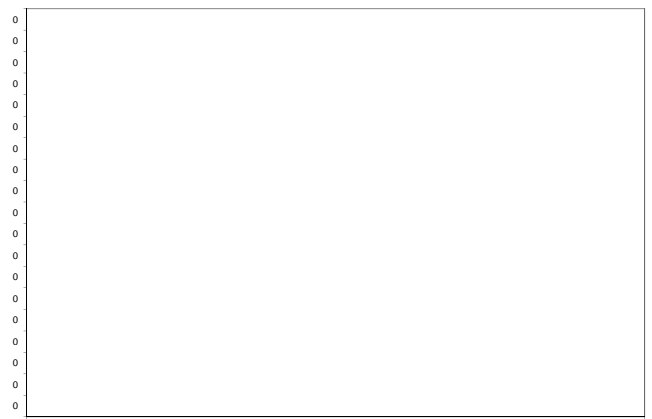
Intake in % of the ARfD

Acute exposure: Thiabendazole / Leek



Intake in % of the ARfD

Acute exposure: Thiabendazole / Oats



Intake in % of the ARfD

Acute exposure: Thiabendazole / Rye



Intake in % of the ARfD

Thiacloprid			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.01	ARfD (mg/kg bw):	0.03
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2004	Year of evaluation:	2004

**Chronic risk assessment**

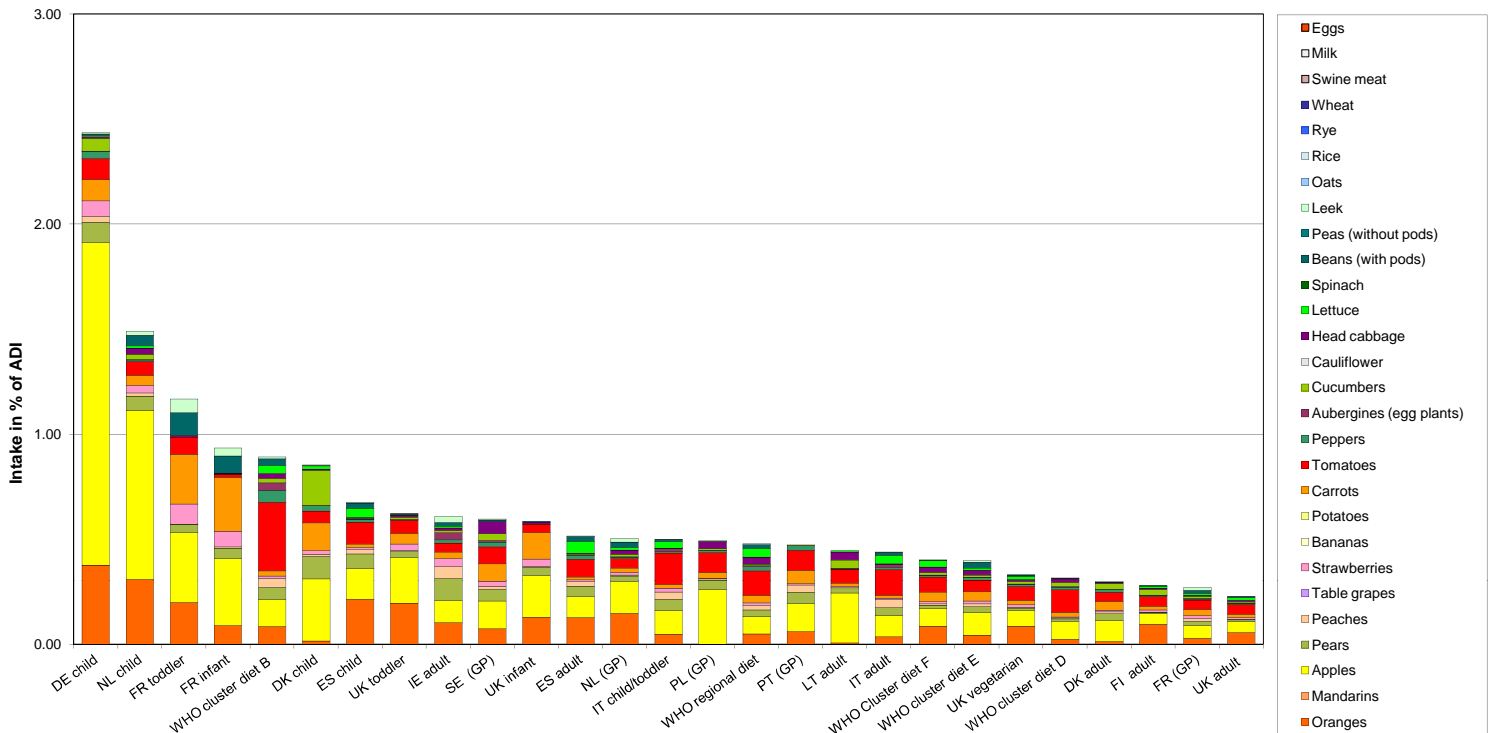
		Exposure (range) in % of ADI minimum - maximum					
		2					
		No of diets exceeding ADI: ---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
2.43	DE child	1.53	Apples	0.38	Oranges	0.10	Tomatoes
1.49	NL child	0.80	Apples	0.31	Oranges	0.07	Pears
1.17	FR toddler	0.33	Apples	0.24	Carrots	0.20	Oranges
0.94	FR infant	0.32	Apples	0.26	Carrots	0.09	Oranges
0.89	WHO cluster diet B	0.32	Tomatoes	0.13	Apples	0.08	Oranges
0.85	DK child	0.30	Apples	0.17	Cucumbers	0.13	Carrots
0.68	ES child	0.22	Oranges	0.15	Apples	0.10	Tomatoes
0.62	UK toddler	0.22	Apples	0.20	Oranges	0.06	Tomatoes
0.61	IE adult	0.11	Pears	0.10	Apples	0.10	Oranges
0.60	SE (GP)	0.13	Apples	0.08	Carrots	0.08	Tomatoes
0.59	UK infant	0.20	Apples	0.13	Oranges	0.13	Carrots
0.52	ES adult	0.13	Oranges	0.10	Apples	0.08	Tomatoes
0.50	NL (GP)	0.15	Apples	0.15	Oranges	0.05	Tomatoes
0.50	IT child/toddler	0.15	Tomatoes	0.11	Apples	0.05	Pears
0.49	PL (GP)	0.26	Apples	0.09	Tomatoes	0.04	Pears
0.48	WHO regional diet	0.12	Tomatoes	0.08	Apples	0.05	Oranges
0.47	PT (GP)	0.13	Apples	0.09	Tomatoes	0.06	Carrots
0.45	LT adult	0.24	Apples	0.07	Tomatoes	0.04	Cucumbers
0.44	IT adult	0.12	Tomatoes	0.10	Apples	0.04	Lettuce
0.40	WHO Cluster diet F	0.09	Oranges	0.08	Apples	0.07	Tomatoes
0.40	WHO cluster diet E	0.11	Apples	0.06	Tomatoes	0.04	Oranges
0.33	UK vegetarian	0.09	Oranges	0.08	Apples	0.07	Tomatoes
0.31	WHO cluster diet D	0.11	Tomatoes	0.08	Apples	0.02	Oranges
0.30	DK adult	0.10	Apples	0.04	Tomatoes	0.04	Carrots
0.28	FI adult	0.10	Oranges	0.05	Apples	0.04	Tomatoes
0.27	FR (GP)	0.06	Apples	0.05	Tomatoes	0.03	Carrots
0.23	UK adult	0.06	Oranges	0.05	Apples	0.05	Tomatoes

**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.3	2456	9.45	0.04	0.86	1	280.83	UK infant	
2010	Peaches	0.3	1221	5.81		0.08		15.82	DE child	
2010	Strawberries	0.5	1903	11.56	0.05	1.09		56.65	DE child	
2010	Tomatoes	0.5	1911	3.45		0.17		32.95	BE child	
2010	Head cabbage	0.2	973	1.34		0.08		13.33	NL child	
2010	Lettuce	2	1905	1.99		0.84		75.33	DE child	
2010	Leek	0.1	782	0.26		0.01		2.36	BE child	
2010	Oats	1	150							
2010	Rye	0.05	361							
2010	Swine Meat									
2010	Milk									

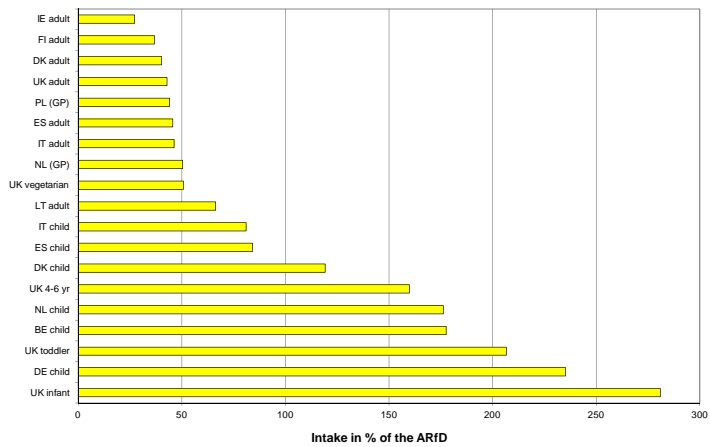
a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Thiacloprid**

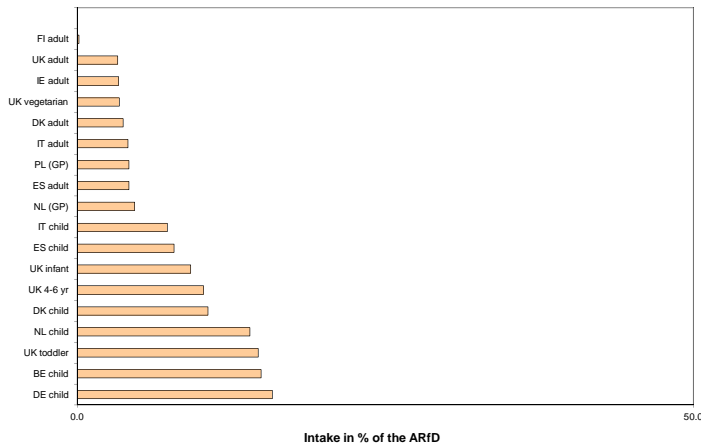


**Thiacloprid**

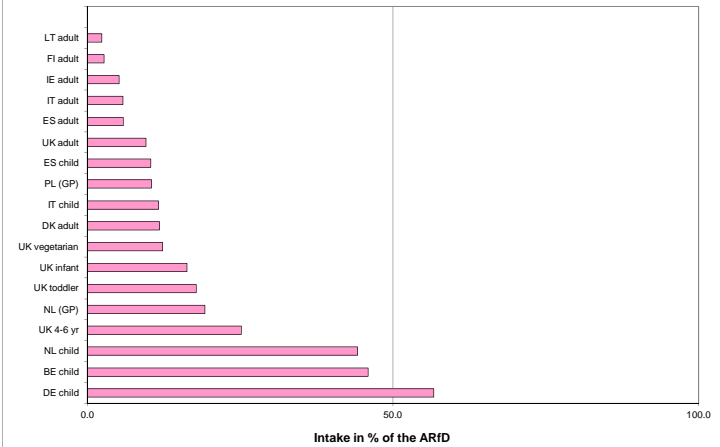
Acute exposure: Thiacloprid / Apples



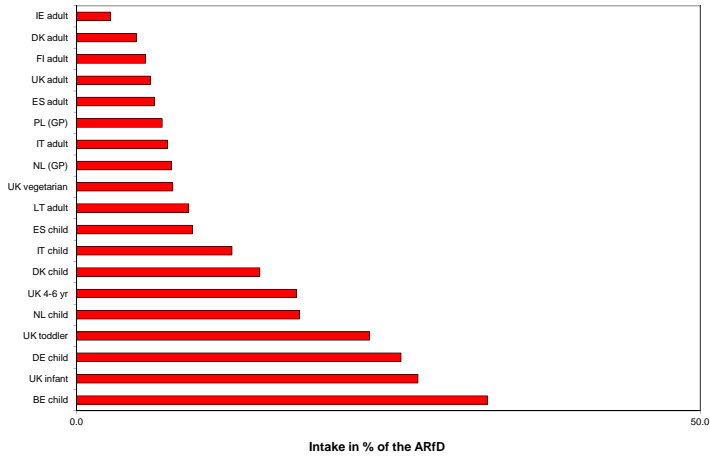
Acute exposure: Thiacloprid / Peaches



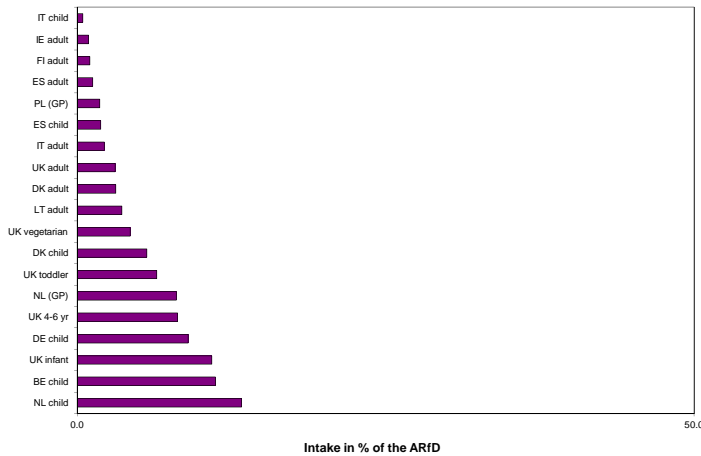
Acute exposure: Thiacloprid / Strawberries



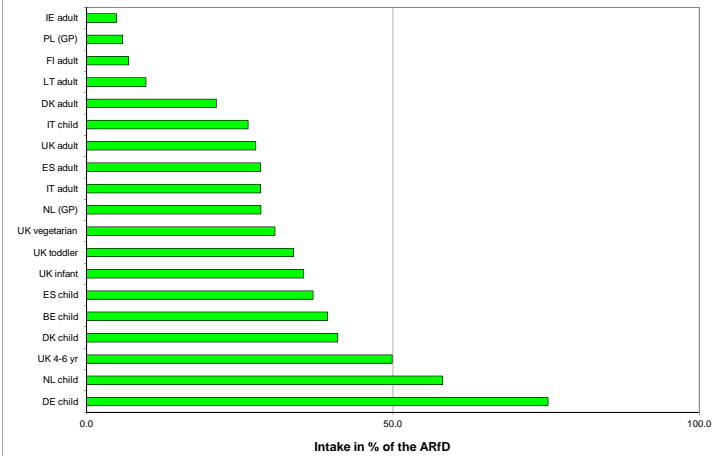
Acute exposure: Thiacloprid / Tomatoes



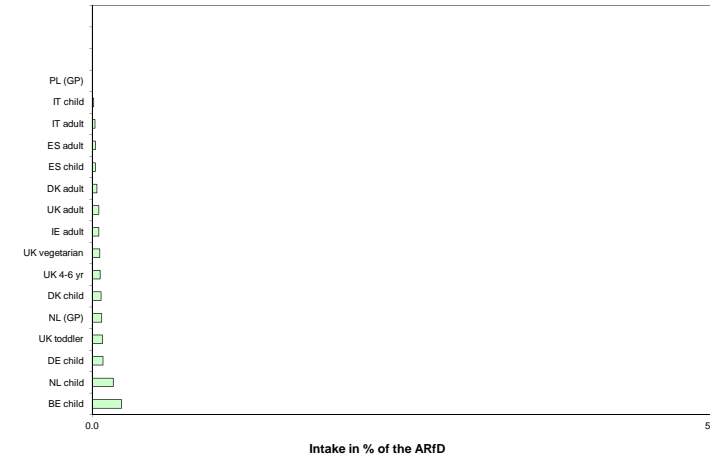
Acute exposure: Thiacloprid / Head cabbage



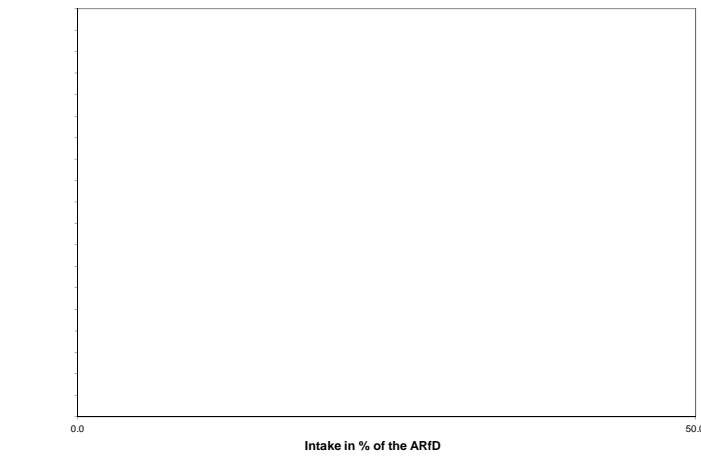
Acute exposure: Thiacloprid / Lettuce



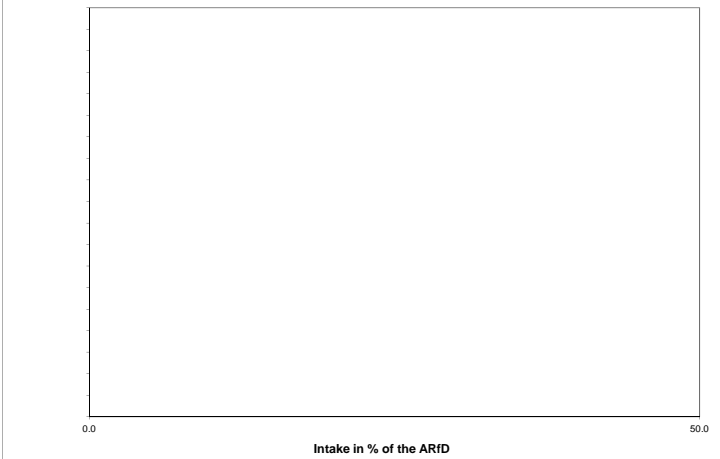
Acute exposure: Thiacloprid / Leek



Acute exposure: Thiacloprid / Oats



Acute exposure: Thiacloprid / Rye



## Thiametoxam

Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	0.026	ARfD (mg/kg bw):	0.5
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2007	Year of evaluation:	2007

Overlap with clothianidin residue definition;

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
1

No of diets exceeding ADI: ---

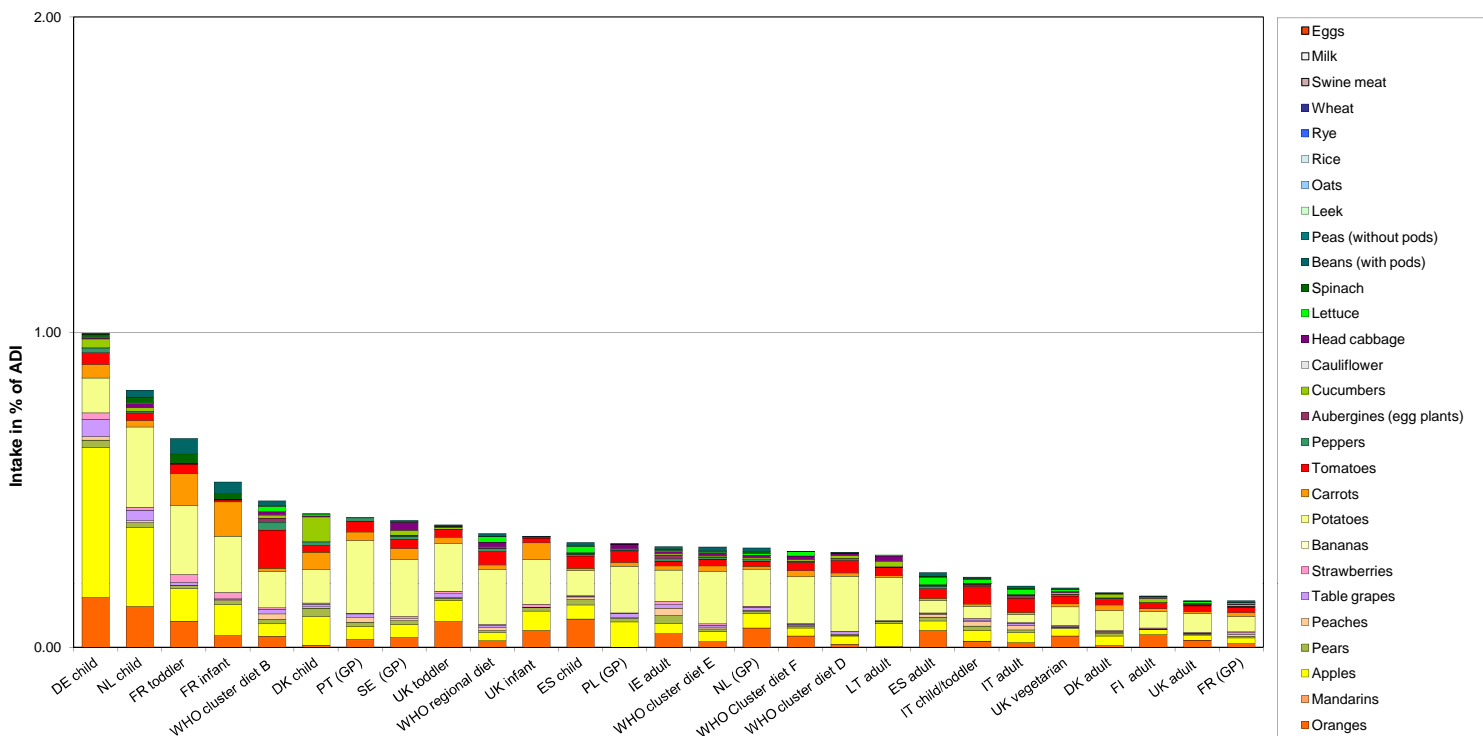
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
1.00	DE child	0.48	Apples	0.16	Oranges	0.11	Potatoes
0.82	NL child	0.25	Potatoes	0.25	Apples	0.13	Oranges
0.66	FR toddler	0.22	Potatoes	0.10	Apples	0.10	Carrots
0.53	FR infant	0.18	Potatoes	0.11	Carrots	0.10	Apples
0.46	WHO cluster diet B	0.12	Tomatoes	0.12	Potatoes	0.04	Apples
0.42	DK child	0.11	Potatoes	0.09	Apples	0.08	Cucumbers
0.41	PT (GP)	0.23	Potatoes	0.04	Apples	0.03	Tomatoes
0.40	SE (GP)	0.18	Potatoes	0.04	Apples	0.04	Carrots
0.39	UK toddler	0.15	Potatoes	0.08	Oranges	0.07	Apples
0.36	WHO regional diet	0.17	Potatoes	0.04	Tomatoes	0.03	Apples
0.35	UK infant	0.14	Potatoes	0.06	Apples	0.05	Carrots
0.33	ES child	0.09	Oranges	0.08	Potatoes	0.05	Apples
0.33	PL (GP)	0.15	Potatoes	0.08	Apples	0.03	Tomatoes
0.32	IE adult	0.10	Potatoes	0.04	Oranges	0.03	Apples
0.32	WHO cluster diet E	0.17	Potatoes	0.03	Apples	0.02	Tomatoes
0.32	NL (GP)	0.12	Potatoes	0.06	Oranges	0.05	Apples
0.30	WHO Cluster diet F	0.15	Potatoes	0.04	Oranges	0.03	Tomatoes
0.30	WHO cluster diet D	0.18	Potatoes	0.04	Tomatoes	0.03	Apples
0.29	LT adult	0.14	Potatoes	0.07	Apples	0.02	Tomatoes
0.24	ES adult	0.05	Oranges	0.04	Potatoes	0.03	Tomatoes
0.22	IT child/toddler	0.06	Tomatoes	0.04	Potatoes	0.03	Apples
0.20	IT adult	0.05	Tomatoes	0.03	Apples	0.03	Potatoes
0.19	UK vegetarian	0.06	Potatoes	0.04	Oranges	0.02	Tomatoes
0.17	DK adult	0.06	Potatoes	0.03	Apples	0.02	Carrots
0.16	FI adult	0.05	Potatoes	0.04	Oranges	0.02	Tomatoes
0.15	UK adult	0.06	Potatoes	0.02	Oranges	0.02	Tomatoes
0.15	FR (GP)	0.05	Potatoes	0.02	Apples	0.02	Tomatoes

## Acute risk assessment

Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.2	1948	0.62	0.05	0.24		4.70	UK infant	
2010	Peaches	0.3	934	0.54		0.19		2.25	DE child	
2010	Strawberries	0.05	1544	0.19	0.06	0.20		0.62	DE child	
2010	Tomatoes	0.2	1530	0.59		0.08		0.93	BE child	
2010	Head cabbage	0.2	791	0.38		0.02		0.19	NL child	
2010	Lettuce	0.5	1512	5.62		0.52		2.82	DE child	
2010	Leek	0.05	600							
2010	Oats	0.05	141							
2010	Rye	0.05	325							
2010	Swine Meat									
2010	Milk									

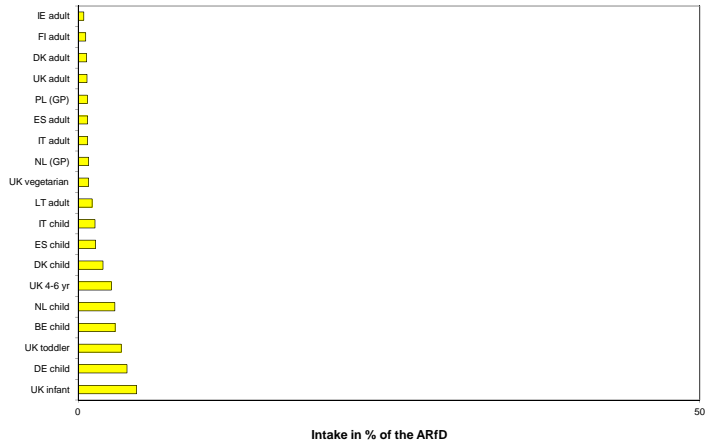
<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.<sup>b)</sup> MRL in place on 01/01/2010<sup>c)</sup> TRL: toxicological threshold level

## Chronic risk assessment: Thiametoxam

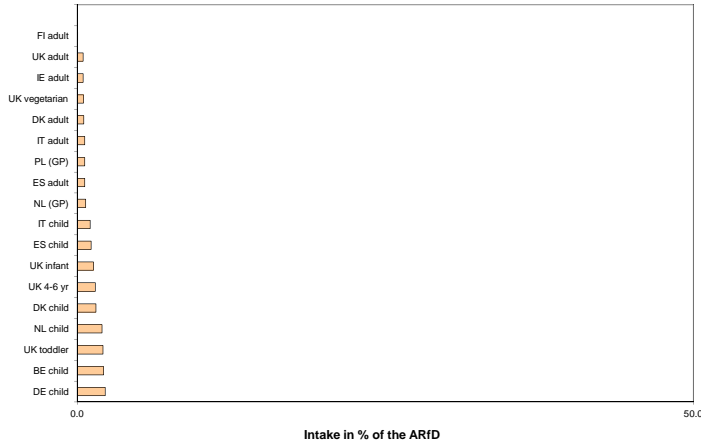


**Thiametoxam**

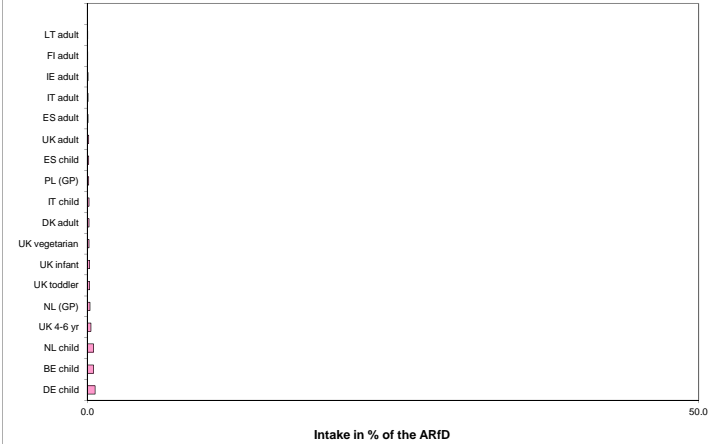
Acute exposure: Thiametoxam / Apples



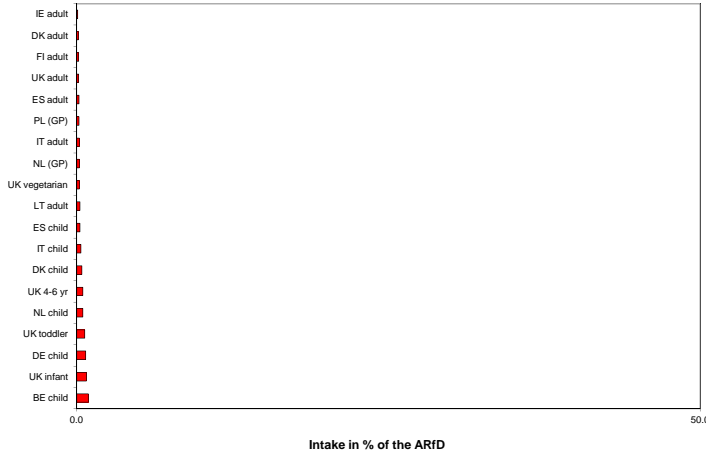
Acute exposure: Thiametoxam / Peaches



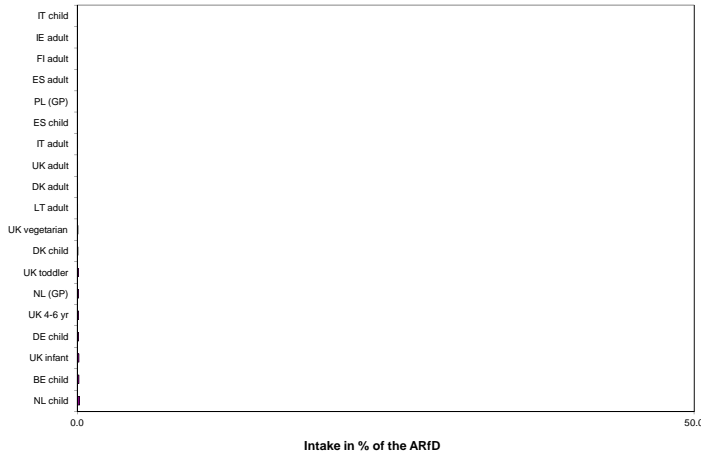
Acute exposure: Thiametoxam / Strawberries



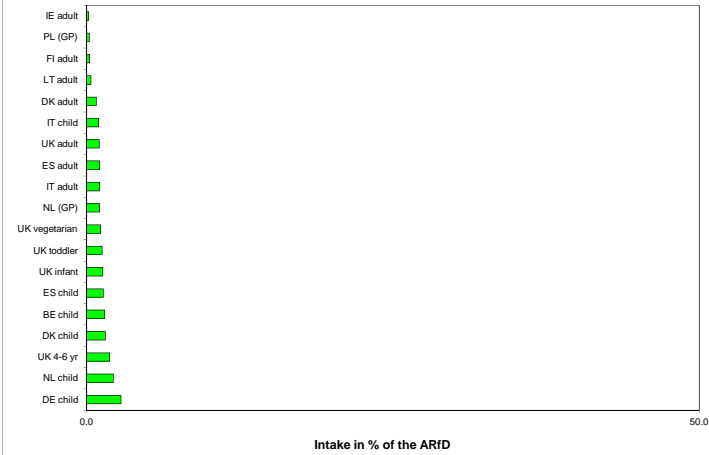
Acute exposure: Thiametoxam / Tomatoes



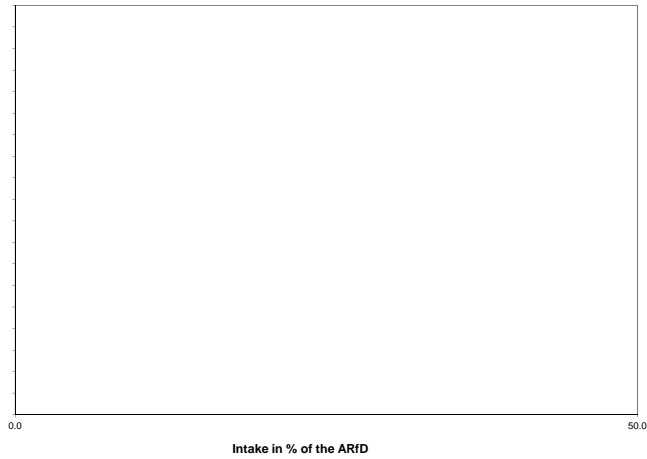
Acute exposure: Thiametoxam / Head cabbage



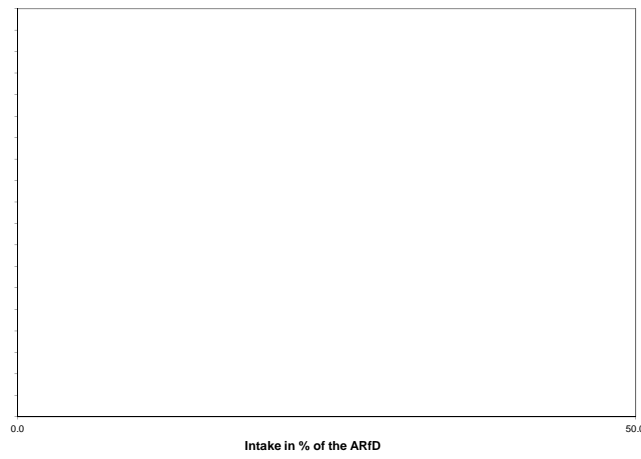
Acute exposure: Thiametoxam / Lettuce



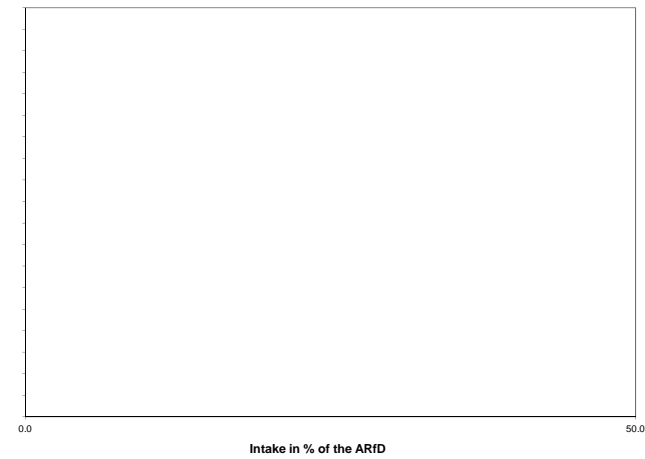
Acute exposure: Thiametoxam / Leek



Acute exposure: Thiametoxam / Oats



Acute exposure: Thiametoxam / Rye



## Thiophanate-methyl

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.08</b>	ARfD (mg/kg bw):	<b>0.2</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2005</b>	Year of evaluation:	<b>2005</b>

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum						
		No of diets exceeding ADI:						
	Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
	0.37	DE child	0.20	Apples	0.07	Oranges	0.02	Table grapes
	0.24	NL child	0.10	Apples	0.06	Oranges	0.01	Table grapes
	0.17	WHO cluster diet B	0.06	Tomatoes	0.03	Peppers	0.02	Apples
	0.14	FR toddler	0.04	Apples	0.04	Oranges	0.02	Beans (with pods)
	0.12	DK child	0.04	Apples	0.03	Cucumbers	0.01	Peppers
	0.11	ES child	0.04	Oranges	0.02	Apples	0.02	Tomatoes
	0.11	IE adult	0.02	Oranges	0.01	Peaches	0.01	Apples
	0.10	UK toddler	0.04	Oranges	0.03	Apples	0.01	Tomatoes
	0.09	FR infant	0.04	Apples	0.02	Oranges	0.01	Beans (with pods)
	0.09	SE (GP)	0.02	Apples	0.01	Oranges	0.01	Tomatoes
	0.09	ES adult	0.02	Oranges	0.01	Tomatoes	0.01	Apples
	0.08	NL (GP)	0.03	Oranges	0.02	Apples	0.01	Tomatoes
	0.08	IT child/toddler	0.03	Tomatoes	0.01	Apples	0.01	Peaches
	0.08	WHO regional diet	0.02	Tomatoes	0.01	Apples	0.01	Peppers
	0.08	PT (GP)	0.02	Apples	0.02	Tomatoes	0.01	Oranges
	0.08	IT adult	0.02	Tomatoes	0.01	Apples	0.01	Peaches
	0.07	PL (GP)	0.03	Apples	0.02	Tomatoes	0.01	Head cabbage
	0.07	UK infant	0.03	Apples	0.02	Oranges	0.01	Tomatoes
	0.07	WHO Cluster diet F	0.02	Oranges	0.01	Tomatoes	0.01	Apples
	0.06	WHO cluster diet E	0.01	Apples	0.01	Tomatoes	0.01	Oranges
	0.06	LT adult	0.03	Apples	0.01	Tomatoes	0.01	Head cabbage
	0.06	WHO cluster diet D	0.02	Tomatoes	0.01	Apples	0.01	Peppers
	0.06	UK vegetarian	0.02	Oranges	0.01	Tomatoes	0.01	Apples
	0.05	FI adult	0.02	Oranges	0.01	Tomatoes	0.01	Apples
	0.04	DK adult	0.01	Apples	0.01	Tomatoes	0.01	Peppers
	0.04	FR (GP)	0.01	Tomatoes	0.01	Apples	0.01	Oranges
	0.04	UK adult	0.01	Oranges	0.01	Tomatoes	0.01	Apples

### Acute risk assessment

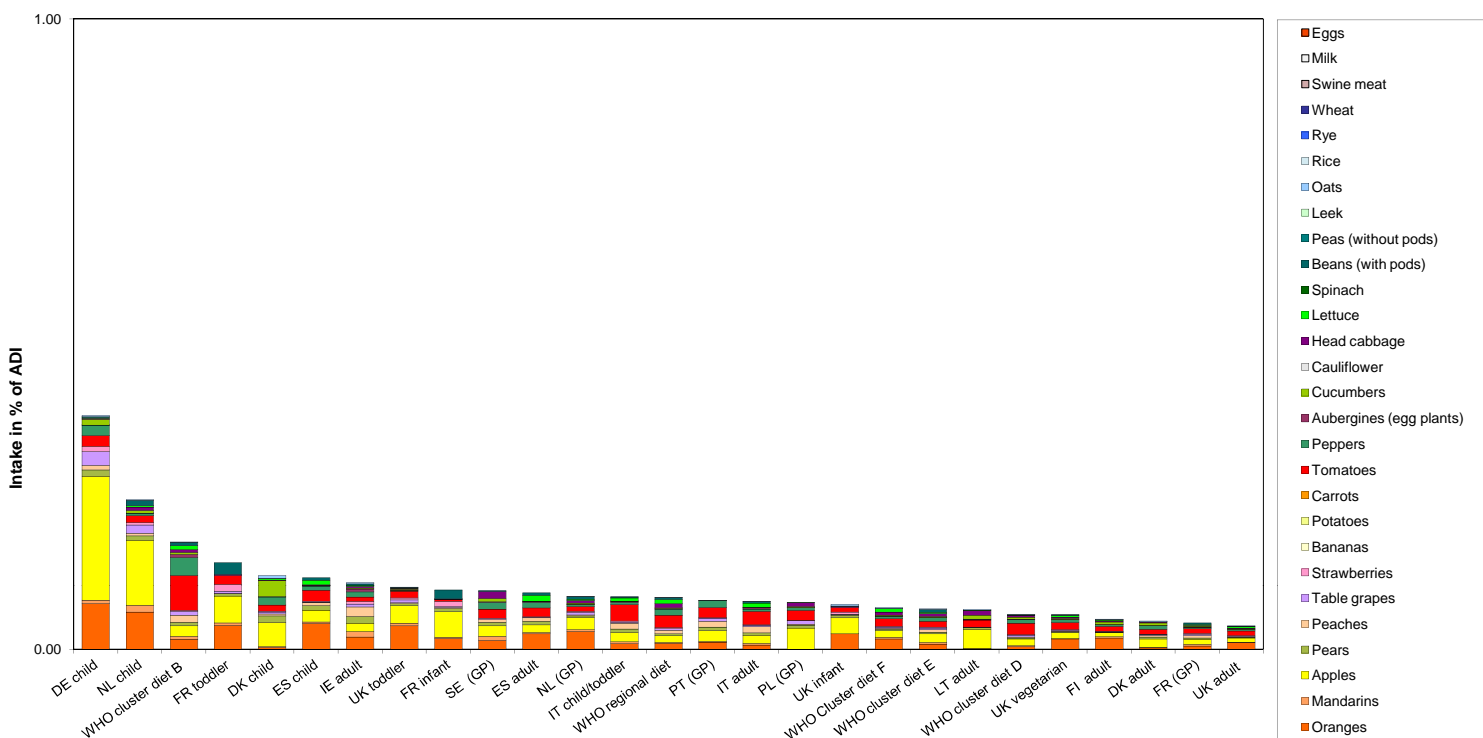
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.5	2320	1.94		0.47		23.02	UK infant	
2010	Peaches	2	1202	3.41	0.08	4.40	1	130.53	DE child	
2010	Strawberries	0.1	1878	0.75	0.27	1.50		11.69	DE child	
2010	Tomatoes	2	1732	1.33		0.47		13.66	BE child	
2010	Head cabbage	0.1	986	0.10		0.09		2.29	NL child	
2010	Lettuce	0.1	1926	0.05		0.01		0.08	DE child	
2010	Leek	0.1	760							
2010	Oats	0.3	155	0.65		0.02		0.04	DE child	
2010	Rye	0.05	319							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

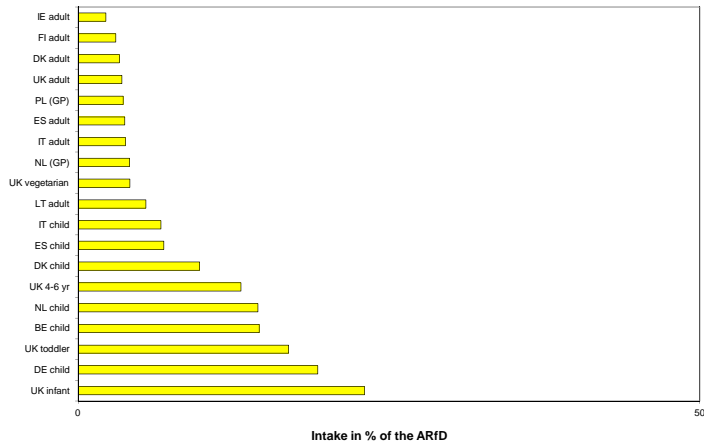
<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Thiophanate-methyl

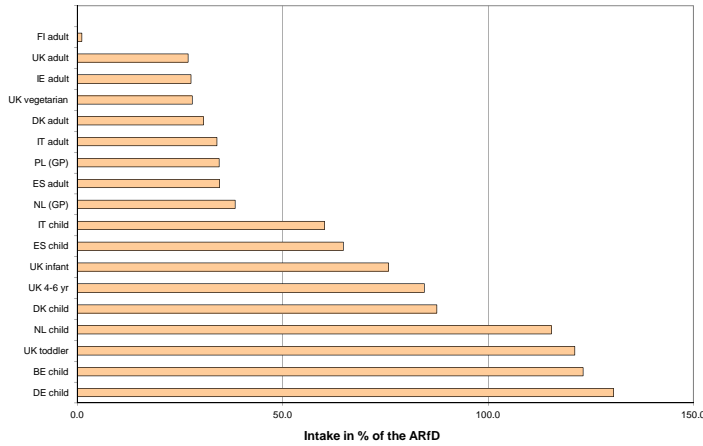


**Thiophanate-methyl**

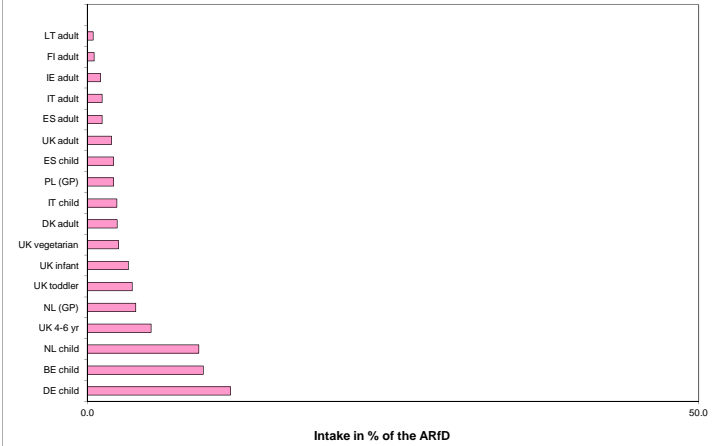
Acute exposure: Thiophanate-methyl / Apples



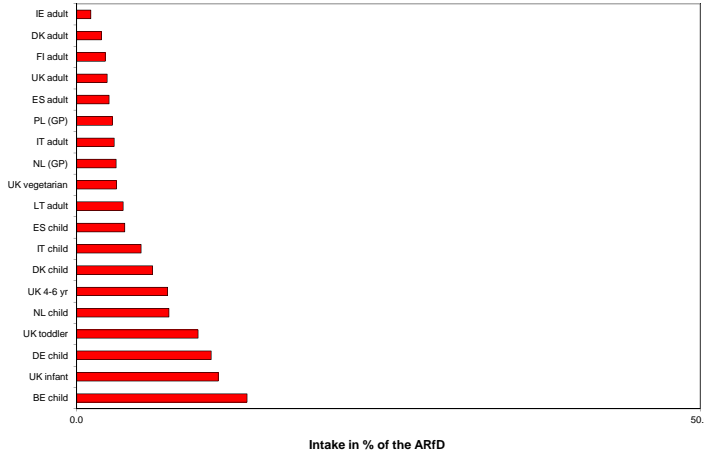
Acute exposure: Thiophanate-methyl / Peaches



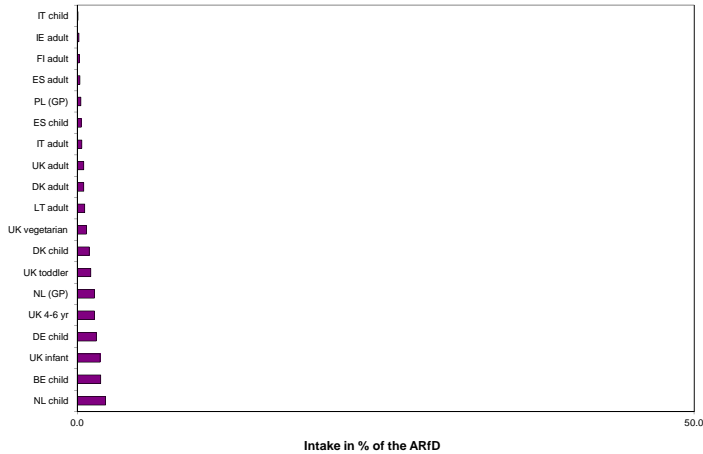
Acute exposure: Thiophanate-methyl / Strawberries



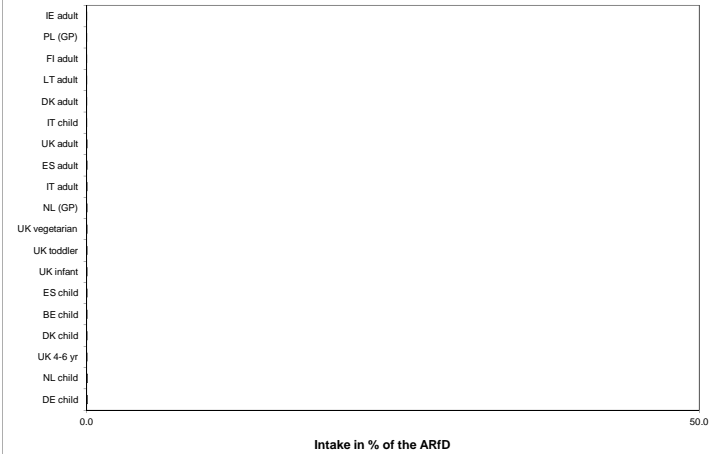
Acute exposure: Thiophanate-methyl / Tomatoes



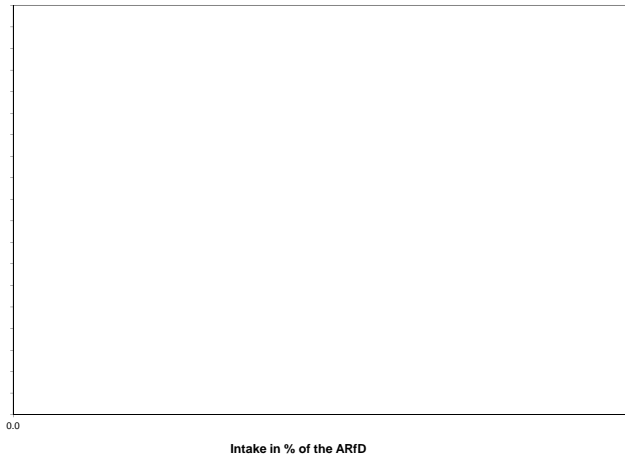
Acute exposure: Thiophanate-methyl / Head cabbage



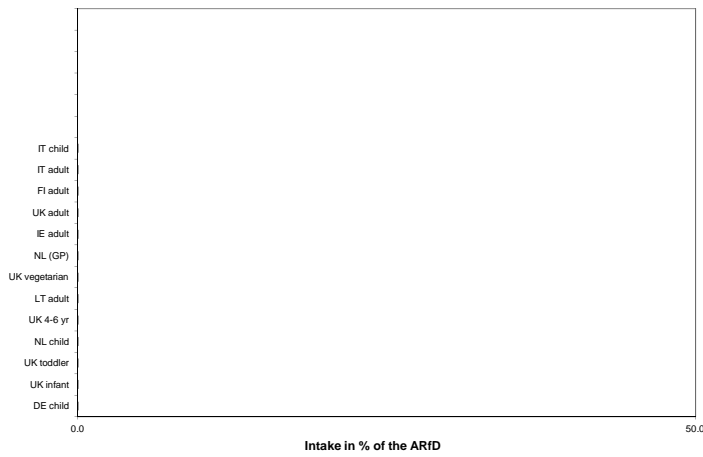
Acute exposure: Thiophanate-methyl / Lettuce



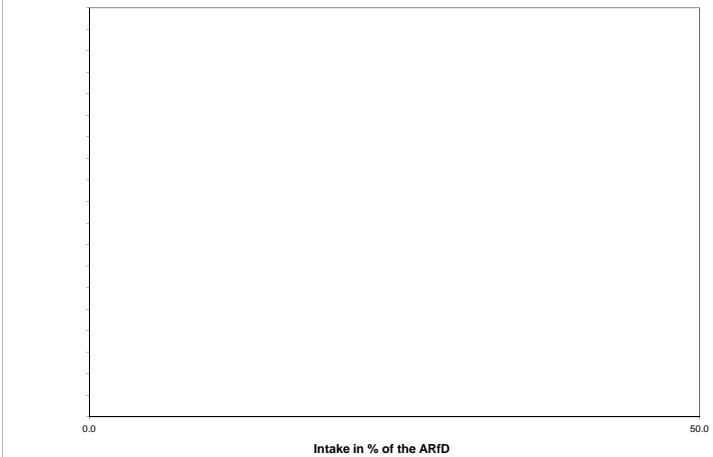
Acute exposure: Thiophanate-methyl / Leek



Acute exposure: Thiophanate-methyl / Oats



Acute exposure: Thiophanate-methyl / Rye





## Tolclofos-methyl

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.064</b>	ARfD (mg/kg bw):	<b>n.n.</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2006</b>	Year of evaluation:	<b>2006</b>

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum			
		No of diets exceeding ADI:		---	
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.15	FR toddler	0.10	Potatoes	0.05	Carrots
0.13	FR infant	0.08	Potatoes	0.05	Carrots
0.13	NL child	0.12	Potatoes	0.01	Carrots
0.12	PT (GP)	0.10	Potatoes	0.01	Carrots
0.10	SE (GP)	0.08	Potatoes	0.02	Carrots
0.09	WHO regional diet	0.08	Potatoes	0.01	Lettuce
0.09	UK infant	0.06	Potatoes	0.03	Carrots
0.09	WHO cluster diet E	0.07	Potatoes	0.01	Carrots
0.08	WHO cluster diet D	0.08	Potatoes	0.00	Carrots
0.08	WHO Cluster diet F	0.07	Potatoes	0.01	Carrots
0.08	UK toddler	0.07	Potatoes	0.01	Carrots
0.08	DK child	0.05	Potatoes	0.03	Carrots
0.07	PL (GP)	0.07	Potatoes	0.01	Carrots
0.07	DE child	0.05	Potatoes	0.02	Carrots
0.07	LT adult	0.06	Potatoes	0.00	Carrots
0.07	WHO cluster diet B	0.05	Potatoes	0.01	Lettuce
0.06	NL (GP)	0.05	Potatoes	0.00	Carrots
0.05	IE adult	0.04	Potatoes	0.01	Carrots
0.05	ES child	0.04	Potatoes	0.01	Lettuce
0.04	DK adult	0.03	Potatoes	0.01	Carrots
0.03	UK vegetarian	0.03	Potatoes	0.00	Carrots
0.03	ES adult	0.02	Potatoes	0.01	Lettuce
0.03	UK adult	0.03	Potatoes	0.00	Carrots
0.03	FR (GP)	0.02	Potatoes	0.01	Carrots
0.03	FI adult	0.02	Potatoes	0.00	Carrots
0.03	IT child/toddler	0.02	Potatoes	0.01	Lettuce
0.02	IT adult	0.01	Potatoes	0.01	Lettuce

### Acute risk assessment

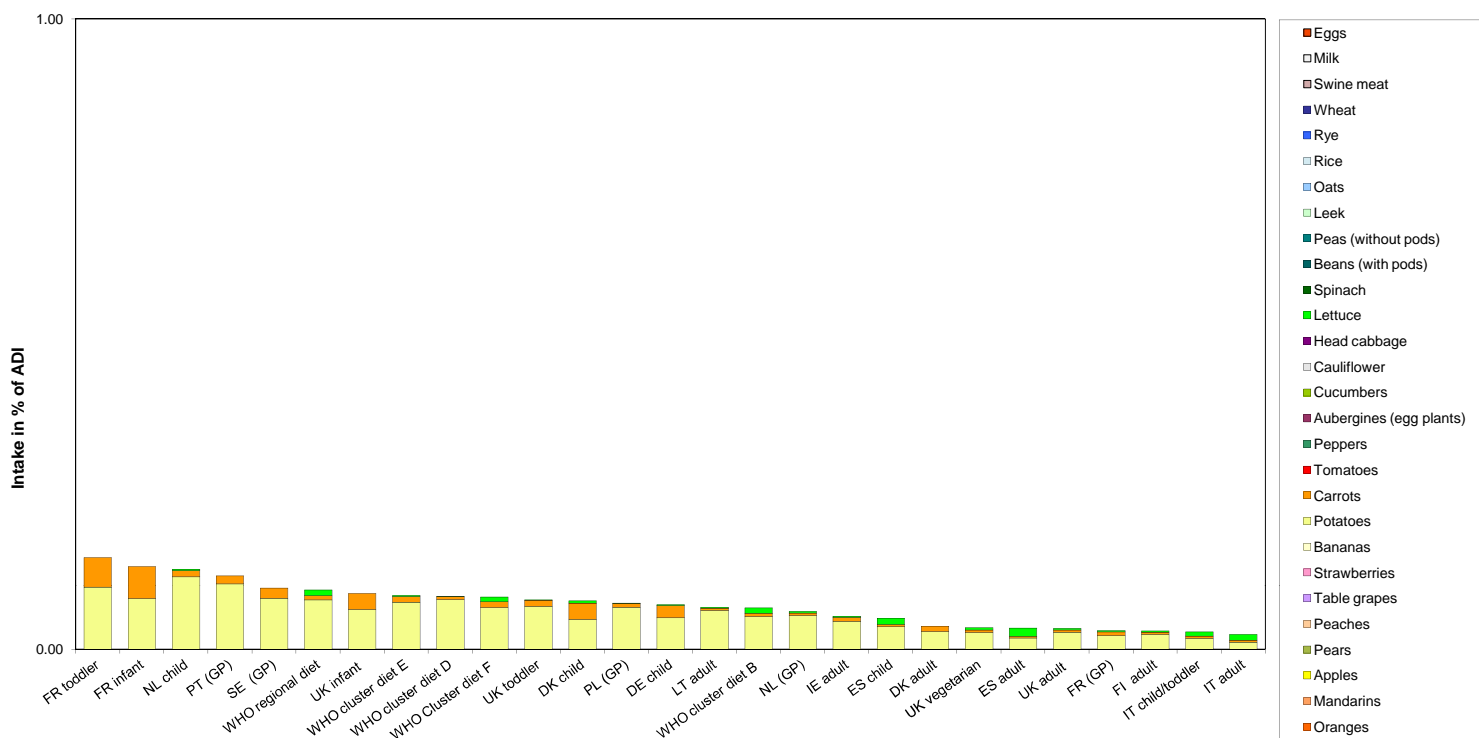
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	3097							
2010	Peaches	0.05	1513							
2010	Strawberries	0.05	2325							
2010	Tomatoes	1	2509							
2010	Head cabbage	0.5	1242							
2010	Lettuce	2	2388	4.86		1.30				
2010	Leek	0.05	990							
2010	Oats	0.05	182							
2010	Rye	0.05	415							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Tolclofos-methyl



## Tolclofos-methyl

Acute exposure: Tolclofos-methyl / Apples



Intake in % of the ARfD

Acute exposure: Tolclofos-methyl / Peaches



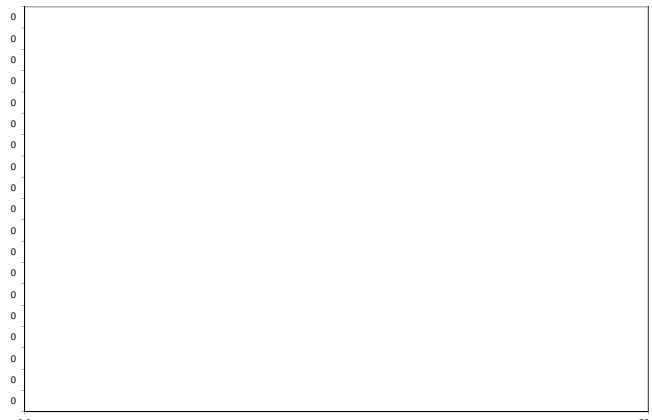
Intake in % of the ARfD

Acute exposure: Tolclofos-methyl / Strawberries



Intake in % of the ARfD

Acute exposure: Tolclofos-methyl / Tomatoes



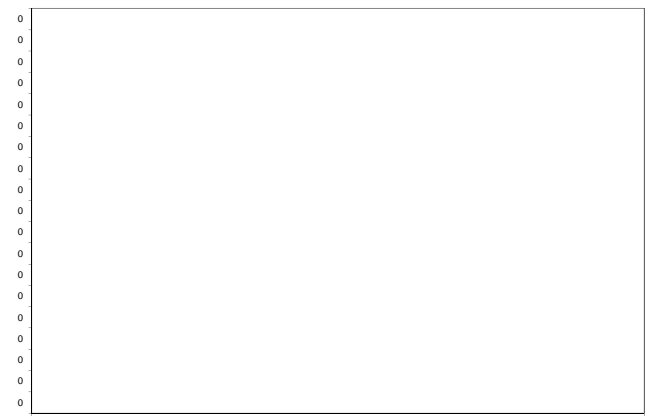
Intake in % of the ARfD

Acute exposure: Tolclofos-methyl / Head cabbage



Intake in % of the ARfD

Acute exposure: Tolclofos-methyl / Lettuce



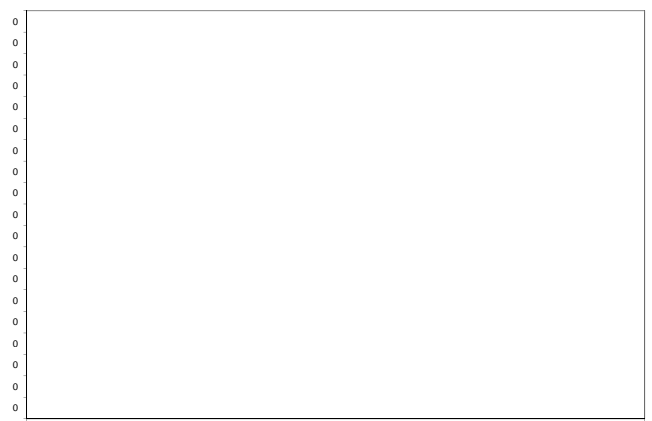
Intake in % of the ARfD

Acute exposure: Tolclofos-methyl / Leek



Intake in % of the ARfD

Acute exposure: Tolclofos-methyl / Oats



Intake in % of the ARfD

Acute exposure: Tolclofos-methyl / Rye



Intake in % of the ARfD

## Tolyfluanid

Status of the active substance:	<b>Excluded</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.1</b>	ARfD (mg/kg bw):	<b>0.25</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2006</b>	Year of evaluation:	<b>2006</b>

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum						
		No of diets exceeding ADI:		---				
	Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.19	DE child		0.18	Apples	0.01	Strawberries		FRUIT (FRESH OR FROZEN)
0.10	NL child		0.09	Apples	0.00	Strawberries		FRUIT (FRESH OR FROZEN)
0.05	FR toddler		0.04	Apples	0.01	Strawberries		FRUIT (FRESH OR FROZEN)
0.05	FR infant		0.04	Apples	0.01	Strawberries		FRUIT (FRESH OR FROZEN)
0.04	DK child		0.03	Apples	0.00	Strawberries		FRUIT (FRESH OR FROZEN)
0.03	PL (GP)		0.03	Apples	0.00	Strawberries		FRUIT (FRESH OR FROZEN)
0.03	UK toddler		0.03	Apples	0.00	Strawberries		FRUIT (FRESH OR FROZEN)
0.03	LT adult		0.03	Apples	0.00	Strawberries		FRUIT (FRESH OR FROZEN)
0.03	UK infant		0.02	Apples	0.00	Strawberries		FRUIT (FRESH OR FROZEN)
0.02	NL (GP)		0.02	Apples	0.00	Strawberries		FRUIT (FRESH OR FROZEN)
0.02	SE (GP)		0.02	Apples	0.00	Strawberries		FRUIT (FRESH OR FROZEN)
0.02	ES child		0.02	Apples	0.00	Strawberries		FRUIT (FRESH OR FROZEN)
0.02	IE adult		0.01	Apples	0.00	Strawberries		FRUIT (FRESH OR FROZEN)
0.02	WHO cluster diet B		0.02	Apples	0.00	Strawberries		FRUIT (FRESH OR FROZEN)
0.02	PT (GP)		0.02	Apples	0.00	Strawberries		FRUIT (FRESH OR FROZEN)
0.02	IT child/toddler		0.01	Apples	0.00	Strawberries		FRUIT (FRESH OR FROZEN)
0.01	WHO cluster diet E		0.01	Apples	0.00	Strawberries		FRUIT (FRESH OR FROZEN)
0.01	IT adult		0.01	Apples	0.00	Strawberries		FRUIT (FRESH OR FROZEN)
0.01	ES adult		0.01	Apples	0.00	Strawberries		FRUIT (FRESH OR FROZEN)
0.01	DK adult		0.01	Apples	0.00	Strawberries		FRUIT (FRESH OR FROZEN)
0.01	WHO regional diet		0.01	Apples	0.00	Strawberries		FRUIT (FRESH OR FROZEN)
0.01	WHO Cluster diet F		0.01	Apples	0.00	Strawberries		FRUIT (FRESH OR FROZEN)
0.01	WHO cluster diet D		0.01	Apples	0.00	Strawberries		FRUIT (FRESH OR FROZEN)
0.01	UK vegetarian		0.01	Apples	0.00	Strawberries		FRUIT (FRESH OR FROZEN)
0.01	FR (GP)		0.01	Apples	0.00	Strawberries		FRUIT (FRESH OR FROZEN)
0.01	FI adult		0.01	Apples	0.00	Strawberries		FRUIT (FRESH OR FROZEN)
0.01	UK adult		0.01	Apples	0.00	Strawberries		FRUIT (FRESH OR FROZEN)

### Acute risk assessment

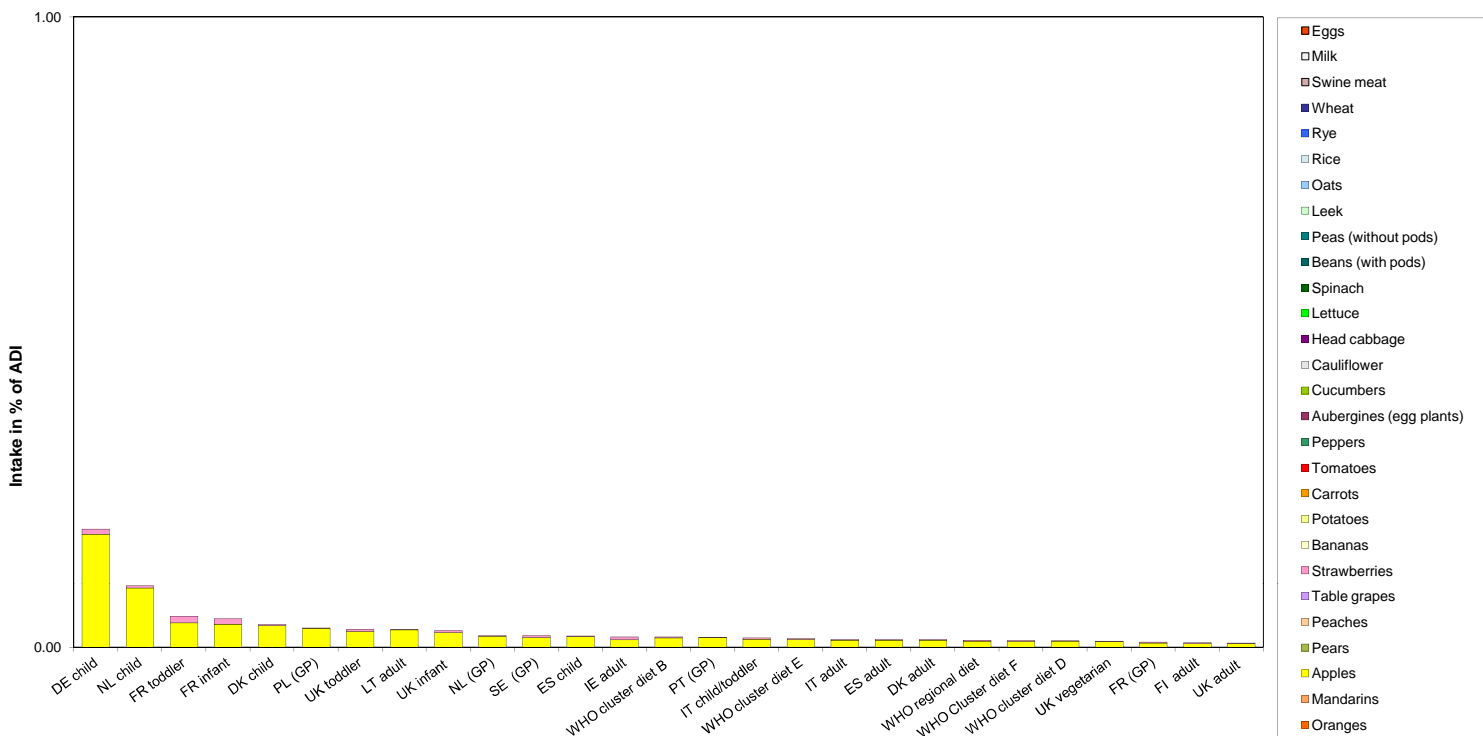
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	3	2258	0.18		0.14		5.49	UK infant	
2010	Peaches	0.05	1122							
2010	Strawberries	5	1728	0.35		0.16		1.00	DE child	
2010	Tomatoes	3	1771	0.11		0.05		1.09	BE child	
2010	Head cabbage	0.05	924							
2010	Lettuce	20	1631	0.12		0.02		0.22	DE child	
2010	Leek	3	697							
2010	Oats	0.05	105							
2010	Rye	0.05	319							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

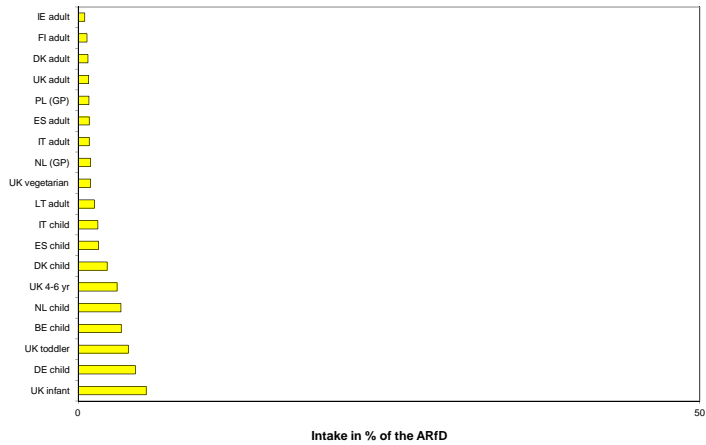
<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Tolyfluanid

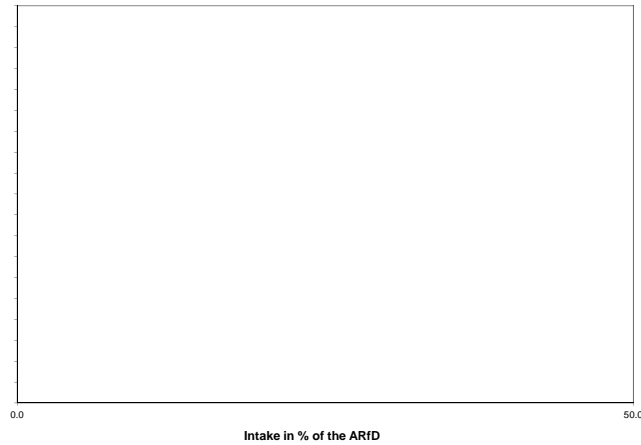


**Tolyfluanid**

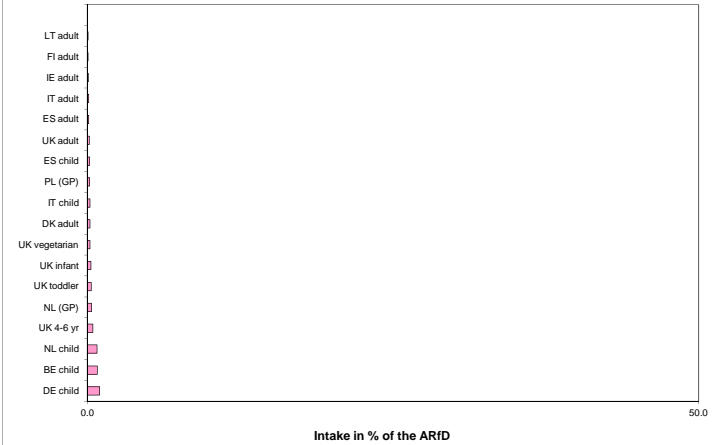
Acute exposure: Tolyfluanid / Apples



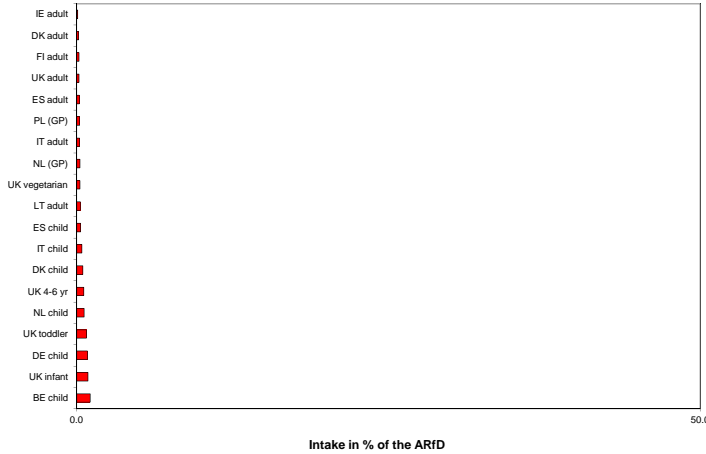
Acute exposure: Tolyfluanid / Peaches



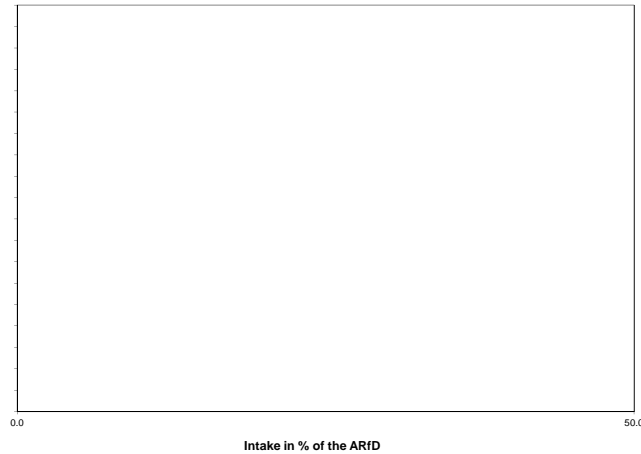
Acute exposure: Tolyfluanid / Strawberries



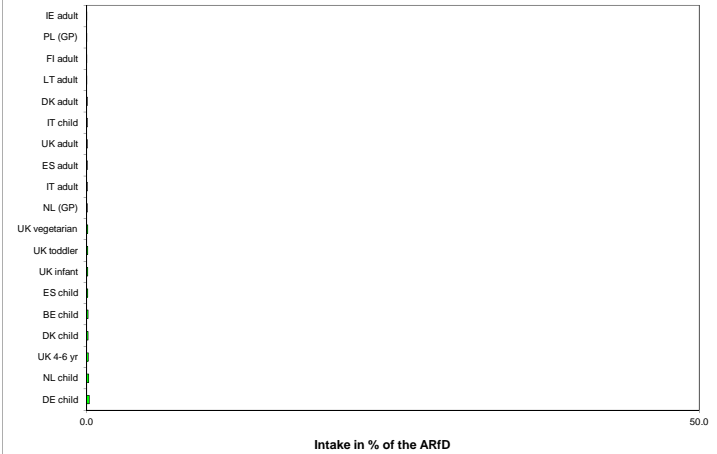
Acute exposure: Tolyfluanid / Tomatoes



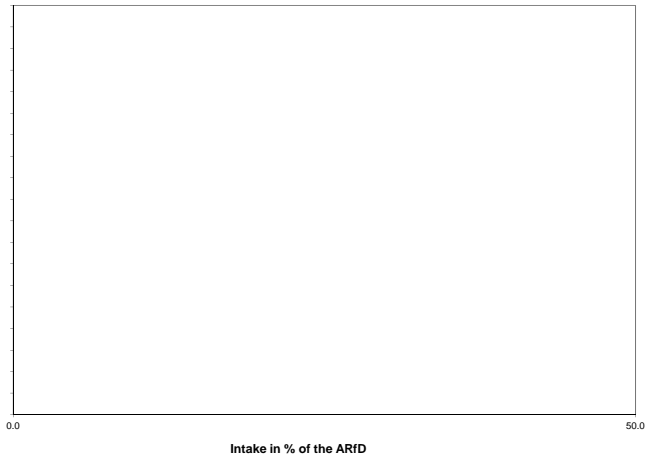
Acute exposure: Tolyfluanid / Head cabbage



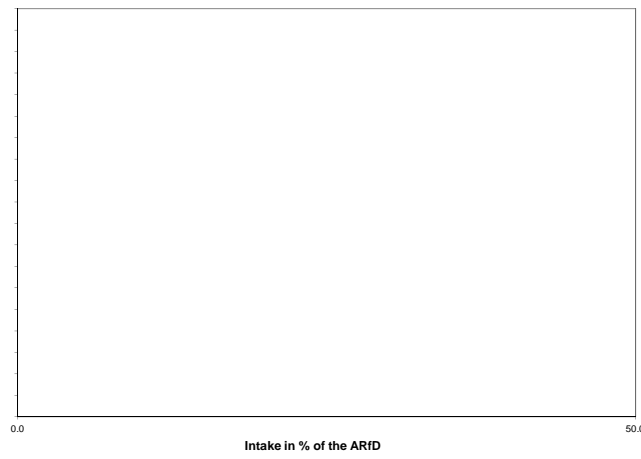
Acute exposure: Tolyfluanid / Lettuce



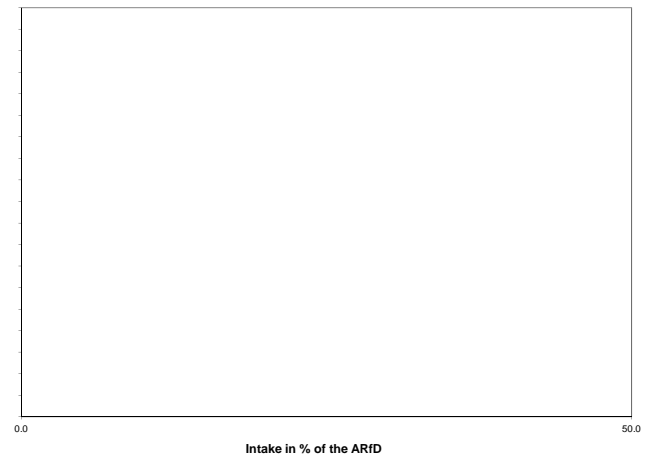
Acute exposure: Tolyfluanid / Leek



Acute exposure: Tolyfluanid / Oats



Acute exposure: Tolyfluanid / Rye



Triadimefon			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.03	ARfD (mg/kg bw):	0.05
Source of ADI:	JMPR	Source of ARfD:	EFSA
Year of evaluation:	2004	Year of evaluation:	2008

For the risk assessment of triadimefon/triadimenol the ADI of triadimefon and the ARfD for triadimenol were selected.  
 ADI triadimenol: 0.05 mg/kg bw/d (EFSA, 2008); ARfD triadimefon: 0,08 mg/kg bw (JMPR, 2004)  
 ARfD triadimefon: 0.08 mg/kg bw (JMPR, 2004).

**Chronic risk assessment**

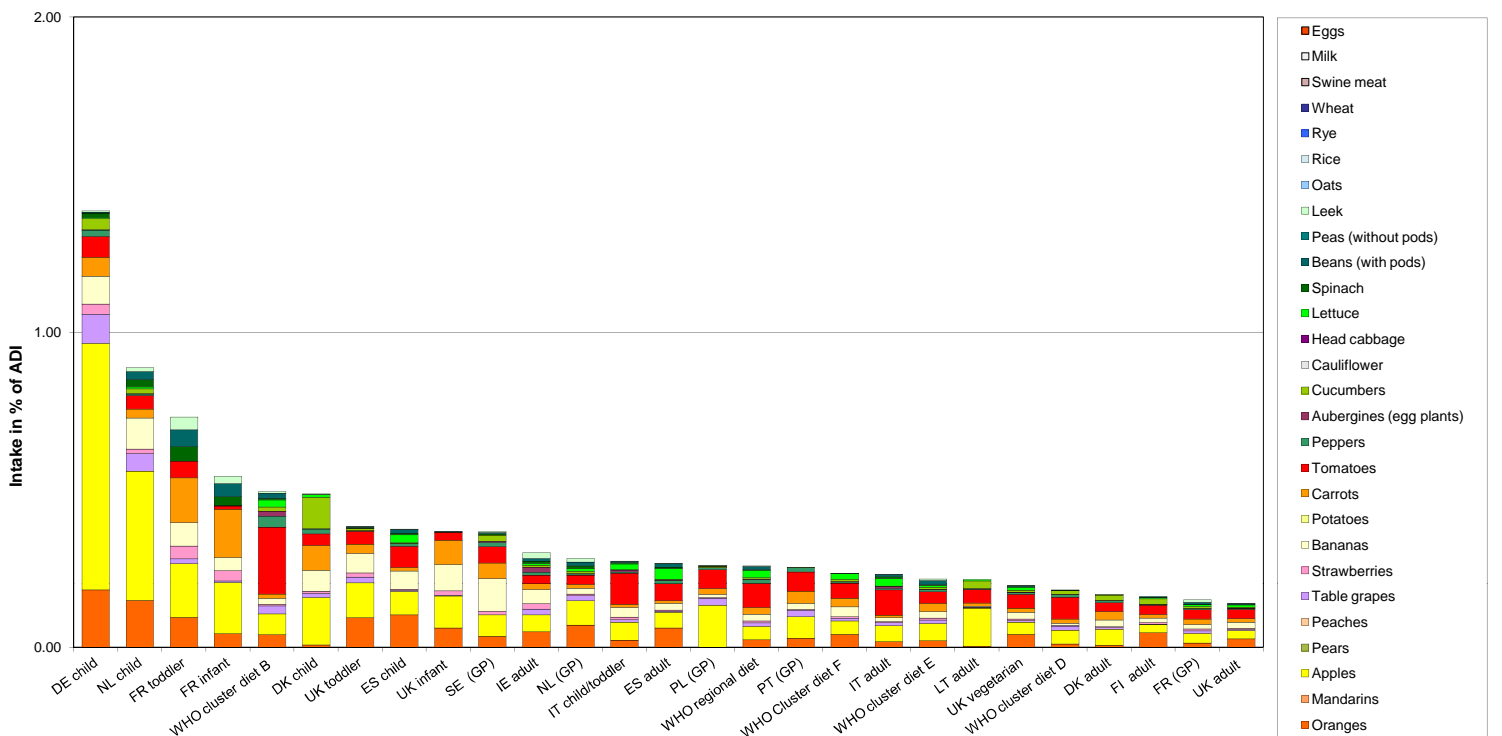
		Exposure (range) in % of ADI minimum - maximum					
		1					
No of diets exceeding ADI:		---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
1.38	DE child	0.78	Apples	0.18	Oranges	0.09	Table grapes
0.89	NL child	0.41	Apples	0.15	Oranges	0.10	Bananas
0.73	FR toddler	0.17	Apples	0.14	Carrots	0.10	Oranges
0.54	FR infant	0.16	Apples	0.15	Carrots	0.04	Oranges
0.49	WHO cluster diet B	0.21	Tomatoes	0.07	Apples	0.04	Oranges
0.49	DK child	0.15	Apples	0.10	Cucumbers	0.08	Carrots
0.38	UK toddler	0.11	Apples	0.09	Oranges	0.06	Bananas
0.38	ES child	0.10	Oranges	0.07	Apples	0.07	Tomatoes
0.37	UK infant	0.10	Apples	0.08	Bananas	0.08	Carrots
0.37	SE (GP)	0.10	Bananas	0.07	Apples	0.05	Tomatoes
0.30	IE adult	0.05	Apples	0.05	Oranges	0.04	Bananas
0.28	NL (GP)	0.08	Apples	0.07	Oranges	0.03	Tomatoes
0.27	IT child/toddler	0.10	Tomatoes	0.06	Apples	0.03	Bananas
0.27	ES adult	0.06	Oranges	0.05	Tomatoes	0.05	Apples
0.26	PL (GP)	0.13	Apples	0.06	Tomatoes	0.02	Table grapes
0.26	WHO regional diet	0.08	Tomatoes	0.04	Apples	0.02	Oranges
0.25	PT (GP)	0.07	Apples	0.06	Tomatoes	0.04	Carrots
0.24	WHO Cluster diet F	0.05	Tomatoes	0.04	Apples	0.04	Oranges
0.23	IT adult	0.08	Tomatoes	0.05	Apples	0.02	Lettuce
0.22	WHO cluster diet E	0.05	Apples	0.04	Tomatoes	0.03	Carrots
0.21	LT adult	0.12	Apples	0.04	Tomatoes	0.02	Cucumbers
0.20	UK vegetarian	0.04	Tomatoes	0.04	Oranges	0.04	Apples
0.18	WHO cluster diet D	0.07	Tomatoes	0.04	Apples	0.01	Table grapes
0.17	DK adult	0.05	Apples	0.03	Tomatoes	0.03	Carrots
0.16	FI adult	0.05	Oranges	0.03	Tomatoes	0.03	Apples
0.15	FR (GP)	0.03	Apples	0.03	Tomatoes	0.02	Carrots
0.14	UK adult	0.03	Tomatoes	0.03	Oranges	0.03	Apples

**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.2	2657	0.68		0.04		7.84	UK infant	
2010	Peaches	0.1	1227							
2010	Strawberries	0.5	2149	2.00	0.05	1.30		40.54	DE child	
2010	Tomatoes	0.3	2281	1.97		0.13		15.12	BE child	
2010	Head cabbage	0.1	1142							
2010	Lettuce	0.1	2119	0.05		0.05		2.69	DE child	
2010	Leek	0.1	874	0.11	0.11	0.11		12.85	BE child	
2010	Oats	0.2	173							
2010	Rye	0.2	434							
2010	Swine Meat									
2010	Milk									

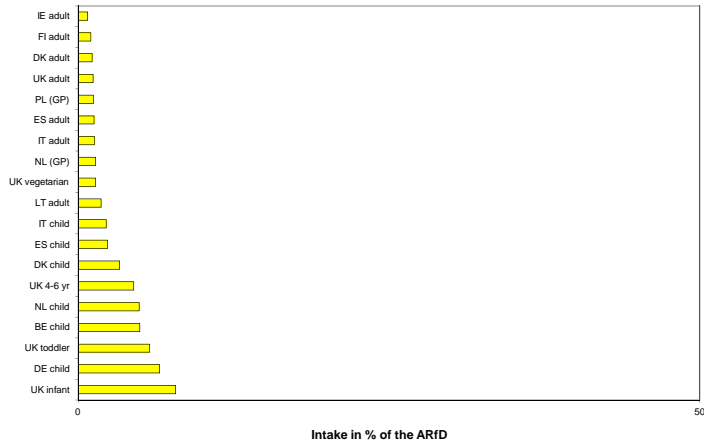
a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Triadimefon**

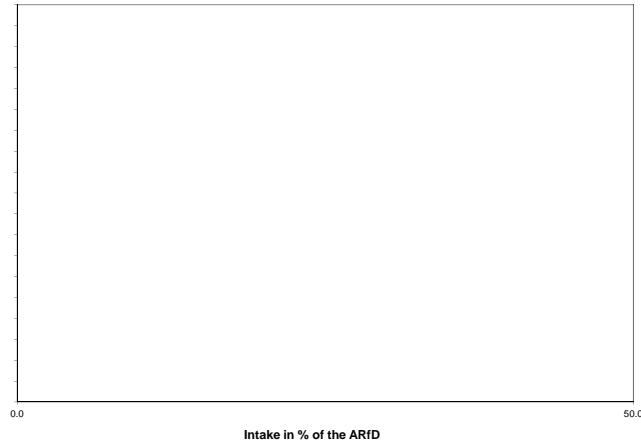


**Triadimefon**

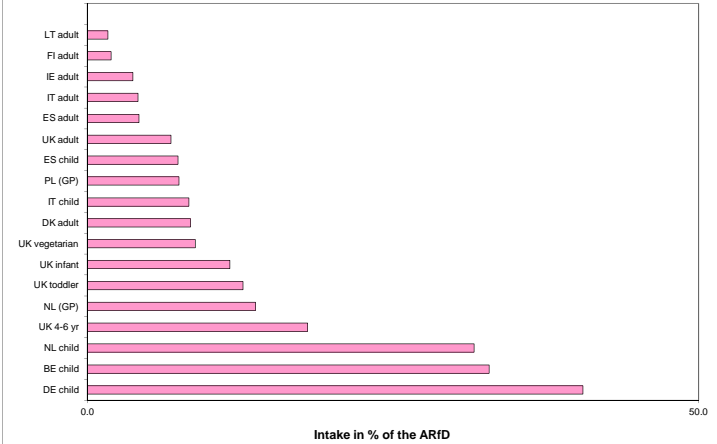
Acute exposure: Triadimefon / Apples



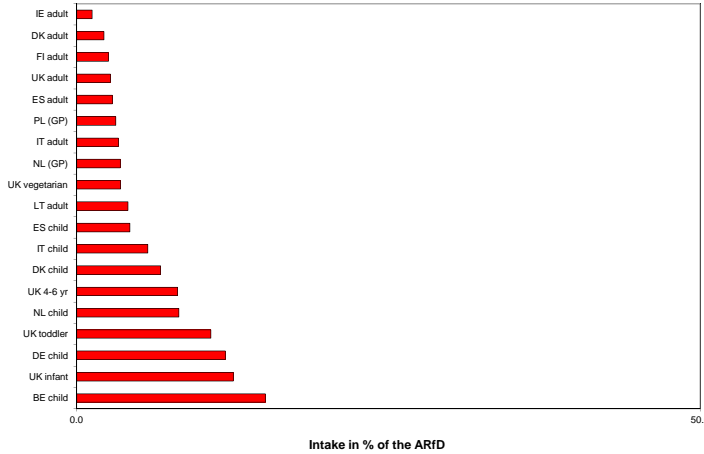
Acute exposure: Triadimefon / Peaches



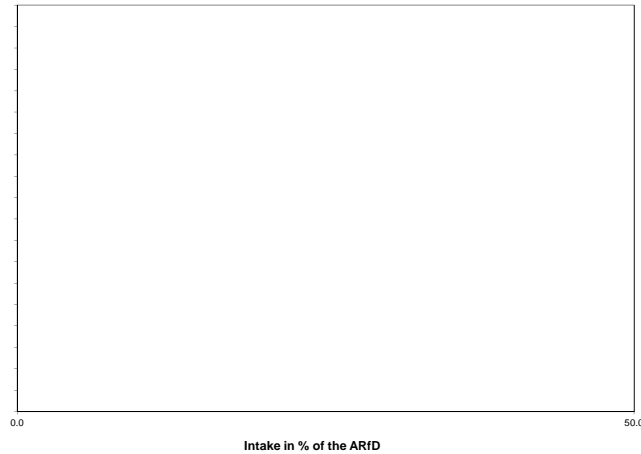
Acute exposure: Triadimefon / Strawberries



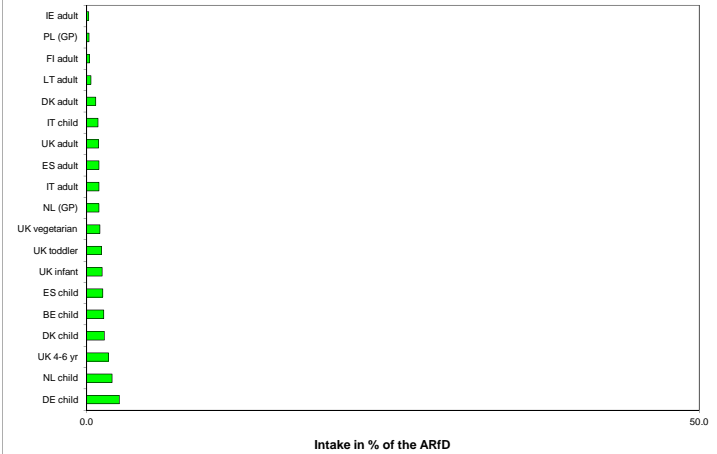
Acute exposure: Triadimefon / Tomatoes



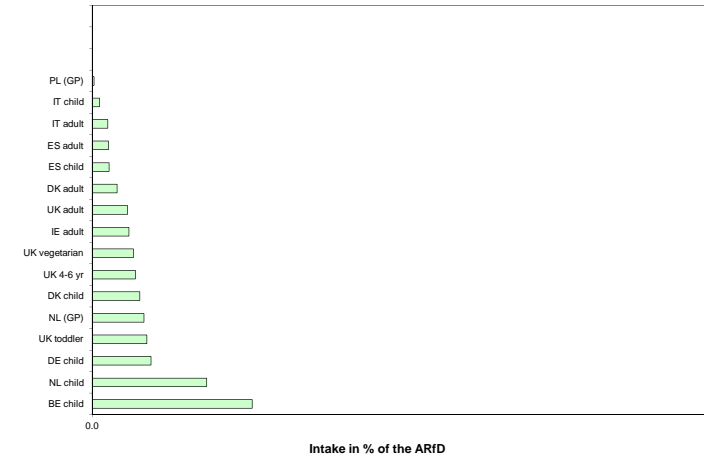
Acute exposure: Triadimefon / Head cabbage



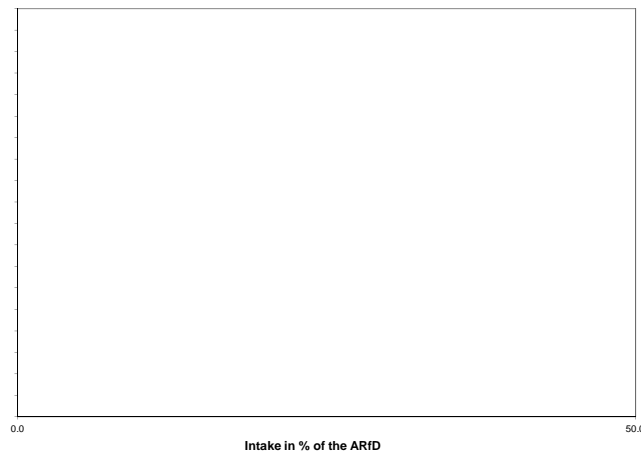
Acute exposure: Triadimefon / Lettuce



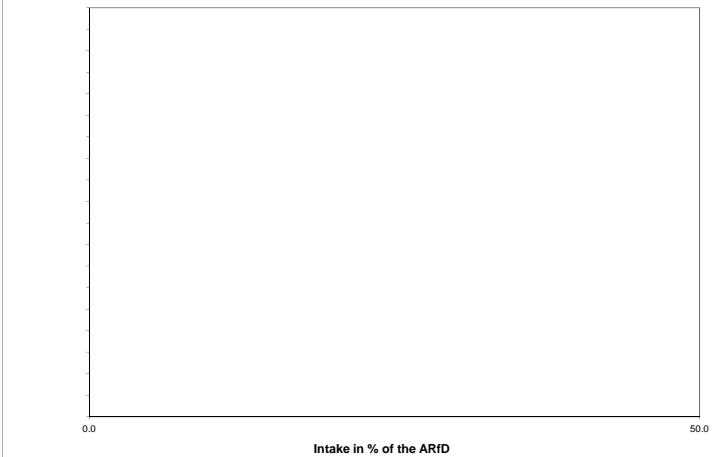
Acute exposure: Triadimefon / Leek



Acute exposure: Triadimefon / Oats



Acute exposure: Triadimefon / Rye



Triadimenol			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.05	ARfD (mg/kg bw):	0.08
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2008	Year of evaluation:	2008

For the risk assessment of triadimefon/triadimenol the ADI of triadimefon and the ARfD for triadimenol were selected.  
 ADI triadimefon: 0.05 mg/kg bw/d (EFSA, 2008); ARfD triadimefon: 0.08 mg/kg bw (JMPR, 2004)  
 ARfD triadimefon: 0.08 mg/kg bw (JMPR, 2004).

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum					
		No of diets exceeding ADI: ---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.09	WHO cluster diet B	0.07	Tomatoes	0.02	Peppers	0.01	Table grapes
0.07	DE child	0.02	Table grapes	0.02	Tomatoes	0.02	Strawberries
0.04	FR toddler	0.02	Strawberries	0.02	Tomatoes	0.00	Table grapes
0.04	IT child/toddler	0.03	Tomatoes	0.00	Strawberries	0.00	Table grapes
0.04	NL child	0.01	Table grapes	0.01	Tomatoes	0.01	Strawberries
0.04	WHO regional diet	0.02	Tomatoes	0.01	Peppers	0.00	Strawberries
0.03	PT (GP)	0.02	Tomatoes	0.01	Peppers	0.01	Table grapes
0.03	IT adult	0.03	Tomatoes	0.00	Table grapes	0.00	Peppers
0.03	WHO cluster diet D	0.02	Tomatoes	0.00	Table grapes	0.00	Peppers
0.03	PL (GP)	0.02	Tomatoes	0.01	Table grapes	0.00	Peppers
0.03	SE (GP)	0.02	Tomatoes	0.01	Strawberries	0.01	Peppers
0.03	ES child	0.02	Tomatoes	0.00	Peppers	0.00	Strawberries
0.03	IE adult	0.01	Tomatoes	0.01	Strawberries	0.01	Table grapes
0.03	DK child	0.01	Tomatoes	0.01	Peppers	0.00	Strawberries
0.03	UK toddler	0.01	Tomatoes	0.01	Strawberries	0.00	Table grapes
0.03	ES adult	0.02	Tomatoes	0.00	Peppers	0.00	Strawberries
0.02	FR infant	0.02	Strawberries	0.00	Tomatoes	0.00	Table grapes
0.02	WHO Cluster diet F	0.02	Tomatoes	0.00	Strawberries	0.00	Table grapes
0.02	WHO cluster diet E	0.01	Tomatoes	0.00	Peppers	0.00	Strawberries
0.02	UK vegetarian	0.01	Tomatoes	0.00	Strawberries	0.00	Peppers
0.02	NL (GP)	0.01	Tomatoes	0.00	Table grapes	0.00	Strawberries
0.02	UK infant	0.01	Tomatoes	0.01	Strawberries	0.00	Table grapes
0.02	FR (GP)	0.01	Tomatoes	0.00	Strawberries	0.00	Table grapes
0.02	LT adult	0.01	Tomatoes	0.00	Strawberries	0.00	Peppers
0.02	DK adult	0.01	Tomatoes	0.00	Peppers	0.00	Strawberries
0.01	FI adult	0.01	Tomatoes	0.00	Strawberries	0.00	Peppers
0.01	UK adult	0.01	Tomatoes	0.00	Strawberries	0.00	Peppers

### Acute risk assessment

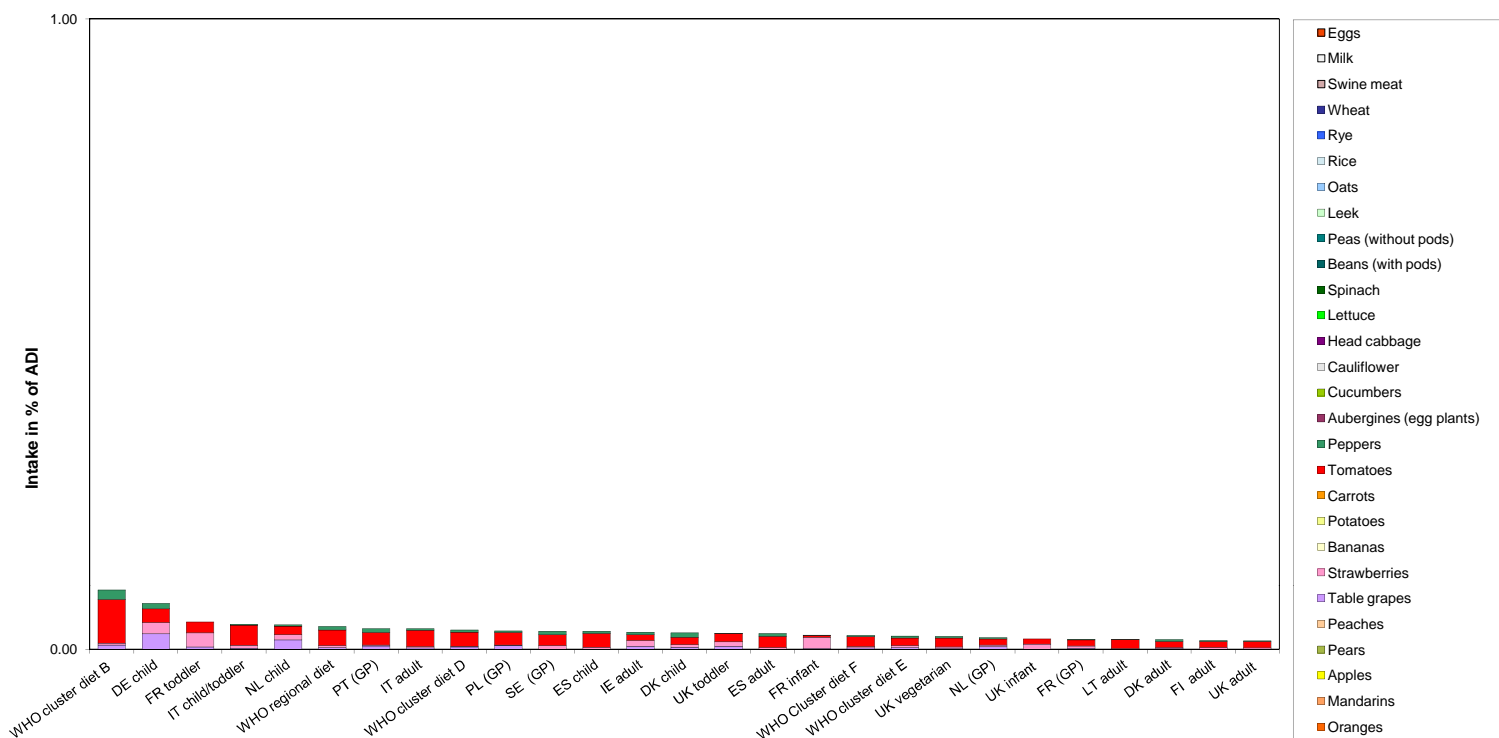
Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.2	2657	0.68		0.04		4.90	UK infant	
2010	Peaches	0.1	1227							
2010	Strawberries	0.5	2149	2.00	0.05	1.30		25.34	DE child	
2010	Tomatoes	0.3	2281	1.97		0.13		9.45	BE child	
2010	Head cabbage	0.1	1142							
2010	Lettuce	0.1	2119	0.05		0.05		1.68	DE child	
2010	Leek	0.1	874	0.11	0.11	0.11		8.03	BE child	
2010	Oats	0.2	173							
2010	Rye	0.2	434							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

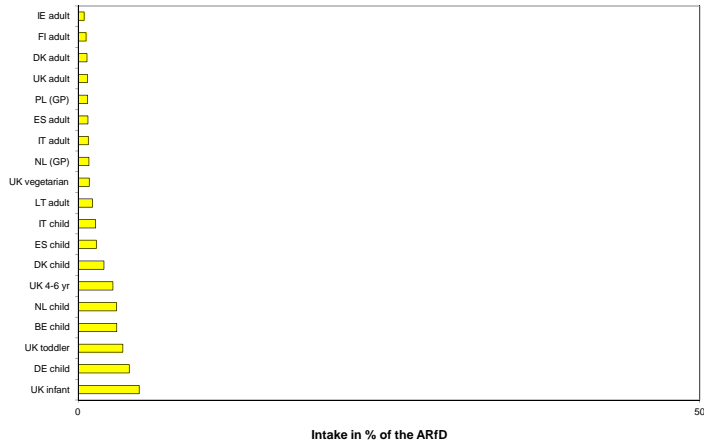
c) TRL: toxicological threshold level

### Chronic risk assessment: Triadimenol

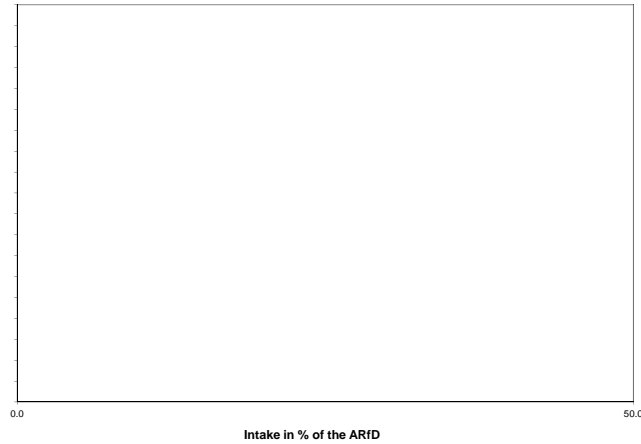


**Triadimenol**

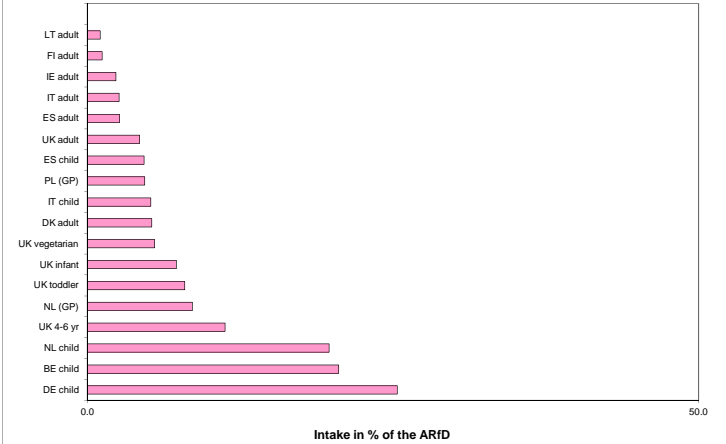
Acute exposure: Triadimenol / Apples



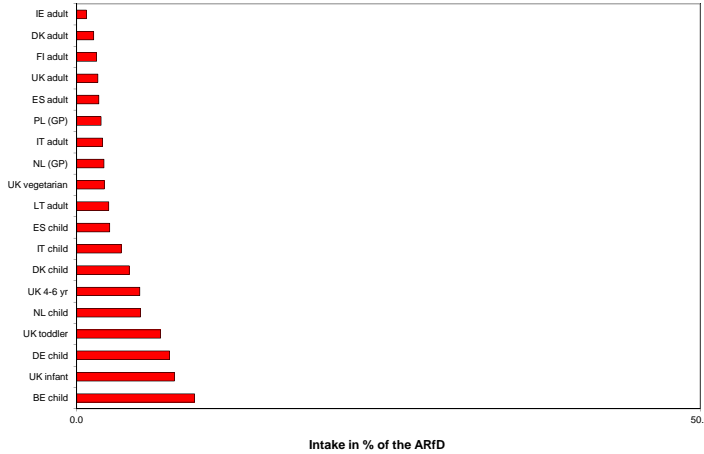
Acute exposure: Triadimenol / Peaches



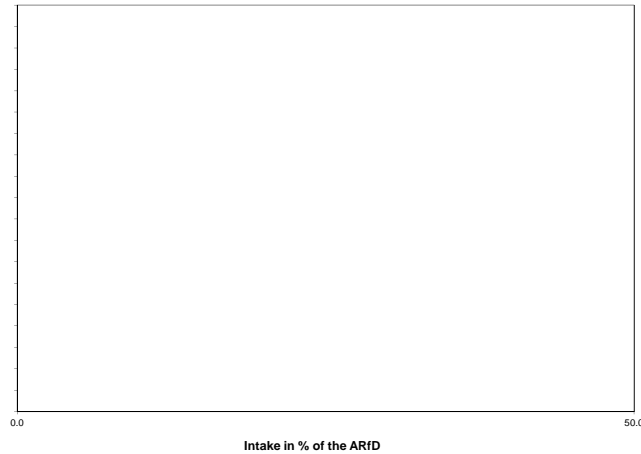
Acute exposure: Triadimenol / Strawberries



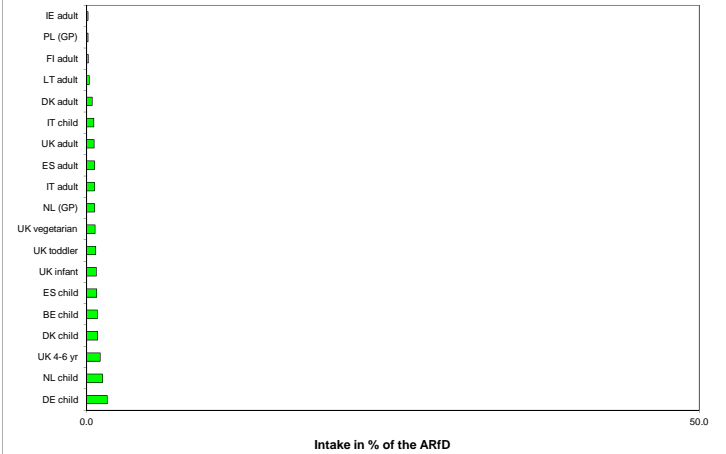
Acute exposure: Triadimenol / Tomatoes



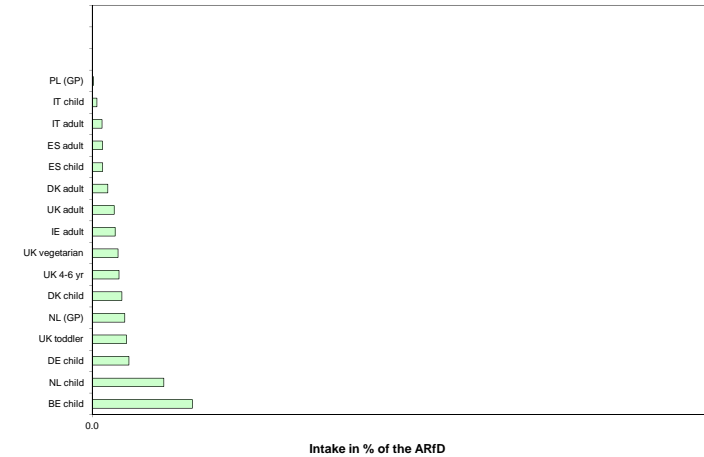
Acute exposure: Triadimenol / Head cabbage



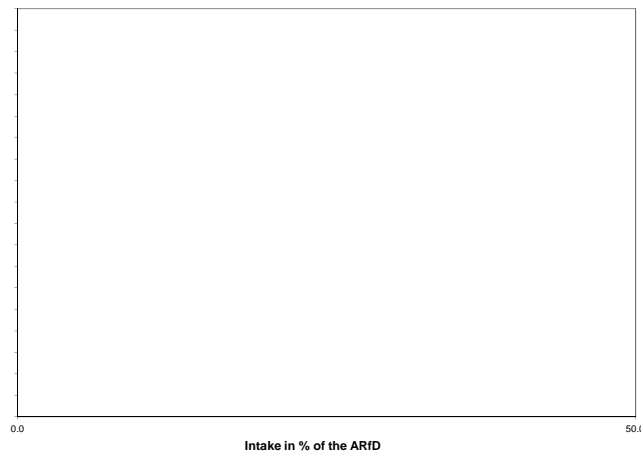
Acute exposure: Triadimenol / Lettuce



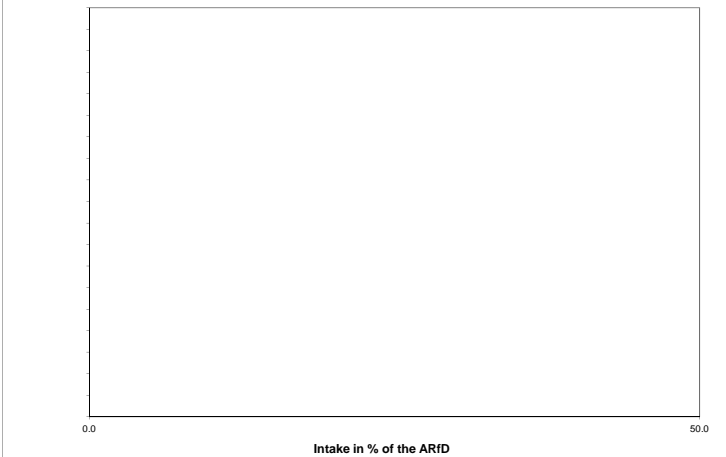
Acute exposure: Triadimenol / Leek



Acute exposure: Triadimenol / Oats



Acute exposure: Triadimenol / Rye





Triazophos			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P and A
Toxicological end points			
ADI (mg/kg bw/day):	0.001	ARfD (mg/kg bw):	0.001
Source of ADI:	JMPR	Source of ARfD:	JMPR
Year of evaluation:	2002	Year of evaluation:	2002

**Chronic risk assessment**

Exposure (range) in % of ADI minimum - maximum  
7

No of diets exceeding ADI: ---

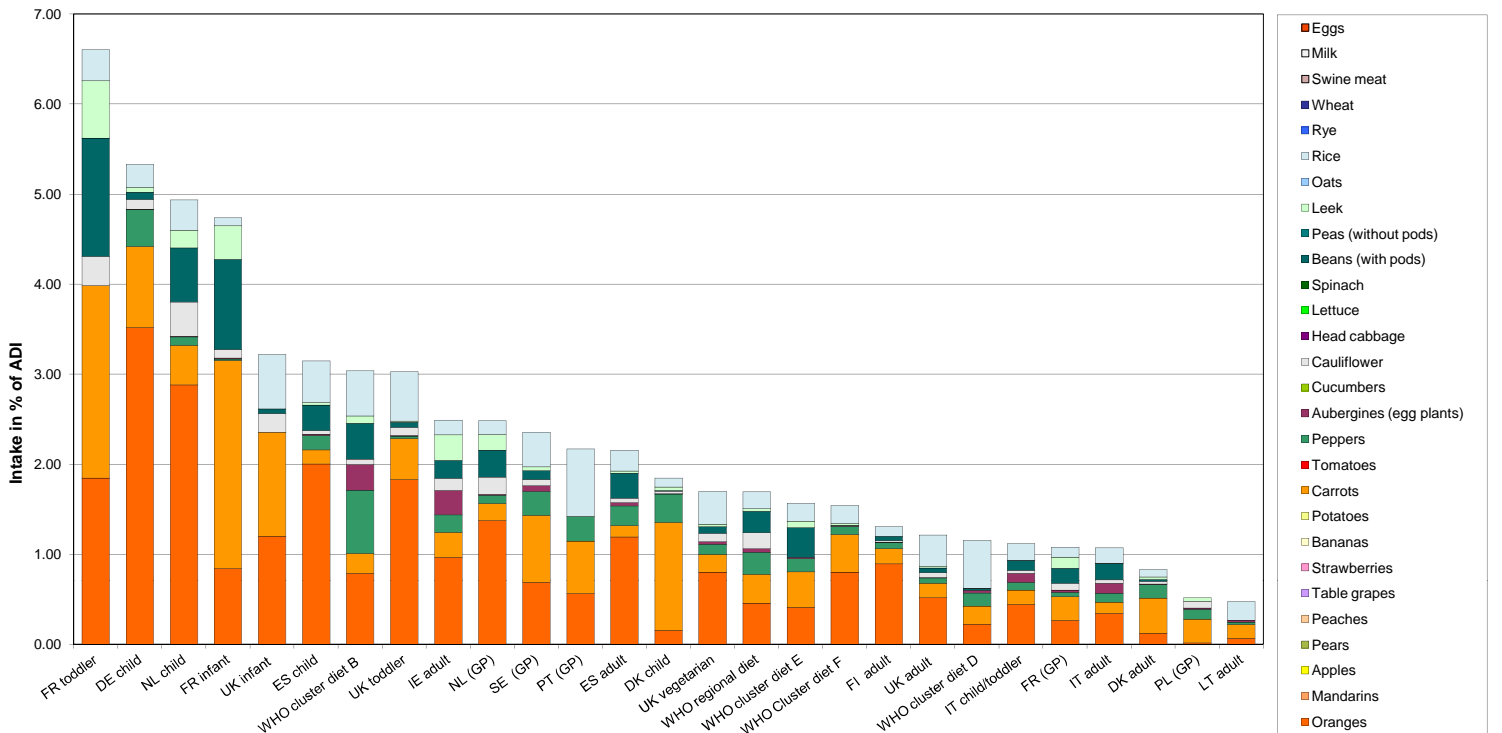
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
6.60	FR toddler	2.13	Carrots	1.85	Oranges	1.32	Beans (with pods)
5.33	DE child	3.52	Oranges	0.90	Carrots	0.41	Peppers
4.93	NL child	2.88	Oranges	0.60	Beans (with pods)	0.44	Carrots
4.74	FR infant	2.31	Carrots	1.00	Beans (with pods)	0.84	Oranges
3.22	UK infant	1.20	Oranges	1.15	Carrots	0.60	Rice
3.15	ES child	2.00	Oranges	0.46	Rice	0.28	Beans (with pods)
3.04	WHO cluster diet B	0.79	Oranges	0.70	Peppers	0.50	Rice
3.03	UK toddler	1.83	Oranges	0.55	Rice	0.45	Carrots
2.49	IE adult	0.96	Oranges	0.28	Leek	0.28	Carrots
2.48	NL (GP)	1.37	Oranges	0.30	Beans (with pods)	0.19	Cauliflower
2.36	SE (GP)	0.74	Carrots	0.69	Oranges	0.38	Rice
2.17	PT (GP)	0.75	Rice	0.58	Carrots	0.57	Oranges
2.16	ES adult	1.19	Oranges	0.28	Beans (with pods)	0.23	Rice
1.85	DK child	1.20	Carrots	0.31	Peppers	0.16	Oranges
1.70	UK vegetarian	0.80	Oranges	0.37	Rice	0.20	Carrots
1.69	WHO regional diet	0.46	Oranges	0.32	Carrots	0.24	Peppers
1.57	WHO cluster diet E	0.41	Oranges	0.39	Carrots	0.33	Beans (with pods)
1.54	WHO Cluster diet F	0.80	Oranges	0.41	Carrots	0.20	Rice
1.31	FI adult	0.90	Oranges	0.17	Carrots	0.10	Rice
1.22	UK adult	0.52	Oranges	0.35	Rice	0.16	Carrots
1.15	WHO cluster diet D	0.53	Rice	0.22	Oranges	0.20	Carrots
1.12	IT child/toddler	0.44	Oranges	0.18	Rice	0.16	Carrots
1.08	FR (GP)	0.27	Oranges	0.26	Carrots	0.17	Beans (with pods)
1.07	IT adult	0.34	Oranges	0.18	Beans (with pods)	0.17	Rice
0.83	DK adult	0.39	Carrots	0.15	Peppers	0.12	Oranges
0.52	PL (GP)	0.26	Carrots	0.11	Peppers	0.08	Cauliflower
0.48	LT adult	0.20	Rice	0.15	Carrots	0.07	Oranges

**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.01	3107							
2010	Peaches	0.01	1510							
2010	Strawberries	0.01	2330							
2010	Tomatoes	0.01	2593							
2010	Head cabbage	0.01	1248							
2010	Lettuce	0.01	2404							
2010	Leek	0.01	996	0.10		0.01		40.68	BE child	
2010	Oats	0.02	267							
2010	Rye	0.02	485							
2010	Swine Meat	0.01	410							
2010	Milk	0.01	668							

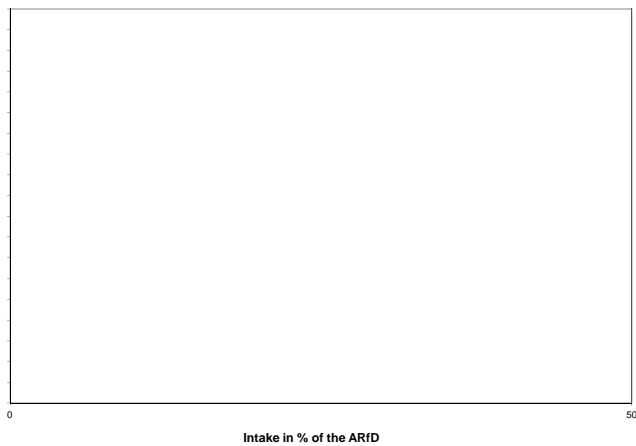
a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Triazophos**

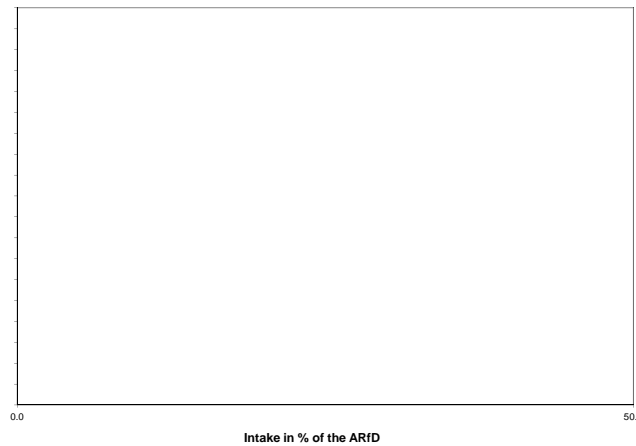


**Triazophos**

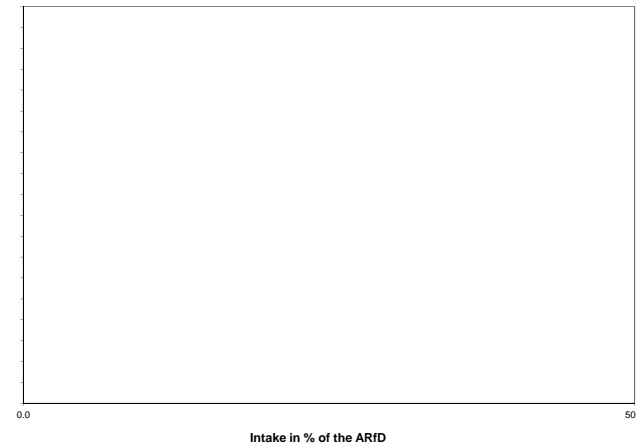
Acute exposure: Triazophos / Apples



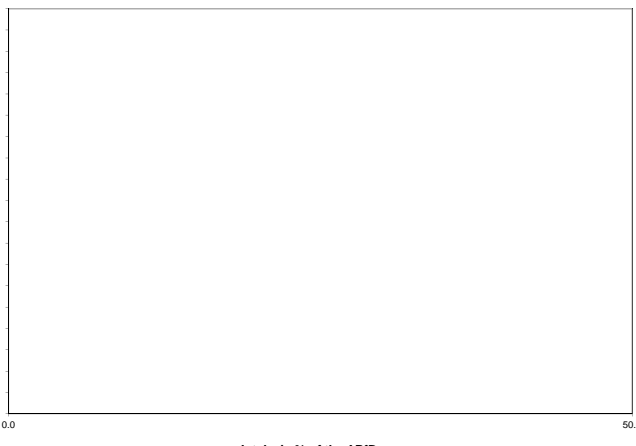
Acute exposure: Triazophos / Peaches



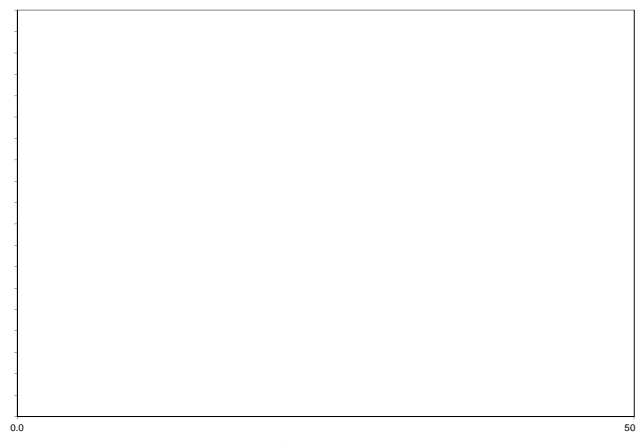
Acute exposure: Triazophos / Strawberries



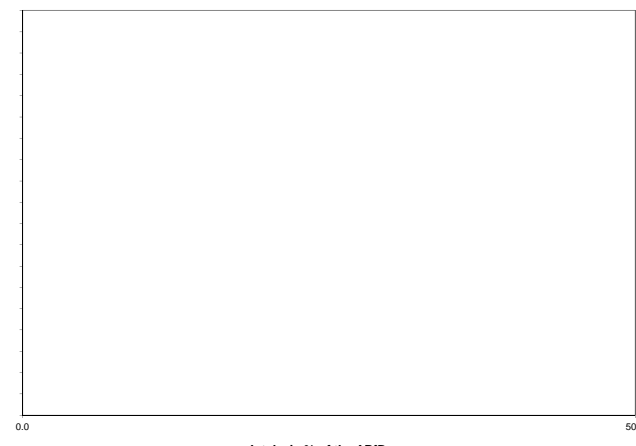
Acute exposure: Triazophos / Tomatoes



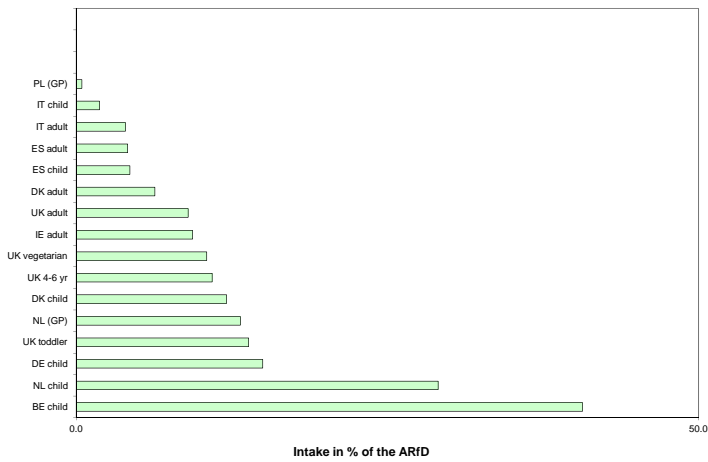
Acute exposure: Triazophos / Head cabbage



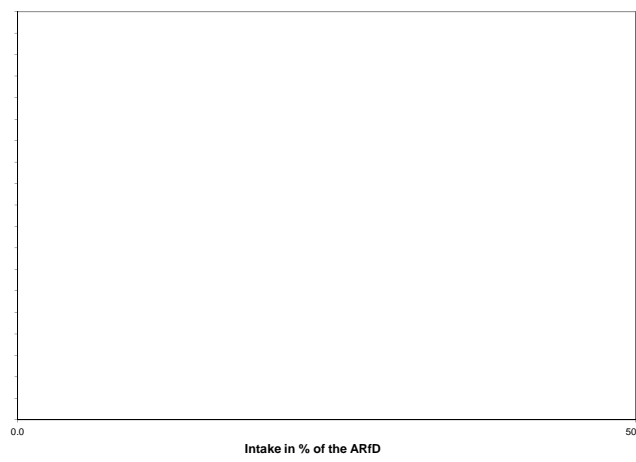
Acute exposure: Triazophos / Lettuce



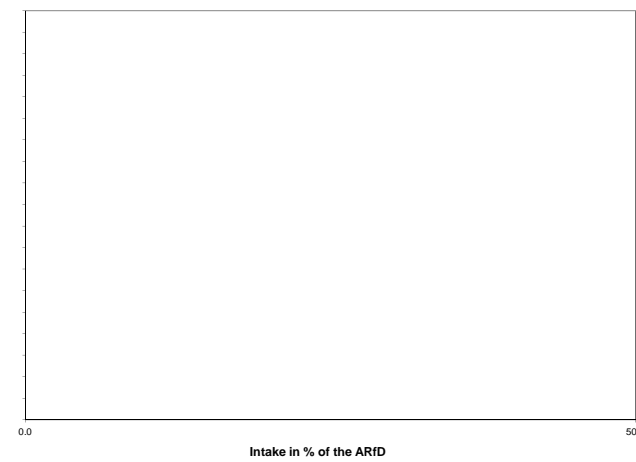
Acute exposure: Triazophos / Leek



Acute exposure: Triazophos / Oats



Acute exposure: Triazophos / Rye





**Trichlorfon**

Acute exposure: Trichlorfon / Apples



Intake in % of the ARfD

Acute exposure: Trichlorfon / Peaches



Intake in % of the ARfD

Acute exposure: Trichlorfon / Strawberries



Intake in % of the ARfD

Acute exposure: Trichlorfon / Tomatoes



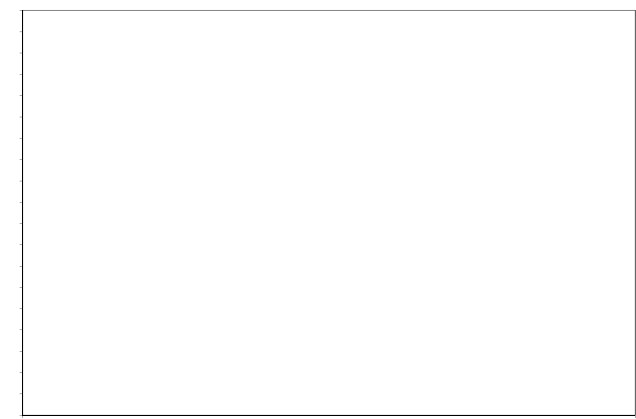
Intake in % of the ARfD

Acute exposure: Trichlorfon / Head cabbage



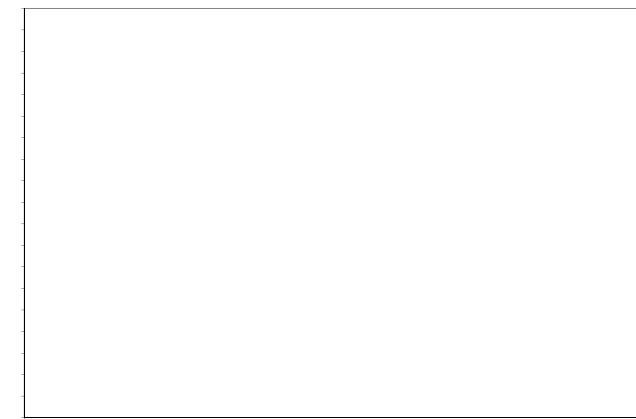
Intake in % of the ARfD

Acute exposure: Trichlorfon / Lettuce



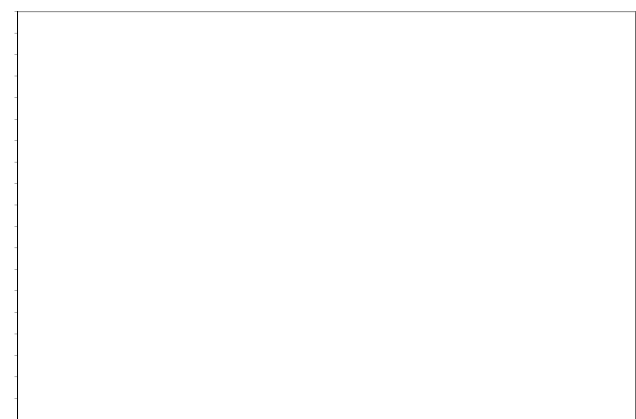
Intake in % of the ARfD

Acute exposure: Trichlorfon / Leek



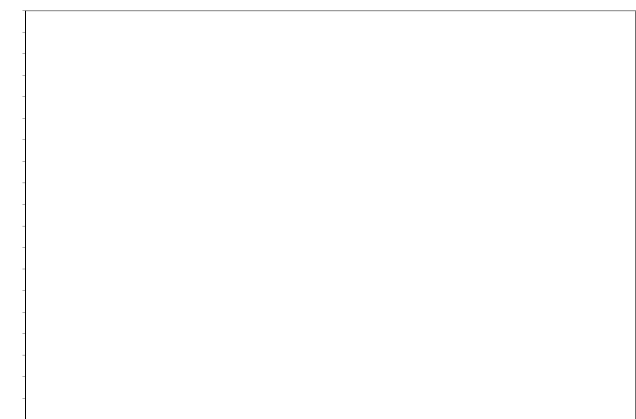
Intake in % of the ARfD

Acute exposure: Trichlorfon / Oats



Intake in % of the ARfD

Acute exposure: Trichlorfon / Rye



Intake in % of the ARfD

Trifloxystrobin			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.1	ARfD (mg/kg bw):	n.n.
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2003	Year of evaluation:	2003

**Chronic risk assessment**

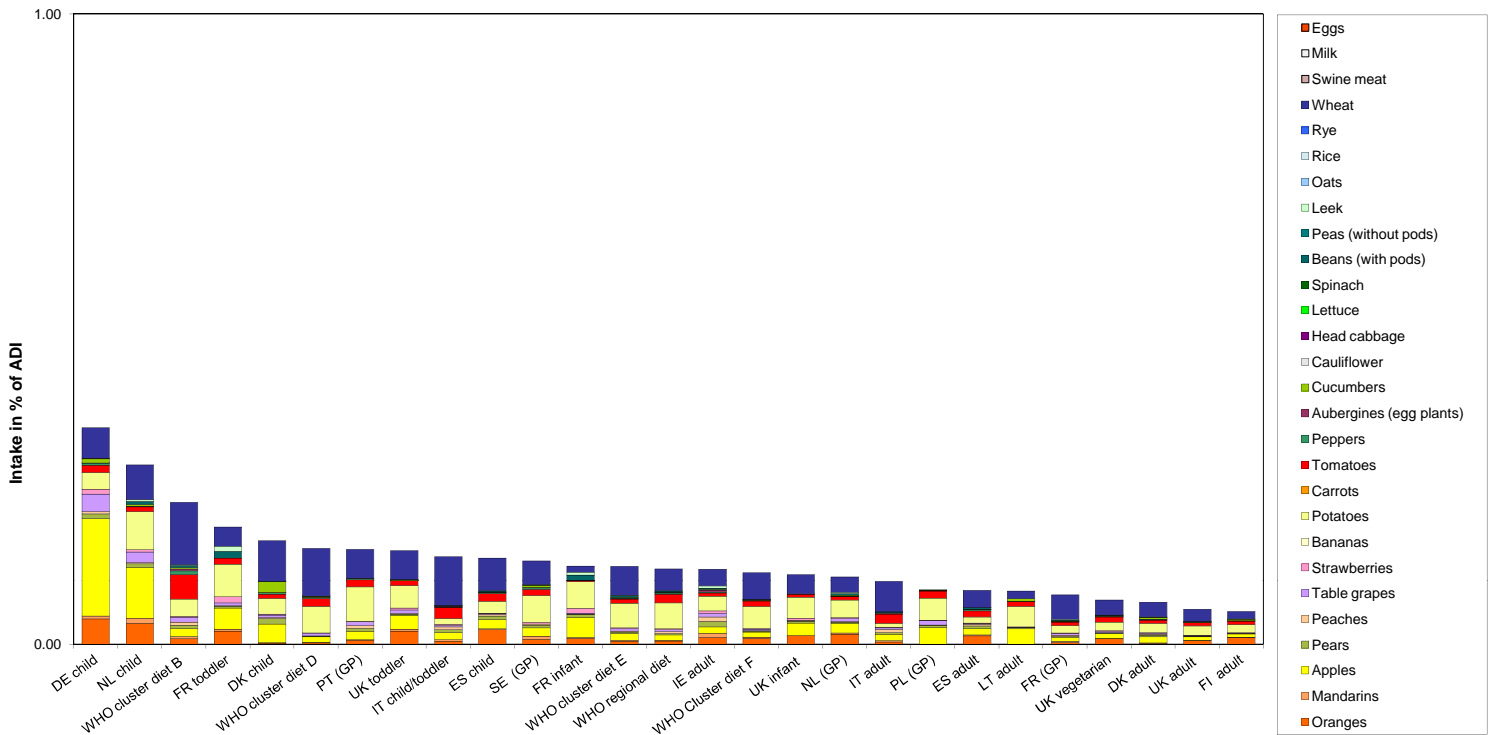
		Exposure (range) in % of ADI minimum - maximum					
		No of diets exceeding ADI: ---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.34	DE child	0.15	Apples	0.05	Wheat	0.04	Oranges
0.28	NL child	0.08	Apples	0.06	Potatoes	0.06	Wheat
0.23	WHO cluster diet B	0.10	Wheat	0.04	Tomatoes	0.03	Potatoes
0.19	FR toddler	0.05	Potatoes	0.03	Apples	0.03	Wheat
0.16	DK child	0.06	Wheat	0.03	Apples	0.02	Potatoes
0.15	WHO cluster diet D	0.08	Wheat	0.04	Potatoes	0.01	Tomatoes
0.15	PT (GP)	0.05	Potatoes	0.05	Wheat	0.01	Apples
0.15	UK toddler	0.05	Wheat	0.04	Potatoes	0.02	Apples
0.14	IT child/toddler	0.08	Wheat	0.02	Tomatoes	0.01	Apples
0.14	ES child	0.05	Wheat	0.02	Oranges	0.02	Potatoes
0.13	SE (GP)	0.04	Potatoes	0.04	Wheat	0.01	Apples
0.12	FR infant	0.04	Potatoes	0.03	Apples	0.01	Wheat
0.12	WHO cluster diet E	0.05	Wheat	0.04	Potatoes	0.01	Apples
0.12	WHO regional diet	0.04	Potatoes	0.03	Wheat	0.01	Tomatoes
0.12	IE adult	0.03	Wheat	0.02	Potatoes	0.01	Oranges
0.11	WHO Cluster diet F	0.04	Wheat	0.04	Potatoes	0.01	Oranges
0.11	UK infant	0.03	Potatoes	0.03	Wheat	0.02	Apples
0.11	NL (GP)	0.03	Potatoes	0.02	Wheat	0.02	Oranges
0.10	IT adult	0.05	Wheat	0.01	Tomatoes	0.01	Apples
0.09	PL (GP)	0.04	Potatoes	0.03	Apples	0.01	Tomatoes
0.09	ES adult	0.03	Wheat	0.01	Oranges	0.01	Apples
0.08	LT adult	0.03	Potatoes	0.02	Apples	0.01	Wheat
0.08	FR (GP)	0.04	Wheat	0.01	Potatoes	0.01	Apples
0.07	UK vegetarian	0.02	Wheat	0.01	Potatoes	0.01	Oranges
0.07	DK adult	0.02	Wheat	0.01	Potatoes	0.01	Apples
0.06	UK adult	0.02	Wheat	0.01	Potatoes	0.01	Oranges
0.05	FI adult	0.01	Potatoes	0.01	Wheat	0.01	Oranges

**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.5	2751	11.20		0.33				
2010	Peaches	1	1418			1.90				
2010	Strawberries	0.5	2115	9.74		0.37				
2010	Tomatoes	0.5	2209	0.32		0.08				
2010	Head cabbage	0.3	1115							
2010	Lettuce	10	2237							
2010	Leek	0.2	923	0.65		0.03				
2010	Oats	0.02	263							
2010	Rye	0.05	405							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Trifloxystrobin**



**Trifloxystrobin**

Acute exposure: Trifloxystrobin / Apples



Intake in % of the ARfD

Acute exposure: Trifloxystrobin / Peaches



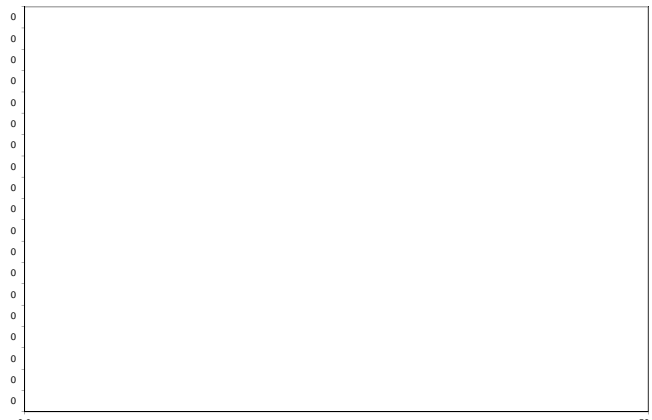
Intake in % of the ARfD

Acute exposure: Trifloxystrobin / Strawberries



Intake in % of the ARfD

Acute exposure: Trifloxystrobin / Tomatoes



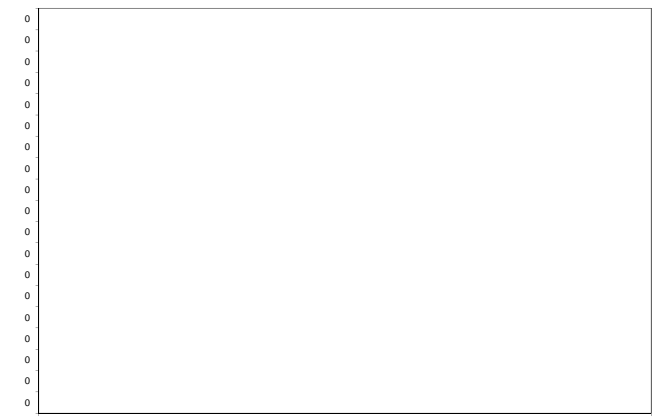
Intake in % of the ARfD

Acute exposure: Trifloxystrobin / Head cabbage



Intake in % of the ARfD

Acute exposure: Trifloxystrobin / Lettuce



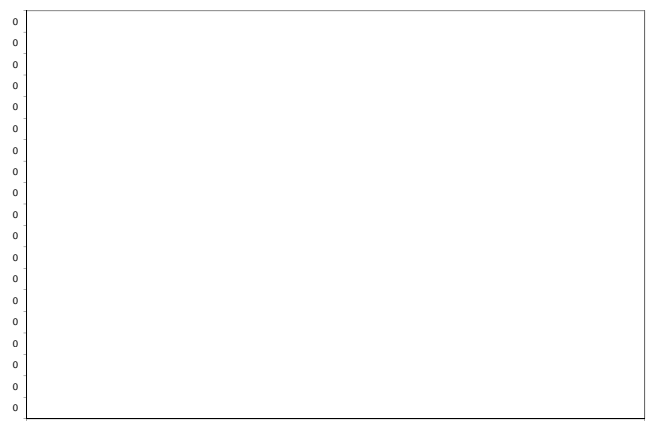
Intake in % of the ARfD

Acute exposure: Trifloxystrobin / Leek



Intake in % of the ARfD

Acute exposure: Trifloxystrobin / Oats



Intake in % of the ARfD

Acute exposure: Trifloxystrobin / Rye



Intake in % of the ARfD

Triflumuron			
Status of the active substance:	Included	Monitoring year:	2010
To be analysed on a voluntary basis:	Yes	Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.014	ARfD (mg/kg bw):	n.n.
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2011	Year of evaluation:	2011

For the metabolite M07 a ARfD of 0.005 mg/kg bw was set. Metabolite M07 is currently not included in the residue definition.

**Chronic risk assessment**

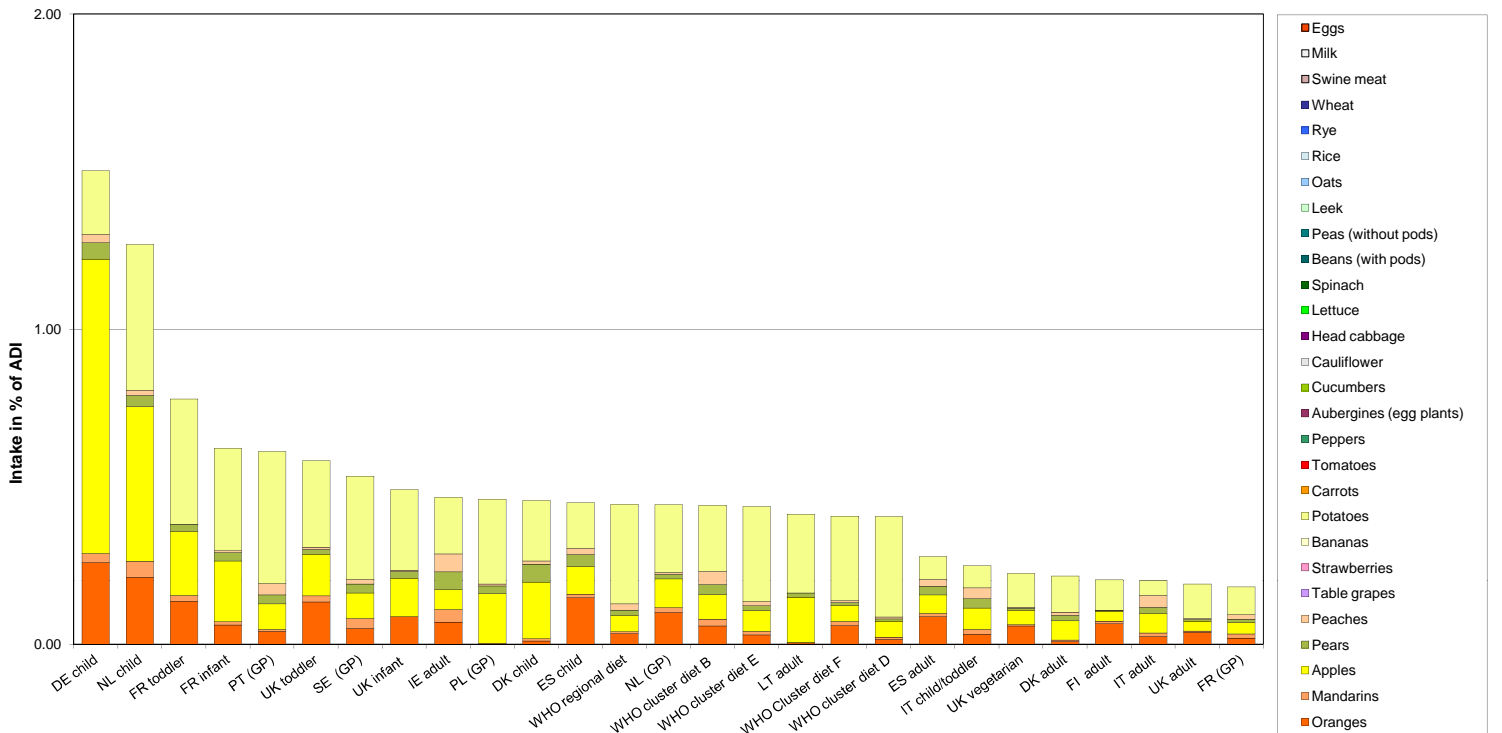
		Exposure (range) in % of ADI minimum - maximum					
		2					
No of diets exceeding ADI:		---					
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
1.50	DE child	0.93	Apples	0.26	Oranges	0.20	Potatoes
1.27	NL child	0.49	Apples	0.46	Potatoes	0.21	Oranges
0.78	FR toddler	0.40	Potatoes	0.20	Apples	0.14	Oranges
0.62	FR infant	0.33	Potatoes	0.19	Apples	0.06	Oranges
0.61	PT (GP)	0.42	Potatoes	0.08	Apples	0.04	Oranges
0.58	UK toddler	0.27	Potatoes	0.14	Oranges	0.13	Apples
0.53	SE (GP)	0.33	Potatoes	0.08	Apples	0.05	Oranges
0.49	UK infant	0.26	Potatoes	0.12	Apples	0.09	Oranges
0.47	IE adult	0.18	Potatoes	0.07	Oranges	0.06	Apples
0.46	PL (GP)	0.27	Potatoes	0.16	Apples	0.02	Pears
0.46	DK child	0.19	Potatoes	0.18	Apples	0.06	Pears
0.45	ES child	0.15	Oranges	0.14	Potatoes	0.09	Apples
0.44	WHO regional diet	0.32	Potatoes	0.05	Apples	0.03	Oranges
0.44	NL (GP)	0.22	Potatoes	0.10	Oranges	0.09	Apples
0.44	WHO cluster diet B	0.21	Potatoes	0.08	Apples	0.06	Oranges
0.44	WHO cluster diet E	0.30	Potatoes	0.07	Apples	0.03	Oranges
0.41	LT adult	0.25	Potatoes	0.14	Apples	0.01	Pears
0.41	WHO Cluster diet F	0.27	Potatoes	0.06	Oranges	0.05	Apples
0.41	WHO cluster diet D	0.32	Potatoes	0.05	Apples	0.02	Oranges
0.28	ES adult	0.09	Oranges	0.07	Potatoes	0.06	Apples
0.25	IT child/toddler	0.07	Potatoes	0.07	Apples	0.03	Peaches
0.23	UK vegetarian	0.11	Potatoes	0.06	Oranges	0.05	Apples
0.22	DK adult	0.11	Potatoes	0.06	Apples	0.02	Pears
0.20	FI adult	0.10	Potatoes	0.07	Oranges	0.03	Apples
0.20	IT adult	0.06	Apples	0.05	Potatoes	0.04	Peaches
0.19	UK adult	0.11	Potatoes	0.04	Oranges	0.03	Apples
0.18	FR (GP)	0.09	Potatoes	0.04	Apples	0.02	Oranges

**Acute risk assessment**

Year	Commodity a)	MRL b)	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL c)	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.5	1839	1.96		0.16				
2010	Peaches	1	924	12.45		0.35				
2010	Strawberries	0.05	1454							
2010	Tomatoes	0.05	1378							
2010	Head cabbage	0.2	816							
2010	Lettuce	0.05	1384							
2010	Leek	0.05	596							
2010	Oats	0.05	140							
2010	Rye	0.05	285							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.  
 b) MRL in place on 01/01/2010  
 c) TRL: toxicological threshold level

**Chronic risk assessment: Triflumuron**



**Triflumuron**

Acute exposure: Triflumuron / Apples



Intake in % of the ARfD

Acute exposure: Triflumuron / Peaches



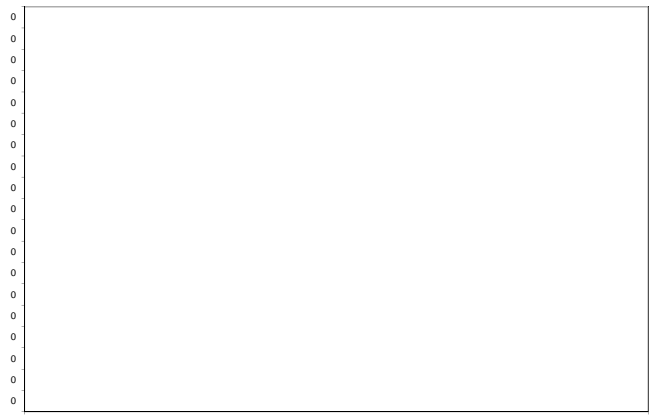
Intake in % of the ARfD

Acute exposure: Triflumuron / Strawberries



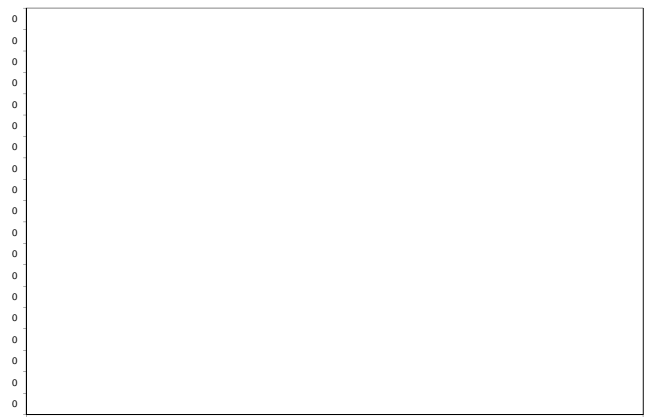
Intake in % of the ARfD

Acute exposure: Triflumuron / Tomatoes



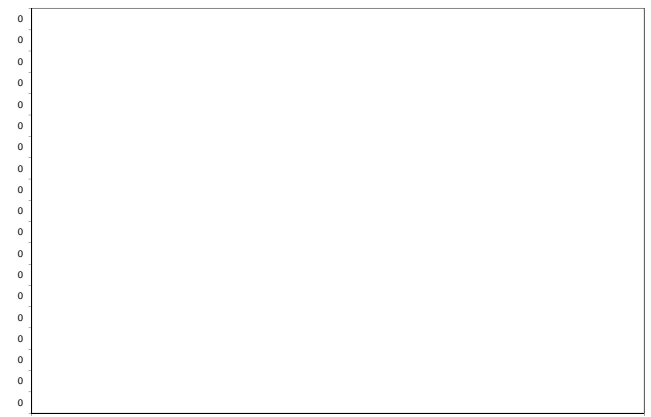
Intake in % of the ARfD

Acute exposure: Triflumuron / Head cabbage



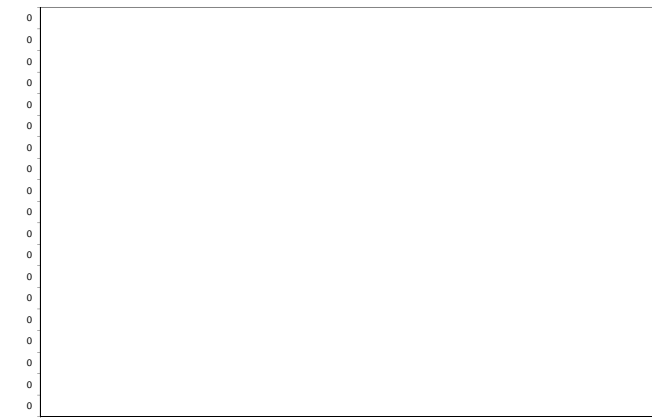
Intake in % of the ARfD

Acute exposure: Triflumuron / Lettuce



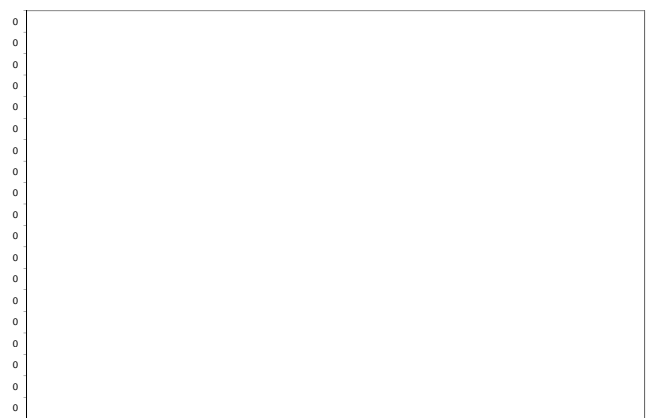
Intake in % of the ARfD

Acute exposure: Triflumuron / Leek



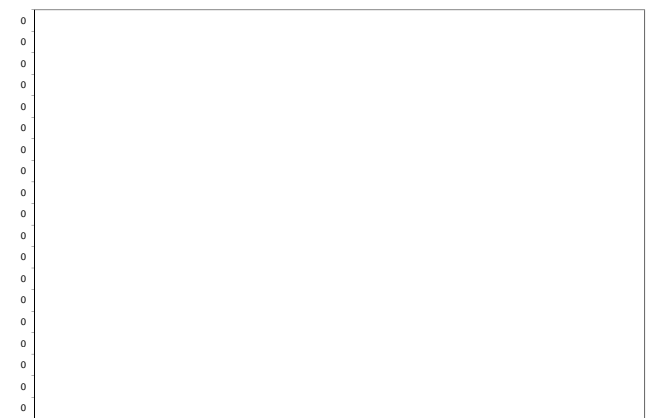
Intake in % of the ARfD

Acute exposure: Triflumuron / Oats



Intake in % of the ARfD

Acute exposure: Triflumuron / Rye



Intake in % of the ARfD



Trifluralin			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.015	ARfD (mg/kg bw):	n.n.
Source of ADI:	EFSA	Source of ARfD:	EFSA
Year of evaluation:	2005	Year of evaluation:	2005

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum

1

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities	3rd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.69	NL child	0.61	Apples	0.05	Carrots	0.03	Cucumbers
0.54	DK child	0.22	Apples	0.17	Cucumbers	0.14	Carrots
0.51	FR infant	0.27	Carrots	0.24	Apples		FRUIT (FRESH OR FROZEN)
0.51	FR toddler	0.25	Apples	0.25	Carrots		FRUIT (FRESH OR FROZEN)
0.29	UK infant	0.15	Apples	0.14	Carrots		FRUIT (FRESH OR FROZEN)
0.24	LT adult	0.18	Apples	0.04	Cucumbers	0.02	Carrots
0.24	PL (GP)	0.20	Apples	0.03	Carrots	0.01	Cucumbers
0.23	UK toddler	0.17	Apples	0.05	Carrots	0.01	Cucumbers
0.22	SE (GP)	0.10	Apples	0.09	Carrots	0.03	Cucumbers
0.17	PT (GP)	0.10	Apples	0.07	Carrots	0.00	Cucumbers
0.15	DK adult	0.08	Apples	0.05	Carrots	0.03	Cucumbers
0.15	NL (GP)	0.11	Apples	0.02	Carrots	0.01	Cucumbers
0.15	WHO cluster diet B	0.10	Apples	0.03	Carrots	0.02	Cucumbers
0.14	WHO cluster diet E	0.08	Apples	0.05	Carrots	0.01	Cucumbers
0.13	ES child	0.11	Apples	0.02	Carrots	0.00	Cucumbers
0.12	WHO Cluster diet F	0.06	Apples	0.05	Carrots	0.01	Cucumbers
0.12	IE adult	0.08	Apples	0.03	Carrots	0.01	Cucumbers
0.11	WHO regional diet	0.06	Apples	0.04	Carrots	0.01	Cucumbers
0.11	WHO cluster diet D	0.06	Apples	0.02	Carrots	0.02	Cucumbers
0.11	IT child/toddler	0.09	Apples	0.02	Carrots	0.00	Cucumbers
0.09	IT adult	0.08	Apples	0.01	Carrots	0.00	Cucumbers
0.09	ES adult	0.07	Apples	0.01	Carrots	0.00	Cucumbers
0.09	UK vegetarian	0.06	Apples	0.02	Carrots	0.01	Cucumbers
0.09	FR (GP)	0.05	Apples	0.03	Carrots	0.01	Cucumbers
0.09	FI adult	0.04	Apples	0.03	Cucumbers	0.02	Carrots
0.06	UK adult	0.04	Apples	0.02	Carrots	0.01	Cucumbers

## Acute risk assessment

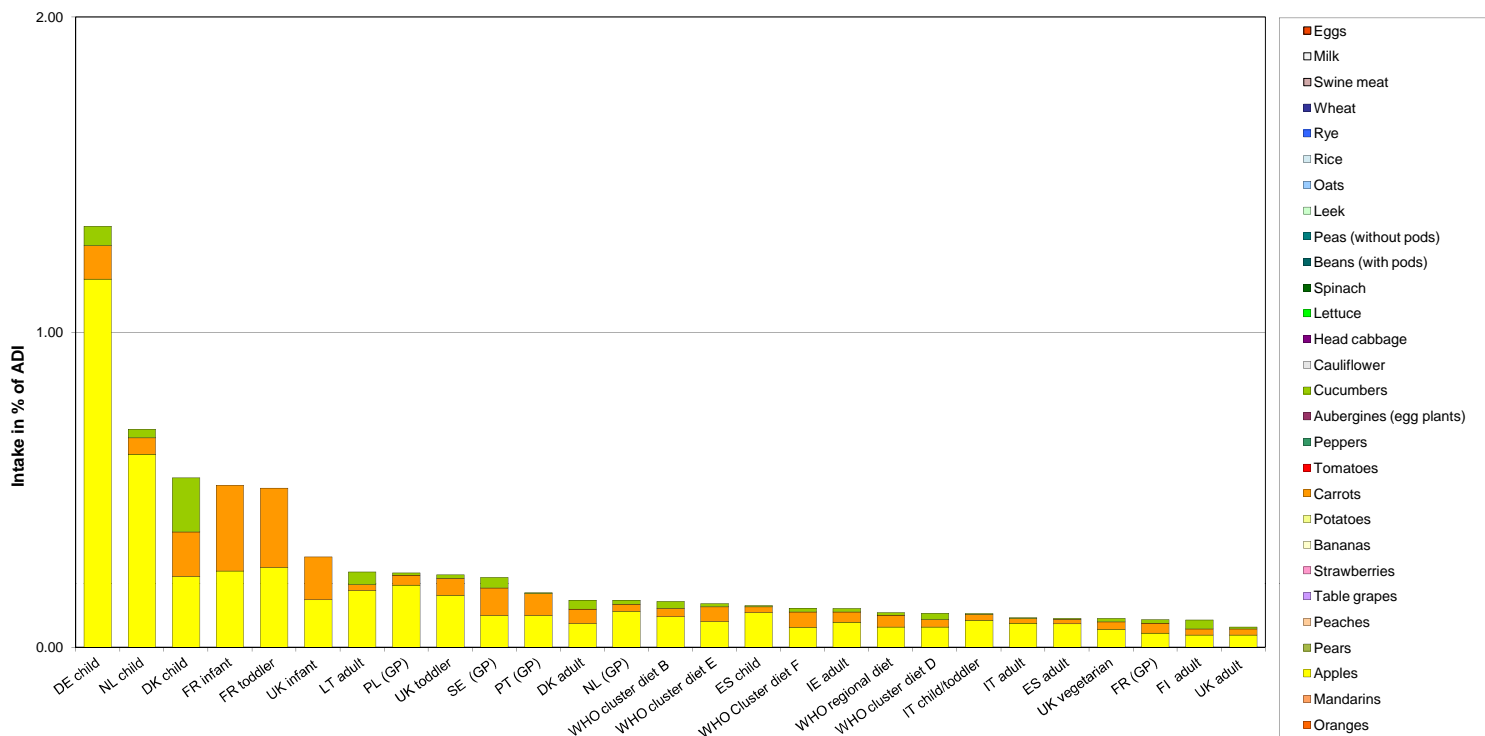
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.1	2571	0.04		0.02				
2010	Peaches	0.1	1243							
2010	Strawberries	0.1	2024							
2010	Tomatoes	0.5	2040	0.10		0.04				
2010	Head cabbage	0.5	1036							
2010	Lettuce	0.5	2153	0.05		0.01				
2010	Leek	0.5	838	0.12		0.00				
2010	Oats	0.1	235							
2010	Rye	0.1	339							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

<sup>c)</sup> TRL: toxicological threshold level

## Chronic risk assessment: Trifluralin



**Trifluralin**

Acute exposure: Trifluralin / Apples



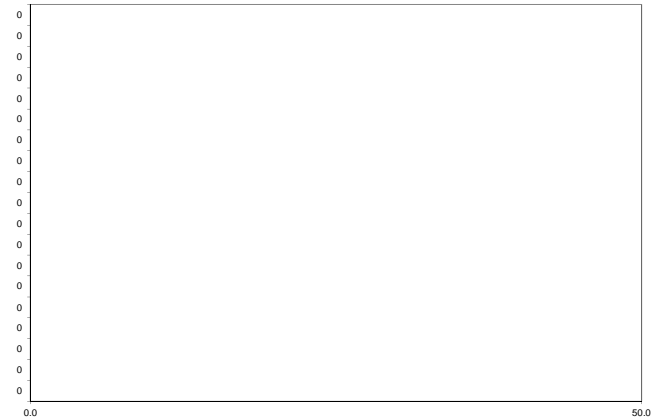
Intake in % of the ARfD

Acute exposure: Trifluralin / Peaches



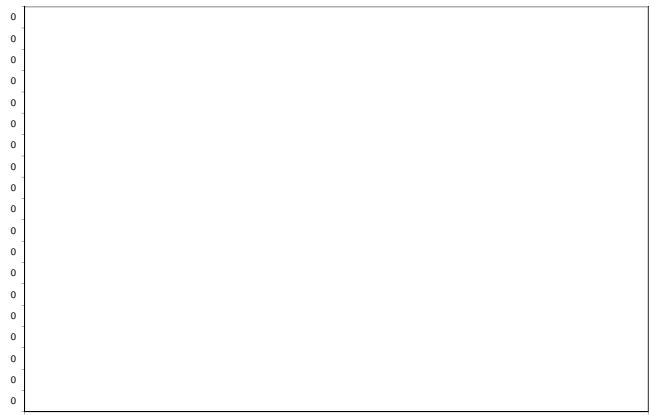
Intake in % of the ARfD

Acute exposure: Trifluralin / Strawberries



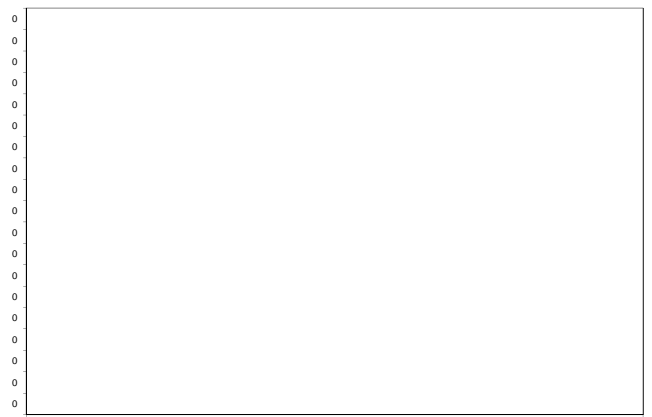
Intake in % of the ARfD

Acute exposure: Trifluralin / Tomatoes



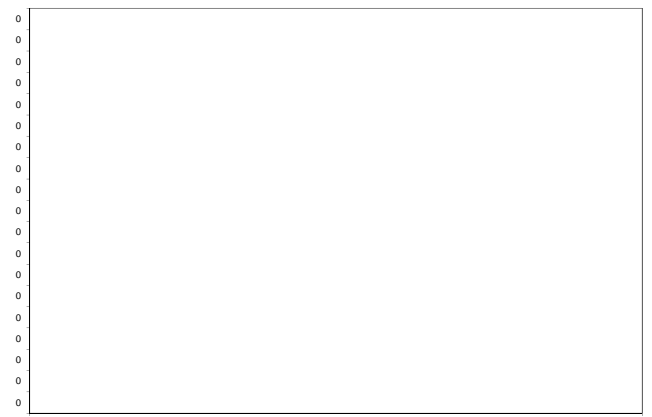
Intake in % of the ARfD

Acute exposure: Trifluralin / Head cabbage



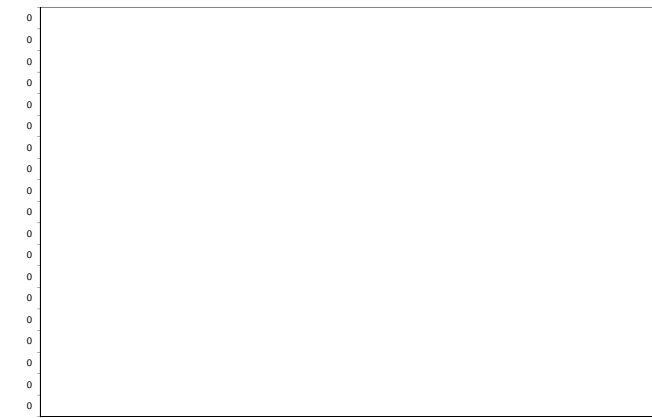
Intake in % of the ARfD

Acute exposure: Trifluralin / Lettuce



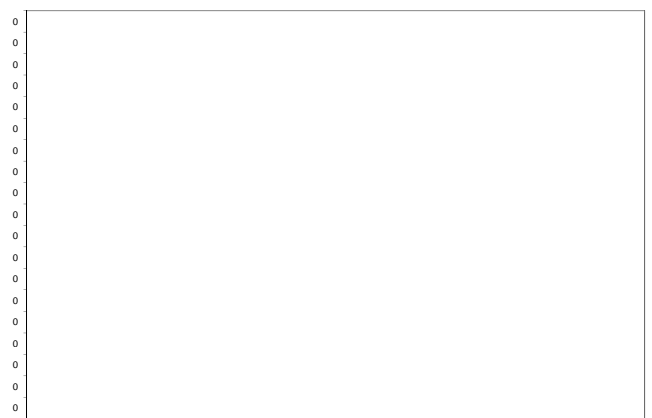
Intake in % of the ARfD

Acute exposure: Trifluralin / Leek



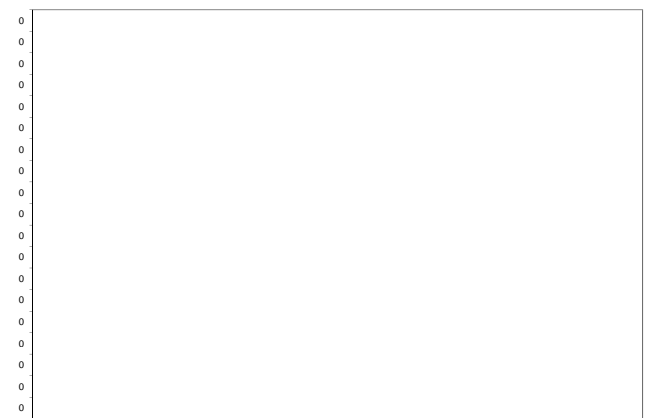
Intake in % of the ARfD

Acute exposure: Trifluralin / Oats



Intake in % of the ARfD

Acute exposure: Trifluralin / Rye



Intake in % of the ARfD

## Triticonazole

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:	<b>Yes</b>	Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.025</b>	ARfD (mg/kg bw):	<b>0.05</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2006</b>	Year of evaluation:	<b>2006</b>

### Chronic risk assessment

		Exposure (range) in % of ADI minimum - maximum			
		No of diets exceeding ADI:		---	
Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)	Commodity / group of commodities	2nd contributor to MS diet (in % of ADI)	Commodity / group of commodities
0.05	DE child	0.05	Table grapes		FRUIT (FRESH OR FROZEN)
0.03	NL child	0.03	Table grapes		FRUIT (FRESH OR FROZEN)
0.01	WHO cluster diet B	0.01	Table grapes		FRUIT (FRESH OR FROZEN)
0.01	PL (GP)	0.01	Table grapes		FRUIT (FRESH OR FROZEN)
0.01	PT (GP)	0.01	Table grapes		FRUIT (FRESH OR FROZEN)
0.01	IE adult	0.01	Table grapes		FRUIT (FRESH OR FROZEN)
0.01	UK toddler	0.01	Table grapes		FRUIT (FRESH OR FROZEN)
0.01	NL (GP)	0.01	Table grapes		FRUIT (FRESH OR FROZEN)
0.01	FR toddler	0.01	Table grapes		FRUIT (FRESH OR FROZEN)
0.01	WHO cluster diet D	0.01	Table grapes		FRUIT (FRESH OR FROZEN)
0.01	DK child	0.01	Table grapes		FRUIT (FRESH OR FROZEN)
0.01	WHO cluster diet E	0.01	Table grapes		FRUIT (FRESH OR FROZEN)
0.01	WHO regional diet	0.01	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	IT adult	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	WHO Cluster diet F	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	FR (GP)	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	IT child/toddler	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	FR infant	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	DK adult	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	UK vegetarian	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	UK adult	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	ES adult	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	ES child	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	UK infant	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	FI adult	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	LT adult	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
	SE (GP)		FRUIT (FRESH		FRUIT (FRESH OR FROZEN)

### Acute risk assessment

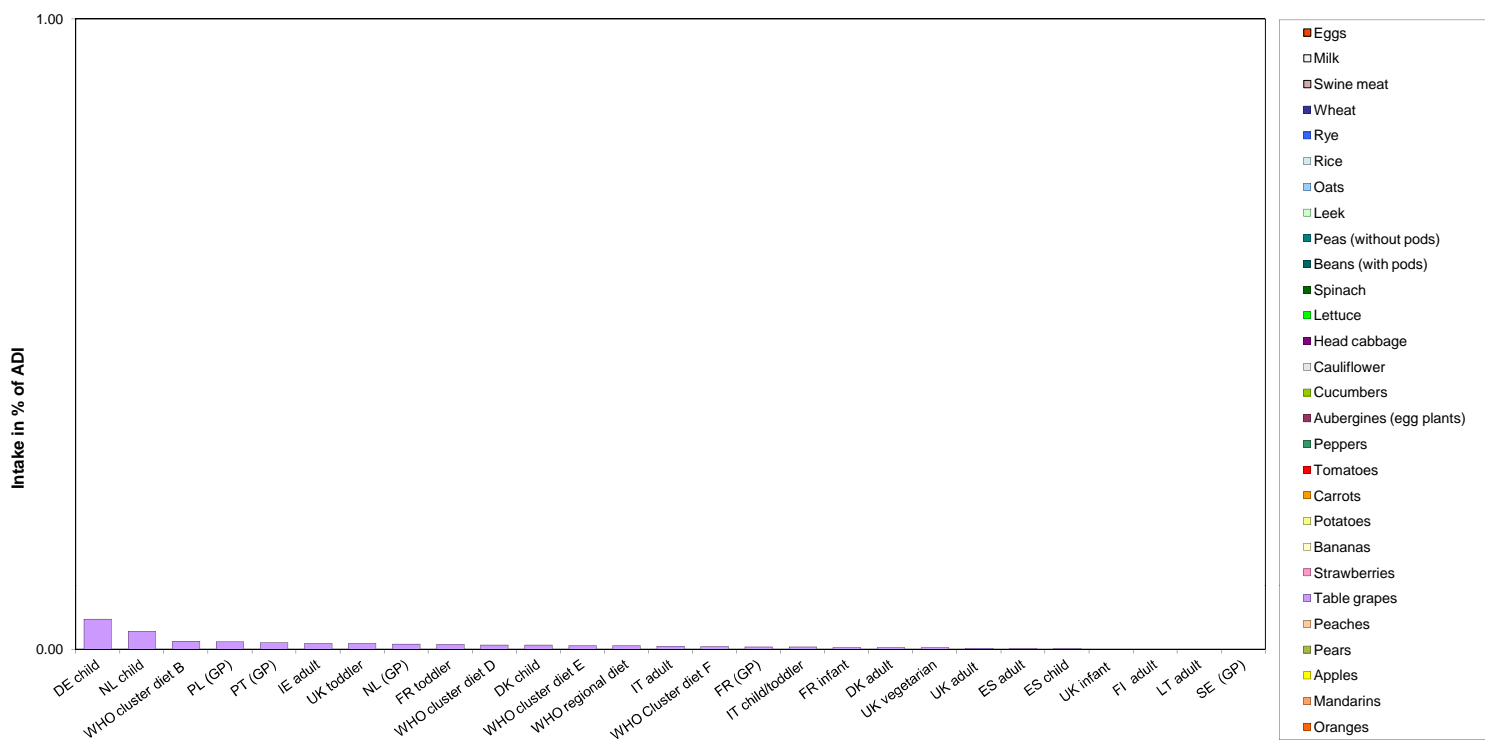
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.01	1981							
2010	Peaches	0.01	1027							
2010	Strawberries	0.01	1544							
2010	Tomatoes	0.01	1550							
2010	Head cabbage	0.01	906							
2010	Lettuce	0.01	1558							
2010	Leek	0.01	685							
2010	Oats	0.01	208							
2010	Rye	0.01	343							
2010	Swine Meat									
2010	Milk									

<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Triticonazole



**Triticonazole**

Acute exposure: Triticonazole / Apples



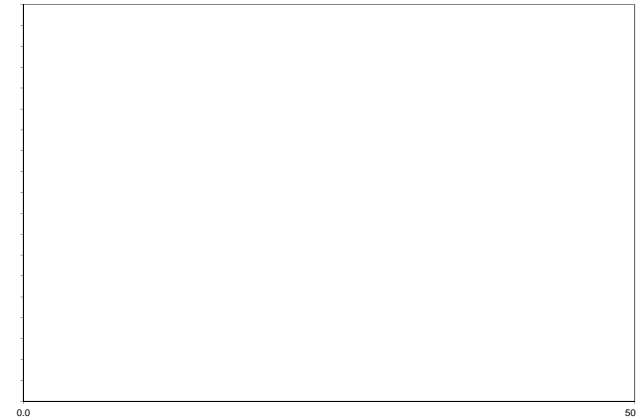
Intake in % of the ARfD

Acute exposure: Triticonazole / Peaches



Intake in % of the ARfD

Acute exposure: Triticonazole / Strawberries



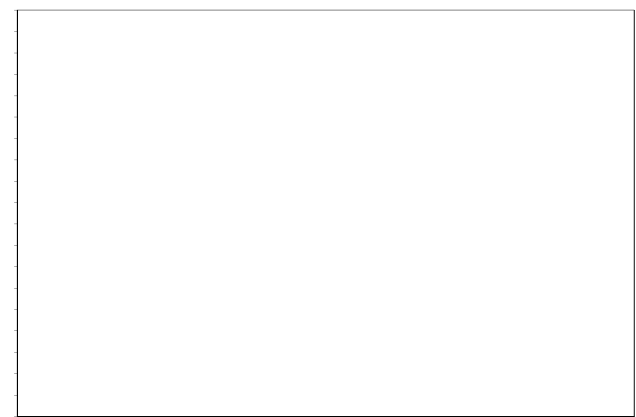
Intake in % of the ARfD

Acute exposure: Triticonazole / Tomatoes



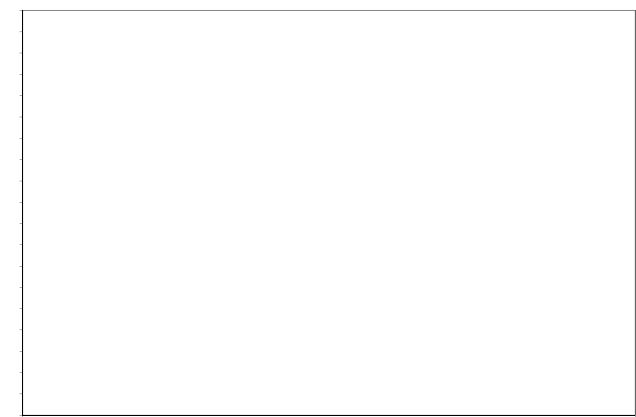
Intake in % of the ARfD

Acute exposure: Triticonazole / Head cabbage



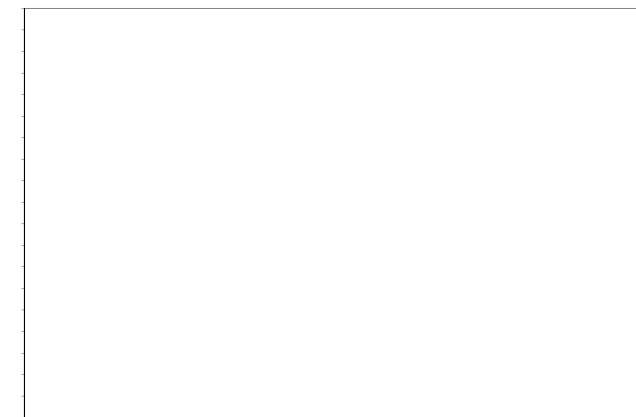
Intake in % of the ARfD

Acute exposure: Triticonazole / Lettuce



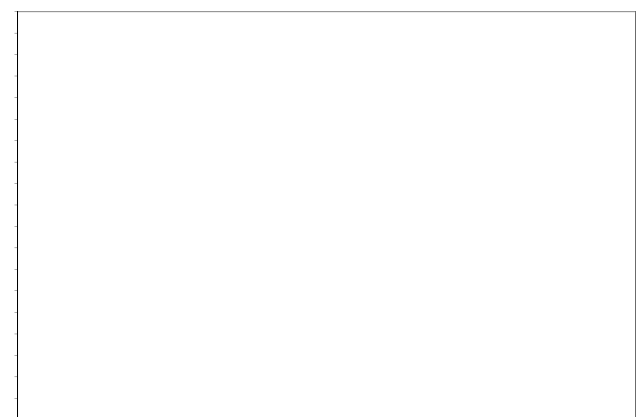
Intake in % of the ARfD

Acute exposure: Triticonazole / Leek



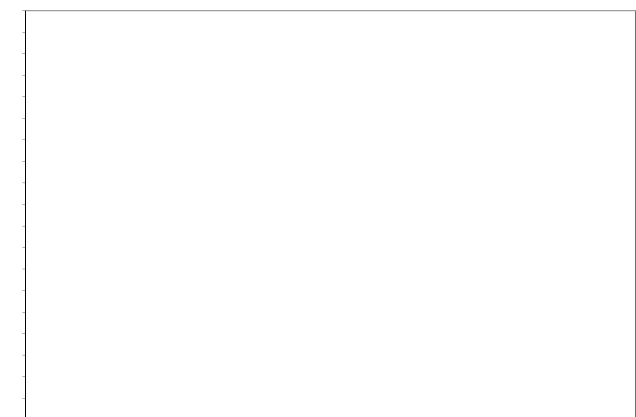
Intake in % of the ARfD

Acute exposure: Triticonazole / Oats



Intake in % of the ARfD

Acute exposure: Triticonazole / Rye



Intake in % of the ARfD

Vinclozolin			
Status of the active substance:	Excluded	Monitoring year:	2010
To be analysed on a voluntary basis:		Analysed on animal (A) or plant (P) products:	P
Toxicological end points			
ADI (mg/kg bw/day):	0.005	ARfD (mg/kg bw):	0.06
Source of ADI:	COM	Source of ARfD:	COM
Year of evaluation:	2006	Year of evaluation:	2006

## Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum  
2

No of diets exceeding ADI: ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)		2nd contributor to MS diet (in % of ADI)		3rd contributor to MS diet (in % of ADI)	
		Commodity / group of commodities	Commodity / group of commodities	Commodity / group of commodities	Commodity / group of commodities		
1.75	WHO cluster diet B	1.34	Tomatoes	0.09	Lettuce	0.09	Mandarins
1.24	DE child	0.42	Tomatoes	0.27	Carrots	0.27	Table grapes
1.17	FR toddler	0.65	Carrots	0.34	Tomatoes	0.07	Mandarins
0.91	IT child/toddler	0.62	Tomatoes	0.08	Pears	0.08	Lettuce
0.90	FR infant	0.71	Carrots	0.07	Pears	0.06	Tomatoes
0.90	NL child	0.27	Tomatoes	0.20	Mandarins	0.16	Table grapes
0.86	DK child	0.37	Carrots	0.23	Tomatoes	0.16	Pears
0.78	WHO regional diet	0.48	Tomatoes	0.10	Carrots	0.10	Lettuce
0.77	IT adult	0.51	Tomatoes	0.10	Lettuce	0.05	Pears
0.76	SE (GP)	0.33	Tomatoes	0.23	Carrots	0.12	Mandarins
0.74	ES child	0.43	Tomatoes	0.11	Lettuce	0.10	Pears
0.73	PT (GP)	0.39	Tomatoes	0.18	Carrots	0.08	Pears
0.65	IE adult	0.17	Tomatoes	0.16	Mandarins	0.16	Pears
0.64	ES adult	0.34	Tomatoes	0.14	Lettuce	0.08	Pears
0.61	PL (GP)	0.38	Tomatoes	0.08	Carrots	0.07	Table grapes
0.61	WHO Cluster diet F	0.30	Tomatoes	0.13	Carrots	0.08	Lettuce
0.59	WHO cluster diet D	0.44	Tomatoes	0.06	Carrots	0.04	Table grapes
0.58	UK infant	0.35	Carrots	0.16	Tomatoes	0.06	Pears
0.57	UK toddler	0.26	Tomatoes	0.14	Carrots	0.08	Mandarins
0.49	WHO cluster diet E	0.23	Tomatoes	0.12	Carrots	0.05	Mandarins
0.42	NL (GP)	0.19	Tomatoes	0.06	Mandarins	0.06	Carrots
0.41	UK vegetarian	0.27	Tomatoes	0.06	Carrots	0.04	Lettuce
0.40	FR (GP)	0.19	Tomatoes	0.08	Carrots	0.05	Mandarins
0.38	DK adult	0.18	Tomatoes	0.12	Carrots	0.05	Pears
0.38	LT adult	0.27	Tomatoes	0.05	Carrots	0.04	Pears
0.31	UK adult	0.19	Tomatoes	0.05	Carrots	0.03	Lettuce
0.30	FI adult	0.19	Tomatoes	0.05	Carrots	0.03	Mandarins

## Acute risk assessment

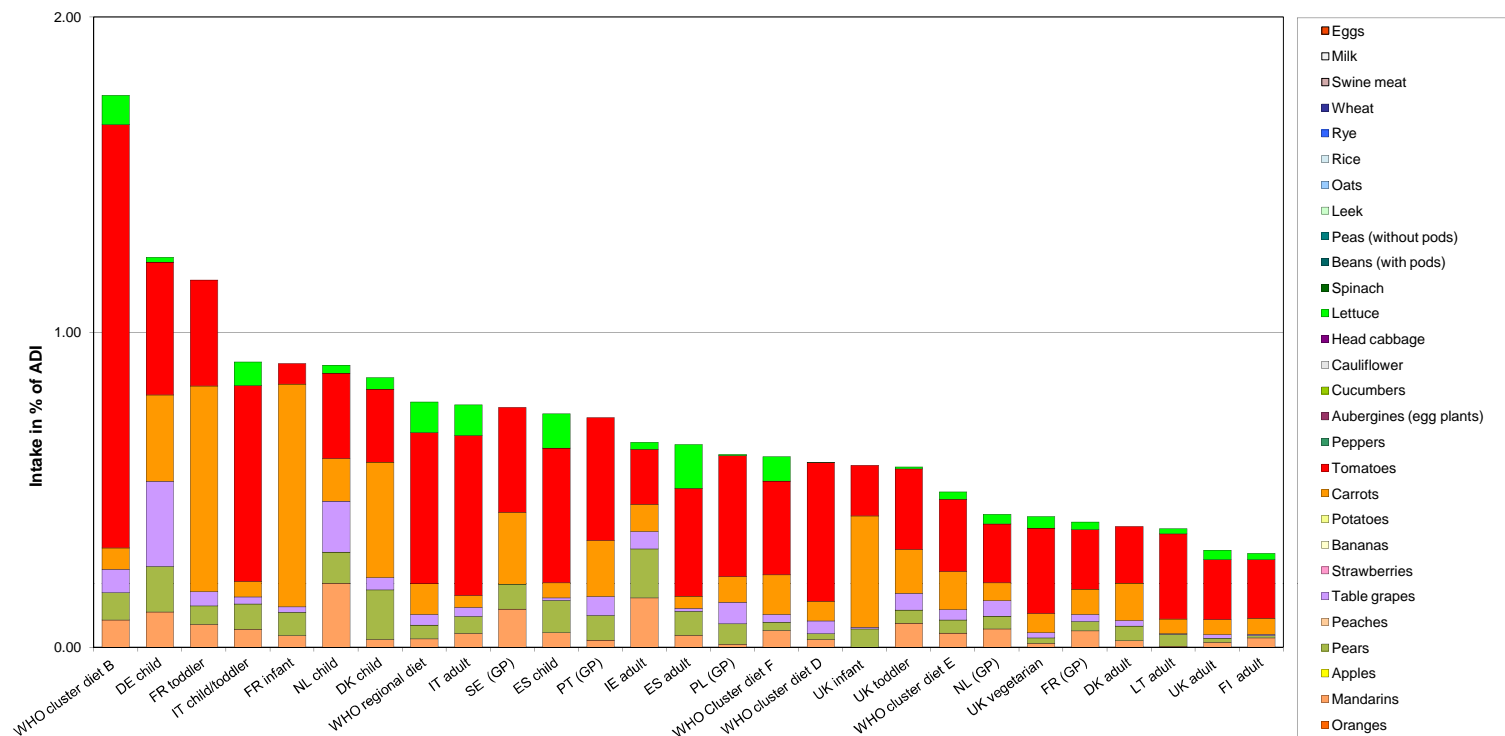
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.05	1877							
2010	Peaches	0.05	860							
2010	Strawberries	5	1452		0.07	0.26		6.78	DE child	
2010	Tomatoes	0.05	1431	0.07		0.02		1.65	BE child	
2010	Head cabbage	0.05	668	0.15		0.01		0.88	NL child	
2010	Lettuce	5	1369	0.22	0.07	0.15		6.81	DE child	
2010	Leek	0.05	504							
2010	Oats	0.05	96							
2010	Rye	0.05	290							
2010	Swine Meat									
2010	Milk									

a) For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

b) MRL in place on 01/01/2010

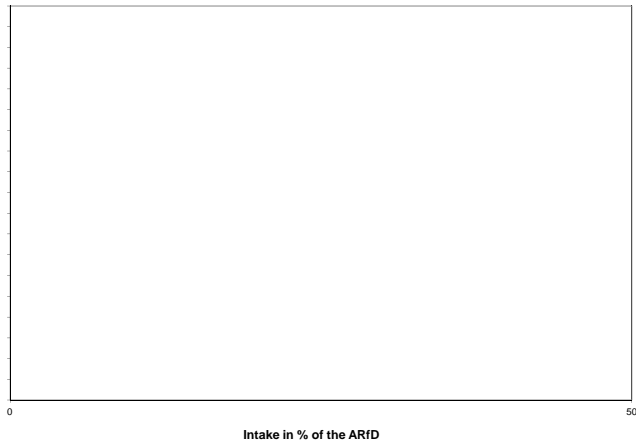
c) TRL: toxicological threshold level

## Chronic risk assessment: Vinclozolin

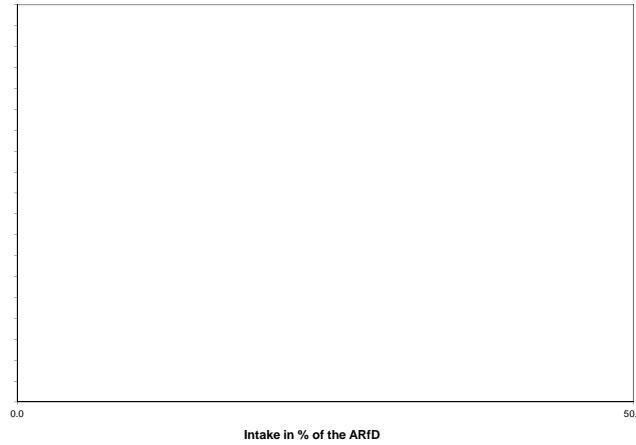


Vinclozolin

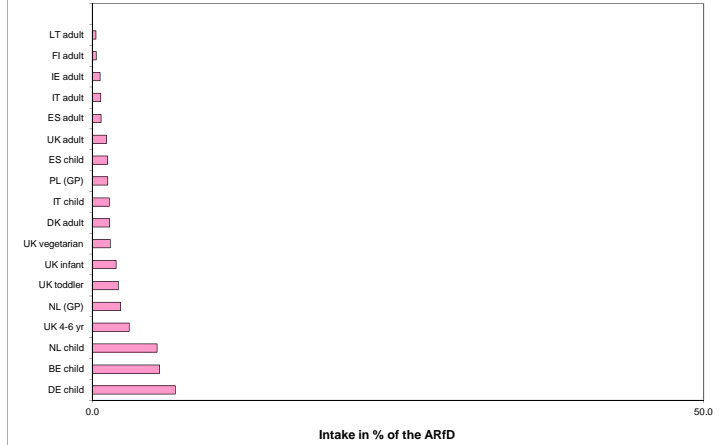
Acute exposure: Vinclozolin / Apples



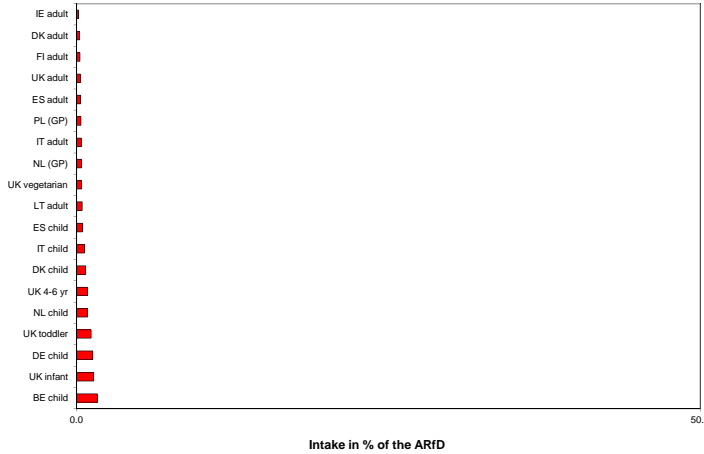
Acute exposure: Vinclozolin / Peaches



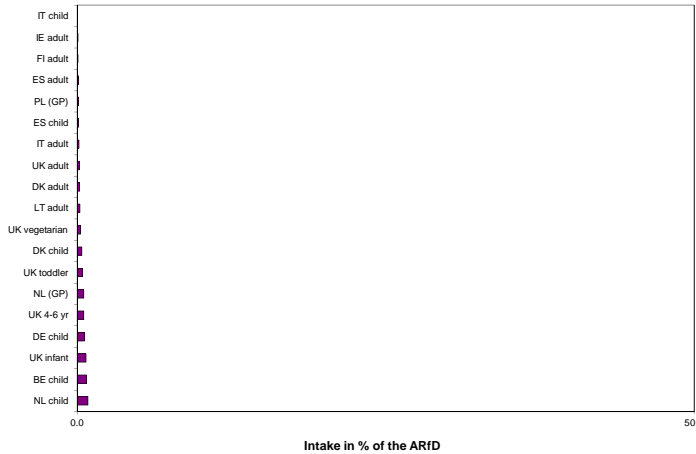
Acute exposure: Vinclozolin / Strawberries



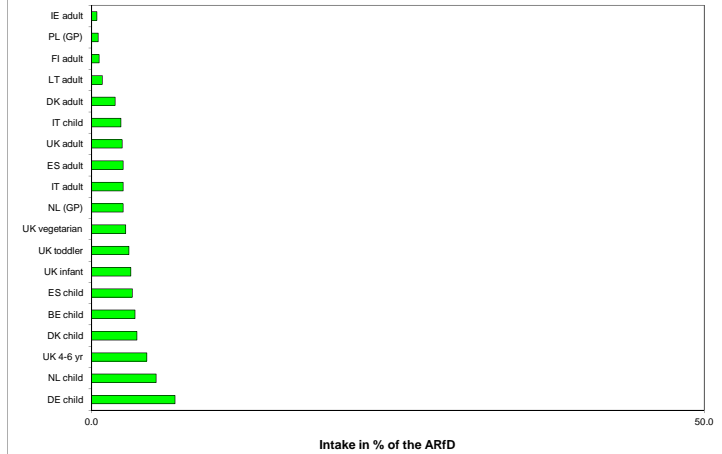
Acute exposure: Vinclozolin / Tomatoes



Acute exposure: Vinclozolin / Head cabbage



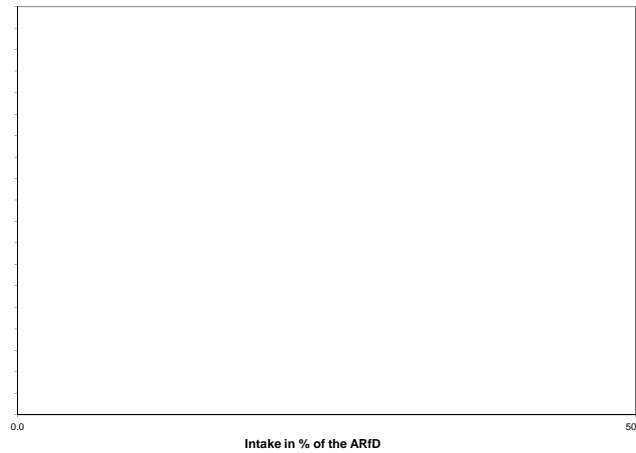
Acute exposure: Vinclozolin / Lettuce



Acute exposure: Vinclozolin / Leek



Acute exposure: Vinclozolin / Oats



Acute exposure: Vinclozolin / Rye



## Zoxamide

Status of the active substance:	<b>Included</b>	Monitoring year:	<b>2010</b>
To be analysed on a voluntary basis:	<b>Yes</b>	Analysed on animal (A) or plant (P) products:	<b>P</b>
<b>Toxicological end points</b>			
ADI (mg/kg bw/day):	<b>0.5</b>	ARfD (mg/kg bw):	<b>n.n.</b>
Source of ADI:	<b>COM</b>	Source of ARfD:	<b>COM</b>
Year of evaluation:	<b>2003</b>	Year of evaluation:	<b>2003</b>

### Chronic risk assessment

Exposure (range) in % of ADI  
minimum - maximum

**No of diets exceeding ADI:** ---

Highest calculated exposure in % of ADI	MS Diet	Highest contributor to MS diet (in % of ADI)		2nd contributor to MS diet (in % of ADI)		3rd contributor to MS diet (in % of ADI)	
		Commodity / group of commodities	Commodity / group of commodities	Commodity / group of commodities	Commodity / group of commodities		
0.01	WHO cluster diet B	0.01	Tomatoes	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.01	DE child	0.00	Table grapes	0.00	Tomatoes		FRUIT (FRESH OR FROZEN)
0.00	NL child	0.00	Table grapes	0.00	Tomatoes		FRUIT (FRESH OR FROZEN)
0.00	IT child/toddler	0.00	Tomatoes	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	IT adult	0.00	Tomatoes	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	PL (GP)	0.00	Tomatoes	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	WHO regional diet	0.00	Tomatoes	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	PT (GP)	0.00	Tomatoes	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	WHO cluster diet D	0.00	Tomatoes	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	FR toddler	0.00	Tomatoes	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	ES child	0.00	Tomatoes	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	UK toddler	0.00	Tomatoes	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	ES adult	0.00	Tomatoes	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	WHO Cluster diet F	0.00	Tomatoes	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	DK child	0.00	Tomatoes	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	IE adult	0.00	Tomatoes	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	SE (GP)	0.00	Tomatoes		FRUIT (FRESH OR		FRUIT (FRESH OR FROZEN)
0.00	NL (GP)	0.00	Tomatoes	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	WHO cluster diet E	0.00	Tomatoes	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	UK vegetarian	0.00	Tomatoes	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	LT adult	0.00	Tomatoes	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	FR (GP)	0.00	Tomatoes	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	DK adult	0.00	Tomatoes	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	UK adult	0.00	Tomatoes	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	FI adult	0.00	Tomatoes	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	UK infant	0.00	Tomatoes	0.00	Table grapes		FRUIT (FRESH OR FROZEN)
0.00	FR infant	0.00	Tomatoes	0.00	Table grapes		FRUIT (FRESH OR FROZEN)

### Acute risk assessment

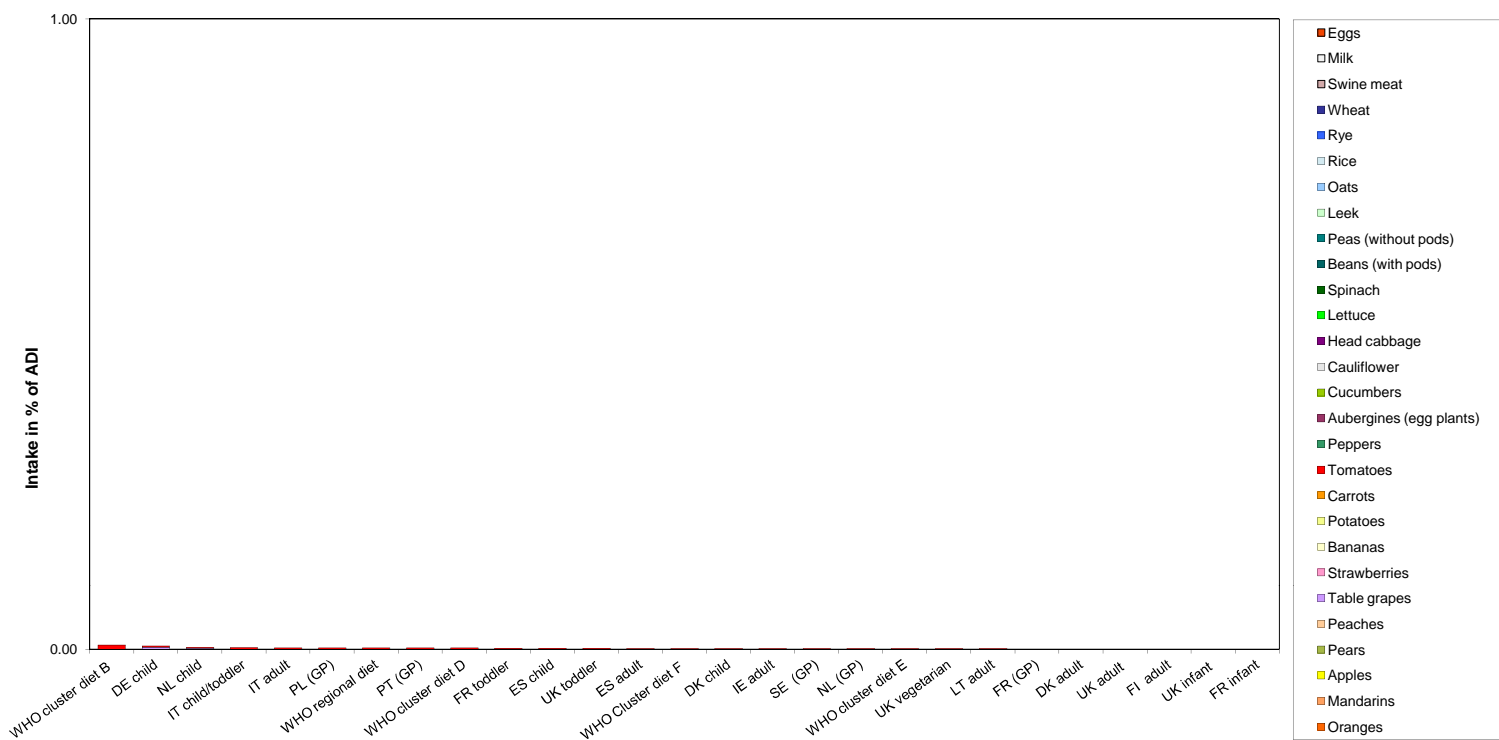
Year	Commodity <sup>a)</sup>	MRL <sup>b)</sup>	Total number of samples analysed	% of samples with detectable residues below the MRL	% of samples exceeding the MRL	Highest residue measured (HRM) mg/kg	No. of samples exceeding the TRL <sup>c)</sup>	Maximum acute exposure (expressed in % of the ARfD)	Most critical diet	Comment
2010	Apples	0.02	1908							
2010	Peaches	0.02	988							
2010	Strawberries	0.02	1565							
2010	Tomatoes	0.5	1459	0.41		0.02				
2010	Head cabbage	0.02	821							
2010	Lettuce	0.02	1536							
2010	Leek	0.02	666							
2010	Oats	0.02	115							
2010	Rye	0.02	325							
2010	Swine Meat									
2010	Milk									

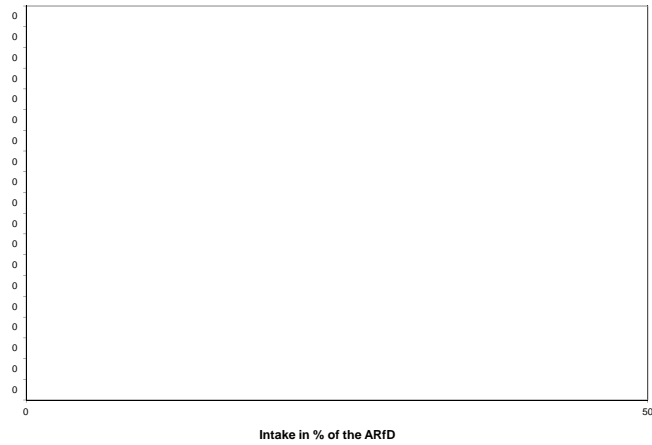
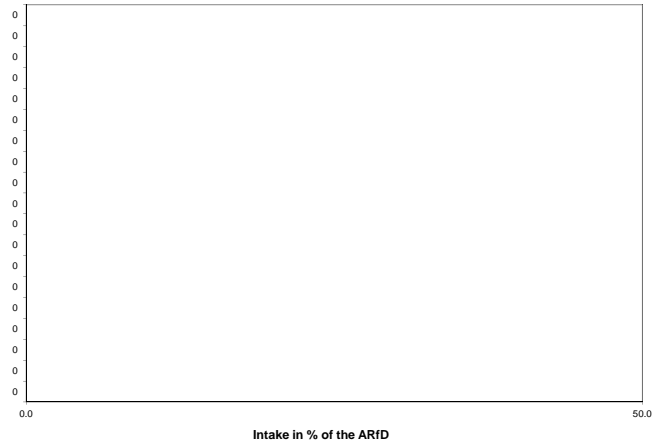
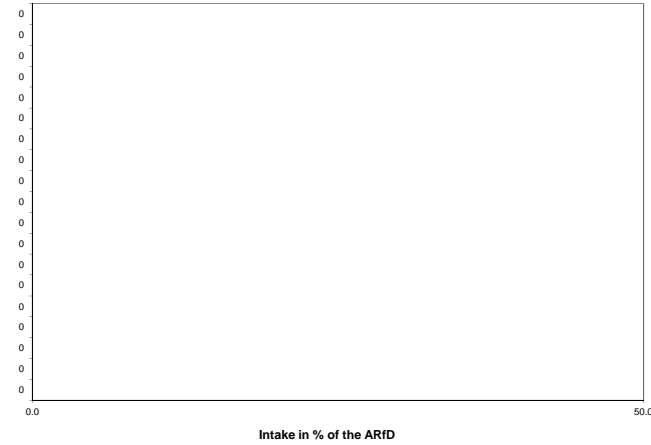
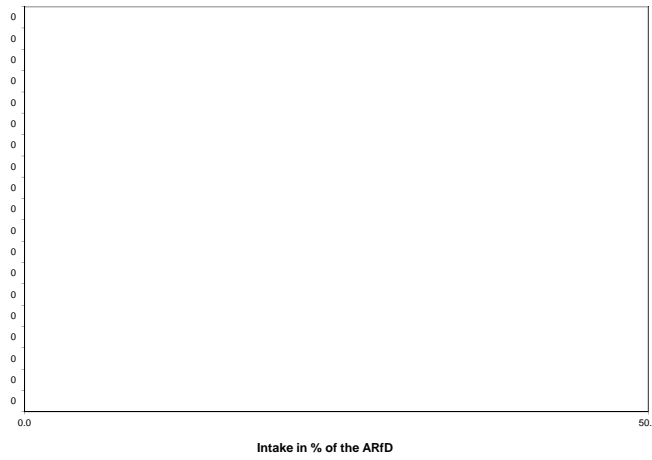
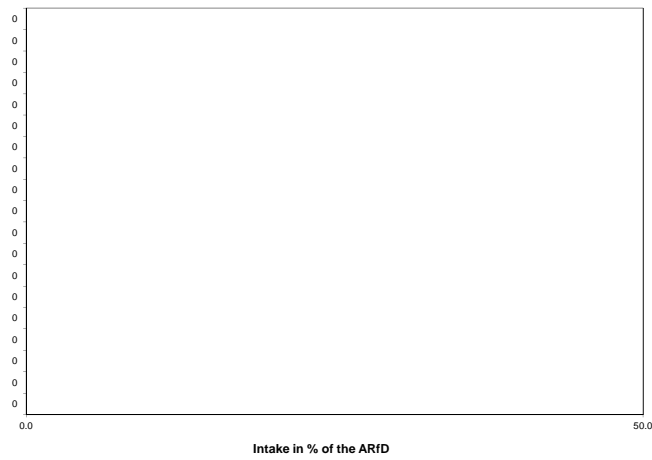
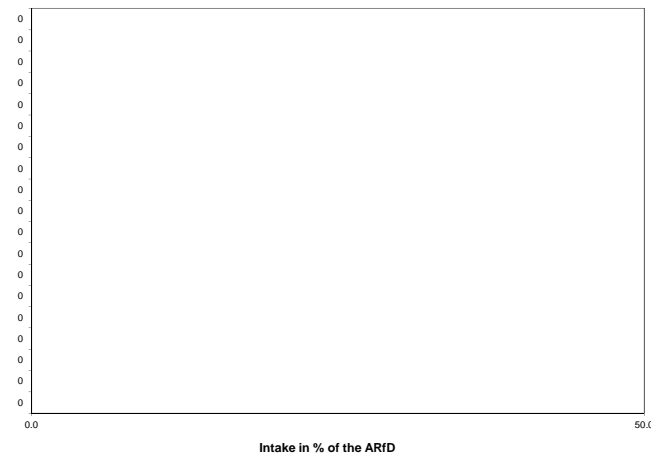
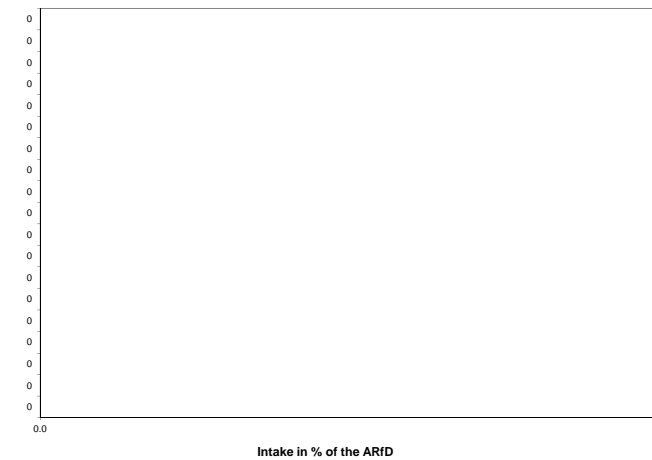
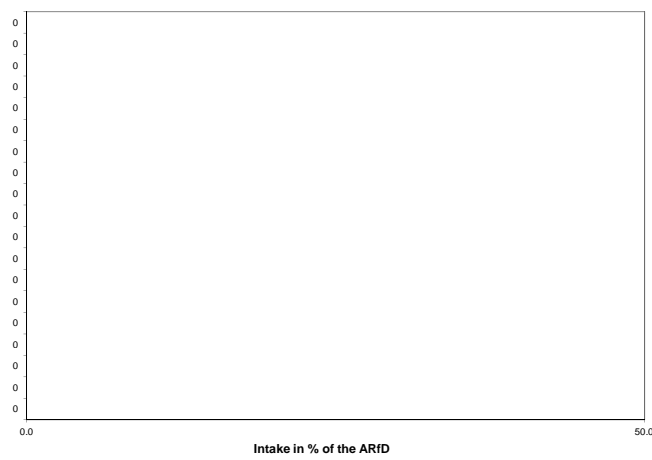
<sup>a)</sup> For fat soluble pesticides, the residues reported for swine fat were recalculated to swine meat, considering the reported fat content or default fat content of 20%.

<sup>b)</sup> MRL in place on 01/01/2010

<sup>c)</sup> TRL: toxicological threshold level

### Chronic risk assessment: Zoxamide



**Zoxamide****Acute exposure: Zoxamide / Apples****Acute exposure: Zoxamide / Peaches****Acute exposure: Zoxamide / Strawberries****Acute exposure: Zoxamide / Tomatoes****Acute exposure: Zoxamide / Head cabbage****Acute exposure: Zoxamide / Lettuce****Acute exposure: Zoxamide / Leek****Acute exposure: Zoxamide / Oats****Acute exposure: Zoxamide / Rye**