DIRTY DOZEN

The UK government tests roughly 3,000kg of food for pesticide residues each year. Once the results are published, PAN UK analyses this data and makes it accessible to the general public by producing the annual 'Dirty Dozen'. The Dirty Dozen lists the produce most likely to contain residues of two or more pesticides (known as 'pesticide cocktails') to help inform people's shopping decisions. (see Dirty Dozen 2023). This year we looked beyond just fruit and vegetables to include all products of 'non-animal origin'. As a result, the latest Dirty Dozen includes bread at number seven – with rice just missing out at number thirteen.

The problem with UK government testing

Unfortunately, the government tends to select a different list of produce for testing each year. As a result, produce found to be high in multiple pesticide residues one year will often not be tested in subsequent years. This inconsistent approach means that it is impossible to establish long-term trends in terms of which produce is the most problematic. In order to provide shoppers with a clearer overview of problem produce, PAN UK has compiled a list looking at the worst culprits over the past six years (see Dirty Dozen 2018-2023 over the page).

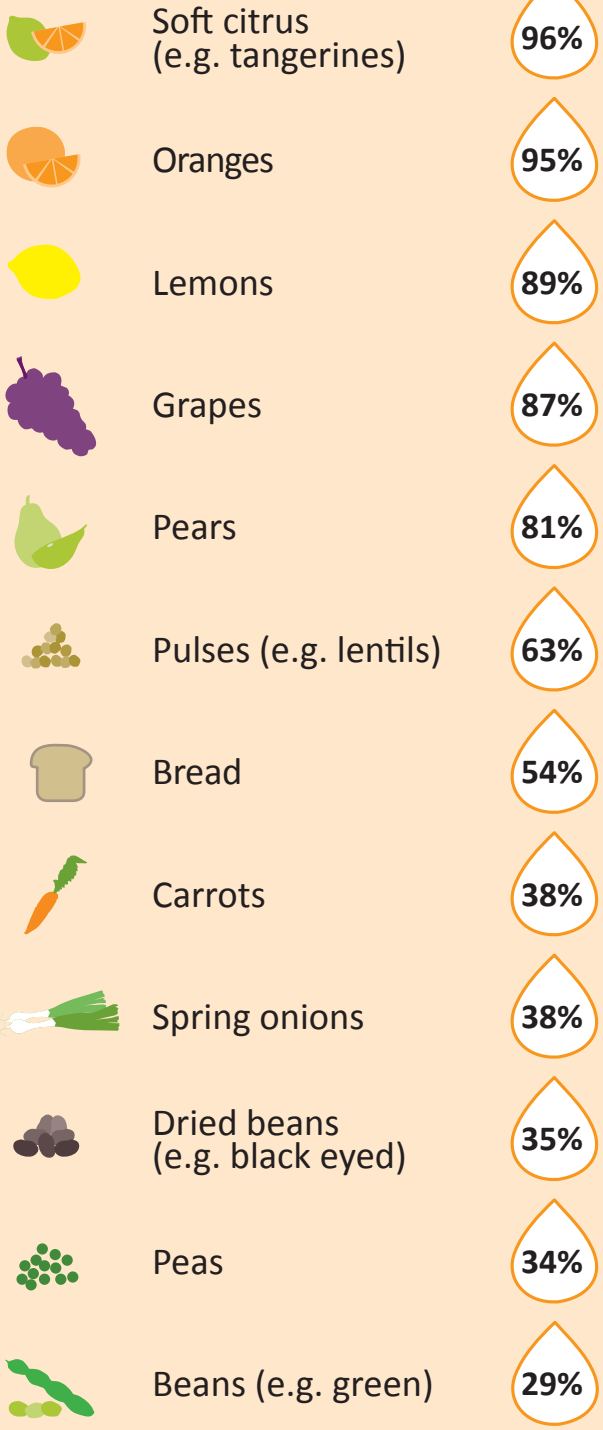
The cocktail effect

PAN UK's Dirty Dozen focuses on produce with multiple pesticide residues. This is because the government sets safety limits for just one pesticide at a time, ignoring the growing body of evidence that chemicals can become more harmful when combined (a phenomenon known as the 'cocktail effect'). This not only ignores the potential risks to human health associated with pesticide mixtures found on one item (an apple, for example) but also those found in one dish (such as a fruit salad) let alone an entire day's worth of food.

Why does PAN not provide a list of 'safe' produce?

PAN UK does not produce a so-called 'Clean 15' list of produce with the least residues. This is because the government testing programme is so limited that we would not want to give the impression that certain produce is guaranteed to be free from pesticide cocktails. It is also possible to grow food using hazardous pesticides without the chemicals in question appearing as residues in food. As a result, an absence of residues should not be taken as assurance that there have been no pesticide-related harms to human health or the environment where the food was grown.

Dirty Dozen 2023



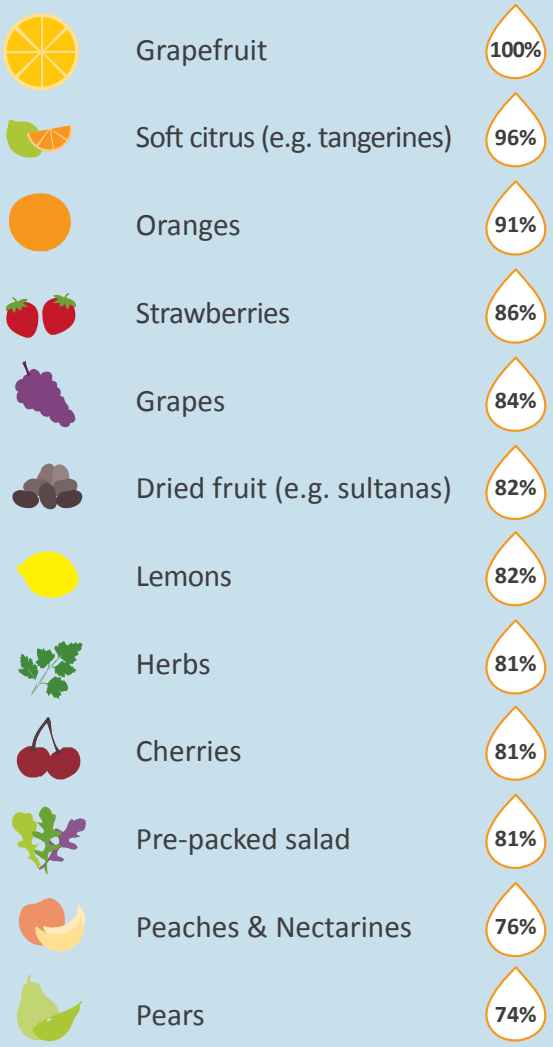
The results of the government's residue testing programme are only available for the preceding year. The results above are, therefore, based on the most recent data available.

What are pesticides?

Pesticides are poisons designed to kill living organisms. 'Pesticides' is the umbrella term for thousands of different active substances including herbicides (commonly referred to as weed killers), insecticides and fungicides. Crops are often treated with pesticides many times during a growing season – as many as 20 different chemicals can be applied to wheat for example.

Certain groups of people are more susceptible to the effects of pesticides, especially young children and expectant parents. Exposure to certain pesticides at critical stages in development can interfere with particular organs and their functions. Of particular concern are endocrine disrupting chemicals which affect hormone systems and have been associated with learning disabilities, attention deficit disorder, and cognitive and brain development problems.

Dirty Dozen 2018-2023



Spotlight on imports

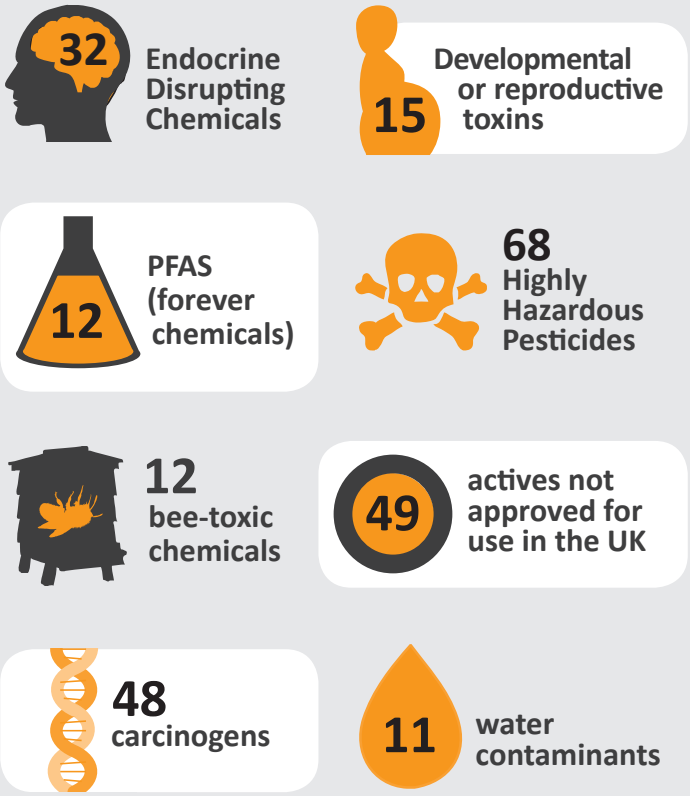
The UK remains heavily reliant on imports, which account for roughly 45% of the food we consume.

According to the most recent UK government testing, imported food tends to be more problematic when it comes to pesticides than UK produce. Looking at all food of 'non-animal origin', 55% of the imported produce tested contained pesticide cocktails, compared to 31% of UK foods. 127 different pesticides were found on imported produce, compared to 60 on UK produce. And imported food was 2.5 times more likely to contain pesticides above the safety limit than UK-grown food.

Since leaving the EU, the UK has signed up to new trade deals with a number of countries that are major agricultural producers. UK food imports from these countries are likely to increase. We are also in the midst of negotiating a trade deal with India which has a long history of struggling with high residue levels in their food exports. Of the 25 samples of Indian beans tested by the UK government, 10 (40%) contained residues above the UK safety limit.

There are major questions over the capacity of English ports to test for pesticides and detect issues, particularly if food imports increase significantly under new trade deals. Those wanting to reduce their exposure to pesticides should aim to buy British whenever possible.

Found on ALL produce of non-animal origin



What is PAN UK doing?

PAN UK campaigns for a major reduction in pesticide-related harms to both human health and the environment. This includes making sure that UK farmers have the support they need to reduce their pesticide use and working with supermarkets to tackle pesticide harms linked to their global supply chains.

PESTICIDE ACTION NETWORK *UK*

Sign up to follow our work at: **www.pan-uk.org**