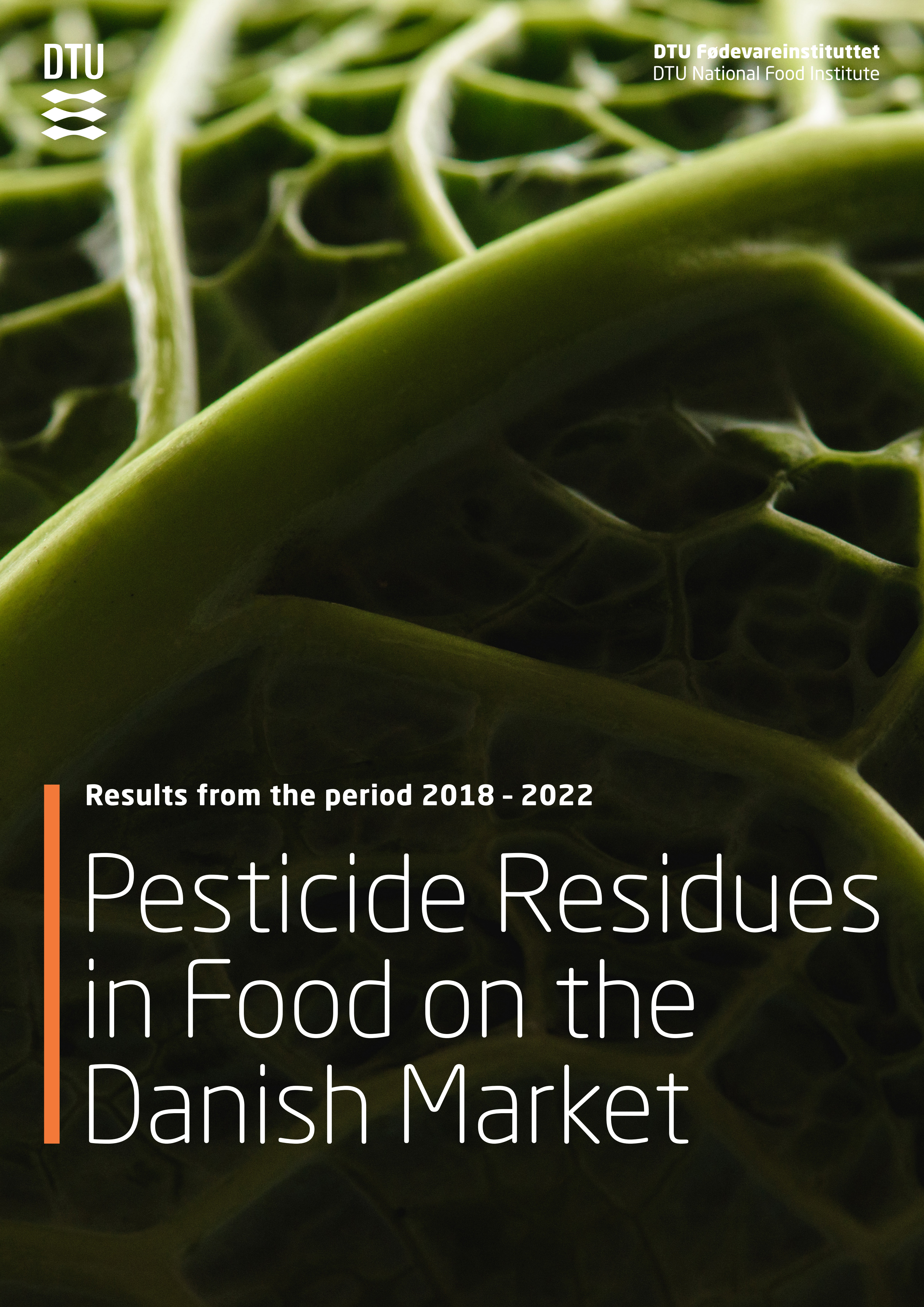

DTU Fødevareinstituttet
DTU National Food Institute

Results from the period 2018 - 2022

Pesticide Residues in Food on the Danish Market

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Pesticide Residues in Food on the Danish Market

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1 Preface

The present report presents the results for pesticide residues analysed in the period 2018- 2022 during the monitoring programmes conducted by the Danish Veterinary and Food Administration (DVFA). The programme included commodities of fruit, vegetables, cereals and animal origin using random sampling of food at the Danish market. Since the beginning of the 1960's, Denmark has monitored fruit and vegetables for pesticide residues.

For the periods 1993-1997, 1998-2003, 2004-2011, and 2012-2017 results were collated, and the dietary exposure was calculated. In this report, data for the analyses carried out in the period 2018-2022 are reported, as well as the exposure calculations performed based on the detected residues. The samples were collected by the DVFA and the analyses have been carried out by the laboratory of DVFA.

The residue data have been combined with consumption data and the exposures for different consumer groups have been estimated. Risk assessment of the chronic dietary exposure has been performed for the individual pesticides based on the Acceptable Daily Intake (ADI), as well as risk assessment for cumulative chronic dietary exposure to all the detected pesticides in the present period. Risk assessments of acute dietary exposures are outside the scope of the present report.

The focus of the present report is solely on exposure and risk assessment of pesticide residues in food on the Danish market. It is acknowledged that some individuals in the Danish population may also be exposed to pesticides from other sources; however, it is outside the scope of the present report to perform risk assessments for such sources of pesticides.

It is also recognized that the general population is exposed to other kinds of chemical substances which might exert similar adverse health effects as pesticides; however, it is outside the scope of the present report to perform risk assessments for combined exposures to all kinds of different chemicals, including pesticides.

The present report has been produced and adopted by the authors. This task has been carried out exclusively by the authors in the context of a contract between the DVFA and the National Food Institute, Technical University of Denmark.

2 Sammenfatning og konklusion

Denne rapport præsenterer resultaterne for kontrol af pesticidrester i fødevarer i Danmark for perioden 2018-2022. Antal stoffer varierer fra år til år, da der løbende bliver inkluderet nye stoffer i analysemetoderne. Der er i perioden analyseret for 342-344 pesticider, angivet som restdefinitioner. Der er analyseret i alt 8894 prøver af frugt, grøntsager, cerealier, kød, børnemad og forarbejdede fødevarer. Af det samlede antal er 956 økologiske prøver, og disse er ikke medtaget i eksponeringsberegningerne, da konsum af økologiske fødevarer forventes at være ulige fordelt i befolkningen. Desuden er prøver med indhold af pesticiderne aldrin/dieldrin, DDT, heptachlor og lindan ikke inkluderet i beregningerne, fordi der ikke kan sættes toksikologiske referenceværdier for stofferne. De er alle persistente organiske pesticider (POPs). De er forbudt at bruge, men pga. deres persistens kan de stadig findes i miljøet. En prøve af hvedemel med indhold af dichlorvos er ligeledes udelukket, da den ikke anses som værende repræsentativ for hvedemel på det danske marked. Endelig er prøver med indhold af chlorpyrifos, chlorpyrifos-methyl, dimethoate/omethoate, buprofezin, azinphos-ethyl, diflubenzuron og hexachlorbenzen heller ikke inkluderet i beregningerne, da der ikke kan sættes toksikologiske referenceværdier for stofferne, da genotoksicitet ikke kan udelukkes. Dette betyder, at der som udgangspunkt ikke findes en tærskelværdi, som en given eksponering kan sammenlignes med. Fordelingen mellem de forskellige typer af fødevarer kan ses i tabel 1.

Resultaterne viser, at der er flere fund af pesticider i frugt og grøntsager (se tabel 3) end i andre afgrøder. Sammenlignes frugt og grøntsager indeholder frugt flest pesticidrester (se figurerne 1-3). Der er generelt flere pesticidrester i udenlandske produkter i forhold til danske (se figurerne 1-3), og der er hyppigere fund af flere pesticider i samme prøve blandt udenlandske prøver sammenlignet med prøver fra Danmark (se figur 5).

I 45% af de konventionelt producerede prøver findes indhold af pesticidrester over detektionsgrænsen. Maksimalgrænseværdierne (MRL) er overskredet i 2,0% af prøverne og af disse er overskridelserne signifikante i 1,1% af prøverne.

Resultaterne fra analyseprogrammet er brugt til at beregne eksponeringen fra fødevarer for de danske forbrugere ved at gange gennemsnittet af pesticidindhold med det gennemsnitlige konsum. Der findes ikke en enkelt international vedtaget model til at beregne eksponering fra pesticidrester. De analyseresultater, der ligger til grund for rapporten, er generelt udført på rå afgrøder og ikke på skrællede eller tilberedte afgrøder. Analysemetoderne har også en nedre grænse for, hvornår et indhold af pesticid kan påvises/rapporteres (rapporteringsgrænsen, LOR).

Eksponeringer er indledningsvis beregnet ved brug af tre forskellige modeller. I den ene model (Model 0) indgår alle fund under detektionsgrænsen med 0 i beregningen af middelindholdet. I den anden model (Model 1) indgår alle fund under rapporteringsgrænsen med ½ LOR i beregningen af middelindholdet, mens i Model 2 indgår alle indhold under LOR med ½ LOR begrænset til en faktor 25 i forhold til, hvis 0 havde været brugt i beregningen af middelindholdet. I rapporten er brugt Model 2 i beregningen af middelindholdet, da denne anses for at være tilstrækkelig konservativ (dvs. 'på den forsigtige side').

I beregningerne er der for citrusfrugter, banan og melon brugt forarbejdningsfaktorer, der tager højde for, at størstedelen af pesticidet findes i skrællen.

Risikovurderingen for de enkelte pesticider er udført ved beregning af en Hazard Quotient (HQ), som er forholdet mellem den kroniske (livslange) eksponering og det Acceptable Daglige Indtag (ADI) for det pågældende pesticid. HQ for de enkelte pesticider er mellem 0% og 2,4% for børn 4-6 år (tre stoffer er over 1%, resten under 1%) og mellem 0% og 0,8% for voksne, hvilket indikerer, at der ikke er en nævneværdig sundhedsmæssig risiko ved indtag af de enkelte pesticider fra fødevarer.

Der er også udført risikovurdering af det samlede kroniske indtag af de fundne pesticider ved at summere alle HQ for de enkelte pesticider til et Hazard Indeks (HI). HI varierer mellem 3,0% og 11% for voksne, og mellem 7,2% og 30% for børn i alderen 4-6 år alt efter hvilken model, der er brugt i beregningerne. Med Model 2 er HI beregnet til 8,4% for voksne og 23% for børn i alderen 4-6 år. Da HI-metoden forudsætter samme type effekt for alle de fundne pesticider, er metoden relativt konservativ (dvs. 'på den forsigtige side'), idet alle pesticider ikke har samme type af effekter. HI på 8,4% for voksne og 23% for børn i alderen 4-6 år indikerer således, at der ikke er en sundhedsmæssig risiko ved det samlede kroniske indtag af de fundne pesticider fra fødevarer. Risikovurdering er også udført for børn i alderen 1-3 år og børn i alderen 7-14 år. HI for disse aldersgrupper er lavere med model 2 end for børn i alderen 4-6 år, og derfor præsenteres kun resultater for børn i alderen 4-6 år i denne rapport.

Som tidligere nævnt er der generelt fundet færre pesticidrester i danske afgrøder sammen- lignet med afgrøder fra udlandet. Dette har også indflydelse på eksponeringen. Spiser man danske afgrøder, når det er muligt, er både eksponering og HI nedsat. For børn i alderen 4-6 år og voksne faldt HI med henholdsvis en faktor 2,8 og 2,6, mens eksponeringen faldt med en faktor på 1,9 for både børn og voksne.

Myndighederne anbefaler voksne at spise mindst 600 g frugt og grøntsager om dagen. For mænd og kvinder er eksponeringen beregnet for dem, som spiser mere end 600 g frugt og grøntsager om dagen. Eksponeringen steg med en faktor på 1,7 for kvinder og med en faktor på 1,8 for mænd, og HI steg med en faktor på 1,6 for kvinder og 1,8 for mænd. HI er dog stadig mindre end 100% for både kvinder (15%) og mænd (13%).

Det er også beregnet, hvilke pesticider og afgrøder der bidrager mest til eksponeringen og til HI. For afgrøderne bidrager 25 forskellige afgrøder til 88% af eksponeringen og til 92% til HI. Æbler bidrager mest til både eksponering og HI. For pesticiderne bidrager 'Top-9' pesticiderne med omkring halvdelen til både eksponering og HI.

Resultaterne for perioden 2018-2022 viser, ligesom resultaterne for sidste periode (2012- 2017), at HI er godt under 100% for både børn og voksne. Dette gælder også for voksne, der spiser mere end 600 g frugt og grønt om dagen.

Når der sammenlignes med resultater fra perioden 2012-2017, ses et fald i HI for både børn og voksne. For børn i alderen 4-6 år faldt HI fra 36% til 23% og for voksne fra 13% til 8,4% Derimod er eksponeringen nogenlunde den samme for både børn og voksne i de to perioder. En forklaring på faldet i HI uden et fald i eksponeringen er, at nogle af de mere toksiske pesticider ikke længere er godkendt, og at der i denne periode (2018-2022) derfor er anvendt flere mindre toksiske pesticider sammenlignet med den tidligere periode (2012-2017). Et fald i HI kan også skyldes, at flere af de mere toksiske stoffer ikke er inkluderet i beregningerne, da f.eks. genotoksicitet ikke kan udelukkes, og der kan derfor ikke fastsættes toksikologiske referenceværdier for stofferne.

Med henblik på at vurdere den sundhedsmæssige betydning af pesticidindholdet i forskellige typer frugt og grøntsager er pesticidbelastningen (PL) beregnet som et forhold mellem det gennemsnitlige pesticidindhold i en fødevare og ADI for hvert påvist pesticid i denne fødevare. Beregning af PL for pesticider kan vise, hvilke stoffer der bidrager mest til pesticidbelastningen for en afgrøde, og PL kan således anvendes til at identificere kritiske kilder til eksponering for pesticider. PL er således et redskab til at lave en ranking af både afgrøder og pesticider i forhold til deres PL. For de fleste afgrøder var PL lavere for dansk producerede afgrøder sammenlignet med afgrøder produceret udenfor Danmark. For salat og persille var PL dog højere for dansk producerede afgrøder sammenlignet med udenlandsk producerede afgrøder. Baseret på PL kombineret med indtag er den generelle konklusion, som også nævnt ovenfor, at eksponeringen for pesticider kan nedsættes ved at vælge dansk producerede afgrøder, når det er muligt.

Resultaterne for denne periode (2018-2022) bekræfter generelt konklusionerne fra den forrige periode (2012-2017), dvs. at det med den nuværende viden vurderes, at de pesticidrester, der forekommer i fødevarer på det danske marked, generelt udgør en ubetydelig sundhedsmæssig risiko ved kronisk indtag af de enkelte pesticider fra fødevarer såvel som ved den samlede kroniske eksponering af de fundne pesticider fra fødevarer, selv for voksne, der spiser mindst 600 g frugt og grøntsager om dagen. Generelt kan man halvere sit pesticidindtag ved at vælge dansk producerede afgrøder, hvor det er muligt i stedet for de tilsvarende udenlandske afgrøder.

3 Summary and conclusion

This report presents the results for the control of pesticide residues in food in Denmark for the period 2018-2022. The number of substances varies from year to year, as new substances are continuously included in the analysis methods. 342-344 pesticides were analyzed during the period given as residue definitions. A total of 8894 samples of conventionally and organically produced fruit, vegetables, cereals, meat, baby food and processed foods were analysed. Of these, 956 organic samples are not included in the exposure calculations, as consumption of organic food is expected to be unequally distributed in the population. Furthermore, samples containing the pesticides aldrin/dieldrin, DDT, heptachlor and lindane are not included in the calculations, because toxicological reference values cannot be set for the substances. They are all persistent organic pollutants (POPs) and they are forbidden to use. However, due to their persistence, they can still exist in the environment. A sample of wheat flour containing dichlorvos is also excluded, as it is not considered to be representative of wheat flour on the Danish market. Finally, samples containing chlorpyrifos, chlorpyrifos-methyl, dimethoate/omethoate, buprofezine, azinphos-ethyl, diflubenzuron and hexachlorobenzene are also not included in the calculations, as no toxicological reference values can be set for the substances, as genotoxicity cannot be excluded. The distribution between the different types of food can be seen in table 1.

The results show that there were more findings of pesticides in fruit and vegetables (see table 3) than in other crops. Comparing fruit and vegetables, fruit contained the most pesticide residues (see figures 1-3). There was generally more pesticide residues in foreign products compared to Danish products (see figures 1-3), and there were more frequent findings of several pesticides in the same sample among foreign samples compared to samples from Denmark (see figure 5).

In 45% of the conventionally produced samples, pesticide residue levels above the detection limit are found. The maximum residue levels (MRL) are exceeded in 2.0% of the samples and 1.1% of the samples are found to be non-compliant when considering measurement uncertainty.

The results from the analysis program are used to calculate the exposure for the Danish population from food by multiplying the average pesticide content in a commodity by the average consumption of that commodity. There is no single internationally agreed model for calculating exposure from pesticide residues. The analysis results on which the report is based are generally carried out on raw crops and not on peeled or prepared products. The analysis methods also have a lower limit for when a pesticide content can be detected/reported (the limit of reporting, LOR).

Exposures are initially calculated using three different models. In one model (Model 0), all findings below the detection limit are included with 0 in the calculation of the mean content. In the second model (Model 1) all findings below the level of reporting are included with ½ LOR in the calculation of the mean content, while in Model 2 all contents are included with ½ LOR limited to a factor of 25 compared to, if 0 had been used in the calculation of the mean content. In the report, Model 2 is used in the calculation of the mean content, as this is considered to be sufficiently conservative (i.e. 'on the cautious side').

In this report, for citrus fruits, banana and melon, processing factors are used to take into account that the majority of the pesticide is found in the peel.

The risk assessment for individual pesticides is carried out by calculating a Hazard Quotient (HQ). HQ is the ratio between the chronic (lifelong) exposure and the Acceptable Daily Intake (ADI) for the pesticide in question. The HQ for the individual pesticides is between 0% and 2.4% for children 4-6 years (3 substances above 1%, the rest below 1%) and between 0% and 0.8% for adults which indicates that there is no significant health risk when consuming the individual pesticides from food.

A risk assessment of the total chronic exposure to the pesticides found has also been carried out by summing all HQ for the individual pesticides into a Hazard Index (HI). HI varies between 3.0% and 11% for adults, and between 7.2% and 30% for children aged 4-6 years, depending on which model is used in the calculations. With Model 2, the HI is calculated at 8.4% for adults and 23% for children aged 4-6 years, respectively. Since the HI method assumes the same type of effect for all the pesticides found, the method is relatively conservative (i.e. 'on the cautious side'), as all pesticides do not have the same type of effects. The HI of 8.4% for adults and 23% for children aged 4-6 years thus indicates that there is no health risk from the total chronic intake of the pesticides found from food. Risk assessments have also been carried out for children aged 1-3 years and children aged 7-14 years. The HI for these age groups is lower than for children aged 4–6 years, and therefore only results for children aged 4–6 years are presented in this report.

As previously mentioned, fewer pesticide residues have generally been found in Danish crops compared to crops from abroad. This also affects the exposure. If you eat Danish produced crops, when possible, both exposure and HI are reduced. For children aged 4-6 years and adults HI decreased by a factor of 2.8 and 2.6, respectively, while the exposure decreased by a factor of 1.9 for both children and adults.

The authorities recommend that adults eat at least 600 g of fruit and vegetables per day. For women and men, the exposure is calculated for those who eat more than 600 g of fruit and vegetables per day. The exposure increased by a factor of 1.7 for women and by a factor of 1.8 for men, and the HI increased with a factor of 1.6 for women and with a factor of 1.8 for men. However, HI is still less than 100% for both women (15%) and men (13%).

It has also been calculated which pesticides and crops contribute most to the exposure and to HI. For the crops, 25 different crops contribute 88% to the exposure and 92% for HI. Apples contribute the most to both exposure and HI. For the pesticides, the 'Top-9' pesticides contribute about half to both exposure and HI.

The results for the period 2018-2022 show, just like the results for the last period (2012-2017), that HI is well below 100% for both children and adults. This also applies to adults who eat more than 600 g of fruit and vegetables per day.

When compared with results from the period 2012-2017, a decrease in HI is seen for both children and adults. For children aged 4-6 years, HI fell from 36% to 23% and for adults from 13% to 8.4%. In contrast, the exposure is more or less the same for both children and adults in the two periods. One explanation for the decrease in HI without a decrease in exposure is that some of the more toxic pesticides are no longer approved and that in this period (2018-2022) more less toxic pesticides have therefore been used compared to the previous period (2012 - 2017). A decrease in HI may also be due to several of the more toxic substances not being included in the calculations, e.g. genotoxicity cannot be ruled out and therefore toxicological reference values cannot be set for the substances.

To assess the health significance of the pesticide content in different types of fruit and vegetables, the pesticide load (PL) is calculated as a ratio between the average pesticide content in a food and the ADI for each detected pesticide in this food.

Calculation of PL for pesticides can show which substances contribute most to the pesticide load for a crop, and PL can thus be used to identify critical sources of exposure to pesticides. PL is thus a tool for ranking both crops and pesticides in relation to their PL. For most of the commodities, PL was lower for crops produced in Denmark compared to crops produced outside Denmark. For lettuce and parsley, however, PL was higher for crops produced in Denmark compared to crops produced abroad. Based on PL combined with intake, the general conclusion, as also mentioned above, is that exposure to pesticides can be reduced by choosing Danish-produced crops whenever possible.

The results for this period (2018-2022) generally confirm the conclusions from the previous period (2012-2017), i.e. that with current knowledge it is assessed that the pesticide residues that occur in food on the Danish market generally pose an insignificant health risk as regards chronic intake of the individual pesticides from food as well as the total chronic exposure of the pesticides found from food, even for adults who eat at least 600 g of fruit and vegetables per day. In general, you can halve your pesticide intake by choosing Danish-produced crops, where possible, instead of the corresponding foreign crops.

4 Pesticide residues and exposure

4.1 Monitoring programme

The monitoring programme 2018-2022 included 8894 samples representative for foods, both organic and conventional grown, on the Danish market. The number of fruit, vegetable, cereal and animal product samples has been around 2000 samples each year besides the years 2020 and 2021, where the numbers were reduced with about 25% due to Corona. The results from 2018-2022 have been published in annual reports (Jensen *et al*., 2019, 2020, 2021, 2022, 2023). The annual number of samples for fruit, vegetables, cereals and animal products (including processed commodities and honey) are shown in Figure 1.

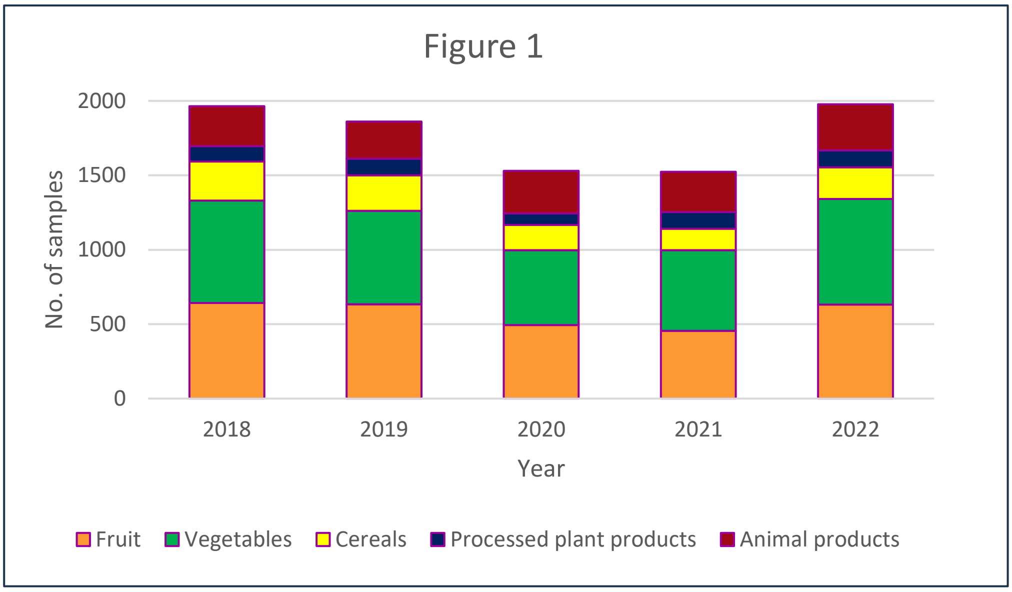


Figure 1. Number of fruit and vegetable samples, cereal samples and samples of animal origin analysed from 2018-2022.

Design of sampling plan

The Danish pesticide monitoring programme has two main objectives. The programme must check compliance with the MRL laid down in the EU (EU Commission, 2005), and the residue levels in foods should be monitored to enable an estimation of the exposure of pesticides to the Danish population.

The sampling plan for the period 2018-2022 consisted of two parts. The first part of the sampling plan focussed on commodities, which were found to contribute most to the dietary exposure and Hazard Index (HI) for the period 2012-2017 (Jensen *et al*. 2022). The number of samples taken of the individual commodities were then graduated depending on how much they contributed to the Hazard Index (HI). Therefore, the number of samples taken of individual commodities varied from 45-50 samples to 15 samples. The highest number of samples was consequently taken of the approximately 20 commodities that contribute most to the HI. Due to changes in the total number of samples available in the different years, changes have been made resulting e.g. in choosing to sample some of the commodities with limited contribution to the HI only every third year to have an acceptable number of samples (e.g. 15 units) when it was included. Focusing on a limited number of commodities will provide a better basis for comparison between years, so that trends in pesticide residues detected may be analysed. All commodities in the EU coordinated control programme are included in this annual sampling plan (European Commission 2017, 2018, 2019, 2020, 2021). This part of the sampling plan comprised primarily fruit and vegetable samples followed by cereal samples, but also samples of animal origin, including milk and honey as well as baby food and organic commodities were included. The second part of the sampling plan included samples that contributed less to the exposure to pesticides but focussed specifically on the compliance with MRLs or labelling of the production method, e.g. organically grown, produced without surface treatment or cereals produced without growth regulators.

Sampling

Authorised personnel from the food control units under the Danish Veterinary and Food Administration performed the sampling and collected the samples randomly within each commodity. The sampling procedure conformed to the EU directive on sampling for official control of pesticide residues (European Union, 2002). A total of 8894 samples were taken primarily at wholesalers, importers, slaughterhouses and at food processing companies (see Table 1). Most of the samples were conventionally grown fresh fruits and vegetables (respectively 29% and 31%), but also conventionally grown cereals (8.7%) and samples of animal products including honey (15%) were collected. In addition, samples of processed fruit and vegetables, processed cereals, baby food and organic grown samples were collected (respectively 3.9%, 1.1%, 0.2% and 11%)[1]. Respectively 15% and 36% of the fruit and vegetable samples and about half of the cereal samples were of Danish origin. For animal products including honey 75% of the samples were of Danish origin. Approximately, 260 different conventionally kind of foods and 103 different organically kind of foods were sampled.

During the sampling period the sampling of meat and other products of animal origin was regulated by EU Directive 96/23/EC (now repealed by several regulations). The aim of the directive was to ensure that the Member States monitor primarily their own production of commodities of animal origin for different substances, e.g. pesticides. However, imported samples from third countries shall also be monitored. The number of samples was between 0.03% and 0.15% of the domestic production or import.

For fruits, vegetables, and cereals the aim has been to monitor commodities sold at the Danish market. Consequently, more samples produced in EU Member States and third countries have been collected compared to samples of Danish origin. The division between Danish and foreign produced commodities were determined based on the availability of the products as well as a more risk-based approach.

[1] Due to rounding the sum is not 100%

Table 1. Number of samples analysed for in the period 2018-2022, Danish, EU and non-EU origin, respectively.

Foods	Danish	EU	Non-EU	Total
Fruit	401	1170	1029	2600
Vegetables	991	1262	509	2762
Cereals	359	276	137	772
Animal products[1]	884	21	284	1189
Honey	141	0	7	148
Processed fruit and vegetables	9	183	153	345
Processed cereals	13	85	4	102
Baby food	3	14	3	20
Fruit, organic	14	158	86	258
Vegetables, organic	105	126	74	305
Cereals, organic	93	114	48	255
Animal products, organic[1]	45	0	0	45
Honey, organic	0	0	2	2
Processed fruit and vegetables, organic	3	41	17	61
Processed cereals, organic	7	5	4	14
Baby food, organic	5	9	2	16
Total	3073	3464	2357	8894

1) Including milk and processed products

Laboratories

Samples were primarily analysed at the DVFA Laboratory. However, from 2013 about 80-100 samples already analysed by the routine analysis were also analysed by High Resolution Mass Spectrometer (HRMS) at DTU National Food Institute. All laboratories involved in the monitoring were accredited for pesticide analysis in accordance with ISO 17025 by the Danish body of accreditation, DANAK. The data from the screening analyses are not included in this report.

Analytical programme

The samples were analysed by different analytical methods and the number of pesticides analysed for in the different commodity types are shown in Table 2. The number includes isomers and metabolites and refers only to the residue definitions. All analytical methods have been slightly extended with new substances since 2012. Furthermore, as mentioned above approximately 80-100 samples have from 2013 and onwards been analysed each year by the HRMS screening method for additional >200 pesticides to ensure that all relevant pesticides are included in the routine pesticide programme.

Table 2. Number of pesticides (residue definitions) analysed for in the period 2018-2022 in different types of foods.

Foods/Year	2018	2019	2020	2021	2022
Fruit and vegetables	324	327	336	342	343
Cereals	324	319	331	334	325
Baby/infant food	318	281	301	300	304
Animal products	125	129	260[1]	124	124
Honey	298	299	290	292	291

[1)] Only one sample of milk powder was analysed for all 260 substances; else 111 different substances were analysed.

The pesticides included in the analytical methods and the results for the screening methods were published in annual reports (Jensen *et al*, 2019, 2020, 2021, 2022, 2023).

4.2 Residues

The average frequencies of samples with residues are shown in Table 3 as well as the frequencies of samples with residues significantly above the MRLs. In baby food as well as organic animal products, organic honey and organic processed cereals no pesticides were found and therefore these groups are not shown in the table. It should be noted that the frequencies have a large variation covering commodities with very low frequencies and others where practically all samples contained residues. The only Danish commodities in which no pesticide residues were detected, was white cabbage as well as all samples of animal products (not including honey). The commodities with the highest frequencies were spinach, apples, and strawberries where residues were found in respectively 54%, 58% and 73% of the samples. Only commodities with more than 10 samples are included.

For foreign produced products only dried dates, tomato paste and some animal products (except honey) have no pesticide residues. Residues were found in 90% or more of the samples of oranges, grapefruits, strawberries, cherries, mandarins, pears, currants, and bananas. Only commodities with more than 10 samples are included.

Pesticides were found in 45% of all the conventional grown samples. The MRLs were exceeded in 2.0% of the conventional grown samples of which 1.1% were found to be non-compliant when considering measurement uncertainty.

The frequencies listed in Table 3 must be considered as the lowest possible frequencies, since the pesticide profile in the analytical methods did not cover all pesticides used in Denmark or in the countries exporting to Denmark. Analysing for all authorised pesticides would probably result in more findings. However, on the other hand, results from the screening analyses have shown, that the pesticide profile in the standard routine analyses covers far most of the pesticide residues present in the samples.

Table 3. Frequency of conventional and organically grown samples with residues, both Danish and foreign commodities.

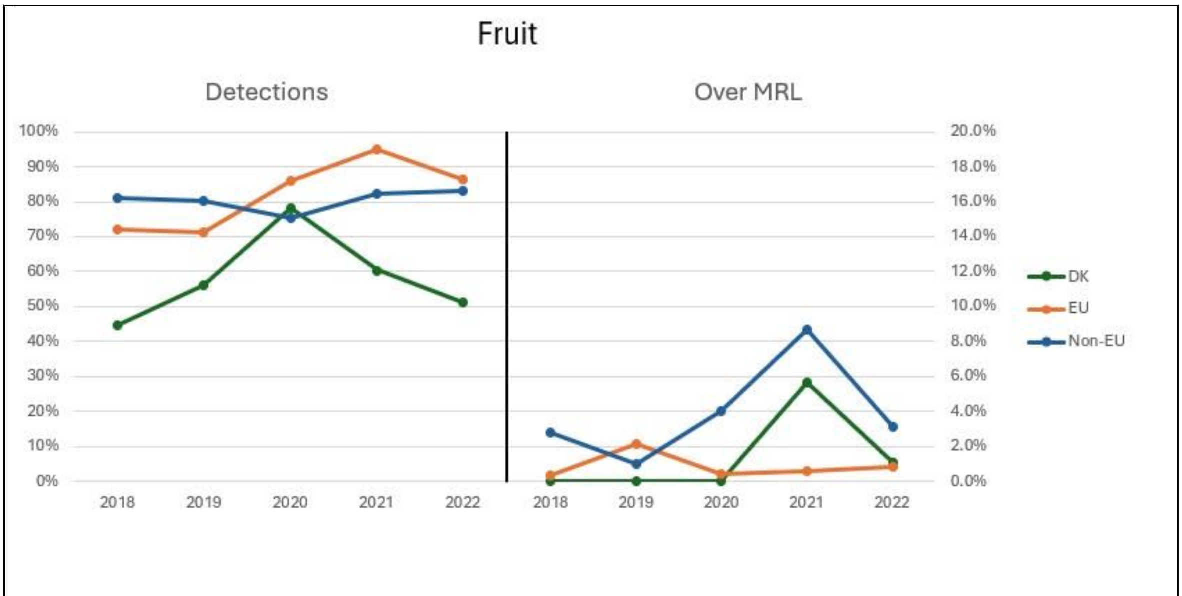
Foodstuff	Frequency of samples with residues (%)	Frequency of samples above MRL[1] (%)
Fruit	77	2.1
Vegetables	40	2.8
Cereals	37	2.5
Animal products	0.3	0
Honey	12	0
Processed fruit and vegetables	40	1.4
Processed cereals	27	0
Fruit, organic	3.1	0
Vegetables, organic	5.0	0.3
Cereals, organic	2.7	0
Processed fruit and vegetables, organic	3.3	0

1) MRLs were exceeded in 2,0% of the conventional grown samples of which 1.1% were found to be non-compliant when considering measurement uncertainty

Comparison between Danish and foreign produced commodities

Detailed information about findings and exceedances of the MRLs can be found in the appendices.

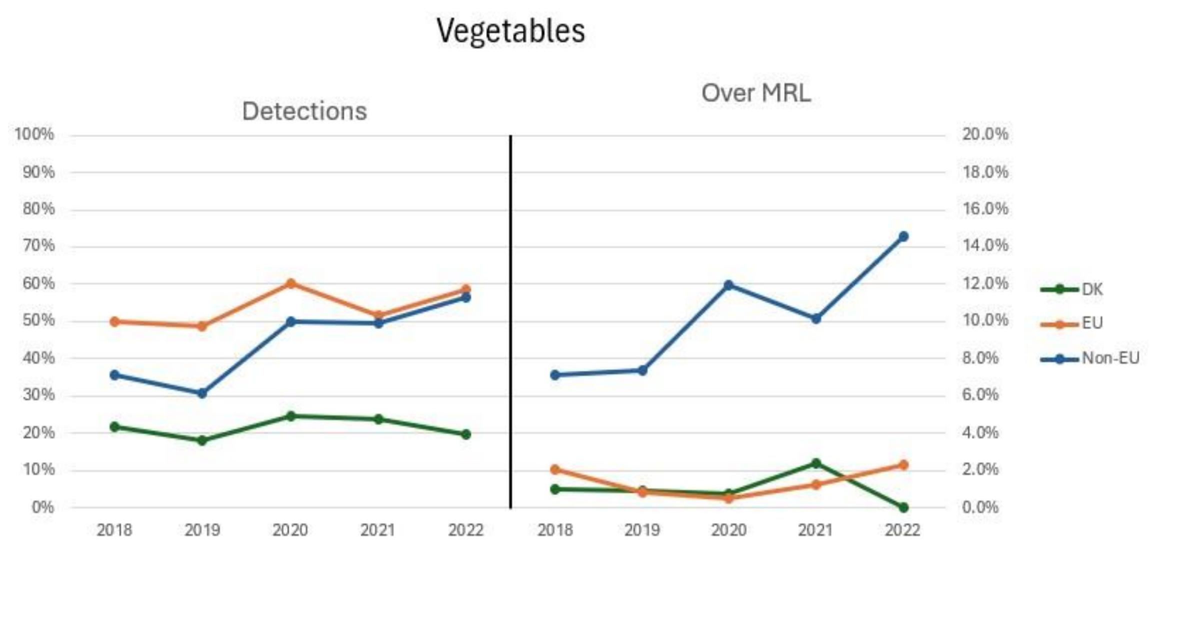
Figure 2 shows the frequencies of samples with detections below or at the MRL, and above the MRL for fruit commodities produced in Denmark (DK), the EU and outside the EU (non-EU). In general, samples of fruit commodities produced in Denmark had lower frequencies of detections below the MRL per year (44-71%) than fruit commodities produced outside Denmark (72-95%). However, the fruit commodities were not the same as many types of fruits cannot be grown in Denmark (e.g. oranges, pineapples). For products of Danish origin, the frequency of samples with detections has increased from 44% in 2018 to 78% in 2020 but decreased again in 2021 and 2022. For Danish samples the frequency of samples above MRL was between 0-1% in all the years except in 2021 (5.7%, three samples). Two of the samples were apples with a content of prosulfocarb and the third was a sample of strawberry. It was assessed that the two samples of apples with content of prosulfocarb is due to windborne contamination from treatment of winter cereals in the autumn. The Danish producers are aware of this problem and to avoid the problem they use nozzles for spraying, that gives 75-90 % drift reduction. In general, the frequency of samples with findings was similar in samples from EU and outside EU. However, the frequency of samples above the MRL was higher for samples outside EU (1-9%) compared to the samples from EU (0.4-2%).



	2018	2019	2020	2021	2022	
DK	0/44/99	0/57/102	0/43/55	3/32/53	1/47/92	No. of samples above MRL/samples with residues/total number of samples
EU	1/194/269	6/203/285	1/188/219	1/154/162	2/203/235	
Non EU	6/173/214	2/164/204	7/131/174	16/151/184	8/211/254	

Figure 2. Frequencies of samples with detections below or at the MRL, and above the MRL for fruit produced in Denmark, the EU and outside the EU.

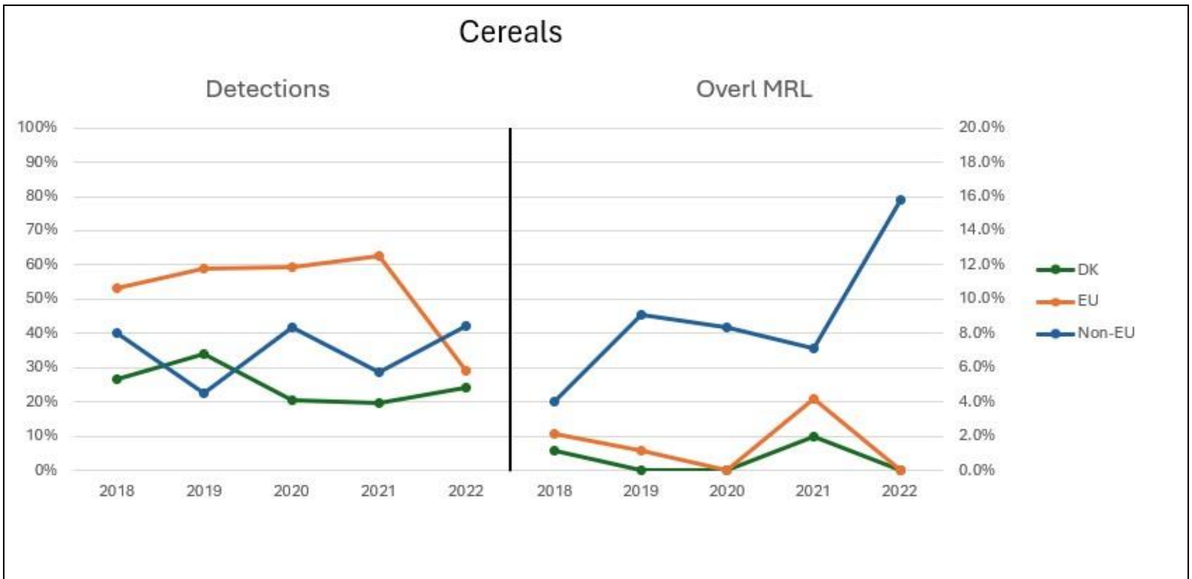
Figure 3 shows the frequencies of samples with detection below or at the MRL, and above the MRL for vegetable commodities produced in Denmark, the EU and outside the EU. In general, there were fewer vegetable samples with residues compared to fruit. Furthermore, than vegetables produced outside Denmark (31-60%). For samples with detection above the MRL, samples produced outside the EU more frequently had residues above the MRL than samples produced in the EU or in Denmark, namely 7-14%, 0.8-2% and 0-2%, respectively.



	2018	2019	2020	2021	2022	
DK	2/46/210	2/40/221	1/35/142	4/40/168	0/49/250	No. of samples above MRL/samples with residues/total number of samples
EU	6/146/293	2/124/254	1/129/215	3/124/240	6/152/260	
Non EU	9/45/127	8/33/108	11/46/92	8/39/79	15/58/103	

Figure 3. Frequencies of samples with detections below or at the MRL, and above the MRL for vegetables produced in Denmark, the EU and outside the EU.

Figure 4 shows the frequencies of samples with detection below or at the MRL, and above the MRL for cereals commodities produced in Denmark, the EU, and outside the EU. Cereals produced in Denmark had lower frequencies of detections below the MRL (20-34%) than cereals produced in the EU (29-62%) while cereals grown outside EU had frequencies of detections between 23-42%. The type of cereals produced in Denmark and the EU was different from cereals produced outside the EU. The cereal samples produced outside the EU were mainly rice and the samples from the EU and Denmark consisted mainly of wheat, oat, rye and barley. Two samples of Danish produced cereals exceeded the MRLs. The exceedances of the MRLs in cereals produced outside Denmark were except for a few samples only observed in rice.



	2018	2019	2020	2021	2022
DK	1/23/86	0/23/68	0/13/63	1/10/51	0/22/91
EU	2/50/94	1/50/85	0/25/42	1/15/24	0/9/31
Non EU	1/10/25	2/5/22	2/10/24	2/8/28	6/16/38

No. of samples above MRL/samples with residues/total number of samples

Figure 4. Frequencies of samples with detections below or at the MRL, and above the MRL for cereals produced in Denmark, the EU and outside the EU.

Products with low frequencies of samples with residues

In addition to the fruit, vegetable and cereal commodities mentioned above, several commodities with few residues have been analysed. These included animal products, organic grown products, baby food and processed foods. No pesticide residues were found in any of the 36 baby/infant food samples. For meat samples, detections were only observed in four foreign samples, namely one sample containing chlorpyrifos (pangasius) and three samples containing DDT (lamb and bovine meat). DDT is a persistent organic pollutant (POP) and is banned worldwide for all uses with the exception for the use in malaria control. Since POPs are very persistent in the environment, residues can still be found in the environment, which can explain the detections of DDT in meat. Chlorpyrifos and chlorpyrifos-methyl are prohibited from use in the European Union in both pesticide and biocide products. In general, processed food contained fewer residues than the raw materials used, because peeling, cooking, mixing, etc. can decrease the concentration in the processed food. However, drying can increase the content of pesticides in the processed food.

Multiple residues

Residues of several different pesticides were found in 56% of all fruit samples and in 20% of all vegetable samples, and details are shown in Figure 5. Danish produced fruit contained 2-6 residues in 34% of the samples while fruit from EU and non-EU countries contained 2-21 residues in about 60% of the samples. The Danish produced vegetables contained 2-4 residues in 6% of the samples while vegetables produced in EU and non-EU countries contained 2-15 residues in 38% of the samples. One reason for the lower number of different pesticides in

Danish samples could be that the number of pesticides approved for use in Denmark is lower than in some other countries.

In total 32 samples contained nine or more pesticides residues and of these samples 16 were fruits, 6 were fresh herbs, 5 were vegetables, 3 were dried herbs as well as 1 sample of raisins and rice, respectively. The samples with the highest number of residues were grapes from Bulgaria where 21 different pesticides were detected. However, it should be emphasised that it is not necessarily an individual fruit or vegetable that contained all the detected pesticides since the analysed samples are composed of more than one fruit or vegetable, e.g. at least 10 individual fruits. The composite sample can also in some cases consist of commodities produced by different growers.

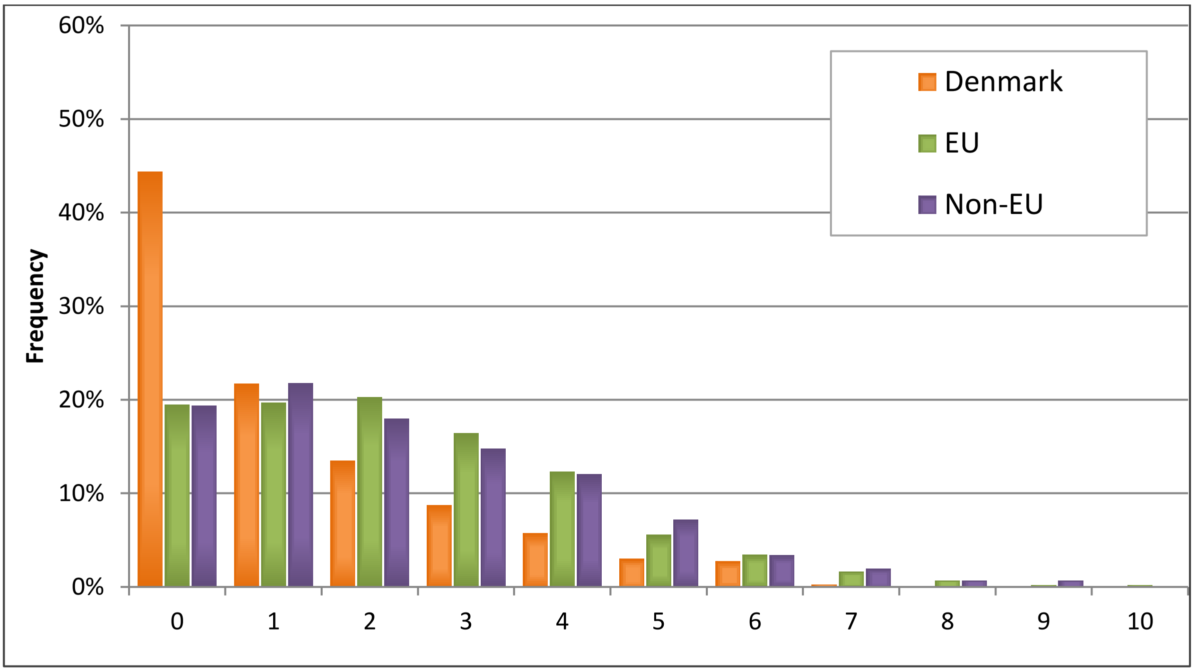


Figure 5. Number of pesticides residues per samples in fruit samples for the period 2018-2022.

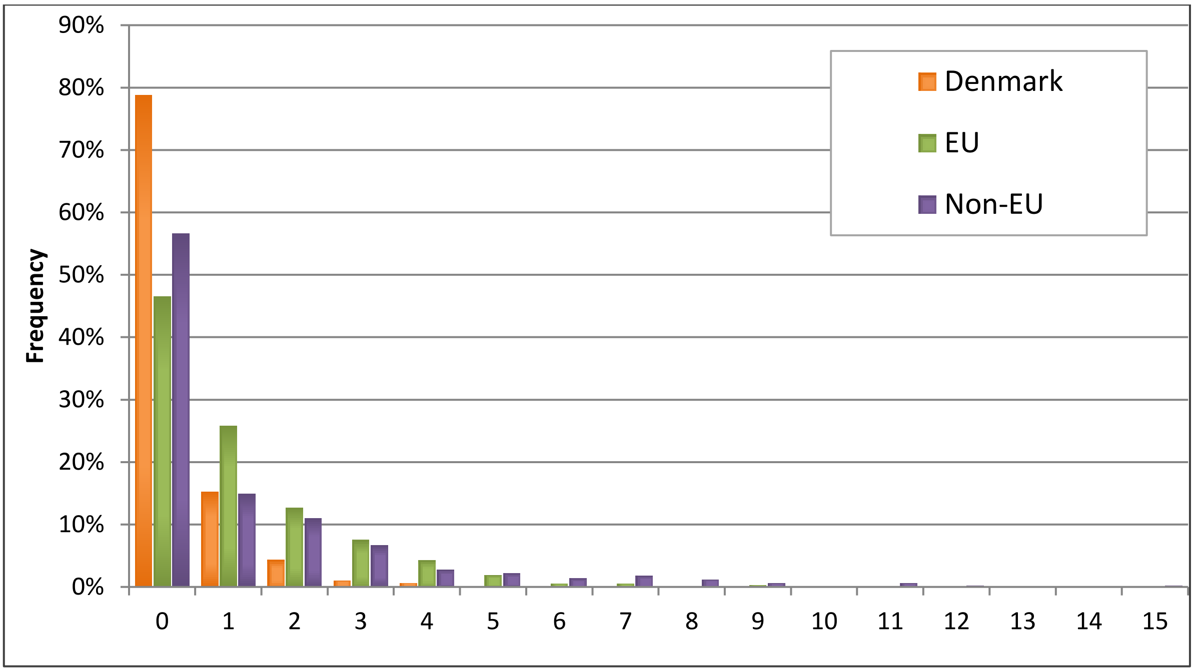
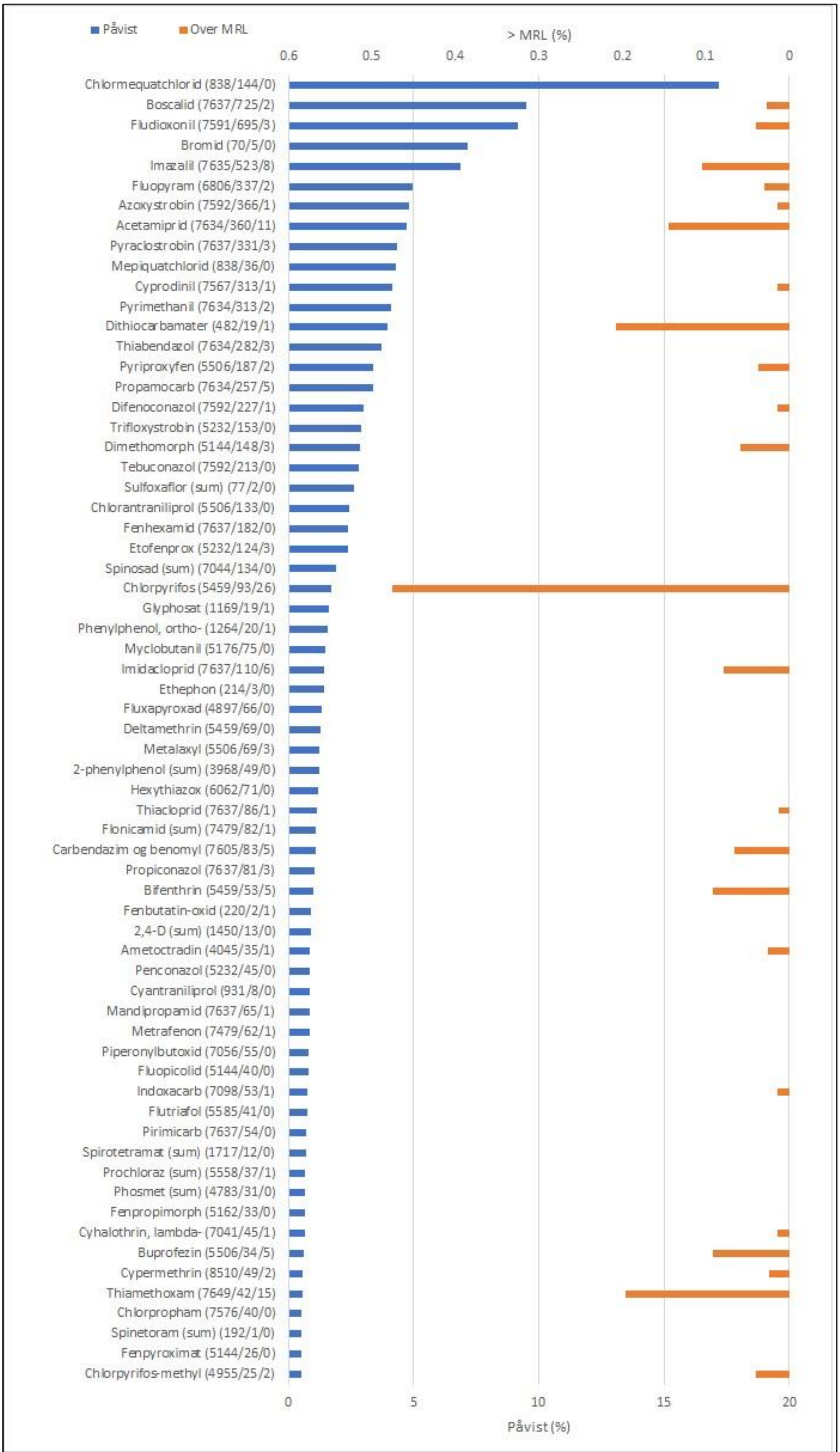


Figure 6. Number of pesticides residues per samples in vegetables samples for the period 2018- 2022

Pesticides found in fruit and vegetables, cereals and samples of animal origin.

The pesticides that have been found in the period 2018-2022 are presented in Appendix 7.2. Pesticides which were detected in at least 0.5 % of the samples of fruit, vegetables and cereals are presented in Figure 7.

Chlormequat-chloride was the most frequently detected pesticide, appearing in approximately 17% of the samples. This was followed by boscalid and fludioxonil, each found in about 9% of the samples. Chlormequat-chloride is only used on cereals while boscalid and fludioxonil are allowed to be used in many different commodities. The pesticide that most frequently exceeded the MRLs was chlorpyrifos in about 0.4% of the samples followed by dithiocarbamates and thiamethoxam. It should be noted that only one sample exceeded the MRLs for dithiocarbamates, but only 482 samples were analyzed. In comparison, chlorpyrifos was analyzed in more than 5000 samples.



Påvist
Over MRL
> MRL (%)
0.6
0.5
0.4
0.3
0.2
0.1
0
Chlormequatchlorid (838/144/0)
Boscalid (7637/725/2)
Fludioxonil (7591/695/3)
Bromid (70/5/0)
Imazalil (7635/523/8)
Fluopyram (6806/337/2)
Azoxystrobin (7592/366/1)
Acetamiprid (7634/360/11)
Pyraclostrobin (7637/331/3)
Mepiquatchlorid (838/36/0)
Cyprodinil (7567/313/1)
Pyrimethanil (7634/313/2)
Dithiocarbamater (482/19/1)
Thiabendazol (7634/282/3)
Pyriproxyfen (5506/187/2)
Propamocarb (7634/257/5)
Difenoconazol (7592/227/1)
Trifloxystrobin (5232/153/0)
Dimethomorph (5144/148/3)
Tebuconazol (7592/213/0)
Sulfoxaflor (sum) (77/2/0)
Chlorantraniliprol (5506/133/0)
Fenhexamid (7637/182/0)
Etofenprox (5232/124/3)
Spinosad (sum) (7044/134/0)
Chlorpyrifos (5459/93/26)
Glyphosat (1169/19/1)
Phenylphenol, ortho- (1264/20/1)
Myclobutanil (5176/75/0)
Imidacloprid (7637/110/6)
Ethephon (214/3/0)
Fluxapyroxad (4897/66/0)
Deltamethrin (5459/69/0)
Metalaxyl (5506/69/3)
2-phenylphenol (sum) (3968/49/0)
Hexythiazox (6062/71/0)
Thiacloprid (7637/86/1)
Flonicamid (sum) (7479/82/1)
Carbendazim og benomyl (7605/83/5)
Propiconazol (7637/81/3)
Bifenthrin (5459/53/5)
Fenbutatin-oxid (220/2/1)
2,4-D (sum) (1450/13/0)
Ametoctradin (4045/35/1)
Penconazol (5232/45/0)
Cyantraniliprol (931/8/0)
Mandipropamid (7637/65/1)
Metrafenon (7479/62/1)
Piperonylbutoxid (7056/55/0)
Fluopicolid (5144/40/0)
Indoxacarb (7098/53/1)
Flutriafol (5585/41/0)
Pirimicarb (7637/54/0)
Spirotetramat (sum) (1717/12/0)
Prochloraz (sum) (5558/37/1)
Phosmet (sum) (4783/31/0)
Fenpropimorph (5162/33/0)
Cyhalothrin, lambda- (7041/45/1)
Buprofezin (5506/34/5)
Cypermethrin (8510/49/2)
Thiamethoxam (7649/42/15)
Chlorpropham (7576/40/0)
Spinetoram (sum) (192/1/0)
Fenpyroximat (5144/26/0)
Chlorpyrifos-methyl (4955/25/2)
0
5
10
15
20
Påvist (%)

Figure 7. Detected pesticides. The pesticides that were detected in at least 0.5% of the plant product samples are ordered by the number of samples with residues of the pesticide. The figures in brackets next to the name of the pesticide refer to the number of samples analysed for this pesticide, the number of samples with residues <MRL and the number of samples exceeding the MRLs. The blue bars represent the percentage of samples <MRL. The axis for these results is shown at the bottom (0%-20%). The orange bars represent the percentage of samples with residues above the MRL. The axis for these results is shown at the top (0.0-0.6%).

Conclusion

The overall conclusion on residues responsible for a major part of the exposure to pesticides is that Danish produced fruits, vegetables and cereals had lower frequencies of samples with pesticide residues compared to products of foreign origin. In general, a smaller number of different pesticides were found in the Danish products.

4.3 Exposure

Chronic dietary exposure

The dietary exposure to pesticides has been calculated to assess the chronic (long-term) consumer health risk for the Danish population. To follow the trend in exposure over time, the exposure has been calculated according to the deterministic approach developed by the World Health Organization (WHO, 2019). The primary goal of this task has been to assess whether the pesticide residues present in an average Danish diet are acceptable from a food safety point of view.

The dietary exposure for each specific pesticide residue in each food was estimated by multiplying the mean residue level in the food by the mean amount of that food consumed. Residues were obtained from the Danish monitoring programme for the period 2018-2022 while consumption data were obtained from the Danish National Dietary Survey. The total dietary exposure to a given pesticide was estimated by summing the exposure for all food items containing residues of that pesticide. The exposure for each food item (*i*) is calculated by multiplying the average residue concentration (*Ci*) in the food item with the consumption (*Mi*) of the food item and divide it with the bodyweight (*bw*)

$$Exposure = \frac{C_1 * M_1 + C_2 * M_2 + C_3 * M_3 + \cdots + C_i * M_i}{bw}$$

A more detailed description of the exposure calculations can be found in Annex 6.1

Consumption data

For Danish consumers (4 to 75 years), the exposure estimates were based on consumption data obtained from the Danish National Survey of Diet and physical Activity (DANSDA) 2011- 2013 (Pedersen *et al*., 2015). The dataset covers the amount of food and beverages recorded for 7 consecutive days and collected from a representative sample of 3946 participants.

For children under 4 years of age, the data were obtained from the National dietary survey among young children aged 6-36 months. The data were collected over one year in 2014-2015. The dataset includes 386 children aged 12-23 months and 347 children aged 24-36 months. The diet of the children was recorded for 7 consecutive days using a web-based structured dietary program.

For both studies the participants can be characterized as nearly to representative of the Danish population. In this report, the following consumer groups will be used: Children 1-3 years, 4-6 years and 7-14 years; and adults, women and men 15-75 years.

The consumption data used for the exposure calculations for different consumer groups are presented in Appendix 7.3. It is not possible from the consumption data to distinguish between consumption of commodities of Danish and foreign origin. Therefore, the distribution between domestic and foreign commodities, as well as the distribution between the foreign commodities have been assumed to follow the distribution of samples taken in the monitoring programmes.

Residue data

The residue data included a total of 8894 samples. Of these, 956 organically grown samples were not included in the exposure calculation. Furthermore, samples containing the pesticides aldrin/dieldrin, DDT, heptachlor and lindane are not included in the calculations, because toxicological reference values cannot be set for the substances. Their findings are due to persistence in the environment, and they are included in the Stockholm Convention of prohibited substances (UNEP, 2001). DDT is still used in some developing countries for malaria control, because it is effective against mosquitoes that spread the disease.

A sample of wheat flour containing dichlorvos is also excluded, as it is not considered to be representative of wheat flour on the Danish market. Finally, samples containing chlorpyrifos, chlorpyrifos-methyl, dimethoate/omethoate, hexachlorobenzene, buprofezine, azinphos-ethyl and diflubenzuron are also not included in the calculations, as no toxicological reference values can be set for the substances, as genotoxicity cannot be ruled out. This means that there is no threshold value for which a given exposure can be compared.

An average content has been calculated for each combination of pesticide, commodity and origin (domestic or foreign). Only combinations of pesticide/commodity/origin with at least one detectable residue above the LOR were included in the exposure calculations.

Different models used for exposure calculation

Levels below the LOR

In many samples, no detectable amounts of pesticides were found, but this does not necessarily mean that the content is zero. The content may just be too low for detection with the available methods, or in other words, below the LOR. No internationally agreed method for estimation of the contribution from levels below the LOR exists. Different methods can be applied for non-detects, e.g. zero, ½LOR and LOR to indicate a lower bound, middle bound and upper bound for the exposure (ANSES 2011; EFSA 2010; EFSA 2018, EFSA 2023).

As described more comprehensively in Annex 6.1, three models have initially been used when addressing levels below the LOR in the calculation of the average content:

- In Model 0, the levels below the LOR have been set to zero.
- In Model 1, all the levels below the LOR have been replaced by ½LOR.
- In Model 2, the average content was calculated in the same way as in Model 1. But the result from the ½LOR-correction was limited to 25 times the result that has been calculated using Model 0. The background for the correction factor of 25 is described in Annex 6.2.

Processing factors

To obtain the most realistic picture of the exposure to pesticides it is also important to address processing factors. The pesticides included in the calculations were found in commodities such as citrus fruits, banana and watermelon for which processing factors for peel/pulp distribution are normally applied in a refined exposure calculation. The processing factors used in this report were the same as those used in the report for the previous monitoring periods, 1998-2003, 2004-2011, 2012-2017 (Poulsen *et al.*, 2004, Petersen *et al.* 2013, Jensen *et al.* 2019). For thiabendazole and the benomyl group a processing factor of 0.25 was used while a factor of 0.1 was used for all the other pesticides (see Appendix 7.6).

Risk assessment

The risk assessment of chronic dietary exposure for a single pesticide is performed by estimation of a Hazard Quotient (HQ), i.e. the estimated total dietary exposure divided by the toxicological reference value, ADI for that pesticide:

$$Hazard\ Quotient\ (HQ) = \frac{Exposure}{ADI}$$

The Acceptable Daily Intake (ADI) is an estimate of the amount of a substance in food or drinking water that can be consumed over a lifetime without presenting an appreciable risk to health (EFSA Glossary).

An HQ below 1 indicates that there is no appreciable risk of adverse health effects following dietary exposure to a specific pesticide, i.e. the total dietary exposure is lower than the ADI for that pesticide. In the present report, the HQ is expressed as a percentage instead of the ratio itself, i.e. an HQ below 100% indicates that there is no appreciable risk of adverse health effects following dietary exposure to a specific pesticide.

Different methods can be used for the risk assessment of cumulative chronic dietary exposure to multiple residues of pesticides in food, e.g. the determined approach and the probabilistic approach EFSA (2019a). In the present report, risk assessment of the cumulative chronic exposure to a mixture of pesticides has been performed by using the HI method as described by US EPA (1986a), Wilkinson *et al*. (2000), EFSA (2009), Reffstrup *et al*. (2010) and Kortenkamp *et al.* (2012), EFSA (2019), EFSA (2019a).

The HI method assumes that the effects following cumulative exposure can be predicted by the mathematical model of dose-addition (Wilkinson *et al*., 2000, EFSA, 2009) and is

$$Hazard\ Index\ (HI) = HQ_1 + HQ_2 + HQ_3 + \cdots + HQ_p$$

designed for risk assessment for substances which have the same kind of adverse health effect or recognized common mode of action, e.g. the organophosphorus pesticides or pesticides belonging to the triazole group. This has also been confirmed by EFSA in their 'Guidance on harmonised methodologies for human health, animal health and ecological risk assessment of combined exposure to multiple chemicals' (EFSA, 2019). The HI method based on dose-addition can also be used even when the substances have dissimilar mode of actions as described by Kortenkamp *et al*. (2012) and Reffstrup *et al*. (2010). Toxicologically relevant interactions (synergism and antagonism) are uncommon at low levels of exposure (EFSA, 2019). In the present report, the HI is the sum of the HQs for the individual pesticides detected in the food:

An HI below 1 indicates that there is no appreciable risk of adverse health effects following cumulative dietary exposure to all the detected pesticides. In the present report, the HI is expressed as a percentage.

As the HI method assumes the same kind of adverse health effect for all the detected pesticides, it is a relatively conservative (precautionary) approach for cumulative risk assessment.

The ADIs used for calculation of the HQs for the individual pesticides are predominantly those set by the EU Commission (COM) or EFSA. For pesticides where no ADI has been set by the EU, e.g. for substances not approved in the EU, the ADI set by the Joint FAO/WHO Meeting on Pesticide Residues (JMPR), when available, is used if considered adequate by the National Food Institute. The ADIs used in the present report are listed in Appendix 7.5.

Results and discussion of exposure calculations

Table 4 presents the average exposure in µg/kg bw/day for adults (15-75 years) and children (1-3 years, 4-6 years, 7-14 years) using different models in the calculations.

Table 4. Average exposure (µg/kg bw/day) for the consumer groups "Children" (1-3 years, 4-6 years, 7-14 years) and "Adults" (15-75 years) using different models

	Exposure		
	Model 0	Model 1	Model 2
	(µg/kg bw/day)		
Children 1-3 years	2.9	5.2	4.8
Children 4-6 years	2.6	5.3	4.8
Children 7-14 years	1.6	3.2	3.0
Adults 15-75 years	1.1	2.1	1.9

For adults the exposure is between 1.1 and 2.1 µg/kg bw/day. For the different children populations, the highest exposure is for children aged 4-6 years (5.3 µg/kg bw/day) with model 1. The exposure is nearly the same for children aged 1-3 years compared to children aged 4-6 years with all three models.

Table 5 presents the HI for adults (aged 15-75 years) and children (aged 1-3 years, 4-6 years and 7-14 years) using different assumptions in the calculations. For adults, the HI is between 3.0 and 11%. For the children's populations, the highest HI is for the age group 4-6 years with HI between 7.2 and 30%.

The average exposures in Table 4 and the HIs in Table 5 also reflect that using ½LOR in the calculations (Model 1) has an impact on the exposure, as well as on the HI. For all three calculation models the HI is well below 100%.

Table 5. HI for the consumer groups "Children" (1-3 years, 4-6 years and 7-14 years) and "Adults" (15-75 years) using different models.

	Hazard Index (HI)		
	Model 0	Model 1	Model 2
		%	
Children 1-3 years	8.6	29	23
Children 4-6 years	7.2	30	23
Children 7-14 years	4.5	18	14
Adults 15-75 years	3.0	11	8.4

The average exposure in µg/kg bw/day and the HI for the consumer groups 'children aged 4-6 years, adults, men, and women' using Model 2 are presented in Table 6. The results show that children had the highest exposure per kg bw followed by women, adults and men. The reason for the highest exposure for children is that they consume relatively more food per kg bodyweight compared to adults. Because women consume more fruit and vegetables than men (see Appendix 7.3) they have a higher average exposure than men. Since the exposure per kg bw is highest for children, the HI is also highest for children (23%) but still well below 100%.

Table 6. Average exposure (µg/kg bw/day) and HI for children 4-6 years, adults, men and women.

	Exposure (µg/kg bw/day)	Hazard Index %
Children, 4-6 years	4.8	23
Adults, 15-75 years	1.9	8.4
Men, 15-75 years	1.7	7.3
Women, 15-75 years	2.1	9.5

The commodities that contribute most to the exposure and Hazard Index

The contribution of each commodity to the exposure, as well as to the HI has been calculated for the consumer groups "Adults" and "Children 4-6 years" by using Model 2.

The exposure and HI for the 25 commodities that contribute most to the exposure for the consumer group "Adults" are presented in Table 7. These 25 commodities contribute 88% to the total exposure and 92% to the total HI. Compared to this, 25 commodities contributed 81% and 85% to the exposure and HI, respectively for the period 2012-2017 (Jensen *et. al*.). Of these, 18 of the commodities were the same in the two periods. As in the previous period apples contributed most and the contribution is nearly the same as in the previous period, i.e. from 23% of the total HI in the previous period to 20% in this period. Both consumption of a specific commodity as well as the toxicity of the pesticides found in the specific commodity can have a high impact on the HI.

Table 7. Exposure (µg/kg bw/day) and HI for the 25 commodities that contribute most to the HI for "Adults" by using Model 2

Commodity	Exposure (µg/kg bw/day)	Hazard Quotient %
Apples	0.34	1.7
Wheat flour, white	0.12	0.96
Tomatoes	0.14	0.65
Cucumbers	0.09	0.65
Lettuce etc.	0.22	0.50
Potatoes	0.16	0.37
Table grapes	0.07	0.36
Pears	0.06	0.34
Peppers, sweet	0.04	0.30
Wine, red	0.09	0.28
Strawberries	0.04	0.23
Carrots	0.02	0.20
Mushrooms	0.004	0.14
Rice	0.01	0.12
Nectarines	0.03	0.12
Avocados	0.01	0.11
Oranges	0.05	0.11
Peaches	0.02	0.11
Wheat, wholemeal	0.02	0.11
Wine, white/rosé	0.02	0.09
Mandarins, clementines	0.03	0.07
Pineapples	0.01	0.07
Rolled oat	0.03	0.07
Oranges, juice	0.05	0.06
Raisins	0.01	0.05
Sum	1.7	7.7
Total	1.9	8.4
% Total	88	92

Figure 8 shows the nine commodities that contribute most to the HI for "Adults", i.e. apples, wheat flour, tomatoes, cucumbers, lettuce, potatoes, table grapes, pears, sweet pepper together with the contributions from the rest of the commodities ("Others").

Figure 9 shows the nine commodities that contribute most to the exposure for "Adults", i.e. apples, lettuce, tomatoes, potatoes wheat flour, tomatoes, cucumbers, red wine, table grapes and pears, together with the contributions from the rest of the commodities ("Others").
As shown, the same eight commodities are in the 'top nine' regarding both HI and exposure, but with some differences in the relative contributions. Apples contribute the most to both HI and exposure, with a slightly higher contribution to HI compared to exposure. Sweet pepper is in the 'top nine' regarding HI while red wine is in the 'top nine' regarding exposure. These differences reflect the different types of pesticides (with different ADIs) that were found in the different commodities.

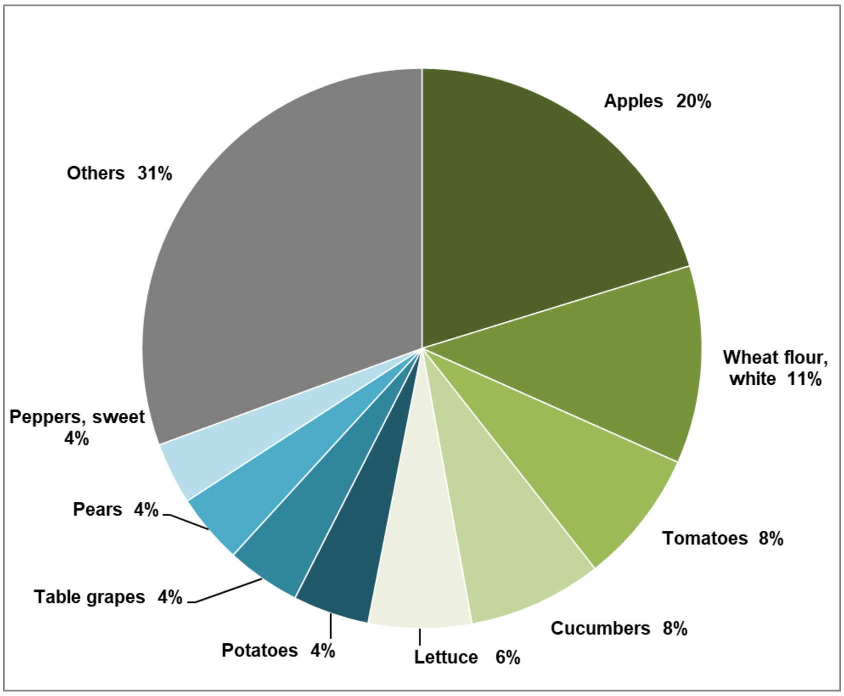


Figure 8. Relative contribution of **commodities** to **HI** for pesticide residues in the diet. Consumer group: Adults; estimated diet Hazard Index: 8.4%. "Other" represents 91 different commodities

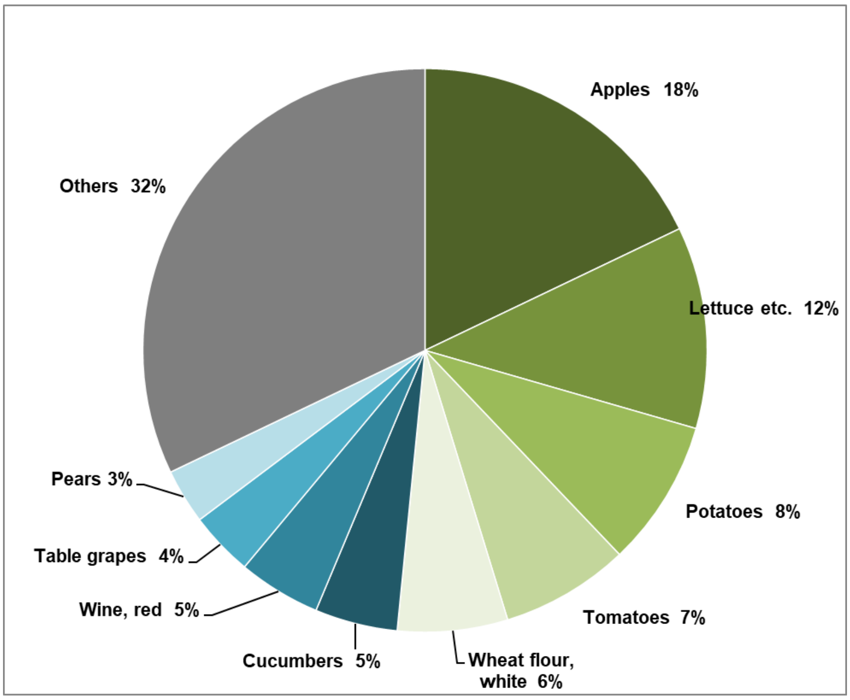


Figure 9. Relative contribution of commodities to total exposure to pesticide residues in the diet. Consumer group: Adults; estimated total exposure: 1.9 µg/kg bw/day. "Other" represents 91 different commodities.

Pesticides that contribute most to exposure and HI

The contribution of each pesticide to the exposure, as well as to the HI has been calculated for the consumer groups “Adults” and “Children 4-6 years” by using Model 2. Details are shown for individual pesticides in Appendix 7.7. For children aged 4-6 years, the HQs for the individual pesticides ranged from 0 to 2.4%; only three substances had an HQ > 1% (see Appendix 7.8). For adults, the HQs for the individual pesticides ranged from 0 to 0.8%; so non pesticides had an HQ > 1 % (see also Appendix 7.8). These HQs indicate that there is no appreciable risk of adverse health effects following dietary exposure to the individual pesticides.

The exposure and HQs for the 25 pesticides that had the highest HQ for the consumer group “Adults” are shown in Table 8. The sum of HQ constitutes about 73% of the total HI and about 34% of the total exposure. As shown in Table 8, there is a big difference in ordering the pesticides according to the exposure or the HQ, which is mainly due to differences in their ADI.

Table 8. Exposure (µg/kg bw/day) and HQ for the group "Adults" and the 25 pesticides that contribute most to the Hazard Index

Pesticide name	Exposure (µg/kg bw/day)	Hazard Quotient %
Dithiocarbamates	0.077	0.77
Phosmet	0.0056	0.55
Indoxacarb	0.018	0.36
Methiocarb	0.00089	0.36
Fluxapyroxad	0.016	0.33
Boscalid	0.13	0.33
Emamectin	0.0016	0.32
Lambda-cyhalothrin	0.0078	0.31
Fluopyram	0.035	0.29
Pirimiphos-methyl	0.010	0.25
Imazalil	0.058	0.23
Abamectin	0.0053	0.21
Difenoconazol	0.019	0.19
Chlorpropham	0.092	0.18
Chlormequat	0.072	0.18
Deltamethin	0.018	0.18
Metalaxyl	0.014	0.14
Cypermethrin	0.0063	0.13
Iprovalicarb	0.018	0.12
Prochloraz	0.011	0.12
Cyprodinil	0.033	0.11
Pyraclostrobin	0.033	0.11
Fipronil	0.0002	0.11
Acetamiprid	0.027	0.11
Prosulfocarb	0.0051	0.095
Sum[1)]	0.71	6.1
Total	1.9	8.4
% of total	37	73

[1)] Summing has been performed using more decimals on individual exposures/HQs than shown in the table.

Figure 10 shows the nine pesticides that contribute most to the HI for "Adults", i.e. dithiocarbamates, phosmet, indoxacarb, methiocarb, fluxapyroxad, boscalid, emamectin, fluopyram and pirimiphos-methyl, and, together with the contributions from the rest of the pesticides ("Others"). Figure 11 shows the nine pesticides that contribute most to the exposure, i.e. pyrimethanil, propamocarb, boscalid, fludioxonil, chlorpropham, glyphosate, dithiocarbamates chlormequat and imazalil together with the contributions from the rest of the pesticides ("Others"). Among the 'top nine' pesticides contributing most to both HI and exposure are dithiocarbamates and boscalid while the other seven 'top nine' pesticides were different in terms of contribution to exposure and HI. For example, dithiocarbamates contribute most to HI while pyrimethanil contributes most to the exposure. HQ for pyrimethanil is so low that this pesticide is not among the 25 pesticides with highest HQ values. The 'top nine' pesticides account for approximately half of the HI as well as exposure. The 'top nine' pesticides are approved in the EU except the dithiocarbamates (except ziram) and phosmet.

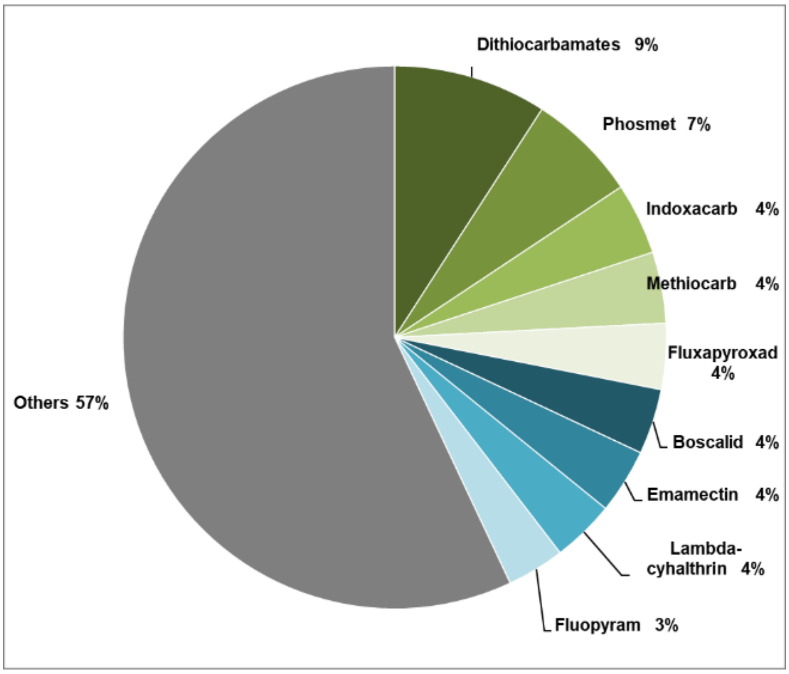


Figure 10. Relative contribution of **pesticides** to **HI** for pesticide residues in the diet. Consumer group: Adults; estimated Hazard Index: 8.4%. "Other" represents 169 different pesticides.

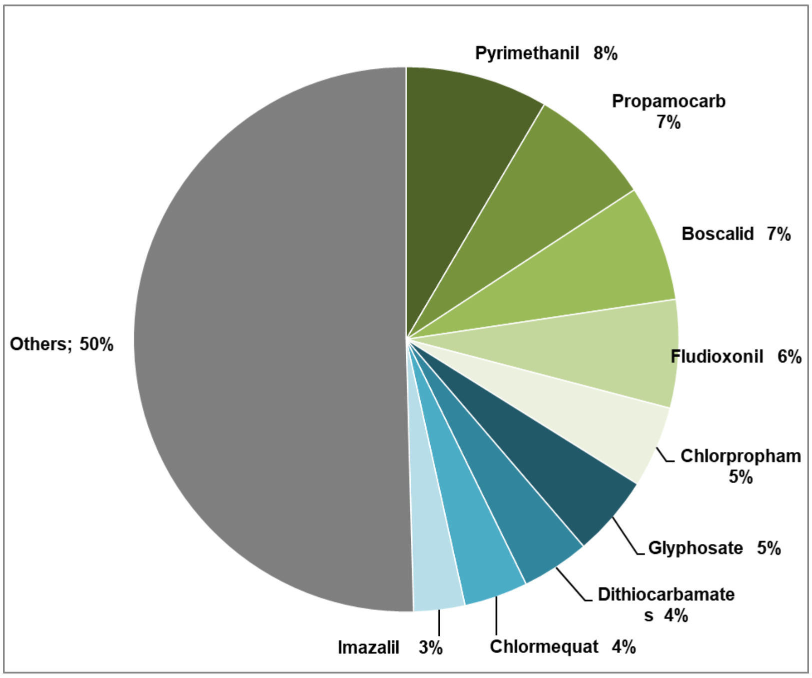


Figure 11. Relative contribution of **pesticides** to total **exposure** to pesticide residues in the diet. Consumer group: Adults; estimated total exposure: 1.9 µg/kg bw/day. "Other" represents 169 different pesticides.

Effect on exposure to pesticide residues due to origin of commodities

Some commodities originate only from foreign countries, e.g. oranges while other commodities are produced both in Denmark and in foreign countries, e.g. apples. Since Danish commodities in general have lower contents and lower frequencies of pesticide residues compared to commodities of foreign origin, the average exposure can be expected to be lower when Danish commodities are eaten whenever possible. As shown in Figure 2 and 3, fruit and vegetables from the EU and outside the EU have a higher frequency of pesticide residues compared to fruit and vegetables produced in Denmark. Therefore, the origin of the commodities can have an impact on the exposure to pesticides, as well as to the HI.

The exposure to pesticides has been calculated assuming that the consumers eat commodities of Danish origin whenever possible, e.g. only Danish apples and pears, but only oranges from non-domestic countries since oranges are not grown in Denmark. The results are shown in Table 9. As shown both exposure and HI decreased when Danish produced commodities are preferred compared to eating commodities of both Danish and foreign origin. For all consumer groups the HI was reduced with more than 50% when choosing Danish produced commodities whenever possible.

Effect on exposure for consumers having a high consumption of fruit and vegetables

In Denmark, the DVFA recommends that everyone above 10 years of age eat 600 g of fruit and vegetables per day. Calculations have been performed to investigate the impact of a high consumption of fruits and vegetables on the exposure to pesticides for the consumer groups, men and women. The calculations were performed by taking all the participants in the food dietary survey who consumed more than 600 grams of fruits and vegetables and then calculated the exposure for these people (high consumers). The results are shown in Table 9. Women had both a higher exposure and HI compared to men, which can be explained by the fact that women generally eat more fruit and vegetables than men.

Table 9. Exposure (μg/kg bw/day) and HI for average consumers and for consumers with high consumption of fruit and vegetables (above 600 g/day excluding potatoes) as well as consumers that choose Danish grown commodities whenever possible

Consumer group	Exposure (μg/kg bw/day)	Hazard Index %
Children 4-6 years average consumption	4.8	23
Children 4-6 years, domestic preferred	2.5	8.2
Adults, average consumption	1.9	8.4
Adults, average consumption, domestic preferred	1.0	3.2
Men, average consumption	1.7	7.3
Men, average consumption, domestic preferred	0.9	2.6
Men, high consumption	3.0	13
Men, high consumption, domestic preferred	1.6	5.2
Women, average consumption	2.1	9.5
Women, average consumption, domestic preferred	1.2	3.9
Women, high consumption	3.3	15
Women, high consumption, domestic preferred	1.9	6.7

Comparison of exposure and HI for the two periods 2012–2017 and 2018-2022

Model 2 for exposure calculation was the same for the two periods, but the number of pesticides, reporting limits, commodities with consumption data and ADIs were not quite the same for the two periods:

Pesticide profile: The present period included and detected a higher number of pesticides. Since 2011, the number of pesticides in the monitoring programme has increased from 275 pesticides to about 344 pesticides including metabolites.
Reporting limits: In some cases, reporting limits were different between the two periods. In most cases where a difference was seen the reporting limit was lower. This might influence the differences between the two periods.

Commodities with consumptions data: The present period included a lower number of commodities with consumption, about 127 commodities, while 136 commodities were included in the previous period. However, the 25 commodities that contributed most to the exposure were included in both periods.

ADIs: The ADIs setting was changed for some of the substances between the two periods. For the pesticides DDT, aldrin/dieldrin, heptachlor and lindan no toxicological values are set, and they are therefore excluded from the calculation. They are persistent in the environment and can therefore still be found in some crops as carrots and courgette. The pesticides chlorpyrifos/chlorpyrifos-methyl, dimethoate/omethoate, hexachlorbenzene, buprofezine, azinphos-ethyl and diflubenzurone are not included in the calculation for this period due the fact that genotoxicity could not be ruled out for the substances, so no reference values are set.

A*ge groups*: Estimation of the exposure was performed for different age groups for both periods. The calculations showed that the children aged 4-6 years had the highest HI compared to the other age groups in both periods. Table 10 shows the average exposure for men, women and children for both periods.

Table 10. Comparison of the mean exposure and HI for men, women and children using for the two periods 2012-2017 and 2018-2022.

	Children 4-6 years	Adults 15-75 years	Women 15-75 years	Men 15-75 years
	Exposure µg/kg bw/day			
Exposure µg/kg bw/day 2018-2022	4.8	1.9	2.1	1.7
Exposure µg/kg bw/day 2012-2017	4.8	1.8	2.8	1.6
	Hazard Index, %			
Hazard Index 2018-2022	23	8.4	9.5	7.3
Hazard Index 2012-2017	36	13	14	11

For all consumer groups the exposure was almost the same for the two periods while the HI decreased for all consumer groups. This could indicate that less toxic pesticides were detected in the present period compared to the previous period. However, as mentioned previously several pesticides were not included in the calculation for the period 2018-2022, because toxicological reference values could not be set.

It should be emphasized that the HI was well below 100% for all consumer groups in both periods.
Table 11 shows the 20 pesticides with the highest HQs in the period 2018-2022. Ten of the pesticides were also among the 20 pesticides with the highest HQs in the period 2012 - 2017.

Table 11. Hazard Quotients (HQ) for the 20 pesticides that contribute most to the HI for the consumer group "Adults", present vs. previous period (the EU Pesticide database).

Pesticide name	Hazard Quotient 2018-2022	Hazard Quotient 2012-2017	Status under Reg.1107/20059
Dithiocarbamates	0.77	1.1	One approved[1]
Phosmet	0.55		Not Approved
Indoxacarb	0.36	0.1	Not Approved
Methiocarb	0.36		Not approved
Fluxapyroxad	0.33		Approved
Boscalid	0.33	0.28	Approved
Emamectin	0.32		Approved
Lambda-cyhalothrin	0.31	0.16	Approved
Fluopyram	0.29		Approved
Pirimiphos-methyl	0.25	0.33	Approved
Imazalil	0.23	0.21	Approved
Abamectin	0.21		Approved
Difenoconazole	0.19	0.095	Approved
Chlorpropham	0.18	0.12	Not approved
Chlormequat	0.18	0.13	Approved
Deltamethin	0.18	0.094	Approved
Metalaxyl	0.14		Approved
Cypermethrin	0.13		Approved
Iprovalicarb	0.12		Approved
Prochloraz	0.12		Not Approved

1) Dithiocarbamates include a group of substances: maneb, mancozeb, metiram, propineb, thiram and ziram. Ziram is approved for uses in the EU.

Conclusion for exposure and risk assessment

The average exposure to pesticides for the group "Adults" was calculated to be 1.9 µg/kg/bw/day. Children have the highest average exposure per kg bw (4.8 µg/kg/bw/day) compared to woman and men (2.1 µg/kg/bw/day and 1.7 µg/kg/bw/day, respectively) since children eat more per kg bw. Women had a higher exposure compared to men since woman eat more fruit and vegetables compared to men. Consumers (men and women) eating more than 600 g of fruit and vegetables per day have an exposure that was higher than the average exposure, namely 3.3 µg/kg/bw/day compared to 2.1 µg/kg/bw/day for women and 3.0 µg/kg/bw/day compared to 1.7 µg/kg/bw/day for men. Choosing Danish produced commodities whenever possible compared to eating commodities of both Danish and foreign origin has an impact on the exposure as well as on the HI. For all consumer groups ("Adults", "Men", "Women", "Children ", "High consumers" (male or female)), the exposure was reduced about 42-45 %, while the HI was reduced with 55% - 64% when choosing Danish whenever possible.

The risk assessment of cumulative exposure was performed by the HI method. The HQ was calculated for each individual pesticide and then summed into the HI. The HQs for the individual pesticides range from 0 to 2.4% for children aged 4-6 years and from 0 to 0.8 % for adults with most of the HQs (98-100%) being below 1% (see Appendix 7.8), indicating that there is no appreciable risk of adverse health effects following exposure to the individual pesticides. The HI for "Adults" was 8.4%. The HI was highest for children (23%), compared to women (9.5%) and men (7.3%). For high consumers (men and women) eating more than 600 g fruit and vegetable per day, the HI increased from 9.5% to 15% for women, and from 7.3% to 13% for men. The HI of 8.4% for adults and 23% for children indicate that there is no appreciable risk of adverse health effects following cumulative exposure to all the pesticides detected in the present period. The HI method assumes the same kind of adverse health effect for all the detected pesticides and therefore, it is a relatively conservative (precautionary) approach for cumulative risk assessment; the method was used in this report to give an indication of whether there is an appreciable risk of adverse health effects following cumulative exposure or not. Furthermore, the HI method gives indications of the commodities and pesticides that contribute most to the exposure, as well as to the HI.
About 92% of HI and 88% of the exposure was accounted for by 25 different commodities. Regarding pesticides, the 'top nine' pesticides account for approximately half of the HI as well as of the exposure.

Summarising the results of the exposure and the HI calculations (based on ADI) it can be concluded that, according to our current knowledge and assessment principles it is assessed that there is no appreciable risk of adverse health effects following dietary exposure to the individual pesticides as well as to cumulative dietary exposure to all the pesticides detected and included in the calculations in the present period, even for high consumers (adults) who eat more than 600 g of fruit and vegetables each da

4.4 Pesticide load

To identify critical sources of pesticide exposure and quantify the load of these pesticides in food on consumer health risk, the term Pesticide Load (PL) has been established in previous work (Andersen *et al*., 2014; Andersen *et al*., 2016). The pesticide load (PL) occurring in food is defined as:

$$\text{PL (kg body weight/(kg food/day))} = \sum_{\substack{\text{pesticides}\\ \text{in food}}} \frac{\text{average concentration of pesticide (mg pesticide/kg food)}}{\text{ADI (mg pesticide/(kg body weight/day))}}$$

PL is calculated as a ratio comparing the average amount of pesticide residues in a food commodity with the acceptable daily intake (ADI) of every occurring pesticide.

If PL (the numerical value) is equal to the weight of a person, that person can consume 1 kg of a commodity without being presented to an appreciable risk of adverse health effects, provided that this commodity is the only source of pesticide residues. For example, if PL for a commodity is 60, an individual with a bodyweight of 60 kg can consume 1 kg of this commodity, and an individual with a bodyweight of 15 kg can consume 250 g of this commodity without being presented to an appreciable risk of adverse health effects. If PL is 30, an individual with a bodyweight of 60 kg can consume 2 kg of this commodity without being presented to an appreciable risk of adverse health effects.

As PL is a function of ADI, PL evaluates the chronic effects of pesticides. In contrast to exposure, PL is independent of the amount of food consumed and thus also of the consumer, e.g. adults and children of different ages. It is possible to make a simple ranking of both food commodities and pesticides occurring in the food samples according to their PL.

In this report PL is calculated on basis of data from the Danish pesticide monitoring program 2018-2022 (see Section 4.1) and ADI values (Appendix 7.5). Since pesticides are much less frequently detected in organic grown commodities, these are not included.

As the PL is based on the data obtained for this period (2018-2022), possible changes in the pesticide concentrations in the commodities will influence future PL values.

In Figure 12 food commodities are ranked according to their PL.

Only commodities with more than 10 samples are shown in the figure.

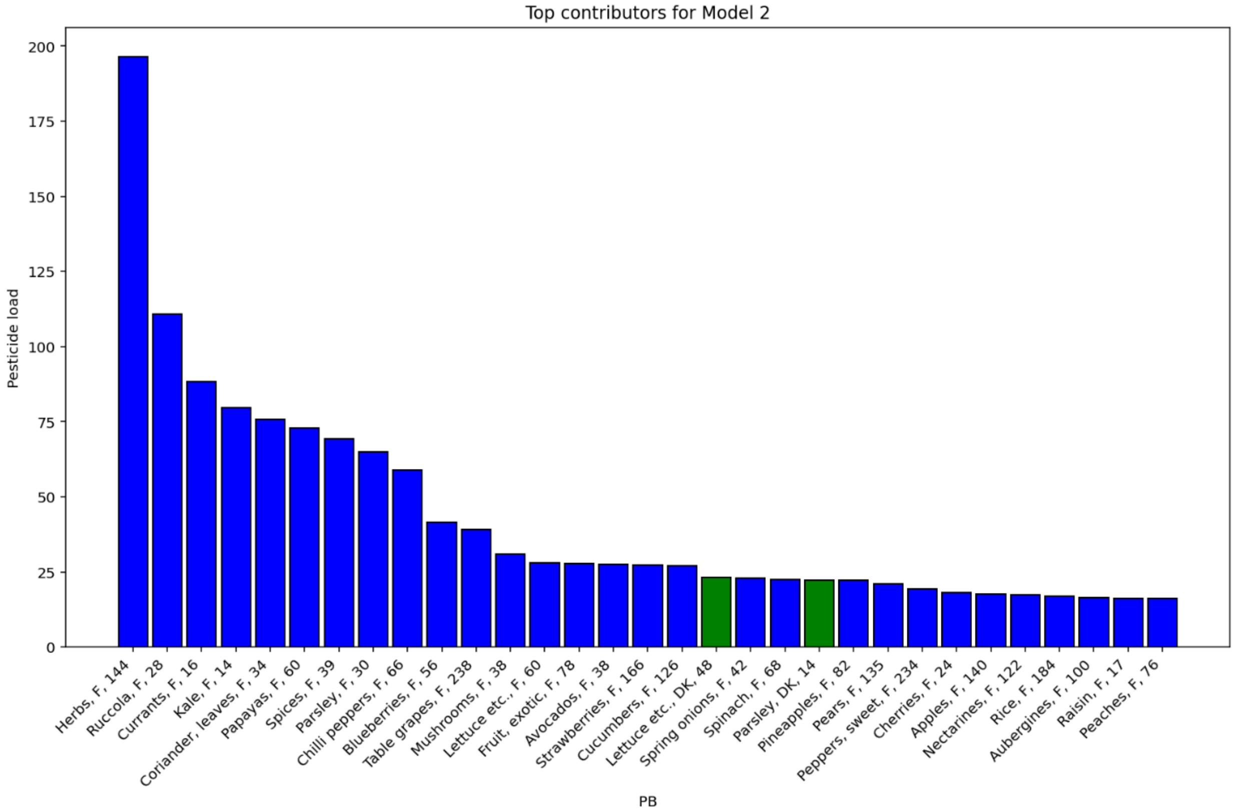


Figure 12. The pesticide load (PL) for food commodities from outside Denmark (all, shown in blue) and commodities from Denmark. Only food commodities with more than 10 samples are shown.

Herbs and rucola had very high PL (PL>100). However, these commodities are not consumed in high amounts. 24 commodities had PL between 15 and 60. Only two food commodities produced in Denmark had PL higher than 15 (lettuce and parsley).

Conclusion

Pesticide load (PL) serves as an essential instrument for assessing the quantification of pesticide residues in food products and their associated risks to consumer health. By utilizing PL, it becomes feasible to categorize food commodities and pesticides according to their pesticide load, allowing consumers to understand the implications of their food consumption on health risk.

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6 Annexes

6.1 Exposure calculations

Exposure to pesticide residues from food has been calculated from an estimate of the mean content in foods of pesticides included in the monitoring programmes combined with the estimated mean consumption of Danish consumer groups.

As previously explained, most pesticides and all important food items in the monitoring programmes have been included all six years (2018-2022). All pesticides found in the monitoring programmes were used in the exposure calculations, but the available data for recently included pesticides do not necessarily cover all years.

The monitoring programme primarily includes fresh fruit, vegetables and cereals. For some commodities, a part of the samples was sampled as frozen food. Results from these samples have been included in the results for fresh items.

In general, commodities were analysed with peels conforming to the definitions of maximum residue levels and thus, the measured content might include parts that are not normally consumed. For citrus fruits, bananas and melons, processing factors have been used for the reduction of pesticide contents due to peeling (see below). No other processing factors have been included for the reduction of residues that may occur during the preparation of the food, e.g. heating and washing, as this is the most conservative approach.
Organically grown food items have been excluded from the exposure calculations since the consumption of organically grown foods is expected to be very unevenly distributed between consumers. Since the organically grown samples have not been considered in eating habits, the estimations of the exposure calculations and HI is considered to be conservative.

Consumption data for children from 4 years and adults (15-75 years of age)

For children aged 4-6 years and adults 15-75 years, the data were collected as a part of DANSDA (DAnish National Survey of Diet and physical Activity) in 2011-2013 and is a subset of the data reported in “Danskernes kostvaner 2011-13” (Pedersen *et al*., 2015). The subset was chosen considering the most recently published data matching the period for chemical analysis best. The dataset covers exposure of food and beverages recorded for seven consecutive days collected from a representative sample of 3946 Danish consumers aged 4 to 75 years. The population was drawn as simple random sample from the civil population registration system. In comparison with census data from Statistics Denmark, the distribution of gender and age of the participants could be characterized as representative for the Danish population. The participants recorded their food intake for seven consecutive days in a pre-coded (semi-closed) food diary with answering categories for the most consumed foods and dishes in the Danish diet. The food diary was organized according to the typical Danish daily meal pattern. For food items not found in the pre-coded categories it was possible to note type and amount eaten. The amounts of food eaten were given in household measures and estimated from photos of different portion sizes. The information collected represents information about the current dietary exposure in the population. The Danish National Centre for Social Research carried out an interview on socioeconomic background and lifestyle, the instruction in registration of the dietary exposure as well as measured height, weight and waist circumference of participants.

Consumption data for children aged 1-3 years

For children under 4 years of age the data was from the National dietary survey among young children aged 6-36 months. Data were collected during one year in 2014-2015. Only children aged 12-36 months were included in the assessment, since children aged 6-11 months still mostly consume porridge, purée and milk. The dataset covers 386 children 12-23 months old and 347 children 24-36 months old. A random sample of the children were selected through the Danish Civil Registry and invited to participate in the study. In comparison with census data from Statistics Denmark, the distribution of gender and age of the children could be characterized as representative for the Danish population, however overrepresentation of mothers with medium long and long education occurs. The diet of the children was recorded for seven consecutive days using a web-based structured dietary program. The program was built to be like our pre-coded dietary booklets used in previous studies (Trolle *et al*., 2013). For food items not found in the pre-coded categories it was possible to note type and amount eaten. Description of the web-based structured dietary program is validated and described elsewhere (Biltoft-Jensen *et al*., 2013, 2014). The Danish National Centre for Social Research carried out an interview on socioeconomic background and lifestyle, the instruction in registration of the diet well as measured height and weight of participants.

Calculation of consumption data

For each participant consumption and the self-reported body weight were combined giving the consumption in g/kg bw/day (or mg/kg bw/day). For food the average was then calculated for the relevant consumer group, e.g. children 4-6 years of age.
Consumption data have been disintegrated into ingredients or raw commodities by recipes and then the commodities analysed have been connected to this food item. This means for example that bread, cakes, pasta, tomato ketchup etc. have been disintegrated and do not exist as individual foods. E.g. ketchup has been disintegrated into vinegar, onion, sugar, corn starch, tomato, apples, salt, and mustard. Ingredients like flour have not been disintegrated further.

Calculation of the mean content of pesticides

Data have been extracted from the data management system of the DVFA and transformed to the EFSA Standard Sample Description (Andersen, 2011), expanding the data on detected residues to include full information on the analytical profile for each sample, including the actual reporting limit for non-detected pesticides.

An average content has been calculated for each combination of pesticide, food item and origin if the number of analysed samples were five or more.

Also, samples exceeding the MRLs or residues from illegal uses have been included in the calculation of the average concentration. Some of these samples have been withdrawn from the market, but it is likely that other samples will have the same residues and therefore have been consumed. Samples containing the pesticides aldrin/dieldrin, DDT, heptachlor and lindane are not included in the calculations because no toxicological reference values can be set for the substances. They are all persistent organic pollutants (POPs), and they are forbidden to use, but can be due to their persistence still exists in the environment. A sample of wheat flour containing dichlorvos is also excluded, as it is not considered to be representative of wheat flour on the Danish market. Finally, samples containing chlorpyrifos, chlorpyrifos-methyl, dimethoate/omethoate, hexachlorobenzene, buprofezin, azinphos-ethyl and diflubenzuron are also not included in the calculations, as no toxicological reference values can be set for the substances, as genotoxicity cannot be ruled out.

Origin: As previously shown, the residue levels sometimes differ considerably between countries and grouping of samples with different origins can have a high impact on the exposure estimates. Calculations were performed separately for the two groups, domestic or foreign origin.

Non-detected residues: Even though a pesticide has been used in a commodity, not all samples of that commodity contain that pesticide. Due to technical and economical limitations in the monitoring programme, some samples will contain residues not detected by the analytical procedures either because the pesticides were not included in the programme or because the residue content was lower than the reporting limit used.

For pesticides where more than one substance is included in the residue definition the highest LOR for the individual substances have been used as LOR for the whole residue definition. Due to the low detection frequency of most pesticides, it is difficult to set up a model for handling of left censored data (EFSA, 2010). The approach used for estimating the contribution of these non-detected residues to the exposure can have a high impact on the result. For calculating the total exposure three different models have initially been used:

Model 0: Contents of pesticides below the LOR have been assumed to be zero
In this model, the calculated results might be underestimated, since non-detected residues are ignored.

Model 1: Contents of pesticides not detected have been assumed to be ½ LOR
If a pesticide has not been detected in a commodity/origin combination, the average content of the pesticide is assumed to be 0 (zero) in that commodity/origin combination.
If a pesticide has been detected in a commodity/origin combination, content of pesticides not detected in a sample of that commodity/origin combination (<LOR) have been assumed to be ½LOR.

In this model, the average content is over-estimated because of sometimes very small frequencies of detection, the contribution from the ½ LOR-correction can be very high (in extreme cases up to nearly 3000 times more than the result using Model 0, see previous report for the period 2004-2011 (Petersen *et al*. 2013).

Model 2: Contents of pesticides not detected have been assumed to be ½LOR with limitations and samples from all foreign countries are merged

The average content is calculated in the same way as in Model 1. But the result from the ½LOR correction is limited to 25 times the result that has been calculated using Model 0. In this model extreme corrections from the ½LOR-contribution are prevented. The background for this model in the is discussed in the report 2004-2011 (Petersen *et al*. 2013)
In this model all non-detect samples from foreign countries were corrected with ½LOR even though no residues were found in samples from this country, e.g. if a residue was found in an apple from the Netherlands, all apple samples with a content <LOR were corrected with a value of ½ LOR for all non-domestic samples. This approach is considered to be conservative.

Processing factors

Detailed information on the actual processing performed by consumers, as well as the effect on the residue levels is limited. EFSA and The Federal Institute for Risk Assessment in Germany has collected information on processing factors from different sources, e.g. EFSA reports and reports from JMPR. A processing factor is the ratio between the concentrations in the prepared food compared to the raw food. Exposure to citrus fruits, bananas and melons contributes significantly to the total exposure of pesticides. As these food items mostly are consumed after peeling, corrections have been made for this process (see Appendix 7.5). In general, data have shown that approximately 90% of residues in these food items are found in the peel, and only 10% remains in the edible part except for thiabendazole and pesticides from the benomyl group (carbendazim, thiophanat-methyl and benomyl) where about 25% remains in the edible parts (Appendix 7.5).

Exposure calculations

The contribution to exposure of pesticide residues for each combination of pesticide and food item and origin was calculated from the average content of that pesticide (see previous section) and the estimated average consumption of that food item for different consumer groups. Model 2 was used to calculate the total exposure and HI in Table 4, 5, 6, 7, 8 and in the figures 7, 8, 9, 10 as well as the exposure and HQ for the individual pesticides in Annex 7.8.

For each group of consumers, the individual contributions to the exposure have been summed for food items, pesticides and origin divided into samples of Danish or foreign origin. Since the food surveys did not include information on the origin of the foods eaten it has been assumed that the origin of food items consumed have the same distribution between domestic and foreign produce as the distribution between the samples analysed. However, in the case denoted “Domestic preferred” only the domestic products are consumed whenever available, e.g. the apples consumed are all of Danish origin while oranges are of non-domestic origin.

Not all foods included in the dietary survey were included in the exposure calculations since they were not analysed in the monitoring programme or no residues were found. The contribution to the exposure from foods not analysed is low either because they are consumed in only small amounts or because they are not expected to contain measurable amounts of pesticide residues. Many of the non-included foods were dairy products or processed foods, e.g. strong alcoholic drinks, yeast and chewing gum that were not expected to contain measurable pesticide residues.

Juices prepared from apple, lemon and tomato concentrates have not been analysed, but for these a concentration was calculated using a processing factor from the concentrations in tomato, lemon, and apple, respectively. Vegetable oils are prepared from raw agricultural commodities that could contain pesticides. Except for olive oil they were not analysed. Residues were found in olive oils in three samples and due to the processing, it is expected that vegetable oils will contain no or only a small amount of pesticides. On the other hand, not all foods analysed were included in the dietary survey e.g. due to that the number of samples was low (<6).

Uncertainties in the exposure calculations

Calculated results for the exposure to pesticides are subject to some uncertainty partly caused by differences between the real world and the calculating models used and partly because the data used in the modelling is sampled with some statistical uncertainty.

While the uncertainty of the residue contents in the single samples is well described, as determinations were performed by accredited methods (normally an analytical reproducibility standard deviation of 15-25% would be expected), the bias of the average content is not known due to the unknown contribution of non-detected residues and the origin of the food in the diet.

Calculations with different models for the compensation of non-detected residues reveal that differences can be quite high for some pesticides, while in other cases the compensation has a little influence. These effects are described in more detail in the reports from 1998-2004 and 2004-2011 (Petersen *et al*., 2013) and in Annex 6.2 the text from the previous report is reproduced.

As previously mentioned, the food consumption study did not provide information on the origin of the food consumed. The sample plans from the monitoring programmes normally target samples for the expected distribution between consumption of domestic and foreign grown items, but the actual distribution might differ from this estimate.

In Model 2 the foreign grown samples may include samples from different countries with different uses of pesticides, so the algorithm used for corrections overestimate the contribution from non-detected residues.

6.2 Correction for samples with non-detected residues

The influence of the correction of non-detect with a ½LOR has been evaluated in the previous reports (Poulsen *et al*., 2004, Petersen *et al*., 2013. For the present report even when using ½LOR for all the non-detects the HI is below 100% (1) (see). The HI has decreased for both children and adults compared to the period 2012-2017 and therefore, no new examples on the influence of replacing non-detects have been demonstrated and for further explanations please refer to the previous reports

7 Appendices

7.1 Pesticide residues analysed in fruit and vegetables, and cereals in 2012-2017 and their frequency of detection in conventionally grown crops

	Frugt og grøntsager		Korn. mel. gryn o.l.		Animalske produkter		Babymad		Honning	
Pesticid (restdefinition)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)
2.4-D (sum)	1272	0.01-0.02	547	0.01-0.02			7	0.01	150	0.01
2-Naphtoxyacetic acid	1177	0.01-0.2	547	0.01			7	0.01	150	0.01-0.02
2-phenylphenol (sum)	4506	0.01-0.2	754	0.02-0.2			25	0.01-0.1	126	0.02
4-Chlorphenoxyacetic acid	1177	0.01-0.05	547	0.01-0.1			7	0.01	150	0.01
AMPA	342	0.05	759	0.05-0.1			2	0.05		
Abamectin (sum)	5925	0.005-0.02	490	0.005-0.02			27	0.005-0.01	150	0.01-0.02
Acephat	5925	0.005-0.05	1017	0.005-0.03	1	0.01	36	0.005-0.01	150	0.01
Acetamiprid	5925	0.005-0.02	1017	0.005-0.02			34	0.005-0.01	150	0.01-0.04
Aclonifen	5787	0.005-0.02	1017	0.005-0.02	317	0.01-0.02	36	0.005-0.02	149	0.02
Acrinathrin			138	0.01			3	0.01		
Aldicarb (sum)	5925	0.01-0.05	1017	0.01-0.03	1	0.01	36	0.01	150	0.01
Aldrin+dieldrin (sum)	5787	0.005-0.1	1017	0.01-0.1	1234	0.01-0.02	36	0.01-0.1	149	0.02
Ametoctradin	4595	0.005-0.05	484	0.01-0.02			25	0.01		
Ametoctradin_sum					1	0.01	2	0.01		
Amidosulfuron	5925	0.005-0.02	490	0.005-0.02			27	0.005-0.01	150	0.01
Amidosulfuron (sum)					1	0.01	2	0.01		
Amitraz (sum)	5925	0.01-0.2	490	0.01-0.2	1	0.01	29	0.01-0.1	150	0.01-0.02
Atrazin	5925	0.005-0.02	1017	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01-0.02
Avermectin B1a					1	0.01	2	0.01		
Azadirachtin	3111	0.005-0.02	467	0.005-0.02			17	0.005-0.01		
Azamethiphos	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01
Azinphos-ethyl	5787	0.005-0.03	1017	0.005-0.03	1234	0.01-0.04	36	0.005-0.02	149	0.02
Azinphos-methyl	3076	0.005-0.02	994	0.005-0.02			24	0.005-0.01		
Azoxystrobin	5787	0.005-0.03	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Benalaxyl	5787	0.005-0.02	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Bendiocarb	5925	0.005-0.02	490	0.01-0.02	1	0.01	29	0.01	150	0.01-0.02
Bensulfuron-methyl	1177	0.01-0.02	22	0.01-0.02					150	0.01-0.02
Bentazon (sum)	3057	0.005-0.01	595	0.005-0.01			19	0.01		
Benzobicyclon	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01-0.02
Bifenthrin	5787	0.005-0.02	1017	0.005-0.02	1234	0.01	36	0.005-0.01	149	0.01
Biphenyl	3076	0.05-0.2	467	0.05-0.2			17	0.05-0.1		

Pesticid (restdefinition)	Frugt og grøntsager		Korn. mel. gryn o.l.		Animalske produkter		Babymad		Honning	
	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)
Bitertanol	5925	0.01-0.2	490	0.01-0.2	1	0.01	29	0.01-0.1	150	0.01
Bixafen	5294	0.005-0.02	879	0.005-0.02			31	0.005-0.01		
Bixafen (sum)					1	0.01	2	0.01		
Boscalid	5925	0.005-0.05	1017	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01-0.04
Bromid	65	3	12	3-5						
Bromophos	5787	0.005-0.02	1017	0.005-0.02	317	0.01-0.02	36	0.005-0.02	149	0.02
Bromophos-ethyl	5787	0.005-0.02	1017	0.005-0.02	317	0.01-0.02	36	0.005-0.02	149	0.02
Bromopropylat	5787	0.005-0.02	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Bromoxynil	1177	0.01-0.2	547	0.01-0.08			7	0.01	150	0.01-0.02
Bromuconazol (sum)	5787	0.005-0.02	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Bupirimat	5925	0.005-0.03	1017	0.01-0.03	1	0.01	36	0.01	81	0.01-0.04
Buprofezin	5925	0.005-0.02	1017	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01-0.04
Cadusafos	5925	0.005-0.03	490	0.005-0.03	1	0.01	29	0.005-0.02	150	0.01-0.02
Carbaryl	5925	0.01-0.1	1017	0.01-0.1	317	0.01	36	0.01-0.1	150	0.01-0.1
Carbendazim og benomyl	5925	0.005-0.03	1017	0.01-0.03	1	0.01	36	0.01	118	0.01
Carbofuran (sum)					111	0.01-0.04	2	0.01		
Carbofuran (sum)	5925	0.005-0.04	1017	0.005-0.05			34	0.005-0.04	150	0.01
Carbophenothion	5787	0.005-0.02	1017	0.005-0.02	317	0.01-0.02	36	0.005-0.02	149	0.02
Carboxin	2165	0.01	428	0.01-0.02	103	0.01-0.02	11	0.01	27	0.01-0.02
Carboxin (sum)	3760	0.005-0.02	589	0.005-0.02	214	0.01-0.02	25	0.005-0.02	123	0.02
Chlorantraniliprol	5925	0.005-0.02	1017	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01-0.02
Chlorbenzilat	3076	0.005-0.02	467	0.005-0.02			17	0.005-0.01		
Chlorbufam	3076	0.005-0.02	467	0.005-0.02			17	0.005-0.01		
Chlordan (cis+trans)					917	0.01				
Chlorfenapyr	5787	0.005-0.04	1017	0.01-0.04	317	0.01-0.04	36	0.01-0.04	149	0.01
Chlorfenson	5787	0.005-0.02	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Chlorfenvinphos	5787	0.005-0.02	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Chlormephos	5787	0.01-0.2	1017	0.01-0.2	317	0.01	36	0.01-0.1	149	0.01
Chlormequatchlorid	127	0.01	662	0.01			9	0.01		
Chlorothalonil	258	0.01-0.02	49	0.01-0.02						
Chlorpropham	5787	0.005-0.02	1017	0.005-0.02	301	0.01-0.02	36	0.005-0.02	149	0.02
Chlorpyrifos	5787	0.005-0.02	1017	0.005-0.02	1234	0.01	36	0.005-0.01	149	0.01
Chlorpyrifos-methyl	5787	0.005-0.02	263	0.01-0.05	1203	0.01-0.05	35	0.005-0.05	149	0.05
Chlorpyrifos-methyl (sum)			753	0.005-0.05			5	0.01		
Chlorthal-dimethyl	5787	0.005-0.02	1017	0.005-0.02	317	0.01-0.02	36	0.005-0.02	149	0.02
Cinidon-ethyl	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01-0.02
Cinosulfuron	5925	0.01-0.05	490	0.01-0.02	1	0.01	29	0.01-0.02	150	0.01
Clethodim (sum)	5925	0.005-0.05	1017	0.005-0.02	1	0.01	36	0.005-0.02	150	0.01
Clodinafop-propargyl	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01-0.02

Pesticid (restdefinition)	Frugt og grøntsager		Korn. mel. gryn o.l.		Animalske produkter		Babymad		Honning	
	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)
Clofentezin	5925	0.01-0.2	1017	0.01-0.2	1	0.01	34	0.01-0.05	150	0.01-0.02
Clomazone	5925	0.01-0.2	1017	0.01-0.2	1	0.01	36	0.01-0.1	150	0.01-0.02
Clopyralid (3.6 DCP)	1177	0.01-0.02	22	0.01						
Clothianidin	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01-0.02
Coumaphos	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01
Cyanazin	5925	0.005-0.02	1017	0.01-0.02	1	0.01	36	0.01	150	0.01-0.02
Cyantraniliprol	1109	0.005-0.02	166	0.01-0.02			9	0.005		
Cyazofamid	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01-0.02
Cycloxydim (sum)	5925	0.005-0.03	490	0.005-0.03	1	0.01	29	0.005-0.02	150	0.01
Cyflufenamid (sum)	1726	0.005-0.02	273	0.01-0.02			10	0.005		
Cyfluthrin	5787	0.005-0.02	1017	0.005-0.02	1234	0.01-0.02	36	0.005-0.02	149	0.02
Cyhalothrin. lambda-	5748	0.005-0.2	552	0.01-0.2	381	0.01	32	0.01-0.05	149	0.01
Cyhexatin (sum)	220	0.01								
Cymoxanil	5925	0.005-0.05	879	0.005-0.02	1	0.01	33	0.005-0.01	150	0.01-0.02
Cypermethrin	5787	0.005-0.04	1017	0.005-0.02	1234	0.01	36	0.005-0.01	149	0.01
Cyproconazol	5787	0.005-0.02	1017	0.005-0.02	317	0.01	36	0.005-0.02	149	0.01
Cyprodinil	5787	0.005-0.02	1017	0.005-0.02	294	0.01-0.02	34	0.005-0.01	149	0.02
Cyromazin	5925	0.005-0.2	1017	0.005-0.2	1	0.01	36	0.005-0.1	150	0.01
DDT (sum)	5787	0.01-0.02	1017	0.01-0.02	1234	0.01-0.02	36	0.01-0.02	149	0.02
DMST	1109	0.005-0.02	166	0.01-0.02			9	0.005		
DNOC	3057	0.01	595	0.01	1	0.01	19	0.01	150	0.01
Deltamethrin	5787	0.01-0.1	1017	0.01-0.1	1234	0.01	36	0.01-0.1	149	0.01
Demeton-S-methyl	2168	0.01	550	0.01	1	0.01	19	0.01		
Dialifos	5787	0.005-0.02	1017	0.005-0.02	317	0.01-0.02	36	0.005-0.02	149	0.02
Diazinon	5787	0.005-0.02	1017	0.005-0.02	1234	0.01-0.02	36	0.005-0.01	149	0.02
Dicamba			138	0.01			3	0.01		
Dichlofenthion	5787	0.005-0.02	1017	0.005-0.02	317	0.01-0.02	36	0.005-0.02	149	0.02
Dichlofluanid	5787	0.01-0.2	1017	0.01-0.2	317	0.01	36	0.01-0.1	149	0.01
Dichlorprop (sum)	1353	0.01-0.2	548	0.01-0.02			7	0.01	150	0.01-0.02
Dichlorvos	5925	0.005-0.2	1017	0.01-0.2	1	0.01	36	0.01-0.1	150	0.01-0.04
Diclofop (sum)	1465	0.005-0.02	213	0.01-0.02	73	0.01	10	0.005	32	0.01
Diclofop (sum)	4317	0.005-0.02	804	0.005-0.01	244	0.01	26	0.01	117	0.01
Dicloran	5875	0.005-0.02	1017	0.005-0.02	317	0.01-0.02	36	0.005-0.02	150	0.01-0.02
Dicofol (sum)	5787	0.005-0.02	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Dicrotophos	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01-0.02
Diethofencarb	5925	0.005-0.02	1017	0.01-0.02	1	0.01	36	0.01	150	0.01-0.02
Difenoconazol	5787	0.005-0.02	1017	0.005-0.05	317	0.01-0.05	36	0.005-0.01	149	0.05
Diflubenzuron	5925	0.005-0.02	1017	0.005-0.02	1	0.01	36	0.005-0.02	150	0.01-0.02
Diflufenican	5925	0.005-0.02	1017	0.005-0.02	1	0.01	36	0.005-0.02	150	0.01
Dimethoat	5925	0.005-0.02	1017	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01-0.04

Pesticid (restdefinition)	Frugt og grøntsager		Korn. mel. gryn o.l.		Animalske produkter		Babymad		Honning	
	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)
Dimethomorph	5925	0.005-0.05	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01-0.04
Dimoxystrobin	5925	0.005-0.02	490	0.005-0.02			27	0.005-0.01	150	0.01-0.02
Diniconazol	5787	0.005-0.02	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Dinocap (sum)	2959	0.02-0.1	63	0.02-0.1	1	0.02	12	0.02	150	0.02
Dinotefuran	5925	0.005-0.02	490	0.01-0.02	1	0.01	29	0.01	150	0.01-0.1
Dinoterb (sum)	3057	0.005-0.01	595	0.005-0.01	1	0.01	19	0.01	150	0.01
Dioxathion	5787	0.005-0.04	1017	0.005-0.04	317	0.01-0.04	36	0.005-0.04	149	0.01
Diphenylamin	5787	0.01-0.02	1017	0.01-0.05	317	0.01-0.05	36	0.01-0.05	149	0.05
Disulfoton (sum)	5787	0.01-0.2	1017	0.01-0.2	317	0.04-0.05	36	0.01-0.05	149	0.05
Ditalimfos	5787	0.01-0.2	1017	0.01-0.2	317	0.01-0.02	36	0.01-0.1	149	0.02
Dithiocarbamater	393	0.04-0.5	87	0.04						
Diuron (sum)	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01-0.02
Doramectin	3587	0.01-10	135	0.01-10	1	0.01	15	0.01-10	81	0.01
EPN	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01-0.02
EmamectinB1a	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01
EmamectinbenzoatB1b	3126	0.0005-0.002	467	0.0005-0.002			17	0.0005-0.001		
Endosulfan (sum)	5787	0.005-0.02	1017	0.01-0.05	1234	0.01-0.05	36	0.01-0.05	149	0.05
Endrin	5787	0.005-0.02	1017	0.005-0.02	317	0.01-0.02	36	0.005-0.02	149	0.02
Epoxiconazol	5925	0.005-0.02	1017	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01-0.02
Ethephon	131	0.05	256	0.05						
Ethiofencarb	5294	0.01-0.05	1017	0.01-0.05	1	0.01	36	0.01-0.05		
Ethion	5787	0.005-0.02	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Ethirimol	5925	0.005-0.02	879	0.005-0.02	1	0.01	33	0.005-0.01	182	0.01-0.04
Ethoprophos	5925	0.005-0.2	490	0.005-0.2	1	0.01	29	0.005-0.1	150	0.01-0.02
Etofenprox	5787	0.005-0.02	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Etoxazol	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01		
Etrimfos	5787	0.005-0.04	1017	0.005-0.04	317	0.02-0.04	36	0.005-0.04	149	0.02
Famoxadon	5925	0.005-0.02	490	0.005-0.02			29	0.005-0.01	150	0.01
Fenamidon	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01-0.02
Fenamiphos (sum)	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01
Fenarimol	5787	0.005-0.05	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Fenazaquin	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01-0.02
Fenbuconazol	2297	0.005-0.02	355	0.005-0.02	110	0.01	14	0.005-0.01	69	0.01
Fenbuconazol_udgået	3479	0.005-0.01	662	0.01	207	0.01	22	0.01	80	0.01
Fenbutatin-oxid	220	0.01								
Fenchlorphos (sum)	3076	0.005-0.02	856	0.005-0.02	38	0.01	21	0.005-0.01		
Fenhexamid	5925	0.005-0.02	1017	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01-0.04
Fenitrothion	5787	0.005-0.02	1017	0.005-0.02	317	0.01-0.02	36	0.005-0.02	149	0.02
Fenoxaprop	1177	0.01-0.02	22	0.01-0.02					150	0.01-0.02
Fenoxaprop-P-ethyl	5787	0.005-0.02	1017	0.005-0.05	317	0.01	36	0.005-0.05	149	0.01

Pesticid (restdefinition)	Frugt og grøntsager		Korn. mel. gryn o.l.		Animalske produkter		Babymad		Honning	
	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)
Fenoxycarb	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01-0.02
Fenpropathrin	5787	0.005-0.02	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Fenpropidin	5925	0.005-0.02	1017	0.01-0.02	1	0.01	36	0.01	150	0.01
Fenpropimorph	5787	0.005-0.02	1017	0.005-0.02	64	0.01	34	0.005-0.01		
Fenpropimorph (sum)					56	0.01			27	0.01
Fenpyrazamin	1726	0.005-0.02	273	0.01-0.02			10	0.005		
Fenpyroximat	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01
Fenson	5787	0.005-0.02	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Fenthion (sum)	5925	0.005-0.2	490	0.01-0.1	93	0.01-0.04	29	0.005-0.1	150	0.02
Fentin	220	0.01								
Fenvalerate og esfenvalerate (sum)	5787	0.005-0.02	1017	0.005-0.02	956	0.01-0.02	36	0.005-0.02	149	0.02
Fipronil (sum)	3057	0.005-0.01	68	0.005-0.01	149	0.003-0.01	12	0.01	150	0.01
Fipronil-sulfid	3057	0.005-0.01	68	0.005-0.01	149	0.003-0.01	12	0.01	150	0.01-0.02
Flamprop-M-isopropyl	5294	0.005-0.02	1017	0.005-0.02	1	0.01	36	0.005-0.01		
Flamprop-methyl	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01-0.1
Flonicamid (sum)	5925	0.005-0.02	879	0.005-0.02			31	0.005-0.01	150	0.01
Flonicamid (sum)					1	0.01	2	0.01		
Florasulam	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01
Fluazifop-P (sum)	5925	0.005-0.02	1017	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01-0.02
Flubendiamid	109	0.01	20	0.01						
Flucythrinat	5787	0.005-0.02	1017	0.005-0.02	317	0.01-0.02	36	0.005-0.02	149	0.02
Fludioxonil	5786	0.005-0.02	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Flufenacet (sum)	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01-0.02
Flufenoxuron	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01-0.02
Fluopicolid	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01
Fluopyram	5294	0.005-0.02	1017	0.005-0.02			34	0.005-0.01		
Fluopyram (sum)					1	0.01	2	0.01		
Fluoxastrobin	5925	0.005-0.02	1017	0.005-0.02						
Flupyrsulfuron-methyl	5925	0.01-0.05	490	0.01-0.05	1	0.01	29	0.01-0.05	150	0.01
Fluquinconazol	5787	0.005-0.02	1017	0.005-0.02	317	0.01-0.02	36	0.005-0.01	149	0.02
Fluroxypyr (sum)	1177	0.01-0.02	547	0.01-0.02			7	0.01	150	0.01-0.02
Flurtamon	5787	0.005-0.02	1017	0.005-0.02	317	0.01-0.02	36	0.005-0.02	149	0.02
Flusilazol	5787	0.005-0.02	1017	0.005-0.02	317	0.01-0.02	36	0.005-0.01	149	0.02
Flutolanil	5787	0.005-0.02	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Flutriafol	5925	0.005-0.02	1017	0.005-0.05	317	0.01	36	0.005-0.05	150	0.01-0.04
Fluvalinat. tau-	5787	0.005-0.02	1017	0.005-0.05	317	0.01-0.05	36	0.005-0.05	149	0.05
Fluxapyroxad	5294	0.005-0.02	1017	0.005-0.02	1	0.01	36	0.005-0.01		
Fonofos	5787	0.005-0.02	1017	0.005-0.02	317	0.01-0.02	36	0.005-0.02	149	0.02
Formetanat	3126	0.01-0.1	467	0.01-0.1			17	0.05-0.1		

Pesticid (restdefinition)	Frugt og grøntsager		Korn. mel. gryn o.l.		Animalske produkter		Babymad		Honning	
	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)
Fosetyl (sum)	124	0.05	256	0.05						
Fosthiazat	3076	0.01-0.02	467	0.01-0.02			17	0.01		
Fuberidazol	5787	0.005-0.02	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Glufosinat (sum)	131	0.03	256	0.03						
Glyphosat	342	0.05	759	0.05			2	0.05		
HCH (sum)	1281	0.01	263	0.01-0.02	244	0.01	9	0.01-0.02	23	0.02
HCH. alfa-	5787	0.005-0.02	1017	0.005-0.02	1234	0.01-0.02	36	0.005-0.02	149	0.02
HCH. beta-	5787	0.005-0.02	1017	0.005-0.02	1234	0.01	36	0.005-0.01	149	0.01
Haloxyfop (sum)	1177	0.01-0.02	22	0.01-0.02					150	0.01-0.02
Heptachlor (sum)	5787	0.005-0.1	1017	0.005-0.1	1234	0.01-0.05	36	0.005-0.1	149	0.05
Heptenophos	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01-0.02
Hexachlorbenzen	5787	0.01-0.2	1017	0.01-0.2	1234	0.01-0.05	36	0.01-0.05	149	0.05
Hexaconazol	5925	0.005-0.02	1017	0.005-0.05	317	0.01-0.05	36	0.005-0.01	150	0.01-0.05
Hexaflumuron	3057	0.005-0.01	68	0.005-0.01	1	0.01	12	0.01	150	0.01
Hexazinon	5925	0.005-0.02	1017	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01-0.02
Hexythiazox	4668	0.005-0.02	808	0.005-0.01	1	0.01			148	0.01-0.04
Hexythiazox							26	0.01		
Imazalil	5925	0.005-0.02	1017	0.005-0.05	1	0.01	34	0.005-0.05	150	0.01-0.04
Imidacloprid	5925	0.005-0.02	1017	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01-0.04
Indoxacarb	5925	0.005-0.02	490	0.01-0.02	55	0.005-0.01	29	0.01	150	0.01-0.04
Iodosulfuron-methyl	5925	0.005-0.02	1017	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01
Ioxynil	892	0.005-0.01	167	0.005-0.01	1	0.01	8	0.01		
Ioxynil (sum)	1534	0.01	428	0.01			11	0.01		
Iprodion	5787	0.01-0.05	1017	0.01-0.04			34	0.01-0.04		
Iprovalicarb	5925	0.01-0.1	1017	0.01-0.1	1	0.01	36	0.01-0.1	150	0.01-0.04
Isocarbophos	5875	0.005-0.02	879	0.005-0.02	1	0.01	33	0.005-0.01	150	0.01
Isofenphos	5787	0.005-0.02	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Isofenphos-methyl	5787	0.005-0.02	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Isoprocarb	5925	0.005-0.03	490	0.01-0.03	1	0.01	29	0.01	150	0.01-0.02
Isoprothiolan	5787	0.005-0.02	1017	0.005-0.02	39	0.01	36	0.005-0.02	149	0.01
Isoproturon	5925	0.01-0.02	1017	0.01-0.02	1	0.01	36	0.01	150	0.01-0.02
Isoxathion	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01-0.02
Ivermectin	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01
Jodfenphos	5787	0.005-0.02	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Kresoxim-methyl	5787	0.01-0.04	1017	0.01-0.05	65	0.04	34	0.01-0.04	149	0.05
Kresoxim-methyl (490M9)					94	0.04-0.05				
Lindan	5787	0.005-0.02	1017	0.005-0.02	1234	0.01	36	0.005-0.01	149	0.01
Linuron	5925	0.005-0.02	1017	0.01-0.02	1	0.01	36	0.01-0.02	150	0.01-0.04
Lufenuron	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01-0.04

Pesticid (restdefinition)	Frugt og grøntsager		Korn. mel. gryn o.l.		Animalske produkter		Babymad		Honning	
	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)
MCPA (sum)	1177	0.01-0.02	547	0.01-0.02			7	0.01	150	0.01-0.02
Malathion-Malaoxon (sum)	5925	0.005-0.02	1017	0.01-0.02	1	0.01	36	0.005-0.01	150	0.01
Mandipropamid	5925	0.005-0.1	1017	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01-0.04
Mecarbam	5925	0.01-0.05	490	0.01-0.05	1	0.01	29	0.01-0.05	150	0.01-0.1
Mecoprop (sum)	1177	0.01-0.02	547	0.01-0.02			7	0.01	150	0.01-0.02
Mepanipyrim	5925	0.01-0.02	490	0.01-0.02	1	0.01	29	0.01-0.02	150	0.01-0.02
Mepiquatchlorid	127	0.01	662	0.01			9	0.01		
Mesotrione	1177	0.01-0.04	22	0.01-0.02					150	0.01-0.04
Metaflumizon	3057	0.01	68	0.01	1	0.01	12	0.01	150	0.01
Metalaxyl	5925	0.01-0.02	1017	0.01-0.02	1	0.01	34	0.01	150	0.01-0.04
Metamitron	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01-0.02
Metconazol	5925	0.005-0.02	1017	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01-0.02
Methacrifos	5787	0.01-0.05	1017	0.01-0.05	317	0.01	36	0.01-0.05	149	0.01
Methamidophos	5925	0.005-0.2	1017	0.01-0.2	1	0.01	36	0.01	150	0.01-0.02
Methidathion	5787	0.005-0.02	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Methiocarb (sum)	5925	0.005-0.05	1017	0.005-0.02	1	0.01	36	0.005-0.02	150	0.01
Methomyl	5925	0.01-0.2	1017	0.01-0.2	1	0.05	36	0.01-0.1	150	0.05
Methoxychlor	5787	0.005-0.02	628	0.005-0.02	1196	0.01	32	0.005-0.01	149	0.01
Methoxyfenozid	3058	0.05-0.2	456	0.05-0.2			17	0.05-0.1		
Metolachlor (sum)	5925	0.01-0.05	879	0.01-0.02	1	0.01	33	0.01	150	0.01-0.02
Metrafenon	5925	0.005-0.1	879	0.005-0.02	1	0.01	33	0.005-0.01	150	0.01
Metribuzin	5925	0.005-0.02	1017	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01-0.02
Mevinphos (sum)	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01-0.02
Mirex	5787	0.005-0.02	490	0.005-0.02	279	0.01	29	0.005-0.01		
Molinat	5787	0.01-0.05	1017	0.01-0.05	317	0.01	36	0.01-0.05	149	0.01
Monocrotophos	5925	0.005-0.02	1017	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01-0.02
Monolinuron	5925	0.01-0.02	490	0.01-0.02	1	0.01	29	0.01	150	0.01-0.02
Moxidectin	3587	0.01-10	135	0.01-10	1	0.01	15	0.01-10	81	0.01
Myclobutanil	5776	0.005-0.04	1017	0.005-0.02			36	0.005-0.02		
Myclobutanil					120	0.01			149	0.01
Nicotine	3126	0.01-0.2	467	0.01-0.2			17	0.01-0.1		
Nitenpyram	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01-0.04
Nitrofen	5787	0.005-0.02	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Nuarimol	5925	0.005-0.02	1017	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01-0.02
Ofurace	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01-0.02
Omethoat	5925	0.005-0.02	1017	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01-0.04
Oxadiazon	5925	0.01-0.2	490	0.01-0.2	1	0.01	29	0.01-0.1	150	0.01-0.1
Oxadixyl	5925	0.005-0.02	1017	0.01-0.02	1	0.01	36	0.01	150	0.01-0.04
Oxamyl	5925	0.005-0.02	1017	0.005-0.02	1	0.01	36	0.005-0.02	150	0.01

Pesticid (restdefinition)	Frugt og grøntsager		Korn. mel. gryn o.l.		Animalske produkter		Babymad		Honning	
	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)
Oxycarboxin	2165	0.01	428	0.01			11	0.01	27	0.01-0.02
Oxydemeton-methyl (sum)	5925	0.005-0.02	1017	0.01-0.02	1	0.01	36	0.005-0.02	150	0.01
Paclobutrazol	5787	0.005-0.02	1017	0.005-0.02	317	0.01	36	0.005-0.02	149	0.01
Parathion	5787	0.01-0.05	1017	0.01-0.05	1234	0.04-0.05	36	0.01-0.05	149	0.05
Parathion-methyl (sum)	5925	0.005-0.05	1017	0.01-0.05	1234	0.01-0.05	36	0.01-0.05	150	0.02-0.05
Penconazol	5787	0.005-0.02	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Pencycuron	3598	0.005-0.01	524	0.01	1	0.01	19	0.01	150	0.01-0.04
Pencycuron (sum)	2327	0.005-0.02	355	0.005-0.02			14	0.005-0.01		
Pendimethalin	5925	0.01-0.2	1017	0.01-0.2	1	0.01	36	0.01-0.1	150	0.01-0.04
Pentachloranisol	5787	0.01-0.02	1017	0.01-0.05	317	0.01-0.05	36	0.01-0.05	149	0.05
Pentachlorbenzen	5787	0.01-0.2	1017	0.01-0.2	317	0.01	36	0.01-0.05	149	0.01
Pentachlorthioanisol	5787	0.005-0.02	1017	0.005-0.02	317	0.01-0.02	36	0.005-0.02	149	0.02
Permethrin (sum)	5787	0.005-0.03	1017	0.01-0.03	1234	0.01	36	0.01-0.02	149	0.01
Phenmedipham	5576	0.01-0.05	490	0.01-0.05	1	0.05	29	0.01-0.05	150	0.05-0.1
Phenthoat	5787	0.005-0.02	1017	0.005-0.05	317	0.01-0.05	36	0.005-0.05	149	0.05
Phenylphenol. ortho-	1281	0.01-0.05	263	0.02-0.05	317	0.02-0.05	11	0.01-0.05	23	0.02
Phorat (sum)	5925	0.005-0.2	1017	0.01-0.2	317	0.01-0.05	36	0.005-0.1	150	0.01
Phosalon	5787	0.005-0.02	1017	0.005-0.02	317	0.01-0.02	36	0.005-0.02	149	0.02
Phosmet					1	0.01	2	0.01		
Phosmet (sum)	5787	0.005-0.02	490	0.005-0.02			27	0.005-0.01		
Phosphamidon	5925	0.005-0.02	1017	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01-0.02
Phoxim	5925	0.005-0.03	490	0.005-0.03	1	0.01	29	0.005-0.01	150	0.01-0.02
Picolinafen	5787	0.005-0.02	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Picoxystrobin	5276	0.01-0.2	1017	0.01-0.2	1	0.01	36	0.01-0.1		
Piperonylbutoxid	5925	0.01-0.05	490	0.01-0.02	1	0.02	29	0.01-0.02	150	0.02-0.1
Pirimicarb	5925	0.01-0.02	1017	0.01-0.02	1	0.01	36	0.01	150	0.01-0.04
Pirimiphos-ethyl	5787	0.005-0.02	1017	0.005-0.02	317	0.01-0.02	36	0.005-0.02	149	0.02
Pirimiphos-methyl	5925	0.005-0.05	1017	0.005-0.02	1234	0.01-0.02	36	0.005-0.01	150	0.01-0.04
Prochloraz (sum)	5914	0.005-0.02	1017	0.005-0.02	279	0.01	36	0.005-0.02	150	0.01
Procymidon	5787	0.005-0.02	1017	0.005-0.02	317	0.01-0.04	36	0.005-0.01	149	0.01
Profenofos	5787	0.005-0.02	1017	0.01-0.02	1234	0.01-0.1	36	0.01	149	0.01
Propamocarb	5925	0.005-0.02	1017	0.005-0.02			34	0.005-0.02	150	0.01-0.04
Propanil	5787	0.005-0.02	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Propaquizafop	3587	0.005-0.01	135	0.01	1	0.01	15	0.01	81	0.01-0.02
Propargit	5787	0.005-0.05	1017	0.005-0.04	317	0.01-0.04	36	0.005-0.04	149	0.01
Propham	5787	0.01-0.05	1017	0.01-0.05	317	0.01	36	0.01-0.05	149	0.01
Propiconazol	5925	0.01-0.05	1017	0.01-0.05	1	0.01	36	0.01-0.05	150	0.01-0.04
Propoxur	5925	0.005-0.2	1017	0.01-0.2	1	0.01	36	0.005-0.1	150	0.01-0.1
Propyzamid	5787	0.005-0.02	1017	0.005-0.02	317	0.01-0.02	36	0.005-0.02	149	0.02

Pesticid (restdefinition)	Frugt og grøntsager		Korn. mel. gryn o.l.		Animalske produkter		Babymad		Honning	
	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)
Proquinazid	5925	0.005-0.05	1017	0.005-0.02			34	0.005-0.01	150	0.01-0.04
Prosulfocarb	5925	0.01-0.2	1017	0.01-0.2	1	0.01	36	0.01-0.1	150	0.01-0.04
Prosulfuron	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01
Prothioconazol	5925	0.005-0.02	1017	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01-0.1
Prothiofos	5787	0.005-0.02	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Pymetrozin	5925	0.005-0.02	1017	0.005-0.02			34	0.005-0.01	150	0.01
Pyraclofos	5925	0.01-0.05	490	0.01-0.05	1	0.01	29	0.01-0.05	150	0.01-0.02
Pyraclostrobin	5925	0.005-0.05	1017	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01-0.04
Pyrazophos	5925	0.005-0.02	490	0.005-0.02	918	0.01-0.04	29	0.005-0.01	150	0.01-0.02
Pyridaben	5925	0.005-0.02	1017	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01-0.04
Pyridalyl	1726	0.005-0.02	273	0.01-0.02			10	0.005		
Pyridaphenthion	5925	0.005-0.02	1017	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01-0.02
Pyrimethanil	5925	0.01-0.2	1017	0.01-0.2			34	0.01-0.05	150	0.01-0.04
Pyriproxyfen	5925	0.005-0.02	1017	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01-0.04
Quinalphos	5787	0.005-0.2	1017	0.005-0.2	317	0.01	36	0.005-0.1	149	0.01
Quinoxyfen	5787	0.005-0.02	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Quintozen (sum)	5787	0.005-0.02	1017	0.005-0.02	1234	0.01-0.02	36	0.005-0.02	149	0.02
Quizalofop (sum)	1995	0.005-0.02	676	0.005-0.01			11	0.01	150	0.01-0.02
Resmethrin					917	0.04				
Simazin	5925	0.01-0.02	490	0.01-0.02	1	0.01	29	0.01-0.02	150	0.01-0.02
Spinetoram (sum)	209	0.004-0.01								
Spinosad (sum)	5925	0.003-0.01	490	0.005-0.01	1	0.01	29	0.005-0.01	150	0.01
Spirodiclofen	3076	0.005-0.02	431	0.005-0.02			16	0.005-0.01		
Spiromesifen	5925	0.005-0.02	879	0.005-0.02	1	0.01	33	0.005-0.01	150	0.01
Spirotetramat (sum)	1354	0.005-0.01					10	0.01		
Spirotetramat (sum)	228	0.01								
Spiroxamin	5925	0.005-0.02	1017	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01-0.02
Sulfotep	5787	0.005-0.02	1017	0.005-0.05	317	0.01-0.05	36	0.005-0.05	149	0.05
Sulfoxaflor (sum)	80	0.005	14	0.005-0.01						
TEPP	5925	0.005-0.05	490	0.005-0.03	1	0.01	29	0.005-0.02	150	0.01-0.02
Tebuconazol	5787	0.005-0.02	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Tebufenozid	5925	0.005-0.02	1017	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01
Tebufenpyrad	5925	0.005-0.02	1017	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01-0.04
Tecnazen	5787	0.01-0.05	1017	0.01-0.02	317	0.01	36	0.01	149	0.01
Teflubenzuron	2969	0.005-0.01	595	0.005-0.01	317	0.01	19	0.01	149	0.01
Tefluthrin	3072	0.005-0.02	467	0.005-0.02			10	0.005		
Tefluthrin							7	0.01		
Tepraloxydim (sum)	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01
Terbuthylazin	5925	0.005-0.05	1017	0.005-0.02	1	0.01	36	0.005-0.02	150	0.01-0.02
Tetrachlorvinphos	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01-0.02

Pesticid (restdefinition)	Frugt og grøntsager		Korn. mel. gryn o.l.		Animalske produkter		Babymad		Honning	
	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)
Tetraconazol	5787	0.005-0.04	1017	0.01-0.04	317	0.01-0.04	36	0.01-0.04	149	0.01
Tetradifon	5787	0.005-0.02	1017	0.01-0.02	317	0.01	36	0.01	149	0.01
Tetrasul	5787	0.005-0.02	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Thiabendazol	5925	0.005-0.02	1017	0.005-0.02			34	0.005-0.01	150	0.01-0.04
Thiacloprid	5925	0.005-0.03	1017	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01-0.04
Thiamethoxam	5925	0.005-0.03	1017	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01-0.04
Thifensulfuron-methyl	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01
Thiobencarb	5925	0.01-0.2	490	0.01-0.2	1	0.01	29	0.01-0.1	150	0.01-0.02
Thiodicarb	5925	0.005-0.2	1017	0.01-0.2	1	0.01	36	0.01-0.02	150	0.01-0.02
Thiometon	5787	0.01-0.05	1017	0.01-0.05	317	0.01-0.05	36	0.01-0.05	149	0.05
Thiophanat-methyl	5925	0.005-0.02	1017	0.01-0.02			34	0.01		
Tolclofos-methyl	5925	0.01-0.03	490	0.01-0.03	1	0.01	29	0.01	150	0.01-0.04
Tolylfluanid (sum)	5787	0.01-0.2	1017	0.01-0.2			34	0.01-0.1	149	0.05
Tralkoxydim	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01
Triadimenol	5925	0.01-0.1	1017	0.01-0.1	1	0.01	36	0.01-0.1	150	0.01-0.04
Triadimenol-Triadimefon (sum)	5925	0.01-0.02	1017	0.01-0.02	1	0.01	36	0.01	150	0.01-0.04
Triallat	5925	0.005-0.2	1017	0.005-0.2	1	0.01	36	0.005-0.1	150	0.01-0.04
Triazophos	5925	0.005-0.02	1017	0.005-0.02	918	0.01-0.1	36	0.005-0.01	150	0.01-0.04
Tribenuron-methyl	5925	0.005-0.1	490	0.005-0.1	1	0.01	29	0.005-0.1	150	0.01
Trichlorfon	5925	0.005-0.02	490	0.01-0.02	1	0.02	29	0.01-0.02	150	0.02
Trichloronat	5787	0.005-0.02	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Tricyclazol	5925	0.005-0.05	1017	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01-0.02
Trifloxystrobin	5787	0.005-0.05	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Triflumizol					1	0.01	2	0.01		
Triflumizol (sum)	5925	0.005-0.02	490	0.005-0.02			27	0.005-0.01	150	0.01
Triflumuron	5925	0.005-0.02	1017	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01-0.02
Trifluralin	5787	0.005-0.02	1017	0.005-0.02	317	0.01-0.02	36	0.005-0.02	149	0.02
Triforin	2799	0.01	23	0.01	1	0.01	12	0.01	150	0.01
Triticonazol	5787	0.005-0.02	1017	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Vamidothion	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01-0.02
Vinclozolin	5787	0.005-0.02	1017	0.005-0.02	143	0.01	36	0.005-0.01	57	0.01
Zoxamid	5925	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01-0.02
dimoxystrobin (505M09)					1	0.01	2	0.01		
Thiobencarb	4595	0.01-0.2	490	0.01-0.2	1	0.01	29	0.01-0.1	150	0.01-0.02
Thiodicarb	4595	0.005-0.2	1037	0.01-0.2	1	0.01	36	0.01-0.02	150	0.01-0.02
Thiometon	4506	0.01-0.05	1037	0.01-0.05	317	0.01-0.05	36	0.01-0.05	149	0.05
Thiophanat-methyl	4595	0.005-0.02	1037	0.01-0.02			34	0.01		
Tolclofos-methyl	4595	0.01-0.03	490	0.01-0.03	1	0.01	29	0.01	150	0.01-0.04
Tolylfluanid	4506	0.01-0.2	1037	0.01-0.2			34	0.01-0.1	149	0.05
Triadimefon	4595	0.01-0.02	1037	0.01-0.02	1	0.01	36	0.01	150	0.01-0.04
Triallat	4595	0.005-0.2	1037	0.005-0.2	1	0.01	36	0.005-0.1	150	0.01-0.04
Triazophos	4595	0.005-0.02	1037	0.005-0.02	918	0.01-0.1	36	0.005-0.01	150	0.01-0.04
Tribenuron-methyl	4595	0.005-0.1	490	0.005-0.1	1	0.01	29	0.005-0.1	150	0.01
Trichlorfon	4595	0.005-0.02	490	0.01-0.02	1	0.02	29	0.01-0.02	150	0.02
Trichloronat	4506	0.005-0.02	1037	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Tricyclazol	4595	0.005-0.05	1037	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01-0.02
Trifloxystrobin	4506	0.005-0.05	1037	0.005-0.02			34	0.005-0.01	149	0.01
Trifloxystrobin (sum)					317	0.01	2	0.01		
Triflumizol					1	0.01	2	0.01		

Pesticid (restdefinition)	Frugt og grøntsager		Korn. mel. gryn o.l.		Animalske produkter		Babymad		Honning	
	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)	Antal prøver	Rapporterings-grænse (mg/kg)
Triflumizol (sum)	4595	0.005-0.02	490	0.005-0.02			27	0.005-0.01	150	0.01
Triflumuron	4595	0.005-0.02	1037	0.005-0.02	1	0.01	36	0.005-0.01	150	0.01-0.02
Trifluralin	4506	0.005-0.02	1037	0.005-0.02	317	0.01-0.02	36	0.005-0.02	149	0.02
Triforin	1469	0.01	23	0.01	1	0.01	12	0.01	150	0.01
Triticonazol	4506	0.005-0.02	1037	0.005-0.02	317	0.01	36	0.005-0.01	149	0.01
Vamidothion	4595	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01-0.02
Vinclozolin	4506	0.005-0.02	1037	0.005-0.02	143	0.01	36	0.005-0.01	57	0.01
Zoxamid	4595	0.005-0.02	490	0.005-0.02	1	0.01	29	0.005-0.01	150	0.01-0.02

7.2 Pesticides included in the monitoring and commodities where residues were found.

The left side of the table lists all pesticides found during the monitoring programmes 2018 – 2022 with representative sampling. The number of samples (of Danish respective foreign origin) analysed for each pesticide is listed together with the number of samples where residues of that pesticide were found (or not).

The right side of the table shows the commodities where the pesticide in question was found, the number of samples of the commodity that was analysed for the pesticide and the number of samples where the pesticide was found.

Commodities are listed alphabetically. The list includes all (conventional or organic) commodity groups.

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
2,4-D (sum of 2,4-D, its salts, its esters and its conjugates, expressed as 2,4-D)	F	1450	1437	13	Grapefruit	24	3
					Mandarins, clementines	28	5
					Oranges	57	5
2-phenylphenol	F	5232	5163	69	Grapefruit	53	8
					Mandarins, clementines	172	15
					Orange, juice	16	1
					Oranges	225	44
					Lemon	27	6
Abamectin (sum of avermectin B1a, avermectin B1b and delta-8,9 isomer of avermectin B1a, expressed as avermectin B1a)	DK	1897	1896	1	Tomatoes	99	1
Abamectin (sum of avermectin B1a, avermectin B1b and delta-8,9 isomer of avermectin B1a, expressed as avermectin B1a)	F	5144	5115	29	Aubergines	55	1
					Basil, fresh	7	4
					Beans with pods	77	1
					Chervil	1	1
					Chilli peppers	18	1
					Courgettes	64	1
					Lettuce	48	2
					Mandarins, clementines	172	1
					Mint leaves	10	1
					Papaya	31	2
					Peppers, sweet	228	3
					Strawberries	144	5
					Table grapes	216	3
					Tarragon	4	2

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
					Tomatoes	120	1
Acephate	F	5506	5501	5	Beans with pods	77	1
					Mango	35	1
					Passion fruit	11	1
					Peas with pods	40	1
					Rice, white	119	1
Acetamiprid	DK	2128	2117	11	Apples	114	7
					Cherries	3	1
					Honey	139	3
Acetamiprid	F	5506	5157	349	Ajowan seed, dried	1	1
					Apple puré	1	1
					Apples	135	43
					Apples, dried	1	1
					Apricots	29	4
					Aubergines	55	2
					Basil, fresh	7	3
					Beans with pods	77	1
					Beans, edamame, pealed	7	1
					Blackcurrants	2	1
					Blueberries	55	13
					Broad beans	4	1
					Broccoli	48	1
					Chards	1	1
					Cherries	18	10
					Chervil	1	1
					Chilli peppers	18	5
					Chives	5	4
					Coriander seed	3	1
					Coriander, fresh	13	5
					Courgettes	64	13
					Cucumbers	121	7
					Currant juice	1	1
					Currants, red	13	1
					Fennel seed	5	2
					Gooseberries	3	1
					Grapefruit	37	13
					Kale	8	1
					Lemon	30	2
					Lettuce	48	2
					Lettuce, baby leaves	1	1
					Lettuce, iceberg	46	4
					Limes	31	1

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
					Mandarins, clementines	172	14
					Marjoram, dried	1	1
					Melon	61	6
					Mint leaves	10	2
					Nectarine	122	24
					Oranges	225	18
					Oregano, dried	1	1
					Papaya	31	1
					Parsley	21	3
					Parsley, flat-leaved	7	1
					Peach	72	12
					Pear	124	14
					Pear, canned	1	1
					Peas with pods	40	2
					Peppers, sweet	228	16
					Pistachios	1	1
					Plum	59	1
					Pomegranate	30	3
					Pomelo	35	19
					Quinces	4	3
					Raisin	15	2
					Raspberries	29	2
					Rice, white	119	2
					Rosemary	3	2
					Ruccola	20	9
					Soyabeans (fresh with pods)	12	1
					Spinach	43	4
					Strawberries	144	2
					Table grapes	216	16
					Tarragon	4	2
					Tea	97	3
					Thyme	6	2
					Tomatoes	120	9
					Watermelon	21	1
Aclonifen	DK	2360	2349	11	Carrots	141	3
					Celeriac	6	2
					Parsley	12	3
					Parsnip	14	2
					Peas with pods	44	1
Aclonifen	F	5232	5227	5	Carrots	82	2
					Spinach	43	2
					Tarragon	4	1

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
Aldrin and Dieldrin (Aldrin and dieldrin combined expressed as dieldrin)	DK	3051	3050	1	Courgettes	15	1
Aldrin and Dieldrin (Aldrin and dieldrin combined expressed as dieldrin)	F	5459	5456	3	Carrots	82	1
					Courgettes	64	2
Ametoctradin	F	4045	4010	35	Cucumbers	95	10
				0	Leek	12	1
					Lettuce	39	1
					Raisin	14	1
					Spring onions	23	2
					Table grapes	170	16
					Tea, herbal	2	1
					Tomatoes	94	2
					Watermelon	15	1
Amidosulfuron	F	5144	5143	1	Coriander, fresh	13	1
Azadirachtin	DK	1068	1065	3	Basil, fresh	3	1
					Lettuce, iceberg	12	1
					Peppers, sweet	1	1
Azadirachtin	F	2807	2797	10	Broccoli (organic)	5	1
					Courgettes	48	1
					Lettuce (organic)	5	1
					Peppers, sweet	125	1
					Peppers, sweet (organic)	4	1
					Strawberries	79	3
					Tomatoes	58	1
					Tomatoes (organic)	4	1
Azinphos-ethyl	F	5459	5456	3	Grapefruit	37	3
Azinphos-methyl	F	3015	3014	1	Tomatoes	57	1
Azoxystrobin	DK	2360	2324	36	Broccoli	29	2
					Carrots	141	3
					Celery	9	1
					Cucumbers	93	1
					Currants, black	1	1
					Kale	8	2
					Lettuce	45	1
					Onions	58	1
					Peas with pods	44	2
					Peas without pods	7	1
					Strawberries	168	20
					Tomatoes	99	1

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
Azoxystrobin	F	5232	4902	330	Apricots	29	1
					Avocados	37	1
					Bananas	104	86
					Basil, fresh	7	1
					Beans with pods	77	11
					Blackberries	15	2
					Blueberries	55	3
					Broccoli	48	8
					Broccoli (organic)	9	1
					Brussels sprouts	20	4
					Butternut squash	5	1
					Carambola	6	1
					Carrots	82	13
					Carrots, grated	1	1
					Celeriac	8	2
					Celery	21	9
					Chervil	1	1
					Chilli peppers	18	1
					Chilli powder	1	1
					Chives	4	2
					Coriander seed	3	2
					Coriander, fresh	13	3
					Courgettes	64	3
					Cranberry, dried	1	1
					Cucumbers	121	4
					Dill	2	1
					Grapefruit	37	5
					Kale	8	2
					Lemon	30	4
					Lentils, dry	35	1
					Lettuce	48	3
					Limes	31	7
					Mandarins, clementines	172	3
					Mango	35	7
					Melon	61	4
					Mint leaves	10	4
					Oranges	225	5
					Oregano, fresh	2	2
					Papaya	31	5
					Parsley	21	7
					Parsley, dried	2	1
					Parsley, flat-leaved	7	4

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
					Parsnip	11	2
					Passion fruit	11	6
					Pear	124	1
					Peas with pods	39	9
					Peas without pods	18	1
					Peppers, sweet	228	15
					Pickled Jalapeno	1	1
					Plum	59	4
					Pomelo	35	1
					Potato	80	5
					Raisin	15	3
					Raspberries	29	7
					Rice, parboiled	10	2
					Rice, white	119	3
					Rosemary	3	2
					Rye flour	1	1
					Soyabeans (fresh with pods)	12	1
					Spring onions	23	1
					Strawberries	144	13
					Table grapes	216	9
					Tarragon	4	4
					Thyme	6	2
					Tomatoes	119	7
					Watermelon	21	1
					Wheat kernels	36	1
Bifenthrin (sum of isomers)	F	5459	5406	53	Bananas	104	33
					Basil, fresh	7	1
					Carambola	6	1
					Currants, red	13	1
					Fennel seed	5	2
					Limes	31	6
					Papaya	31	7
					Soyabeans (fresh with pods)	12	1
					Table grapes	216	1
Boscalid	DK	2131	1885	246	Apples	114	41
					Beetroot leaves	2	2
					Blueberries	4	2
					Brussels sprouts	5	4
					Carrots	141	13
					Chards	2	2
					Cherries	3	2
					Currants, red	1	1

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
					Honey	139	2
					Kale	8	1
					Lettuce	45	12
					Lettuce, baby leaves	1	1
					Lettuce, baby leaves (organic)	1	1
					Lettuce, iceberg	21	1
					Oat kernels	31	1
					Onions	58	2
					Pak choi, red	2	2
					Parsley	12	1
					Parsley root	8	4
					Parsnip	14	2
					Pear	94	21
					Peas with pods	44	5
					Plum	11	3
					Ruccola	9	3
					Spinach	15	5
					Strawberries	168	77
					Wheat bran	1	1
					Wheat kernels	106	31
					Wheat, wholemeal	18	3
Boscalid	F	5506	5027	479	Apples	135	23
					Apples, dried	1	1
					Apricots	29	4
					Aubergines	55	1
					Basil, fresh	7	1
					Beans with pods	77	16
					Blackberries	15	8
					Blueberries	55	22
					Broccoli	48	4
					Brussels sprouts	20	5
					Carrots	82	14
					Celeriac	8	1
					Chards	1	1
					Cherries	18	4
					Chinese radish	8	1
					Coriander, fresh	13	2
					Courgettes	64	3
					Cucumbers	121	5
					Currants, red	13	2
					Head cabbage, red	2	1
					Kale	8	1

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
					Leek	12	1
					Lemon	30	2
					Lettuce	48	7
					Mandarins, clementines	172	1
					Marjoram, dried	1	1
					Melon	61	4
					Nectarine	122	37
					Oranges	225	1
					Oregano, fresh	2	1
					Pak choi	2	1
					Parsley	21	4
					Parsnip	11	3
					Passion fruit	11	1
					Peach	72	10
					Pear	124	43
					Peas with pods	40	4
					Peas without pods	18	5
					Peppers, sweet	228	13
					Perilla leaves	1	1
					Plum	59	13
					Pomegranate	30	1
					Potato	80	1
					Quinces	4	1
					Radish	15	1
					Raisin	15	4
					Raspberries	29	17
					Ruccola	20	6
					Savoy cabbage	1	1
					Scorzonera	2	1
					Spinach	43	6
					Spring onions	23	3
					Strawberries	144	43
					Table grapes	216	73
					Tea, fruit	5	1
					Tea, herbal	2	1
					Tomatoes	120	18
					Wine, red	150	21
					Wine, white	51	7
Bromide ion	F	70	65	5	Peppers, sweet	15	1
					Rice, white	9	4
Bupirimate	F	5502	5483	19	Apples	135	4
					Courgettes	64	1

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
					Gooseberries	3	2
					Melon	61	1
					Nectarine	122	1
					Peach	72	1
					Peppers, sweet	228	2
					Strawberries	144	6
Buprofezin	F	5506	5472	34	Bananas	104	6
					Chilli peppers	18	1
					Grapefruit	37	6
					Kiwi	123	2
					Mandarins, clementines	172	2
					Oranges	225	2
					Peppers, sweet	228	4
					Pomelo	35	1
					Rice, white	119	8
					Table grapes	216	1
					Wine, red	150	1
					Gooseberries	3	2
					Melon	61	1
					Nectarine	122	1
					Peach	72	1
					Peppers, sweet	228	2
					Strawberries	144	6
Buprofezin	F	5506	5472	34	Bananas	104	6
					Chilli peppers	18	1
					Grapefruit	37	6
					Kiwi	123	2
					Mandarins, clementines	172	2
					Oranges	225	2
					Peppers, sweet	228	4
					Pomelo	35	1
					Rice, white	119	8
					Table grapes	216	1
					Wine, red	150	1
Cadusafos	F	5144	5143	1	Rosemary	3	1
Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)	DK	2101	2099	2	Apples	114	1
					Plum	11	1
Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)	F	5504	5423	81	Apples	135	3
					Apples, dried	1	1

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
					Apricots	29	1
					Apricots, dried	2	1
					Beans with pods	77	1
					Blackcurrants	2	1
					Butternut squash	5	1
					Cherries	1	1
					Cherries	18	3
					Chives	5	2
					Currants, red	13	2
					Fennel seed	5	1
					Figs, fresh	11	1
					Gooseberries	3	1
					Grapefruit	37	2
					Lemon	30	2
					Lentils, dry	35	1
					Limes	31	1
					Mandarins, clementines	172	2
					Marjoram, dried	1	1
					Nectarine	122	3
					Oranges	225	15
					Oregano, dried	1	1
					Oregano, fresh	2	1
					Papaya	31	6
					Peach	72	1
					Pear	124	1
					Pear, canned	1	1
					Peas with pods	40	2
					Peas without pods	18	1
					Quinces	4	2
					Raisin	15	2
					Raspberries	29	2
					Rice, white	119	2
					Strawberries	144	6
					Picled plum	1	1
					Table grapes	216	1
					Tea	97	1
					Wine, red	150	3
Chlorantraniliprole (DPX E-2Y45)	F	5506	5373	133	Apples	135	16
					Aubergines	55	4
					Basil, fresh	7	1
					Beans with pods	77	10

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
					Beetroot leaves	1	1
					Blueberries	55	3
					Broccoli	48	1
					Cauliflower	39	1
					Celery	21	4
					Chards	1	1
					Chilli peppers	18	2
					Chilli powder	1	1
					Chives	5	2
					Coriander, fresh	13	2
					Cucumbers	121	2
					Kale	8	1
					Lettuce	48	4
					Mandarins, clementines	172	1
					Melon	61	4
					Mint leaves	10	3
					Nectarine	122	6
					Oranges	225	3
					Paprika	1	1
					Parsley	21	4
					Parsley, flat-leaved	7	1
					Peach	72	3
					Pear	124	13
					Peppers, sweet	228	14
					Plum	59	1
					Quinces	4	1
					Ruccola	20	5
					Soyabeans (fresh with pods)	12	1
					Spinach	43	4
					Sweet basil	1	1
					Table grapes	216	4
					Tomatoes	120	6
					Wine, red	150	1
Chlorfenapyr	F	5232	5228	4	Chilli peppers	18	1
					Oranges	225	1
					Passion fruit	11	1
					Pear	124	1
Chlormequat (sum of chlormequat and its salts, expressed as chlormequat-chloride)	DK	402	383	19	Breakfast cereals	1	1

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
					Durum flour	4	1
					Mushroom (Agaricus bisporus)	2	2
					Oat kernels	25	3
					Rolled oat	19	1
					Rye and wheat flour, bolted	1	1
					Rye groats	6	1
					Spelt, flour	3	2
					Wheat flour	23	2
					Wheat kernels	83	5
Chlormequat (sum of chlormequat and its salts, expressed as chlormequat-chloride)	F	436	311	125	Barley kernels	3	2
					Breakfast cereals	5	5
					Durum flour	5	2
					Mushroom, brown beech	3	2
					Müsli	3	3
					Oat kernels (organic)	10	1
					Pasta, dried	12	3
					Pear	8	2
					Rolled oat	26	9
					Rolled oat (organic)	13	3
					Rye and wheat flour, bolted	1	1
					Rye flour, wholemeal	5	2
					Rye groats	8	2
					Spelt, flour	33	31
					Spelt, grain	4	4
					Table grapes	25	2
					Wheat bran	2	2
					Wheat flour	51	43
					Wheat kernels	35	4
					Wheat, flakes malted	1	1
					Wheat, wholemeal	7	1
Chlorpropham	DK	2345	2336	9	Potato	125	8
					Potato (organic)	12	1
Chlorpropham	F	5231	5200	31	Broccoli	48	1
					Celeriac	8	1
					Oranges	225	1
					Potato	80	27
					Potato, new	11	1
Chlorpyrifos	F	5459	5366	93	Apples	135	1
					Bananas	104	5

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
					Beans with pods	77	1
					Beans, black	3	1
					Beans, dry	1	1
					Beans, mung (organic)	2	1
					Beans, white	8	1
					Blood oranges	3	1
					Carrots	82	1
					Common mushroom	1	1
					Coriander seed	3	1
					Fennel seed	5	2
					Ginger	5	1
					Grapefruit	37	10
					Lemon	30	1
					Lentils, dry	35	1
					Limes	31	3
					Mandarins, clementines	172	11
					Marjoram, dried	1	1
					Olive oil, extra-virgin	20	1
					Oranges	225	22
					Oregano, dried	1	1
					Pangasius	10	1
					Pear	124	1
					Peas with pods	39	1
					Plum	59	1
					Pomelo	35	12
					Quinces	4	1
					Raspberries	29	1
					Strawberries	144	1
					Table grapes	216	1
					Wheat groats	1	1
					Wheat kernels	36	2
Chlorpyrifos-methyl	F	4955	4930	25	Grapefruit	37	2
					Kiwi	123	2
					Lemon	30	1
					Mandarins, clementines	172	6
					Oranges	225	10
					Peppers, sweet	228	3
					Wheat flour	16	1
Cinidon-ethyl (sum of cinidon ethyl and its E-isomer)	F	5144	5143	1	Beans with pods	77	1
Clofentezine	F	5503	5502	1	Strawberries	144	1

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
Clopyralid	F	1010	1008	2	Peppers, sweet	61	1
					Spinach	22	1
Clothianidin	DK	1905	1902	3	Kale	8	1
					Lettuce	45	1
					Tea	2	1
Clothianidin	F	5151	5129	22	Aubergines	55	1
					Chilli peppers	18	1
					Chives	5	3
					Coriander, fresh	13	2
					Cumin seed	2	1
					Ginger	5	1
					Mango	35	1
					Pear	124	6
					Pomelo	35	1
					Rice, white	70	1
					Table grapes	216	3
					Tea	97	1
Cyantraniliprole	F	931	923	8	Cherries	7	1
					Oranges	37	1
					Peppers, sweet	31	6
Cyazofamid	F	5144	5121	23	Cucumbers	121	13
					Table grapes	216	7
					Tomatoes	120	3
Cyflufenamid (sum of cyflufenamid (Z-isomer) and its E-isomer, expressed as cyflufenamid)	F	1527	1522	5	Courgettes	34	1
					Peppers, sweet	50	2
					Strawberries	41	1
					Table grapes	58	1
Cyfluthrin (Cyfluthrin including other mixtures of constituent isomers (sum of isomers))	F	5459	5450	9	Aubergines	55	1
					Kale	8	1
					Lemon	30	1
					Lettuce, iceberg	46	1
					Nectarine	122	2
					Plum	59	1
					Spinach	43	1
					Table grapes	216	1
Cymoxanil	F	5402	5400	2	Table grapes	216	1
					Tomatoes	120	1

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
Cypermethrin (Cypermethrin including other mixtures of constituent isomers (sum of isomers))	DK	3051	3047	4	Parsley	12	1
					Ruccola	9	2
					Strawberries	168	1
Cypermethrin (Cypermethrin including other mixtures of constituent isomers (sum of isomers))	F	5459	5414	45	Almond fruit	1	1
					Apples	135	1
					Apricots	29	1
					Apricots, dried	2	1
					Beans with pods	77	3
					Blackcurrants	2	1
					Blood oranges	3	1
					Carambola	6	1
					Cherries	18	4
					Currants, red	13	1
					Fennel seed	5	1
					Grapefruit	37	1
					Kale	8	1
					Lemon	30	1
					Limes	31	1
					Mango	35	1
					Marjoram, dried	1	1
					Oranges	225	4
					Oregano, dried	1	1
					Parsley	21	1
					Parsley, flat-leaved	7	2
					Passion fruit	11	1
					Peppers, sweet	228	1
					Pineapples	76	1
					Pitaya	3	1
					Plum	59	1
					Pomelo	35	5
					Quinces	4	1
					Spinach	43	1
					Sweet basil	1	1
					Pickled plum	1	1
					Walnuts	17	1

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
Cyproconazole	F	5232	5228	4	Oregano, dried	1	1
					Peach	72	1
					Rice, parboiled	10	1
					Tarragon	4	1
Cyprodinil	DK	2336	2257	79	Apples	114	3
					Carrots	141	1
					Cucumbers	93	7
					Kale	8	1
					Pear	94	8
					Strawberries	168	59
Cyprodinil	F	5231	4997	234	Apples	135	7
					Apricots	29	1
					Aubergines	55	3
					Basil, fresh	7	2
					Beans with pods	77	9
					Beetroot leaves	1	1
					Blackberries	15	6
					Blackcurrants	2	1
					Blueberries	55	8
					Breakfast cereals	8	1
					Celeriac	8	1
					Chervil	1	1
					Chilli peppers	18	1
					Coriander, fresh	13	3
					Cucumbers	121	28
					Currants, red	13	7
					Lettuce	48	3
					Lettuce, iceberg	46	4
					Nectarine	122	4
					Parsley	21	1
					Parsnip	11	1
					Peach	72	6
					Pear	124	38
					Peas with pods	39	1
					Peppers, sweet	228	7
					Plum	59	1
					Radish	15	1
					Raisin	15	4
					Raspberries	29	15
					Rosemary	3	1
					Ruccola	20	1
					Spring onions	23	2

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
					Strawberries	144	33
					Table grapes	216	21
					Tarragon	4	1
					Tomatoes	119	9
Cyromazine	F	5506	5501	5	Basil, fresh	7	1
					Ginger	5	1
					Melon	61	2
					Peppers, sweet	228	1
DDT (sum of p,p'-DDT, o,p'-DDT, p-p'-DDE and p,p'-TDE (DDD) expressed as DDT)	F	5459	5456	3	Beef meat	90	1
					Lamb's meat	69	2
Deltamethrin (cis-deltamethrin)	F	5459	5390	69	Apricots	29	2
					Beans with pods	77	1
					Cherries	18	2
					Chilli peppers	18	1
					Chives	4	3
					Coriander, fresh	13	1
					Cucumbers	121	1
					Dill	2	1
					Kiwi	123	1
					Lettuce	48	3
					Maize	13	1
					Mandarins, clementines	172	1
					Nectarine	122	8
					Parsley	21	7
					Peach	72	12
					Peas with pods	39	1
					Peppers, sweet	228	3
					Perilla leaves	1	1
					Rice, white	119	7
					Ruccola	20	6
					Table grapes	216	1
					Tomatoes	119	3
					Wheat flour	55	1
					Wheat, wholemeal	7	1
Diazinon	F	5459	5452	7	Pineapples	76	7
Dichlorprop (Sum of dichlorprop (including dichlorprop-P), its salts, esters and conjugates, expressed as dichlorprop)	F	1506	1505	1	Mandarins, clementines	32	1
Dichlorvos	F	5506	5505	1	Wheat flour	55	1
Dicloran	F	5418	5416	2	Aubergines	55	1
					Pomelo	35	1

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
Dicofol (sum of p, p' and o,p' isomers)	F	5232	5229	3	Avocados	37	1
					Chervil	1	1
					Passion fruit	11	1
Difenoconazole	DK	2360	2347	13	Apples	114	1
					Broccoli	29	2
					Celery	9	1
					Kale	8	1
					Lettuce	45	1
					Pear	94	6
					Wheat kernels	106	1
Difenoconazole	F	5232	5018	214	Apples	135	2
					Apricots	29	2
					Aubergines	55	1
					Avocados	37	1
					Basil, fresh	7	1
					Beans with pods	77	4
					Blueberries	55	1
					Broad beans	4	1
					Broccoli	48	8
					Broccoli (organic)	9	1
					Brussels sprouts	20	6
					Butternut squash	5	1
					Carrots	82	8
					Celeriac	8	4
					Celery	21	13
					Chervil	1	1
					Chilli peppers	18	1
					Chives	4	1
					Coriander, fresh	13	6
					Courgettes	64	1
					Cranberry, dried	1	1
					Cucumbers	121	2
					Currants, red	13	2
					Dill	2	2
					Fennel	3	2
					Gooseberries	3	1
					Kale	8	3
					Lettuce	48	1
					Limes	31	1
					Melon	61	5
					Mint leaves	10	2
					Nectarine	122	6

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
					Oregano, dried	1	1
					Oregano, fresh	2	1
					Papaya	31	7
					Parsley	21	14
					Parsley, dried	2	2
					Parsley, flat-leaved	7	7
					Parsley, frozen	1	1
					Passion fruit	11	2
					Peach	72	11
					Pear	124	8
					Peas with pods	39	4
					Peppers, sweet	228	9
					Pomelo	35	9
					Raspberries	29	3
					Rice, white	119	1
					Rosemary	3	2
					Strawberries	144	10
					Table grapes	216	19
					Tarragon	4	1
					Thyme	6	1
					Tomatoes	119	7
					Watermelon	21	2
Diflubenzuron	F	5506	5502	4	Aubergines	55	1
					Pear	124	1
					Pineapples	76	1
					Quinces	4	1
Dimethoate	F	5513	5504	9	Ajowan seed, dried	1	1
					Celeriac	8	1
					Cherries	18	1
					Chinese radish	8	1
					Fennel seed	5	1
					Marjoram, dried	1	1
					Oranges	225	1
					Peas with pods	40	1
					Strawberries	144	1
Dimethomorph (sum of isomers)	F	5144	4996	148	Basil, fresh	7	5
					Beans with pods	77	1
					Chives	5	1
					Courgettes	64	1
					Cucumbers	121	10
					Lettuce	48	2
					Mint leaves	10	3

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
					Papaya	31	1
					Parsley	21	3
					Parsley, dried	2	1
					Parsley, flat-leaved	7	3
					Peppers, sweet	228	1
					Raisin	15	2
					Rosemary	3	1
					Spring onions	23	5
					Strawberries	144	7
					Sweet basil	1	1
					Table grapes	216	48
					Tarragon	4	1
					Tea, herbal	2	1
					Tomatoes	120	5
					Wine, red	150	40
					Wine, white	51	5
Dinotefuran	F	5144	5139	5	Rice, white	70	1
					Wine, red	150	3
					Wine, white	51	1
Dithiocarbamates (Dithiocarbamates expressed as CS2, including Maneb, Mancozeb, Metiram, Propineb, and Ziram)	DK	131	129	2	Lettuce, baby leaves (organic)	1	1
					Pear	7	1
Dithiocarbamates (Dithiocarbamates expressed as CS2, including Maneb, Mancozeb, Metiram, Propineb, and Ziram)	F	351	334	17	Apples	15	1
					Grapefruit	17	6
					Melon	10	1
					Nectarine	11	1
					Oranges	15	4
					Pear	3	1
					Peppers, sweet	26	1
					Spinach	8	1
					Table grapes	21	1
Emamectin benzoate B1a, expressed as emamectin	F	5144	5125	19	Basil, fresh	7	2
					Chervil	1	1
					Coriander, fresh	13	1
					Lettuce	48	2
					Mint leaves	10	1
					Peppers, sweet	228	1
					Ruccola	20	3
					Strawberries	144	2
					Table grapes	216	5

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
					Tarragon	4	1
Emamectin benzoate B1b	F	2827	2822	5	Basil, fresh	1	1
					Chervil	1	1
					Coriander, fresh	11	1
					Mint leaves	5	1
					Table grapes	111	1
Endosulfan (sum of alpha- and beta-isomers and endosulfan-sulphate expressed as endosulfan)	F	5459	5458	1	Courgettes	64	1
Epoxiconazole	DK	2131	2130	1	Wheat kernels	106	1
Epoxiconazole	F	5506	5504	2	Coriander, fresh	13	1
					Wheat kernels	36	1
Ethephon	F	214	211	3	Table grapes	8	3
Ethion	F	5232	5230	2	Ajowan seed, dried	1	1
					Coriander seed	3	1
Ethirimol	F	5402	5392	10	Apple puré	1	1
					Apples	135	4
					Currants, red	13	1
					Gooseberries	3	1
					Strawberries	144	3
Etofenprox	F	5232	5108	124	Apples	135	11
					Apricots	29	8
					Blood oranges	3	1
					Broccoli	48	1
					Kiwi	123	20
					Lemon	30	1
					Limes	31	4
					Mandarins, clementines	172	9
					Melon	61	2
					Nectarine	122	36
					Oranges	225	12
					Peach	72	7
					Plum	59	5
					Ruccola	20	1
					Table grapes	216	5
					Tomatoes	119	1
Famoxadone	F	5144	5135	9	Leek	12	1
					Raisin	15	1
					Table grapes	216	2
					Tomatoes	120	5
Fenamidone	F	5144	5142	2	Basil, fresh	7	2

Pesticide	**Origin of samples (DK=Domestic; F=Foreign)**	**Number of samples analysed**	**Number of samples without detected pesticides**	**Number of samples with detected pesticides**	**Commodity**	**Number of samples analysed**	**Number of samples with detected residues**
Fenazaquin	F	5144	5141	3	Cucumbers	121	1
					Mandarins, clementines	172	1
					Raspberries	29	1
Fenbuconazole	F	5221	5205	16	Apricots	14	1
					Cherries	11	1
					Nectarine	122	9
					Peach	48	4
					Blueberries	26	1
Fenbutatin oxide	F	220	218	2	Grapefruit	17	2
Fenhexamid	DK	2131	2112	19	Strawberries	168	18
					Wine, red	4	1
Fenhexamid	F	5506	5343	163	Apricots	29	1
					Basil, fresh	7	2
					Bay leaves (laurel)	2	1
					Blackberries	15	3
					Blueberries	55	15
					Blueberries (organic)	11	1
					Cherries	18	2
					Chives	5	1
					Coriander, fresh	13	1
					Currants, red	13	2
					Kiwi	123	9
					Lettuce, iceberg	46	1
					Nectarine	122	1
					Parsley	21	1
					Peach	72	3
					Peppers, sweet	228	3
					Raisin	15	4
					Raspberries	29	6
					Strawberries	144	15
					Table grapes	216	47
					Thyme	6	1
					Tomatoes	120	4
					Wine, red	150	28
					Wine, white	51	11
Fenoxycarb	F	5144	5143	1	Apples	135	1
Fenpropathrin	F	5232	5226	6	Grapefruit	37	1
					Limes	31	1
					Mandarins, clementines	172	2
					Pomelo	35	1
					Soyabeans (fresh with pods)	12	1

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
Fenpropidin (sum of fenpropidin and its salts, expressed as fenpropidin)	F	5506	5504	2	Bananas	104	1
					Spinach	43	1
Fenpropimorph (sum of isomers)	F	5162	5129	33	Bananas	104	33
Fenpyrazamine	F	1527	1526	1	Peppers, sweet	50	1
Fenpyroximate	F	5144	5118	26	Courgettes	64	1
					Lemon	30	2
					Mandarins, clementines	172	8
					Oranges	225	8
					Peppers, sweet	228	2
					Strawberries	144	3
					Strawberries, puree	1	1
					Tomatoes	120	1
Fenvalerate (any ratio of constituent isomers (RR, SS, RS & SR) including esfenvalerate)	F	5382	5379	3	Nectarine	122	1
					Raisin	15	2
Fipronil (sum fipronil + sulfone metabolite (MB46136) expressed as fipronil)	F	2596	2595	1	Common mushroom	1	1
Flonicamid (sum of flonicamid, TNFG and TNFA)	DK	2077	2071	6	Apples	114	5
					Cherries	3	1
Flonicamid (sum of flonicamid, TNFG and TNFA)	F	5402	5326	76	Apples	135	4
					Aubergines	55	4
					Chilli peppers	18	1
					Chilli powder	1	1
					Chives	5	1
					Courgettes	64	7
					Cucumbers	121	8
					Nectarine	122	10
					Parsley	21	1
					Parsley, flat-leaved	7	1
					Peach	72	6
					Peas without pods	18	2
					Peppers, sweet	228	29
					Tea	97	1
Fludioxonil	DK	2360	2270	90	Apples	114	3
					Carrots	141	1
					Kale	8	1
					Pear	94	8
					Potato	125	1
					Potato, new	50	1

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
					Radish	4	2
					Spelt, grain	4	1
					Strawberries	168	72
Fludioxonil	F	5231	4626	605	Apples	135	49
					Apricots	29	2
					Aubergines	55	2
					Basil, fresh	7	2
					Beans with pods	77	4
					Beetroot leaves	1	1
					Blackberries	15	5
					Blackcurrants	2	1
					Blueberries	55	15
					Carrots	82	6
					Celeriac	8	1
					Cherries	18	4
					Chilli peppers	18	1
					Coriander, fresh	13	2
					Cucumbers	121	18
					Currants, red	13	7
					Grapefruit	37	2
					Kiwi	123	42
					Lemon	30	5
					Lettuce	48	4
					Lettuce, iceberg	46	2
					Mandarins, clementines	172	21
					Mango	35	13
					Nectarine	122	43
					Oranges	225	24
					Papaya	31	1
					Parsley	21	1
					Parsnip	11	1
					Peach	71	15
					Peaches, puree	1	1
					Pear	124	82
					Peas with pods	39	1
					Peppers, sweet	228	17
					Pineapples	76	69
					Plum	59	22
					Plumcots	1	1
					Pomegranate	30	8

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
					Potato	80	1
					Pumpkin	3	1
					Radish	15	1
					Raisin	15	2
					Raspberries	29	14
					Rosemary	3	1
					Ruccola	20	3
					Spring onions	23	2
					Strawberries	144	39
					Strawberry, dried	1	1
					Sweet potatoes	19	7
					Table grapes	216	27
					Tomatoes	119	9
					Watermelon	21	1
					Yams	1	1
Flufenoxuron	F	5144	5141	3	Tea	97	3
Fluopicolide	F	5144	5104	40	Basil, fresh	7	1
					Broccoli	48	1
					Coriander, fresh	13	1
					Cucumbers	121	9
					Lettuce	48	1
					Melon	61	2
					Parsnip	11	1
					Peas with pods	40	1
					Potato	80	1
					Spinach	43	2
					Spring onions	23	3
					Table grapes	216	6
					Watermelon	21	2
					Wine, red	150	9
Fluopyram	DK	1909	1892	17	Onions	57	1
					Wheat flour	26	1
					Wheat kernels	106	15
Fluopyram	F	4897	4577	320	Apples	120	4
					Apricots	29	7
					Aubergines	44	4
					Beans with pods	63	8
					Blackberries	15	2
					Blackcurrants	2	1
					Blueberries	55	2
					Breakfast cereals	8	1
					Broccoli	43	1

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
					Carrots	73	2
					Celeriac	8	2
					Cherries	12	2
					Chilli peppers	17	4
					Chilli powder	1	1
					Courgettes	63	16
					Cucumbers	106	19
					Currants, red	13	4
					Gooseberries	3	1
					Head cabbage, spring	13	1
					Kiwi	94	1
					Lettuce	45	3
					Lettuce, iceberg	41	1
					Melon	54	2
					Melon, candied	1	1
					Nectarine	113	19
					Parsnip	9	2
					Peach	67	14
					Peaches, puree	1	1
					Pear	110	4
					Peas with pods	31	1
					Peppers, sweet	189	34
					Potato	71	1
					Quinces	3	1
					Radish	14	1
					Raisin	15	2
					Raspberries	28	6
					Scorzonera	2	1
					Spring onions	23	2
					Strawberries	120	60
					Table grapes	187	51
					Tomatoes	104	22
					Wine, red	134	6
					Witloof	4	1
Flutolanil	F	5232	5229	3	Potato	80	2
					Potato, new	11	1
Flutriafol	F	5585	5544	41	Chilli peppers	18	2
					Courgettes	64	1
					Melon	61	1
					Peach	72	1
					Peas with pods	40	1
					Peppers, sweet	228	22

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
					Rice, white	119	4
					Strawberries	144	5
					Table grapes	216	1
					Tomatoes	120	2
					Wine, red	150	1
Fluvalinate (sum of isomers) resulting from the use of tau-fluvalinate	DK	2365	2363	2	Broccoli	29	1
					Kale	8	1
Fluvalinate (sum of isomers) resulting from the use of tau-fluvalinate	F	5239	5222	17	Apples	135	2
					Cauliflower	39	1
					Grapefruit	37	4
					Mandarins, clementines	172	2
					Oranges	225	6
					Table grapes	216	1
					Tomatoes	119	1
Fluxapyroxad	F	4897	4831	66	Apples	120	4
					Apricots	29	2
					Breakfast cereals	8	1
					Butternut squash	5	1
					Carrots	73	2
					Celery	21	2
					Courgettes	63	5
					Cucumbers	106	3
					Papaya	31	1
					Parsley	21	1
					Parsley, flat-leaved	7	1
					Parsnip	9	2
					Peach	67	3
					Pear	110	2
					Peppers, sweet	189	9
					Potato	71	3
					Raisin	15	1
					Strawberries	120	7
					Table grapes	187	13
					Tomatoes	104	1
					Wine, red	134	1
					Wine, white	42	1

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
Glufosinate (sum of glufosinate isomers, its salts and its metabolites 3-[hydroxy(methyl)phosphinoyl]propionic acid (MPP) and N-acetyl-glufosinate (NAG), expressed as glufosinate)	F	214	213	1	Nectarine	8	1
Glyphosate	DK	508	500	8	Apples	4	1
					Oat kernels	31	2
					Rye kernels	93	1
					Wheat kernels	101	3
					Wheat, wholemeal	16	1
Glyphosate	F	661	650	11	Beans, white	2	1
					Durum flour	8	1
					Grapefruit	7	1
					Pasta, dried	12	1
					Rolled oat	30	4
					Spelt, flour	41	1
					Wheat flour	55	2
Heptachlor (sum of heptachlor and heptachlor epoxide expressed as heptachlor)	F	5459	5457	2	Courgettes	64	2
Hexachlorobenzene	DK	3051	3050	1	Carrots	141	1
Hexaconazole	F	5585	5582	3	Common mushroom	1	1
					Coriander seed	3	1
					Strawberries	144	1
Hexazinone	F	5513	5512	1	Mandarins, clementines	172	1
Hexythiazox (any ratio of constituent isomers)	DK	1636	1627	9	Apples	92	1
					Strawberries	126	7
					Tomatoes	79	1
Hexythiazox (any ratio of constituent isomers)	F	4426	4364	62	Aubergines	50	1
					Grapefruit	34	1
					Lemon	28	9
					Mandarins, clementines	150	22
					Melon	60	2
					Nectarine	96	1
					Oranges	189	18
					Peppers, sweet	187	5
					Quinces	4	1
					Tomatoes	98	2
Imazalil (any ratio of constituent isomers)	DK	2129	2127	2	Cucumbers	93	2
Imazalil (any ratio of constituent isomers)	F	5506	4985	521	Bananas	104	20
					Blood oranges	3	2

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
					Cucumbers	121	3
					Grapefruit	37	34
					Lemon	30	26
					Lettuce, iceberg	46	1
					Limes	31	21
					Mandarins, clementines	172	158
					Melon	61	18
					Orange, bitter	1	1
					Orange, juice	33	5
					Oranges	225	211
					Peach	72	1
					Pomelo	35	17
					Potato	80	1
					Tea	97	1
					Tomatoes	120	1
Imidacloprid	DK	2131	2128	3	Basil, fresh	7	1
					Cucumbers	93	1
					Tomatoes	99	1
Imidacloprid	F	5506	5399	107	Apricots	29	2
					Aubergines	55	2
					Basil, fresh	7	1
					Beans with pods	77	1
					Carambola	6	2
					Cherries	18	1
					Chilli peppers	18	2
					Chilli powder	1	1
					Chives	5	1
					Courgettes	64	4
					Cucumbers	121	1
					Currants, red	13	2
					Fennel seed	5	2
					Grapefruit	37	5
					Kale	8	1
					Lemon	30	2
					Lettuce, iceberg	46	1
					Limes	31	1
					Mandarins, clementines	172	4
					Mango	35	2
					Melon	61	8
					Mint leaves	10	1
					Nectarine	122	1
					Oranges	225	7

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
					Oregano, dried	1	1
					Peach	72	5
					Pear	124	1
					Peas with pods	40	2
					Peppers, sweet	228	4
					Pickled Jalapeno	1	1
					Pomegranate	30	3
					Potato	80	1
					Pumpkin	3	1
					Pumpkin seeds	4	1
					Rice, parboiled	10	3
					Rice, red	9	1
					Rice, white	119	13
					Spinach	43	1
					Strawberries	144	1
					Table grapes	216	10
					Tea	97	1
					Tomatoes	120	1
					Watermelon	21	1
Indoxacarb (sum of indoxacarb and its R enantiomer)	DK	1954	1934	20	Apples	114	10
					Broccoli	29	5
					Cauliflower	44	1
					Currants, red	1	1
					Kale	8	2
					Lettuce	45	1
Indoxacarb (sum of indoxacarb and its R enantiomer)	F	5144	5111	33	Apples	135	4
					Apricots	29	1
					Broccoli	48	1
					Celery	21	3
					Chilli peppers	18	2
					Cucumbers	121	1
					Lettuce, iceberg	46	1
					Nectarine	122	3
					Peach	72	1
					Pear	124	2
					Peppers, sweet	228	7
					Raisin	15	1
					Spinach	43	1
					Table grapes	216	1
					Tea	97	1
					Tomatoes	120	3

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
Iprodione	F	5145	5137	8	Basil, fresh	7	1
					Kiwi	123	3
					Lettuce	48	1
					Peach	72	1
					Raspberries	29	1
					Thyme	6	1
Iprovalicarb	F	5506	5495	11	Table grapes	216	1
					Wine, red	150	4
					Wine, white	51	6
Isoprothiolane	F	5155	5133	22	Rice, white	119	22
Kresoxim-methyl	F	5170	5164	6	Apples	135	1
					Strawberries	144	2
					Table grapes	216	3
Lambda-cyhalothrin (includes gamma-cyhalothrin) (sum of R,S and S,R isomers)	DK	2131	2129	2	Cherries	3	1
					Strawberries	168	1
Lambda-cyhalothrin (includes gamma-cyhalothrin) (sum of R,S and S,R isomers)	F	4910	4867	43	Beans with pods	77	2
					Blueberries	55	1
					Brussels sprouts	20	1
					Chards	2	1
					Cherries	18	2
					Chives	4	1
					Coriander, fresh	13	1
					Kale	8	1
					Kiwi	123	1
					Lettuce	48	1
					Mandarins, clementines	172	4
					Mint leaves	10	1
					Nectarine	122	1
					Oranges	225	5
					Parsley	21	3
					Peach	72	2
					Peas with pods	39	1
					Persimmon	18	1
					Plum	59	1
					Spinach	43	5
					Strawberries	144	5
					Tarragon	4	1
					Turnips	3	1

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
Lindane (Gamma-isomer of hexachlorocyclohexane (HCH))	DK	3051	3050	1	Spelt, grain	4	1
Linuron	DK	2131	2130	1	Carrots	141	1
Linuron	F	5506	5499	7	Carrots	82	3
					Celery	21	1
					Coriander, fresh	13	2
					Parsnip	11	1
Lufenuron (any ratio of constituent isomers)	F	5144	5141	3	Coriander, fresh	13	1
					Pear	124	1
					Peppers, sweet	228	1
Malathion (sum of malathion and malaoxon expressed as malathion)	F	5506	5488	18	Fennel seed	5	1
					Grapefruit	37	5
					Limes	31	2
					Mandarins, clementines	172	2
					Oranges	225	4
					Rice, white	119	2
					Wheat kernels	36	1
					Wheat, wholemeal	7	1
Mandipropamid (any ratio of constituent isomers)	DK	2131	2112	19	Beetroot leaves	2	1
					Chards	2	2
					Lettuce	45	4
					Lettuce, baby leaves	1	1
					Ruccola	9	5
					Spinach	15	6
Mandipropamid (any ratio of constituent isomers)	F	5506	5460	46	Brussels sprouts	20	3
					Chards	1	1
					Coriander, fresh	13	1
					Dill	2	1
					Lettuce	48	7
					Lettuce, iceberg	46	1
					Parsley	21	3
					Parsley, flat-leaved	7	2
					Parsley, frozen	1	1
					Ruccola	20	8
					Spinach	43	4
					Spring onions	23	1
					Table grapes	216	10
					Tea, herbal	2	1
					Tomatoes	120	1
					Wine, red	150	1

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
Mepanipyrim	DK	1900	1890	10	Strawberries	168	10
Mepanipyrim	F	5144	5123	21	Cucumbers	121	5
					Fennel seed	5	1
					Strawberries	144	14
					Tomatoes	120	1
Mepiquat (sum of mepiquat and its salts, expressed as mepiquat chloride)	DK	402	386	16	Barley kernels	4	1
					Breakfast cereals	1	1
					Mushroom (Agaricus bisporus)	2	2
					Rye and wheat flour, bolted	1	1
					Rye flour, wholemeal	10	2
					Spelt, flour	3	1
					Wheat flour	23	1
					Wheat kernels	83	7
Mepiquat (sum of mepiquat and its salts, expressed as mepiquat chloride)	F	436	416	20	Barley grit	2	1
					Barley kernels	3	1
					Breakfast cereals	5	2
					Mushroom, brown beech	3	2
					Müsli	3	2
					Rolled oat	26	1
					Rye flour, wholemeal	5	2
					Spelt, flour	33	2
					Spelt, grain	4	3
					Wheat kernels	35	2
					Wheat, durum, grain	3	1
					Wheat, flakes malted	1	1
Metaflumizone (sum of E- and Z-isomers)	F	2575	2574	1	Ruccola	14	1
Metalaxyl and metalaxyl-M (metalaxyl including other mixtures of constituent isomers including metalaxyl-M (sum of isomers)	F	5506	5437	69	Basil, fresh	7	2
					Blackberries	15	1
					Broad beans	4	1
					Broccoli	48	2
					Brussels sprouts	20	1
					Chinese cabbage	2	1
					Chives	5	1
					Cucumbers	121	3
					Kale	8	1
					Marjoram, dried	1	1
					Melon	61	1
					Oregano, fresh	2	1

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
					Parsley	21	1
					Raisin	15	1
					Rosemary	3	1
					Ruccola	20	2
					Soyabeans (fresh with pods)	12	1
					Strawberries	144	1
					Table grapes	216	10
					Tomatoes	120	2
					Wine, red	150	32
					Wine, white	51	2
Metamitron	F	5144	5141	3	Rosemary	3	1
					Spinach	43	1
					Thyme	6	1
Methamidophos	F	5506	5504	2	Beans with pods	77	1
					Rice, white	119	1
Methiocarb (sum of methiocarb and methiocarb sulfoxide and sulfone, expressed as methiocarb)	F	5506	5503	3	Chives	5	1
					Rosemary	3	1
					Tarragon	4	1
Methomyl	F	5506	5504	2	Marjoram, dried	1	1
					Oregano, dried	1	1
Metrafenone		2077	2065	12	Cucumbers	93	1
					Strawberries	168	8
					Tomatoes	99	3
Metrafenone	F	5402	5352	50	Aubergines	55	1
					Chilli peppers	18	2
					Courgettes	64	3
					Cucumbers	121	6
					Mushroom (Agaricus bisporus)	6	1
					Peppers, sweet	228	4
					Raisin	15	1
					Strawberries	144	4
					Table grapes	216	25
					Tea, herbal	2	1
					Tomatoes	120	2
Metribuzin	F	5506	5505	1	Strawberries	144	1
Myclobutanil (sum of constituent isomers)	F	5176	5101	75	Apricots	29	1
					Aubergines	55	1
					Bananas	104	30

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
					Cucumbers	121	1
					Figs, fresh	11	1
					Melon	61	2
					Nectarine	122	3
					Peach	72	2
					Peppers, sweet	228	7
					Pomelo	35	2
					Raisin	15	2
					Raisin (organic)	8	1
					Strawberries	144	10
					Table grapes	216	10
					Tomatoes	119	2
Nicotine	F	2820	2819	1	Coriander, fresh	11	1
Omethoate	F	5513	5510	3	Cherries	18	1
					Peas with pods	40	2
Oxadiazon	F	5144	5143	1	Parsley	21	1
Paclobutrazol (sum of constituent isomers)	F	5232	5231	1	Cranberry, dried	1	1
Penconazole (sum of constituent isomers)	F	5232	5187	45	Nectarine	122	2
					Parsley	21	1
					Peach	72	1
					Peppers, sweet	228	1
					Raisin	15	1
					Strawberries	144	15
					Table grapes	216	24
Pencycuron	DK	1269	1259	10	Potato	90	5
					Potato, new	30	5
Pencycuron	F	3300	3299	1	Potato	48	1
Pendimethalin	DK	2131	2128	3	Carrots	141	2
					Parsley	12	1
Pendimethalin	F	5506	5504	2	Carrots	82	1
					Coriander, fresh	13	1
Permethrin (sum of isomers)	DK	3051	3048	3	Barley kernels	4	2
					Wheat flour	26	1
Permethrin (sum of isomers)	F	5459	5457	2	Pitaya	3	1
					Rice, white	119	1
Phenmedipham	F	4856	4854	2	Spinach	43	2
Phorate (sum of phorate, its oxygen analogue and their sulfones expressed as phorate)	F	5585	5583	2	Coriander seed	3	1
					Cumin seed	2	1

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
Phosmet (phosmet and phosmet oxon expressed as phosmet)	F	4783	4752	31	Apples	135	3
					Blood oranges	3	1
					Blueberries	55	4
					Cherries	18	1
					Currants, red	13	4
					Limes	31	2
					Mandarins, clementines	172	2
					Nectarine	122	1
					Olive oil, extra-virgin (organic)	11	1
					Oranges	225	6
					Peach	72	1
					Pear	124	3
					Plum	59	1
					Raisin	15	1
Piperonyl Butoxide	DK	1905	1889	16	Durum flour	3	1
					Oat kernels	20	2
					Rolled oat	13	1
					Rye kernels	43	4
					Rye kernels (organic)	8	1
					Spelt, flour	6	1
					Spelt, grain	3	1
					Wheat kernels	51	3
					Wheat, wholemeal	8	2
Piperonyl Butoxide	F	5151	5112	39	Barley kernels	3	1
					Barley kernels (organic)	4	1
					Corn flakes	18	3
					Durum flour	3	1
					Lentils, dry	35	2
					Lentils, dry (organic)	5	1
					Pasta, dried	14	7
					Peanut	7	1
					Peppers, sweet	228	1
					Pineapples	76	3
					Rice flour	1	1
					Rice, brown (organic)	1	1
					Rice, short grained	4	1
					Rice, white	70	8
					Rolled oat	11	1
					Spelt, flour	16	1
					Sweet potatoes	19	1
					Tomatoes	120	1
					Wheat kernels	11	3

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
Pirimicarb	DK	2131	2118	13	Apples	114	5
					Chards	2	1
					Strawberries	168	7
Pirimicarb	F	5506	5465	41	Apples	135	13
					Cherries	18	1
					Chilli peppers	18	1
					Coriander, fresh	13	5
					Cucumbers	121	1
					Currants, red	13	3
					Mint leaves	10	2
					Oregano, fresh	2	1
					Parsley, dried	2	1
					Pear	124	1
					Peppers, sweet	228	3
					Raspberries	29	1
					Rosemary	3	1
					Strawberries	144	6
					Tarragon	4	1
Pirimiphos-methyl	F	5812	5792	20	Corn flakes	40	1
					Durum flour	8	1
					Maize	13	1
					Müsli	3	1
					Pasta, dried	27	9
					Rice, white	119	2
					Rolled oat	31	1
					Wheat flour	55	3
					Wheat kernels	36	1
Prochloraz (sum of prochloraz, BTS 44595 (M201-04) and BTS 44596 (M201-03), expressed as prochloraz)	F	5558	5521	37	Avocados	37	11
					Grapefruit	37	4
					Mango	35	9
					Mushroom (Agaricus bisporus)	6	2
					Oranges	225	1
					Papaya	31	1
					Pineapples	76	3
					Pomelo	35	5
					Portobello	1	1
Procymidone	F	5232	5228	4	Courgettes	64	1
					Lentils, dry	35	1
					Pumpkin seeds	4	1
					Strawberries	144	1

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
Profenofos	F	5459	5455	4	Ajowan seed, dried	1	1
					Fennel seed	5	1
					Marjoram, dried	1	1
					Raisin	15	1
Propamocarb (Sum of propamocarb and its salts, expressed as propamocarb)	DK	2128	2067	61	Cucumbers	93	39
					Lettuce	45	6
					Potato	125	15
					Spinach	15	1
Propamocarb (Sum of propamocarb and its salts, expressed as propamocarb)	F	5506	5310	196	Aubergines	55	1
					Basil, fresh	7	1
					Beans with pods	77	5
					Broccoli	48	5
					Brussels sprouts	20	1
					Cauliflower	39	1
					Chilli peppers	18	3
					Courgettes	64	12
					Cucumbers	121	67
					Head cabbage, spring	13	3
					Leek	12	1
					Lettuce	48	6
					Lettuce, iceberg	46	7
					Mandarins, clementines	172	1
					Melon	61	14
					Mint leaves	10	1
					Peppers, sweet	228	20
					Potato	80	15
					Radish	15	9
					Raisin	15	1
					Shallots	3	1
					Spinach	43	4
					Spring onions	23	4
					Strawberries	144	2
					Table grapes	216	1
					Tomatoes	120	7
					Turnips	3	1
					Watermelon	21	2

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
Propargite	F	5232	5230	2	Strawberries	144	2
Propiconazole (sum of isomers)	DK	2131	2130	1	Wheat kernels	106	1
Propiconazole (sum of isomers)	F	5506	5426	80	Coriander seed	3	1
					Fennel seed	5	1
					Grapefruit	37	5
					Lemon	30	7
					Mandarins, clementines	172	26
					Oranges	225	31
					Rice, red	9	1
					Rice, white	119	7
					Spinach	43	1
Propyzamide	F	5232	5231	1	Oranges	225	1
Proquinazid	F	5506	5495	11	Apples	135	1
					Blackcurrants	2	1
					Gooseberries	3	1
					Table grapes	216	8
Prosulfocarb	DK	2131	2121	10	Apples	114	2
					Carrots	141	3
					Chards	2	1
					Kale	8	1
					Parsley	12	1
					Parsnip	14	1
					Ruccola	9	1
Prosulfocarb	F	5506	5499	7	Carrots	82	5
					Parsley	21	2
Prothioconazole: prothioconazole-desthio (sum of isomers)	F	5506	5503	3	Brussels sprouts	20	2
					Lentils, dry	35	1
Pymetrozine	F	5506	5503	3	Peppers, sweet	228	2
					Strawberries	144	1
Pyraclostrobin	DK	2131	2045	86	Apples	114	27
					Beetroot leaves	2	1
					Carrots	141	1
					Cucumbers	93	1
					Currants, red	1	1
					Honey	139	1
					Kale	8	1
					Lettuce	45	6
					Lettuce, iceberg	21	1
					Onions	58	1
					Pak choi, red	2	1
					Pear	94	10

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
					Peas with pods	44	2
					Plum	11	1
					Spinach	15	1
					Strawberries	168	30
Pyraclostrobin	F	5506	5261	245	Apples	135	14
					Apricots	29	3
					Aubergines	55	1
					Basil, fresh	7	2
					Beans with pods	77	4
					Blackberries	15	2
					Blueberries	55	3
					Broccoli	48	1
					Brussels sprouts	20	1
					Butternut squash	5	1
					Carambola	6	1
					Cherries	18	2
					Courgettes	64	1
					Currants, red	13	2
					Grapefruit	37	4
					Kale	8	1
					Lemon	30	4
					Lettuce	48	3
					Limes	31	3
					Mandarins, clementines	172	18
					Mint leaves	10	3
					Nectarine	122	21
					Oranges	225	23
					Oregano, fresh	2	1
					Pak choi	2	1
					Papaya	31	3
					Parsley	21	3
					Parsley, flat-leaved	7	1
					Peach	72	4
					Pear	124	39
					Peas with pods	40	2
					Peppers, sweet	228	6
					Plum	59	4
					Pomelo	35	4
					Pumpkin seeds	4	1
					Quinces	4	1

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
					Raisin	15	1
					Raspberries	29	7
					Ruccola	20	2
					Soyabeans (fresh with pods)	12	1
					Spinach	43	2
					Spring onions	23	1
					Strawberries	144	25
					Table grapes	216	10
					Tea, herbal	2	1
					Tomatoes	120	7
Pyridaben	F	5506	5486	20	Blackberries	15	1
					Chilli peppers	18	1
					Grapefruit	37	4
					Mandarins, clementines	172	4
					Oranges	225	1
					Peppers, sweet	228	6
					Quinces	4	1
					Tea	97	1
					Tomatoes	120	1
Pyridalyl	F	1527	1526	1	Peppers, sweet	50	1
Pyrimethanil	DK	2128	2113	15	Cucumbers	93	1
					Strawberries	168	11
					Tomatoes	99	3
Pyrimethanil	F	5506	5208	298	Apples	135	13
					Apricots	29	1
					Aubergines	55	1
					Beans with pods	77	1
					Blueberries	55	1
					Breakfast cereals	8	1
					Cucumbers	121	2
					Currants, red	13	5
					Grapefruit	37	11
					Lemon	30	10
					Lettuce, iceberg	46	1
					Mandarins, clementines	172	86
					Mango	35	1
					Müsli	3	1
					Nectarine	122	2
					Orange, juice	33	1
					Oranges	225	102
					Pear	124	16
					Peppers, sweet	228	2

Pesticide	**Origin of samples (DK=Domestic; F=Foreign)**	**Number of samples analysed**	**Number of samples without detected pesticides**	**Number of samples with detected pesticides**	**Commodity**	**Number of samples analysed**	**Number of samples with detected residues**
					Persimmon	18	1
					Plum	59	6
					Raisin	15	3
					Raspberries	29	4
					Strawberries	144	2
					Table grapes	216	12
					Tea, fruit	5	1
					Tomatoes	120	4
					Wine, red	150	2
					Wine, white	51	5
Pyriproxyfen	F	5506	5319	187	Aubergines	55	1
					Bananas	104	35
					Blood oranges	3	1
					Chilli peppers	18	2
					Chives	5	1
					Coriander, fresh	13	1
					Courgettes	64	1
					Grapefruit	37	14
					Lemon	30	11
					Limes	31	1
					Mandarins, clementines	172	40
					Oranges	225	65
					Peppers, sweet	228	4
					Pomegranate	30	1
					Pomelo	35	2
					Quinces	4	2
					Tea	97	1
					Tomatoes	120	4
Quinoxyfen	F	5232	5223	9	Strawberries	144	2
					Table grapes	216	7
Quintozene (sum of quintozene and pentachloro-aniline expressed as quintozene)	DK	3051	3045	6	Carrots	141	2
					Courgettes	15	1
					Parsnip	14	1
					Potato	125	1
					Pumpkin	1	1
Quintozene (sum of quintozene and pentachloro-aniline expressed as quintozene)	F	5459	5454	5	Carrots	82	1
					Courgettes	64	2
					Parsnip	11	1
					Watermelon	21	1

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
Spinetoram (sum of spinetoram-J and	F	192	191	1	Cucumbers	4	1
Spinosad (spinosad, sum of spinosyn A and spinosyn D)	DK	1900	1885	15	Basil, fresh	7	1
					Lettuce, baby leaves (organic)	1	1
					Parsley	12	1
					Strawberries	168	11
					Tomatoes	99	1
Spinosad (spinosad, sum of spinosyn A and spinosyn D)	F	5144	5025	119	Apricots	29	2
					Bananas (organic)	27	3
					Basil, fresh	7	3
					Beans with pods	77	1
					Blackberries	15	2
					Blueberries	55	1
					Blueberries (organic)	11	1
					Broccoli	48	1
					Cherries	18	1
					Chervil	1	1
					Chives	5	2
					Coriander, fresh	13	3
					Courgettes	64	1
					Cucumbers	121	3
					Currants, red	13	1
					Kale (organic)	6	1
					Lettuce	48	3
					Lettuce (organic)	8	1
					Nectarine	122	17
					Nectarine (organic)	5	1
					Pak choi	2	1
					Parsley	21	2
					Parsley (organic)	3	2
					Parsley, flat-leaved (organic)	3	3
					Peach	72	12
					Peach (organic)	1	1
					Peaches, puree	1	1
					Pear	124	1
					Peas with pods	40	1
					Peppers, sweet	228	7
					Raspberries	29	1
					Ruccola	20	5
					Spinach	43	3
					Strawberries	144	15

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
					Table grapes	216	10
					Table grapes (organic)	13	1
					Tarragon	4	1
					Tomatoes	120	2
					Tomatoes (organic)	12	1
Spirodiclofen	F	2623	2617	6	Apples	80	2
					Currants, red	13	1
					Strawberries	80	1
					Table grapes	111	2
Spiromesifen	F	5402	5386	16	Aubergines	55	1
					Papaya	31	4
					Peppers, sweet	228	3
					Tea	97	1
					Tomatoes	120	7
Spirotetramat and its 4 metabolites BYI08330-enol, BYI08330-ketohydroxy, BYI08330-monohydroxy, and BYI08330 enol-glucoside, expressed as spirotetramat	DK	498	497	1	Kale	3	1
Spirotetramat and its 4 metabolites BYI08330-enol, BYI08330-ketohydroxy, BYI08330-monohydroxy, and BYI08330 enol-glucoside, expressed as spirotetramat	F	1219	1208	11	Blueberries	26	1
					Broccoli	29	1
					Currants, red	9	3
					Peppers, sweet	50	2
					Table grapes	58	4
Spiroxamine (sum of isomers)	F	5506	5500	6	Parsley	21	1
					Table grapes	216	5
Sulfoxaflor (sum of isomers)	F	77	75	2	Peach	4	2
Tebuconazole	DK	2360	2354	6	Leek	24	1
					Oat kernels	31	4
					Wheat kernels	106	1
Tebuconazole	F	5232	5025	207	Apples	135	6
					Apricots	29	7
					Aubergines	55	2
					Barley kernels	4	1
					Basil, fresh	7	1
					Beans with pods	77	1
					Blackcurrants	2	1
					Brussels sprouts	20	1
					Cherries	18	6
					Chilli powder	1	1

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
					Chives	4	1
					Coriander seed	3	2
					Gooseberries	3	1
					Kiwi	123	1
					Leek	12	1
					Limes	31	9
					Mandarins, clementines	172	3
					Mango	35	1
					Melon	61	1
					Nectarine	122	51
					Oranges	225	1
					Oregano, dried	1	1
					Oregano, fresh	2	1
					Papaya	31	1
					Passion fruit	11	9
					Peach	72	21
					Peaches, puree	1	1
					Pear	124	5
					Peas with pods	39	7
					Peppers, sweet	228	3
					Plum	59	14
					Raisin	15	4
					Raspberries	29	1
					Rice, white	119	14
					Rye flour	1	1
					Rye groats	8	1
					Spelt, flour	41	4
					Spring onions	23	1
					Table grapes	216	9
					Tomatoes	119	3
					Wheat kernels	36	6
					Wheat, wholemeal	7	1
Tebufenozide	F	5506	5498	8	Apples	135	1
					Blueberries	55	2
					Chives	5	1
					Pear	124	1
					Tomatoes	120	1
					Wine, red	150	2
Tebufenpyrad	F	5506	5491	15	Lemon	30	1
					Mandarins, clementines	172	4
					Oranges	225	3

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
					Peppers, sweet	228	1
					Raisin	15	1
					Strawberries	144	1
					Tarragon	4	1
					Tomatoes	120	2
					Watermelon	21	1
Tetraconazole	F	5232	5225	7	Currants, red	13	2
					Gooseberries	3	1
					Peas with pods	39	1
					Raisin	15	1
					Strawberries	144	1
					Table grapes	216	1
Tetradifon	F	5232	5231	1	Avocados	37	1
Thiabendazole	DK	2128	2127	1	Strawberries	168	1
Thiabendazole	F	5506	5225	281	Apples	135	1
					Avocados	37	8
					Bananas	104	41
					Grapefruit	37	28
					Lemon	30	8
					Limes	31	6
					Mandarins, clementines	172	64
					Orange, juice	33	3
					Oranges	225	112
					Papaya	31	5
					Pear	124	2
					Pomelo	35	1
					Potato	80	1
					Tomatoes	120	1
Thiacloprid	DK	2131	2100	31	Currants, black	1	1
					Honey	139	14
					Strawberries	168	15
					Tea	2	1
Thiacloprid	F	5506	5451	55	Apples	135	3
					Apricots	29	2
					Apricots, dried	2	1
					Basil, fresh	7	1
					Celeriac	8	1
					Cherries	18	5
					Chervil	1	1
					Chilli peppers	18	1
					Cucumbers	121	2

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
					Currants, red	13	2
					Dill	2	1
					Limes	31	1
					Melon	61	1
					Mint leaves	10	2
					Nectarine	122	3
					Parsley, flat-leaved	7	1
					Peach	72	3
					Pear	124	8
					Peas with pods	40	1
					Quinces	4	1
					Strawberries	144	6
					Strawberry, dried	1	1
					Tea	97	4
					Thyme	6	3
Thiamethoxam	DK	2136	2133	3	Kale	8	1
					Tea	2	2
Thiamethoxam	F	5513	5474	39	Beans with pods	77	1
					Beans, kidney	8	1
					Carambola	6	1
					Chervil	1	1
					Chilli peppers	18	1
					Chives	5	3
					Coriander, fresh	13	2
					Cucumbers	121	1
					Cumin seed	2	1
					Fennel seed	5	2
					Lettuce	48	3
					Lettuce, iceberg	46	3
					Mango	35	1
					Melon	61	1
					Pear	124	1
					Peas with pods	40	1
					Rice, white	119	8
					Table grapes	216	3
					Tea	97	4
Thiophanate-methyl	F	5497	5481	16	Butternut squash	5	1
					Currants, red	13	1
					Gooseberries	3	1
					Lemon	30	1
					Lettuce	48	1

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
					Marjoram, dried	1	1
					Papaya	31	1
					Peas without pods	18	1
					Raspberries	29	2
					Strawberries	144	3
					Table grapes	216	1
					Wine, red	150	1
					Wine, white	51	1
Tolclofos-methyl	DK	1900	1899	1	Potato, new	50	1
Tolclofos-methyl	F	5144	5143	1	Radish	15	1
Triadimefon and triadimenol (sum of triadimefon and triadimenol)	F	5506	5505	1	Pineapples	76	1
Triadimenol (any ratio of constituent isomers)	F	5506	5494	12	Chilli peppers	18	1
					Oregano, dried	1	1
					Peppers, sweet	228	6
					Pineapples	76	1
					Tomatoes	120	2
					Watermelon	21	1
Triazophos	F	5733	5731	2	Ajowan seed, dried	1	1
					Rice, white	119	1
Tricyclazole	F	5506	5491	15	Coriander seed	3	1
					Rice, white	119	14
Trifloxystrobin	F	5232	5079	153	Apples	135	14
					Apricots	29	4
					Beans with pods	77	3
					Blackberries	15	1
					Blueberries	55	2
					Brussels sprouts	20	1
					Cucumbers	121	1
					Currants, red	13	5
					Gooseberries	3	2
					Grapefruit	37	6
					Lemon	30	3
					Lentils, dry	35	1
					Limes	31	3
					Mandarins, clementines	172	6
					Nectarine	122	4
					Oranges	225	7
					Passion fruit	11	7
					Peach	72	1

Pesticide	Origin of samples (DK=Domestic; F=Foreign)	Number of samples analysed	Number of samples without detected pesticides	Number of samples with detected pesticides	Commodity	Number of samples analysed	Number of samples with detected residues
					Pear	124	2
					Peppers, sweet	228	1
					Quinces	4	1
					Raspberries	29	5
					Strawberries	144	62
					Strawberry, dried	1	1
					Table grapes	216	8
					Tomatoes	119	2
Triflumizole Triflumizole and metabolite FM-6-1(N-(4-chloro-2-trifluoromethylphenyl)-n-propoxyacetamidine), expressed as Triflumizole	F	5144	5140	4	Cucumbers	121	4
Triflumuron	F	5506	5494	12	Apples	135	1
					Apples, dried	1	1
					Nectarine	122	9
					Peach	72	1
Zoxamide	F	5144	5135	9	Table grapes	216	7
					Tomatoes	120	2

7.3 Consumption used for exposure calculation

Consumer group	Children	Adults	Male	Female	Male High F&V a)	Female High F&V a)	Assumed domestic consumption
Age (years)	4-6	15-75	15-75	15-75	15-75	15-75	
Avg. weight (kg)							
No. of individuals in group							
Average consumption (g/kg bw/day)							
Almonds	0.0736	0.0336	0.0232	0.0434	0.0413	0.0767	0%
Apples	3.26	1.01	0.914	1.09	1.89	1.76	46%
Apricot, dried	0.028	0.00616	0.0039	0.00828	0.00949	0.0149	0%
Apricots	0.0126	0.00665	0.00677	0.00653	0.00891	0.00779	0%
Aspargus	0.029	0.0216	0.0162	0.0268	0.027	0.0507	21%
Aubergines	0.0106	0.016	0.0144	0.0174	0.0277	0.0324	0%
Avocados	0.0504	0.0413	0.022	0.0594	0.0481	0.123	0%
Bananas	1.33	0.414	0.355	0.47	0.831	0.759	0%
Barley kernels	0.00334	0.00222	0.00251	0.00195	0.00461	0.0028	71%
Barley, malted	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	43%
Beans with pods	0.0607	0.0309	0.024	0.0373	0.0419	0.0551	2%
Beans, dried	0.021	0.00928	0.00667	0.0117	0.0172	0.0231	0%
Beef liver	0	0.00141	0.00126	0.00155	0.00101	0.00247	100%
Beef meat	0.81	0.579	0.673	0.49	0.729	0.535	48%
Beetroot	0.0477	0.0397	0.0405	0.039	0.0616	0.0664	94%
Blueberries	0.00925	0.00433	0.00349	0.00512	0.00636	0.00962	10%
Broccoli	0.0727	0.0639	0.0559	0.0714	0.112	0.126	31%
Brussels sprouts	0.0117	0.00897	0.00737	0.0105	0.0153	0.0192	50%
Buckwheat	0	0.0000963	0.0000228	0.000165	0.0000455	0.000565	7%
Bulgur	0.033	0.0142	0.0164	0.0121	0.0218	0.0153	0%
Carrots	1.59	0.418	0.331	0.5	0.732	0.908	68%
Cauliflower	0.123	0.0824	0.0748	0.0895	0.134	0.144	42%
Celeriac	0.0405	0.0261	0.0228	0.0292	0.0299	0.0401	53%
Celery	0.00426	0.00504	0.00246	0.00746	0.0056	0.0157	56%
Cherries	0.0158	0.00645	0.0037	0.00904	0.00927	0.0208	12%
Chick pea	0.00102	0.00126	0.000702	0.00178	0.000799	0.0022	0%
Chicken meat	0.632	0.274	0.274	0.274	0.353	0.33	100%
Chilli peppers	0.000141	0.000139	0.000135	0.000143	0.000234	0.000195	0%
Chinese cabbage	0.0264	0.0261	0.0254	0.0268	0.0439	0.0365	62%
Chives	0.00249	0.00198	0.00167	0.00227	0.00216	0.00297	19%
Citrus, other	0	0.0000528	0.000109	0	0.000117	0	0%
Coconuts	0.00113	0.000309	0.000289	0.000328	0.00132	0.000408	0%
Coconuts, flakes	0.00611	0.00191	0.00188	0.00193	0.00356	0.00242	0%
Coffee beans, green	0	0.0000575	0.0000617	0.0000536	0	0.0000193	0%
Coriander, leaves	0.0000643	0.000241	0.0000912	0.000381	0.000164	0.000816	14%
Corn flour	0.243	0.0313	0.033	0.0296	0.0357	0.0279	5%
Courgettes	0.0232	0.0316	0.0277	0.0353	0.0575	0.0725	30%
Cucumbers	1.95	0.311	0.249	0.369	0.466	0.617	47%
Currants	0.0112	0.00603	0.00627	0.00581	0.0082	0.00744	20%

Consumer group	Children	Adults	Male	Female	Male High F&V [a)]	Female High F&V [a)]	Assumed domestic
Age (years)	4-6	15-75	15-75	15-75	15-75	15-75	consumption
Avg. weight (kg)							
No. of individuals in grouţ							
			Average consumption (g/kg bw/day)				
Dates	0.0168	0.000959	0.000612	0.00128	0.00188	0.00206	0%
Dill	0.0000643	0.000241	0.0000912	0.000381	0.000164	0.000816	14%
Duck meat	0.0109	0.0187	0.02	0.0174	0.0283	0.0177	0%
Fat, pork	0.000714	0.00152	0.00274	0.000374	0.0021	0.000377	100%
Figs, dried	0.0524	0.00769	0.00576	0.00951	0.0111	0.0154	0%
Figs, fresh	0.00388	0.000659	0.000594	0.000719	0.000302	0.000962	0%
Fruit, canned	0.0126	0.00665	0.00677	0.00653	0.00891	0.00779	0%
Fruit, dried	0.0168	0.000959	0.000612	0.00128	0.00188	0.00206	3%
Fruit, exotic	0	0.0000528	0.000109	0	0.000117	0	0%
Fruit, other	0	0.000155	0.000109	0.000199	0.0000417	0.000338	14%
Garlics	0.000959	0.0012	0.00108	0.00132	0.00136	0.002	0%
Globe artichokes	0	0.00109	0.000311	0.00181	0.000246	0.00704	0%
Gooseberries	0	0.000155	0.000109	0.000199	0.0000417	0.000338	64%
Grapefruit	0.032	0.0155	0.0097	0.0209	0.0209	0.0349	0%
Hazelnuts	0.0618	0.0207	0.0154	0.0257	0.0305	0.0488	0%
Head cabbage	0.0427	0.0482	0.0449	0.0513	0.0715	0.0738	53%
Head cabbage, red	0.0131	0.0163	0.0181	0.0146	0.0191	0.0174	69%
Herbs	0.00249	0.00198	0.00167	0.00227	0.00216	0.00297	19%
Herbs, dried	0.0000643	0.000241	0.0000912	0.000381	0.000164	0.000816	0%
Honey	0.014	0.00633	0.00698	0.00572	0.0111	0.00715	100%
Horseradish	0	0.0000475	0.0000832	0.0000139	0	0	67%
Iceberg	0.00608	0.0121	0.0103	0.0138	0.02	0.0201	34%
Jerusalem artichokes	0	0.000694	0.000155	0.0012	0	0.0017	88%
Kale	0.00115	0.00459	0.00421	0.00495	0.00614	0.0108	84%
Kiwi	0.169	0.0273	0.0159	0.038	0.0587	0.0878	0%
Lambs meat	0.0146	0.0273	0.029	0.0258	0.0405	0.0347	2%
Leek	0.062	0.0482	0.0481	0.0483	0.0711	0.0649	49%
Lemons, lime	0.00888	0.00693	0.00515	0.00861	0.0095	0.0141	0%
Lentils	0.00115	0.00149	0.00145	0.00152	0.00264	0.00363	0%
Lettuce etc,	0.112	0.159	0.136	0.181	0.24	0.262	44%
Mandarins, clementines	0.183	0.0885	0.0554	0.12	0.12	0.199	0%
Mango	0.0337	0.00961	0.00433	0.0146	0.0107	0.0294	0%
Melons	1.21	0.155	0.0873	0.219	0.303	0.51	0%
Mushrooms	0.0858	0.0495	0.0477	0.0513	0.0608	0.0717	56%
Nectarines	0.128	0.0672	0.0368	0.0957	0.13	0.232	0%
Nuts, other	0.0141	0.00595	0.00385	0.00792	0.00745	0.0158	0%
Olive oil	0.021	0.0189	0.0148	0.0228	0.0212	0.0306	0%
Onions	0.383	0.182	0.196	0.169	0.231	0.202	77%
Oranges	0.263	0.127	0.0837	0.168	0.172	0.277	0%
Oranges, juice	1.18	0.449	0.429	0.468	0.662	0.614	8%
Papayas	0.0039	0.00111	0.000502	0.00169	0.00124	0.00341	0%
Parsley	0.00155	0.00119	0.000911	0.00146	0.00131	0.00227	34%
Parsley Root	0.00178	0.00422	0.003	0.00537	0.00576	0.00837	91%
Parsnips	0.00734	0.0158	0.011	0.0203	0.0223	0.0332	91%

Consumer group	Children	Adults	Male	Female	Male High F&V a)	Female High F&V a)	Assumed domestic consumption
Age (years)	4-6	15-75	15-75	15-75	15-75	15-75	
Avg. weight (kg)							
No. of individuals in group							
Average consumption (g/kg bw/day)							
Peaches	0.13	0.0686	0.0378	0.0975	0.134	0.234	0%
Peanut	0.0454	0.0222	0.0224	0.0219	0.0279	0.0241	0%
Pears	0.725	0.205	0.171	0.238	0.481	0.489	42%
Peas with pods	0.0265	0.0122	0.0113	0.0131	0.0193	0.0196	56%
Peas without pods	0.2	0.106	0.0981	0.114	0.166	0.163	46%
Peppers, sweet	0.701	0.156	0.124	0.187	0.238	0.312	1%
Persimmon	0.0112	0.0032	0.00144	0.00486	0.00356	0.00981	0%
Pine nuts	0.00542	0.00275	0.00186	0.00358	0.00233	0.00675	0%
Pineapples	0.0671	0.0315	0.0189	0.0433	0.0522	0.0799	0%
Plums	0.181	0.0514	0.0444	0.058	0.198	0.106	9%
Pomegranate	0	0.0000528	0.000109	0	0.000117	0	0%
Pomelos	0	0.0000528	0.000109	0	0.000117	0	0%
Pork liver	0.253	0.0665	0.0881	0.0461	0.0765	0.0424	100%
Pork meat	2.13	0.891	1.06	0.735	0.984	0.688	100%
Potatoes	1.79	1.21	1.43	0.996	1.5	0.982	74%
Prune	0.00431	0.00197	0.00221	0.00175	0.00572	0.00316	0%
Pumpkin	0.00266	0.00243	0.00197	0.00287	0.00483	0.00691	92%
Pumpkin seeds	0.0141	0.00595	0.00385	0.00792	0.00745	0.0158	0%
Radish	0.00166	0.00176	0.000751	0.00271	0.00197	0.00585	33%
Raisin	0.171	0.0324	0.0253	0.039	0.0582	0.0652	0%
Raspberries, blackber-ries	0.0588	0.0219	0.0166	0.0268	0.0317	0.0525	11%
Rhubarb	0.0085	0.00473	0.00472	0.00474	0.00915	0.00798	58%
Rice	0.197	0.0703	0.0768	0.0642	0.106	0.0806	0%
Rice flour	0.00181	0.00103	0.00112	0.000945	0.00208	0.00132	0%
Rice, short grained	0.102	0.007	0.00484	0.00902	0.00618	0.00953	0%
Rice, wild	0.00442	0.00157	0.00159	0.00155	0.00288	0.00192	0%
Rolled oat	0.777	0.2	0.228	0.174	0.309	0.21	44%
Ruccola	0.00164	0.00343	0.00291	0.00391	0.00568	0.00572	23%
Rye flour, bolted	0.0159	0.00553	0.00604	0.00505	0.00649	0.00495	67%
Rye grain and flour	1.68	0.503	0.533	0.476	0.589	0.528	80%
Sesame seed	0.0367	0.011	0.0114	0.0105	0.0134	0.0123	0%
Spices	0.00115	0.000737	0.000726	0.000748	0.00108	0.000904	0%
Spinach	0.0208	0.0228	0.0216	0.024	0.0279	0.0423	19%
Spring onions	0.000731	0.00245	0.00227	0.00261	0.00386	0.0048	16%
Strawberries	0.351	0.117	0.0911	0.141	0.193	0.277	56%
Sunflower seed	0.118	0.037	0.0387	0.0355	0.0467	0.0427	0%
Swedes	0	0.000463	0.000308	0.000609	0.00117	0.00293	50%
Sweet corn	0.219	0.0831	0.0735	0.0921	0.136	0.128	17%
Table grapes	0.337	0.0928	0.0517	0.131	0.165	0.246	0%
Tea	0.38	1.85	1.12	2.54	1.92	3.96	0%
Tofu	0.00298	0.000988	0.00129	0.000704	0.00483	0.000634	0%
Tomatoes	1.31	0.632	0.565	0.695	0.983	1.08	43%
Total	31.4	14.1	13	15.1	19.4	21.4	
Tropical roots and	0.000141	0.000139	0.000135	0.000143	0.000234	0.000195	0%

Consumer group	Children	Adults	Male	Female	Male High F&V [a)]	Female High F&V [a)]	Assumed domestic consumption
Age (years)	4-6	15-75	15-75	15-75	15-75	15-75	
Avg. weight (kg)							
No. of individuals in group							
	Average consumption (g/kg bw/day)						
tubers							
Turnips	0	0.0000169	0.000035	0	0.000248	0	0%
Vegetables, leafy, other	0.00249	0.00198	0.00167	0.00227	0.00216	0.00297	13%
Vegetables, other	0.000731	0.00245	0.00227	0.00261	0.00386	0.0048	4%
Vine leaves	0.000383	0.000496	0.000483	0.000507	0.000878	0.00121	0%
Walnuts	0.0141	0.00595	0.00385	0.00792	0.00745	0.0158	0%
Watermelon	0.362	0.0463	0.0261	0.0654	0.0904	0.152	0%
Wheat flour, white	3.45	1.1	1.16	1.03	1.15	0.97	41%
Wheat, wholemeal	0.77	0.189	0.17	0.208	0.26	0.246	66%
Wine, red	0	0.756	0.778	0.736	0.9	0.771	1%
Wine, white/rosé	0.000436	0.288	0.213	0.357	0.286	0.405	0%

[a)] Consumption over 600 g of fruits and vegetables (excluding potatotes)

7.4 Consumption used for exposure calculation, for children

Consumer group	**Children**
Age (years)	1-3
Avg. weight (kg)	
No. of individuals in group	
	Average consumption (g/kg bw/day)
Almonds	0.0169
Apples	3
Apricot, dried	0
Apricots	0.0629
Aspargus	0.0264
Aubergines	0.00909
Avocados	0.0986
Bananas	2.5
Barley kernels	0.0139
Barley, malted	0
Beans with pods	0.0299
Beans, dried	0.0203
Beef liver	0.00145
Beef meat	0.664
Beetroot	0.0536
Blueberries	0.173
Broccoli	0.113
Brussels sprouts	0.00248
Buckwheat	0.0104
Bulgur	0.0178
Carrots	0.553
Cauliflower	0.0885
Celeriac	0.0395
Celery	0.00459
Cherries	0.0169
Chick pea	0.012
Chicken meat	0.579
Chilli peppers	0
Chinese cabbage	0.0196
Chinese radish	0.000586
Chives	0.00198
Citrus, other	0
Coconuts	0.0018
Coconuts, flakes	0.0054
Coffee beans, green	0.0000132
Coriander, leaves	0
Corn flour	0.179
Courgettes	0.017
Cucumbers	0.927
Currants	0.0194
Dates	0.0187

Consumer group	Children
Age (years)	1-3
Avg. weight (kg)	
No. of individuals in group	
	Average consumption (g/kg bw/day)
Dill	0.000166
Duck meat	0.0162
Egg, hen, dried	0.000377
Fat, pork	0.00154
Figs, dried	0
Figs, fresh	0.505
Fruit, canned	0
Fruit, dried	0
Fruit, exotic	0.00104
Fruit, other	0.0146
Garlics	0.0051
Globe artichokes	0.000871
Gooseberries	0.00257
Grapefruit	0.00899
Hazelnuts	0.00961
Head cabbage	0.0325
Head cabbage, red	0.0145
Herbs	0.0000227
Herbs, dried	0
Honey	0.0139
Horseradish	0
Iceberg	0.0112
Infant formula, milk-based, powder	1.95
Jerusalem artichokes	0.00107
Kale	0.00305
Kiwi	0.141
Lambs meat	0.019
Leek	0.0499
Lemons, lime	0.00898
Lentils	0.011
Lettuce etc.	0.0316
Mandarins, clementines	0.307
Mango	0.0782
Melons	0.368
Millet	0.00737
Mushrooms	0.0957
Nectarines	0.114
Nuts, other	0.00106
Olive oil	0.0265
Onions	0.325
Oranges	1.41
Oranges, juice	0
Papayas	0
Parsley	0.00288
Parsley Root	0.00157
Parsnips	0.0104

Consumer group	Children
Age (years)	1-3
Avg. weight (kg)	
No. of individuals in group	
	Average consumption (g/kg bw/day)
Peaches	0.0787
Peanut	0.0124
Pears	0.894
Peas with pods	0.0183
Peas without pods	0.189
Peppers, sweet	0.291
Persimmon	0.0175
Pine nuts	0.00134
Pineapples	0.0843
Plums	0.077
Pomegranate	0.00635
Pomelos	0
Pork liver	0.273
Pork meat	1.43
Potatoes	1.57
Prune	0.0105
Pumpkin	0
Pumpkin seeds	0
Radish	0.00101
Raisin	0.211
Raspberries, blackberries	0.147
Rhubarb	0.0472
Rice	0.162
Rice flour	0.00255
Rice, short grained	0.0714
Rice, wild	0
Rolled oat	1.34
Ruccola	0
Rye flour, bolted	0
Rye grain and flour	1.55
Salsify	0
Sesame seed	0.0134
Spices	0.00179
Spinach	0.0213
Spring onions	0.00516
Strawberries	0.791
Sunflower seed	0.0509
Swedes	0.0000513
Sweet corn	0.243
Table grapes	0.461
Tea	0.314
Tofu	0
Tomatoes	1.25
Tropical roots and tubers	0
Turnips	0
Vegetables, leafy, other	0.000671

Consumer group	Children
Age (years)	1-3
Avg. weight (kg)	
No. of individuals in group	
	Average consumption (g/kg bw/day)
Vegetables, other	0.00217
Vine leaves	0.00176
Walnuts	0.00213
Watermelon	0.624
Wheat flour, white	2.45
Wheat, wholemeal	0.731
Wine, red	0.000499
Wine, white/rosé	0.00147

7.5 ADIs for pesticides included in the risk assessment.

The ADIs used for calculation of the HQs for the individual pesticides are predominantly those set by the EU (Commission (COM) or EFSA). For pesticides where no ADI has been set by the EU, e.g. for substances not approved in the EU, the ADI set by the Joint FAO/WHO Meeting on Pesticide Resi- dues (JMPR), when available, is used if considered adequate by the National Food Institute. For dicarbamates an ADI, only to be used for the present report, has been set by the National Food Institute (see below the table.)

Substance	ADI, mg/kg bw/day	Source
2.4-D	0.02	COM 2017
2-phenylphenol_sum	0.4	EFSA 2008
Abamectin_sum	0.0025	COM 2008
Acephat	0.03	JMPR 2005
Acetamiprid	0.025	COM 2017
Aclonifen	0.07	COM 2008
Ametoctradin	10	EFSA 2012
Azadirachtin	0.01	COM 2017
Azinphos-ethyl		ADI cannot be set[2]
Azinphosmethyl	0.005	COM 2006
Azoxystrobin	0.2	EFSA 2010
Bifenthrin	0.015	EFSA 2018
Boscalid	0.04	COM 2008
Bromidion	0.1	JMPR 1988.
Bupirimat	0.05	EFSA 2010
Buprofezin		ADI cannot be set[2]
Cadusafos	0.0004	EFSA 2009
Carbendazim_sum	0.02	EFSA 2024
Chlorantraniliprol	1.56	EFSA 2013
Chlorfenapyr	0.015	COM 2000
Chlormequatchlorid	0.04	EFSA 2008
Chlorpropham	0.05	EFSA 2019
Chlorpyrifos		ADI cannot be set[2]
Chlorpyrifos-methyl		ADI cannot be set[2]
Cinidonethyl	0.01	COM 2002
Clofentezin	0.02	COM 2008
Clopyralid	0.15	COM 2021
Clothianidin	0.097	COM 2006
Cyazofamid	0.17	COM 2021
Cyfluthrin	0.01	EFSA 2020
Cymoxanil	0.013	EFSA 2008
Cypermethrin	0.005	COM 2021

Substance	ADI, mg/kg bw/day	Source
Cyproconazol	0.02	COM 2011
Cyprodinil	0.03	COM 2006
Cyromazin	0.06	COM 2009
DDT_sum		No ADI set in EU[3]
Deltamethrin	0.01	COM 2003
Diazinon	0.0002	EFSA 2006
Dichloran	0.005	EFSA 2010
Dichlorprop_sum	0.06	COM 2006
Dichlorvos	0.00008	EFSA 2006
Dicofol_sum	0.002	EFSA 2010
Dieldrin_sum		No ADI set in EU[3]
Difenoconazol	0.01	COM 2008
Diflubenzuron		ADI cannot be set[2]
Dimethoat		ADI cannot be set[2]
Dimethomorph	0.05	COM 2007
Dinotefuran	0.2	JMPR 2012
Dithiocarbamater	0.01	DTU. 2017
Emamectin	0.0005	EFSA 2012
EmamectinbenzoatB1b	0.0005	EFSA 2012
Epoxiconazol	0.008	COM 2008
Ethephon	0.03	COM 2006
Ethirimol	0.035	EFSA 2010
Etofenprox	0.03	EFSA 2008
Etoxazol	0.04	COM 2020
Famoxadon	0.006	COM 2021
Fenamidon	0.03	COM 2003
Fenazaquin	0.005	EFSA 2013
Fenbuconazol	0.006	EFSA 2010
Fenbutatin-oxid	0.05	EFSA 2010
Fenhexamid	0.2	COM 2015
Fenoxycarb	0.053	EFSA 2010
Fenpropathrin	0.03	JMPR 2012

2) due to genotoxicity

3) possibly due to e.g. (eco)tox profile or data gaps

Substance	ADI, mg/kg bw/day	Source
Fenpropidin	0.02	COM 2008
Fenpropimorph	0.003	COM 2008
Fenpyroximat	0.01	EFSA 2013
Fenvalerat_sum	0.02	JMPR 2012
Fipronil_sum	0.0002	EFSA 2006
Flonicamid_sum	0.025	COM 2010
Fludioxonil	0.37	COM 2007
Flufenoxuron	0.01	EFSA 2011
Fluopicolid	0.08	COM 2010
Fluopyram	0.012	COM 2013
Flutolanil	0.09	COM 2008
Flutriafol	0.01	COM 2011
Fluxapyroxad	0.02	EFSA 2012
Glyphosat	0.5	COM 2017
Heptachlor		No ADI set in EU[3]
Hexachlorbenzen		ADI cannot be set[2]
Hexaconazol	0.005	JMPR 1990
Hexythiazox	0.03	COM 2011
Imazalil	0.025	EFSA 2010
Imidacloprid	0.06	COM 2008
Indoxacarb	0.005	COM 2021
Iprodion	0.02	COM 2017
Iprovalicarb	0.015	COM 2016
Isoprothiolan	0.1	JMPR 2017
Kresoxim-methyl	0.4	COM 1999
Lambda-cyhalothrin	0.0025	COM 2016
Lindan		No ADI set in EU[3]
Linuron	0.003	COM 2017
Lufenuron	0.015	COM 2009
Malathion-Malaoxon	0.03	EFSA 2006
Mandipropamid	0.15	EFSA 2012
Mepanipyrim	0.02	COM 2004
Mepiquatchlorid	0.2	COM 2008
Metaflumizon	0.01	EFSA 2013
MetalaxylM	0.01	COM 2010
Metamitron	0.03	EFSA 2008
Methamidophos	0.001	COM 2006
Methiocarb_sum	0.00025	COM 2019
Metrafenon	0.25	COM 2007
Metribuzin	0.013	Database
Myclobutanil	0.025	COM 2016
Omethoat		ADI cannot be set[2]

Substance	ADI, mg/kg bw/day	Source
Oxadiazon	0.0036	EFSA 2010
Penconazol	0.03	COM 2009
Pencycuron	0.2	COM 2011
Pendimethalin	0.125	COM 2017
Permethrin	0.01	JMPR 1999
Phenmedipham	0.03	COM 2004
Phosmet_sum	0.001	COM 2022
Pirimicarb	0.035	COM 2006
Pirimiphos-methyl	0.004	EFSA 2005
Prochloraz_sum	0.01	EFSA 2011
Procymidon	0.0028	DTU. 2018
Profenofos	0.03	JMPR 2007
Propamocarb	0.29	COM 2007
Propargit	0.03	EFSA 2011
Propiconazol	0.04	EFSA 2018
Proquinazid	0.01	EFSA 2009
Prosulfocarb	0.005	COM 2007
Prothioconzoldesthio	0.01	COM 2008
Pymetrozin	0.03	COM 2001
Pyraclostrobin	0.03	COM 2004
Pyridaben	0.01	EFSA 2010
Pyrimethanil	0.17	COM 2006
Pyriproxyfen	0.05	COM 2020
Quinoxyfen	0.2	COM 2004
Quintozen_sum	0.01	JMPR 1995
Spinosad_sum	0.024	COM 2007
Spirodiclofen	0.015	EFSA 2009
Spiromesifen	0.03	EFSA 2007
Spirotetramat_sum	0.05	EFSA 2013
Spiroxamin	0.025	EFSA 2010
Tau-fluvalinat	0.005	EFSA 2018
Tebuconazol	0.03	EFSA 2008
Tebufenozid	0.02	COM 2011
Tebufenpyrad	0.01	COM 2009
Tetraconazol	0.004	EFSA 2008
Thiabendazol	0.1	COM 2017
Thiacloprid	0.01	COM 2017
Thiamethoxam	0.026	COM 2007
Thiophanat-methyl	0.02	EFSA 2021
Tolclofos-methyl	0.064	COM 2006
Triadimefon	0.05	EFSA 2009
Triadimenol	0.05	EFSA 2009

Substance	ADI, mg/kg bw/day	Source
Triazophos	0.001	JMPR 2002
Tricyclazol	0.05	COM 2023
Trifloxystrobin	0.1	COM 2018

Substance	ADI, mg/kg bw/day	Source
Triflumizol_sum	0.05	COM 2010
Triflumuron	0.014	EFSA 2011
Zoxamid	0.5	COM 2018

7.6 Reduction factors.

Reduction factors for the pesticides have been found from the literature in citrus fruits. melon and bananas. Reduction factors in citrus fruits from Rapport 7/98 Statens Livsmedelverk. Sweden is shown below.

Reduction factors in citrus fruits found in Sweden:

Commodity/pesticide	Content of total residue in peel (%)
Orange	
Azinfosmethyl	≥90
Bromopropylat	≥90
Dicofol	97
Dimethoate	≥90
Fenithrothion	≥95
Phosmet	≥90
Chlorfenvinphos	≥90
Chlorpyrifos	≥90
Quinalphos	≥90
Mecarbam	≥95
Methidathion	≥95
Parathion	≥95
Parathion-methyl	≥95
Tetradifon	≥90
Lemon	
Mecarbam	≥95
Grapefruit	
Ethion	≥97
Small citrus fruits	
Ethion	≥95
Chlorfenvinphos	≥90
Malathion	≥97
Methidathion	≥95

Livsmedelverket has found that for thiabendazol about 15-25% of the pesticide is in the pulp from oranges.

The reduction factors found in the JMPR reports are shown below.

Reduction factors found in JMPR reports

Pesticide	Commodity	Reduction	Source
Thiabendazole	Oranges	<3% in pulp; >97% in peel	JMPR 2000
Imazalil	Melon	About 10% in pulp; about 90% in peel	JMPR 1994
Phenyl-phenol	Oranges	2-4% in pulp; 96-98 % in peel	JMPR 1999
Benomyl	Oranges	From oranges to orange juice the reduction is 17-98%	JMPR 1998
Procymidon	Kiwi	In pulp about 1%; in peel about 99%	JMPR 1998

Conclusion

Most results for reduction factors are for citrus fruits. As bananas and melons also have a thick peel it is estimated that the results for citrus fruits can be transferred to these two commodities. Therefore overall, a reduction factor of 90% is used for both citrus fruits. melons and bananas except for thiabendazole and pesticides from the benomyl group (carbendazim, thiophanat-methyl and benomyl). For these substances a reduction of 75% is used. as it is the lowest reduction found and the worst-case situation.

Processing factors used in the present report:

Commodity	Processing factor
Bananas Grapefruit Lemons. lime Mandarins. clementines Melons Mineola Oranges Pomelos Watermelon	75% for.thiabendazole. thiophanate-methyl. carbendazim and benomyl 90% for all other pesticides

7.7 Hazard Quotient (HI) for individual commodities (consumer groups “Children 4-6 years” and “Adults”)

Commodity	Children 4-6 years Hazard Quotient. Model 2. %	Adults Hazard Quotient. Model 2. %
Almonds	0.052	0.024
Apples	5.5	1.7
Apricot. dried	0.0064	0.0014
Apricots	0.014	0.0072
Aubergines	0.017	0.027
Avocados	0.14	0.11
Bananas	0.10	0.032
Barley kernels	0.00052	0.00034
Beans with pods	0.074	0.038
Beans. dried	0.017	0.0074
Blueberries	0.036	0.017
Broccoli	0.047	0.042
Brussels sprouts	0.0029	0.0023
Carrots	0.76	0.20
Cauliflower	0.016	0.010
Celeriac	0.0083	0.0054
Celery	0.0029	0.0035
Cherries	0.027	0.011
Chilli peppers	0.00083	0.00082
Chinese cabbage	0.047	0.046
Chives	0.025	0.02
Citrus. other	0	0.0000074
Coffee beans. green	0	0.0000015
Coriander. leaves	0.00049	0.0018
Courgettes	0.016	0.021
Cucumbers	4.1	0.65
Currants	0.092	0.049
Dates	0.0071	0.00040
Dill	0.0011	0.0043
Figs. fresh	0.00016	0.000028
Fruit. dried	0.001	0.000057
Fruit. exotic	0	0.00015
Fruit. other	0	0.00011
Gooseberries	0	0.00013
Grapefruit	0.027	0.013
Head cabbage	0.0019	0.0022

Commodity	Children 4-6 years	Adults
	Hazard Quotient. Model 2. %	Hazard Quotient. Model 2. %
Head cabbage. red	0.00026	0.00032
Herbs	0.048	0.038
Herbs. dried	0.0011	0.0040
Honey	0.0047	0.0021
Iceberg	0.0023	0.0046
Kale	0.0099	0.040
Kiwi	0.066	0.011
Leek	0.0059	0.0046
Lemons. lime	0.0062	0.0049
Lentils	0.00046	0.00060
Lettuce etc.	0.35	0.50
Mandarins. clementines	0.15	0.074
Mango	0.036	0.010
Melons	0.11	0.014
Mushrooms	0.24	0.14
Nectarines	0.22	0.12
Nuts. other	0.00048	0.00020
Onions	0.016	0.0078
Oranges	0.23	0.11
Oranges. juice	0.16	0.062
Papayas	0.029	0.0081
Parsley	0.0084	0.0065
Parsley Root	0.000055	0.00013
Parsnips	0.0039	0.0084
Peaches	0.21	0.11
Pears	1.2	0.34
Peas with pods	0.023	0.011
Peas without pods	0.027	0.014
Peppers. sweet	1.4	0.30
Persimmon	0.00016	0.000045
Pineapples	0.15	0.07
Plums	0.11	0.032
Pomegranate	0	0.0000027
Potatoes	0.55	0.37
Pumpkin	0.00020	0.00018
Pumpkin seeds	0.0060	0.0025
Radish	0.00018	0.00019
Raisin	0.28	0.053
Raspberries. blackberries	0.047	0.017
Rice	0.33	0.12
Rice. short grained	0.0074	0.00050
Rice. wild	0.00011	0.000039
Rolled oat	0.26	0.066
Rucola	0.014	0.029
Rye flour. bolted	0.0015	0.00052
Rye grain and flour	0.081	0.024

Commodity	Children 4-6 years	Adults
	Hazard Quotient. Model 2. %	Hazard Quotient. Model 2. %
Sesame seed	0.015	0.0044
Spices	0.008	0.0051
Spinach	0.038	0.042
Spring onions	0.0016	0.0055
Strawberries	0.68	0.23
Table grapes	1.4	0.36
Tea	0.0025	0.012
Tomatoes	1.4	0.65
Tropical roots and tubers	0.000034	0.000034
Turnips	0	0.00000036
Vegetables. leafy. other	0.0072	0.0057
Vegetables. other	0.0067	0.023
Walnuts	0.0023	0.00099
Watermelon	0.0074	0.00095
Wheat flour. white	3.0	0.96
Wheat. wholemeal	0.43	0.11
Wine. red	0	0.28
Wine. white/rosé	0.00013	0.088
Total	23	8.4

7.8 Exposure and Hazard Quotient (HQ) for individual pesticides (consumer groups “Children 4-6 years” and “Adults”)

Exposure and Hazard Quotients for individual pesticides (consumer groups “Children 4-6 years” and “Adults”) calculated by Model 2.

Pesticide	Children 4-6 years		Adults	
	Exposure µg/kg bw/day	Hazard Quotient %	Exposure µg/kg bw/day	Hazard Quotient %
2.4-D	0.00069	0.0035	0.00034	0.0017
2-phenylphenol	0.062	0.016	0.025	0.0062
2-Phenylphenol (sum)	0.010	0.0025	0.005	0.0013
Abamectin	0.017	0.69	0.0053	0.21
Acephate	0.00098	0.0033	0.00057	0.0019
Acetamiprid	0.075	0.30	0.027	0.11
Aclonifen	0.0065	0.0093	0.002	0.0028
Ametoctradin	0.046	0.00046	0.029	0.00029
Amidosulfuron	0.00000023	0.00000011	0.00000086	0.00000043
Atrazine	0.000048	0.00024	0.000066	0.00033
Azadirachtin	0.0077	0.078	0.0031	0.031
Azinphos-methyl	0.0025	0.05	0.0012	0.024
Azoxystrobin	0.078	0.039	0.031	0.015
Bifenthrin	0.0020	0.013	0.00077	0.0051
Boscalid	0.24	0.61	0.13	0.33
Bupirimate	0.037	0.073	0.010	0.020
Cadusafos	0.0000078	0.0019	0.0000062	0.0016
Carbaryl	0	0	0.00000096	0.000013
Carbendazim and benomyl	0.047	0.24	0.018	0.091
Carbofuran	0.000057	0.038	0.000030	0.020
Carboxin	0.0000099	0.00012	0.0000079	0.000098
Chlorantraniliprole (DPX E-2Y45)	0.045	0.0029	0.022	0.0014
Chlorfenapyr	0.0051	0.034	0.0016	0.011
Chlormequat	0.24	0.61	0.072	0.18
Chlorpropham	0.14	0.27	0.092	0.18
Cinidon-ethyl (sum of cinidon	0.00050	0.0050	0.00034	0.0034
Clethodim	0.0000032	0.0000020	0.000011	0.0000068
Clofentezine	0.0018	0.0091	0.00060	0.0030
Clopyralid	0.0064	0.0042	0.0016	0.0011
Clothianidin	0.0065	0.0067	0.0030	0.0031
Cyantraniliprole	0.0048	0.048	0.0011	0.011
Cyazofamid	0.018	0.011	0.0049	0.0029
Cyflufenamid	0.0038	0.0095	0.0011	0.0027
Cyfluthrin	0.0014	0.014	0.00072	0.0072
Cymoxanil	0.0090	0.069	0.0033	0.025
Cypermethrin	0.015	0.31	0.0063	0.13

Pesticide	Children 4-6 years		Adults	
	Exposure µg/kg bw/day	Hazard Quotient %	Exposure µg/kg bw/day	Hazard Quotient %
Cyproconazole	0.0013	0.0065	0.00056	0.0028
Cyprodinil	0.11	0.37	0.033	0.11
Cyromazine	0.012	0.020	0.0069	0.011
Deltamethrin	0.053	0.53	0.018	0.18
Diazinon	0.00026	0.13	0.00012	0.060
Dichlorprop	0.00010	0.00017	0.000048	0.000080
Dicloran	0.000038	0.00076	0.000058	0.0012
Dicofol	0.00021	0.010	0.00017	0.0084
Difenoconazole	0.054	0.54	0.019	0.19
Diflubenzuron	0.0045	0.0045	0.0033	0.0033
Dimethomorph	0.037	0.073	0.021	0.041
Dinotefuran	0.0014	0.00070	0.0065	0.0033
Diphenylamine	0.000021	0.000029	0.000018	0.000024
Dithiocarbamates	0.25	2.5	0.077	0.77
Diuron	0.0000056	0.000080	0.0000045	0.000064
Emamectin	0.0035	0.69	0.0016	0.32
Endosulfan	0.000085	0.0014	0.000082	0.0014
Epoxiconazole	0.0040	0.050	0.00098	0.012
Ethephon	0.050	0.17	0.014	0.046
Ethion	0.000052	0.0026	0.000072	0.0036
Ethirimol	0.014	0.039	0.0043	0.012
Etofenprox	0.035	0.12	0.012	0.041
Etoxazole	0.0034	0.0086	0.0010	0.0025
Famoxadone	0.017	0.28	0.0051	0.085
Fenamidone	0.00037	0.0012	0.00029	0.00097
Fenazaquin	0.0080	0.16	0.0014	0.027
Fenbuconazole	0.0018	0.029	0.0009	0.015
Fenbuconazole (sum)	0.0005	0.0083	0.00026	0.0043
Fenbutatin oxide	0.000066	0.00013	0.000032	0.000063
Fenhexamid	0.065	0.032	0.031	0.015
Fenoxycarb	0.0021	0.0039	0.00065	0.0012
Fenpropathrin	0.00013	0.00043	0.000074	0.00025
Fenpropidin	0.00046	0.0023	0.00023	0.0011
Fenpropimorph	0.00076	0.025	0.00024	0.0079
Fenpyrazamine	0.0020	0.0015	0.00045	0.00034
Fenpyroximate	0.0058	0.058	0.0021	0.021
Fenvalerate	0.0012	0.0071	0.00037	0.0021
Fipronil	0.00037	0.19	0.00022	0.11
Flonicamid	0.030	0.12	0.0086	0.034
Fludioxonil	0.38	0.10	0.12	0.033
Flufenoxuron	0.000039	0.00039	0.00019	0.0019
Fluopicolide	0.014	0.018	0.0077	0.0096
Fluopyram	0.10	0.83	0.035	0.29
Fluoxastrobin	0.00000065	0.0000043	0.00000064	0.0000043
Flutolanil	0.0076	0.0084	0.0051	0.0057
Flutriafol	0.021	0.084	0.0076	0.031
Fluvalinate	0.0091	0.18	0.0035	0.070
Fluxapyroxad	0.043	0.87	0.016	0.33
Fosetyl-Al	0	0	0.022	0.0022
Glufosinate	0.0025	0.012	0.0013	0.0062
Glyphosate	0.30	0.060	0.092	0.018

Pesticide	Children 4-6 years		Adults	
	Exposure µg/kg bw/day	Hazard Quotient %	Exposure µg/kg bw/day	Hazard Quotient %
Hexaconazole	0.0010	0.021	0.00048	0.0095
Hexythiazox	0.019	0.064	0.0068	0.023
Imazalil	0.13	0.54	0.058	0.23
Imidacloprid	0.027	0.046	0.0098	0.016
Indoxacarb	0.045	0.90	0.018	0.36
Iprodione	0.0074	0.037	0.0042	0.021
Iprovalicarb	0.00051	0.0034	0.018	0.12
Isoprocarb	0.000010	0.00026	0.0000082	0.00021
Isoprothiolane	0.0046	0.0046	0.0016	0.0016
Kresoxim-methyl	0.032	0.0079	0.0099	0.0025
Lambda-cyhalothrin	0.017	0.61	0.0078	0.31
Linuron	0.0085	0.28	0.0023	0.078
Lufenuron	0.0034	0.023	0.00093	0.0062
Malathion	0.0058	0.02	0.0017	0.0055
Mandipropamid	0.020	0.013	0.026	0.017
Mepanipyrim	0.022	0.19	0.0066	0.055
Mepiquat	0.040	0.020	0.012	0.0061
Metaflumizone	0.00038	0.0038	0.00080	0.0080
Metalaxyl and metalaxyl-M	0.021	0.21	0.014	0.14
Metamitron	0.000096	0.00032	0.00010	0.00034
Methamidophos	0.00063	0.063	0.00030	0.030
Methiocarb	0.0055	2.2	0.00089	0.36
Methomyl	0.00015	0.0060	0.00024	0.0096
Metrafenone	0.032	0.013	0.0093	0.0037
Metribuzin	0.00025	0.0019	0.000082	0.00063
Monocrotophos	0.000014	0.0023	0.000019	0.0031
Myclobutanil	0.022	0.088	0.007	0.028
Oxadiazon	0.000034	0.00095	0.000046	0.0013
Oxadixyl	0.0000078	0.000078	0.0000062	0.000062
Paclobutrazol	0.000063	0.00029	0.0000036	0.000016
Penconazole	0.0080	0.027	0.0024	0.0079
Pencycuron	0.012	0.0058	0.0078	0.0039
Pendimethalin	0.02	0.016	0.0053	0.0042
Permethrin (sum of isomers)	0.028	0.28	0.009	0.09
Phenmedipham	0.00029	0.00096	0.00031	0.0010
Phorate	0.000038	0.0054	0.00003	0.0043
Phosmet	0.017	1.7	0.0055	0.55
Pirimicarb	0.039	0.11	0.011	0.032
Pirimiphos-methyl	0.033	0.82	0.010	0.25
Prochloraz	0.016	0.16	0.012	0.12
Procymidone	0.00041	0.015	0.0002	0.0071
Profenofos	0.0022	0.0074	0.00070	0.0023
Propamocarb	0.31	0.11	0.14	0.048
Propanil	0.000026	0.00013	0.000063	0.00031
Propargite	0.0023	0.0076	0.00091	0.0030
Propiconazole	0.0097	0.024	0.0037	0.0092
Propyzamide	0.000011	0.000086	0.0000083	0.000041
Proquinazid	0.0036	0.036	0.0011	0.011
Prosulfocarb	0.017	0.34	0.0051	0.10
Prothioconazole	0.000061	0.00061	0.000050	0.00050

Pesticide	Children 4-6 years		Adults	
	Exposure µg/kg bw/day	Hazard Quotient %	Exposure µg/kg bw/day	Hazard Quotient %
Pymetrozine	0.0041	0.014	0.0011	0.0037
Pyraclostrobin	0.077	0.26	0.033	0.11
Pyridaben	0.0079	0.079	0.0029	0.029
Pyridalyl	0.0018	0.0061	0.00041	0.0014
Pyrimethanil	0.48	0.29	0.16	0.095
Pyriproxyfen	0.015	0.029	0.0056	0.011
Quinoxyfen	0.0024	0.0012	0.0007	0.00035
Quintozene	0.0092	0.092	0.0037	0.037
Spinetoram	0.0083	0.033	0.0013	0.0053
Spinosad	0.025	0.11	0.011	0.045
Spirodiclofen	0.014	0.091	0.0042	0.028
Spiromesifen	0.011	0.037	0.0047	0.016
Spirotetramat	0.0087	0.017	0.0026	0.0052
Spiroxamine	0.0017	0.0066	0.00046	0.0018
Sulfoxaflor	0.00094	0.0024	0.00050	0.0012
Tebuconazole	0.076	0.25	0.025	0.083
Tebufenozide	0.012	0.060	0.0060	0.030
Tebufenpyrad	0.012	0.12	0.0045	0.045
Tecnazene	0.000013	0.000067	0.000011	0.000053
Tetraconazole	0.0061	0.16	0.0019	0.048
Tetradifon	0.00021	0.0011	0.00018	0.00086
Thiabendazole	0.12	0.12	0.054	0.054
Thiacloprid	0.031	0.31	0.0089	0.089
Thiamethoxam	0.016	0.062	0.0063	0.024
Thiophanate-methyl	0.018	0.092	0.011	0.054
Tolclofos-methyl	0.010	0.016	0.0068	0.011
Triadimefon and triadimenol	0.00035	0.00070	0.00017	0.00033
Triadimenol	0.036	0.073	0.014	0.028
Triazophos	0.0012	0.12	0.00048	0.048
Tricyclazole	0.0030	0.0060	0.0011	0.0022
Trifloxystrobin	0.042	0.042	0.013	0.013
Triflumizole	0.0076	0.015	0.0012	0.0024
Triflumuron	0.0070	0.050	0.0025	0.018
Zoxamide	0.0076	0.0015	0.0032	0.00063
Total	4.8	23	1.9	8.4

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