Do we really know what pesticides are in our food?

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Introduction

To produce our food and to meet the appearance standards imposed by supermarkets, most farmers use chemical pesticides to control weeds, crop pests and diseases. Residues from the pesticides used may still be in the food when it gets into our homes and onto our plates. In some cases there will be residues of more than one pesticide.

The Government places legal limits on the level of a pesticide that can be present in food. This is known as the Maximum Residue Level (MRL). However, these are set in order to allow farmers to use pesticides “for effective and reliable pest control”[1] and according to the Government, foods containing pesticide residues that comply with the MRL are “toxicologically acceptable”, rather than safe.

There are grave concerns about the safety of pesticides for human health. A number of pesticides which are commonly found in our food have been identified by the European Union as likely to cause disturbance to natural hormones in our bodies. These so-called gender bending chemicals mimic natural hormones, or block them from working properly. Natural hormones can affect behaviour, brain development and development of reproductive organs. The gender bending chemicals have been found to have an effect at very low doses.

It is the Government’s responsibility to ensure that the food we eat is safe. It claims that it is “committed to ensuring the safety of food” and “therefore carries out a comprehensive monitoring programme for the presence of pesticides residues in food on sale in the UK”[2]. The Food Standards Agency has even stated that it will review current regulation of pesticides “with the aim of minimising their residues in food”[3]. But Friends of the Earth has uncovered evidence that systems for monitoring pesticide residues in our food are far from adequate and most food goes unchecked.

Pesticides in our food

Every year, the Pesticide Residues Committee (PRC) tests various shop-bought food samples for a range of different pesticide residues. Foods tested include bread, milk and potatoes, plus a selection of fruit and vegetables, cereals and cereal products, animal and fish products, and some processed foods. Their results show that almost 30 per cent of our food contains pesticide residues[4]. Almost half of fruit and vegetables contain residues[5], and they may contain residues of more than one pesticide. This is of particular concern, since these foods are such an important part of a healthy diet. The consumption of fresh fruit and vegetables is heavily encouraged by the Government and has been rising steadily for the last five years[6]. It is vital that as the consumption of fresh foods increases, monitoring and protection from pesticide residues also increases.

Meagre Sampling

The Government claims that “the sampling that we use is the most cost-effective option and ensures that we can assess consumer safety”[7]. But compared to other countries in the EU, the Government appears to put cost savings before thoroughness. A report produced by the European Commission, which looked at pesticide monitoring across the EU in 1999, highlighted the small number of food samples tested in the UK compared to other countries[8]. While Italy tested nearly 8,000 samples of fruits and vegetables, and Germany tested more than 6,000, the UK tested only 1,372. While this was
almost double the samples tested in 1998 (732), only five countries tested fewer samples of food than the UK (see table).

### Pesticide Residue Tests on Fruit and Vegetables in 1999 (most recent figures available)

<table>
<thead>
<tr>
<th>Country</th>
<th>No. of Samples analysed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy</td>
<td>7,938</td>
</tr>
<tr>
<td>Germany</td>
<td>6,617</td>
</tr>
<tr>
<td>France</td>
<td>4,553</td>
</tr>
<tr>
<td>Spain</td>
<td>3,325</td>
</tr>
<tr>
<td>Sweden</td>
<td>3,046</td>
</tr>
<tr>
<td>Finland</td>
<td>2,460</td>
</tr>
<tr>
<td>Denmark</td>
<td>2,287</td>
</tr>
<tr>
<td>Greece</td>
<td>1,422</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1,419</td>
</tr>
<tr>
<td>UK</td>
<td>1,372</td>
</tr>
<tr>
<td>Belgium</td>
<td>1,035</td>
</tr>
<tr>
<td>Portugal (fresh produce only)</td>
<td>648</td>
</tr>
<tr>
<td>Austria</td>
<td>597</td>
</tr>
<tr>
<td>Ireland</td>
<td>232</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>231</td>
</tr>
</tbody>
</table>

With so few samples taken, the vast majority of food coming into the UK is not monitored for pesticides by the Government. For example, Friends of the Earth (FOE) has estimated that in 1997 the Government tested fewer than one in every 100 million bananas imported into the UK[9]. In 1999, the Government spent only £1.6 million on testing our food for pesticide residues. Clearly, far more resources must be given to pesticide residue monitoring if the UK is to get anywhere near the standard of Germany or Italy.

Supermarkets also regularly test their food for pesticides, in order to ensure that they are complying with the law on residues. However, the results of these tests are not made available to their customers. This means that while supermarkets know what pesticides are in their food, shoppers are kept in the dark.

### Mismatch

The Government has said that in terms of testing, ‘*the most important foods are those eaten frequently and in large amounts*’ [10]. But the Government’s choice of foods tested does not relate well to what people are actually eating. For example, The National Food Survey [11] lists those foods which people eat most often. Of the most popular foods only bread, milk, potatoes, apples and
carrots have been tested every year between 1994 and 1999 (the most recent figures available). Beef, chicken and bananas were only tested twice, while orange juice, apple juice, breakfast cereals, wine and beer were only tested once.

Market research has highlighted the growing trend of eating out in restaurants and cafes, and the popularity of the take-away market[12]. But the Government’s focus on testing food sold in shops, rather than at wholesalers, completely ignores the safety of food supplied to the catering trade. Similarly, for many children school dinners are an important part of their diet - for one in four children it is the only hot meal of the day[13], yet these meals are not included in the Government’s testing programme.

Testing Children’s Food

Infants and children can be much more susceptible to pesticides than adults[14]. This is partly because of their smaller size and lower body weight, but also because their bodies are still developing. The immature organs of infants may be more vulnerable to damage than those of adults, and in some cases children and infant are less able to break down chemicals in their bodies. So it is all the more important that the foods they eat most are regularly monitored, and that action is taken to ensure their food is pesticide free.

A national survey published in 1995 looked at the food eaten by children under four and a half years old[15]. A comparison of this survey against the foods tested by the Government for pesticide residues shows a serious failure to monitor the safety of children’s diets. Between 1994 and 1999 (the most recent data available), the Government only twice tested biscuits, chicken, turkey, beef and peas for pesticides. Breakfast cereals, cakes, pasta, ice-cream, bacon, cooked meats, sausages, crisps and maize snacks were only tested once.

The survey showed that the youngest children (less than two and a half years old) were more likely to eat bananas, yoghurt, peas and fish. Bananas were only tested twice, and yoghourt once between 1994 and 1999. In 1997, 45 out of 50 bananas sampled contained pesticide residues - 19 contained residues of more than one pesticide[16]. Despite claims that there was a commitment to monitor foods eaten by infants, this work was not followed up.

Children’s chocolate was not tested at all between 1994 and 1999. Cooking chocolate and continental chocolate were tested, but not children’s chocolate bars[17]. Nearly all of the chocolate that was tested contained residues of the hormone disrupting pesticide lindane, which has been linked to breast cancer. However, no follow up looking at the chocolate eaten by children has been done.

Protecting Children

The European Commission has recognised that young children need protection from chemicals in their food. In 1999, it set a maximum limit of 0.01mg/kg for pesticides in milk formula and baby food[18]. This limit is so low that it effectively means that there must not be any residues present. But because this only applies to processed baby foods, it leaves young and older children unprotected from pesticides in the other foods they eat.

It is vital for the health of our children that they eat healthy diets with plenty of fresh fruit and vegetables. It is totally unacceptable that they should only be protected from pesticide residues in food while they eat processed baby food. Friends of the Earth believes that the law restricting
pesticides in baby food should be extended to all food, in order to ensure that our children are safe from pesticide residues in their food. This would need to be enforced by effective monitoring to ensure that food is not being sold which contains pesticides. Clearly the current level of monitoring is far from adequate to achieve this.

What Friends of the Earth is calling for...

No pesticides in our food

Friends of the Earth believes that the starting point for pesticide residues in food must be consumer safety. The Government’s aim should not be compliance with residue limits that suit the farming industry, but the complete removal of pesticide residues from our food.

The EU has introduced legislation that limits the level of all pesticide residues in processed baby food to less than 0.01mg/kg. The Government must extend this to cover all food. All infants and children deserve to be protected from pesticide residues, not just those who eat processed food.

Adequate monitoring

The Government’s programme for monitoring pesticide residues in our food is completely inadequate to give a realistic picture of what pesticides we are exposed to in our diets. The sampling programme must be increased to bring it into line with those of other EU countries. It is unacceptable that only 732 fruit and vegetables were tested in the UK while Italy could manage over 8,000. The Government’s programme may be cost effective, but Friends of the Earth believes that it cuts corners to achieve this.

The serious lack of resources given to pesticide residue monitoring means that only a small number of products can be tested every year. A far greater range of produce must be tested annually, particularly focussing on those products eaten most by children. Many more resources must be given to the monitoring programme in order to achieve this.

The right to know

Supermarkets must make the results of their pesticide monitoring available to shoppers, in order that they can make informed choices about the food that they eat.

Endnotes and (references)


[3] Food Standards Agency *Strategic Plan 2001-2006 - Putting consumers first*

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[5] Ibid. Page 17 According to the PRC, 43 per cent fruits and vegetables tested in the rolling programme of testing in 1999 contained pesticide residues


[7] Ibid. Page iii. Foreword


[9] According to KeyNote Market Report, 1999, 725,600 tonnes of bananas were imported in 1997. According to Chiquita (www.chiquita.com) a medium sized serving of one banana weighs 126g. Using this figure, 5,758,730,158 bananas were imported. The Working Party on Pesticides Residues Report for 1997 states that 50 bananas were tested for pesticide residues in 1997, working out at one banana tested for every 115 million imported.


[17] Cooking chocolate was tested in 1997. All samples contained pesticides, including inorganic bromide and lindane. Continental chocolate was tested in 1998, 12 out of 16 samples contained lindane.