

PESTICIDES IN OUR FOOD



Pesticides are poisons designed to kill living organisms. 'Pesticides' is the umbrella term for thousands of different active substances designed to kill plants (herbicides, commonly referred to as weedkillers), insects (insecticides), and mould and fungus (fungicides). All three of these groups of pesticides are used throughout a growing season by farmers to grow the food we eat.

Each year, the UK Government tests a range of produce and other food stuffs for pesticide residues. Using data over a five-year period, we have produced the following lists of the 'dirtiest' and 'cleanest' fruit and vegetables, based on how many of the samples tested revealed residues of more than one pesticide. **We have chosen to focus on multiple residues because our regulatory system is only set up to assess the safety of one pesticide at a time and so misses what is often called 'the cocktail effect'.**

THE COCKTAIL EFFECT





The 'cocktail effect' of pesticides has long been recognised as an area of concern in the UK. Little has been done to understand the human health impacts that may occur due to continued exposure of the multiple pesticide residues that consumers eat on a daily basis.



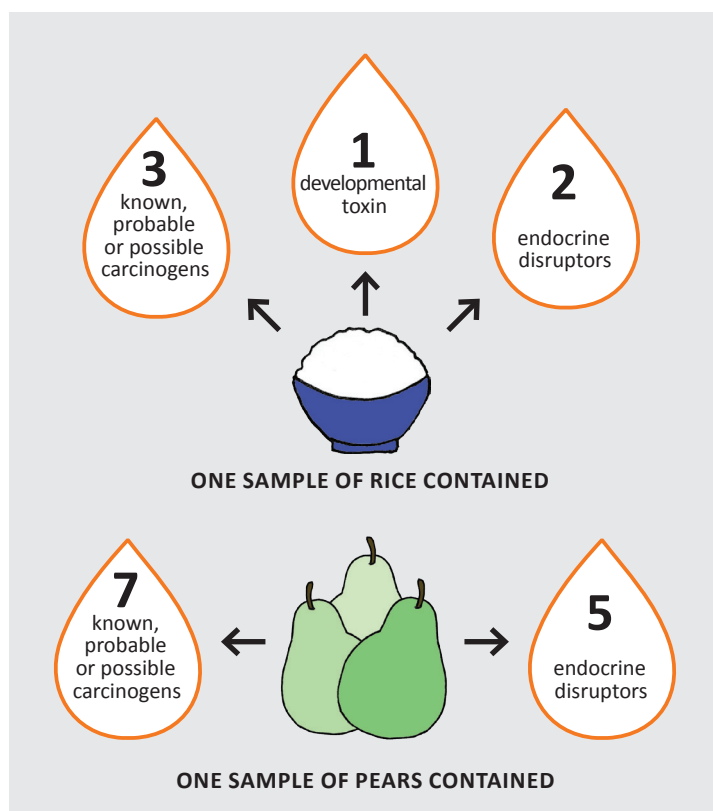
Certain groups of people are more susceptible to the effects of pesticides, especially young children and expectant mothers. Exposure to certain pesticides at critical stages in development can interfere with particular organs and their functions. Of particular concern are endocrine disrupting chemicals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



CONCERNING STATISTICS (BASED ON 2017 DATA)

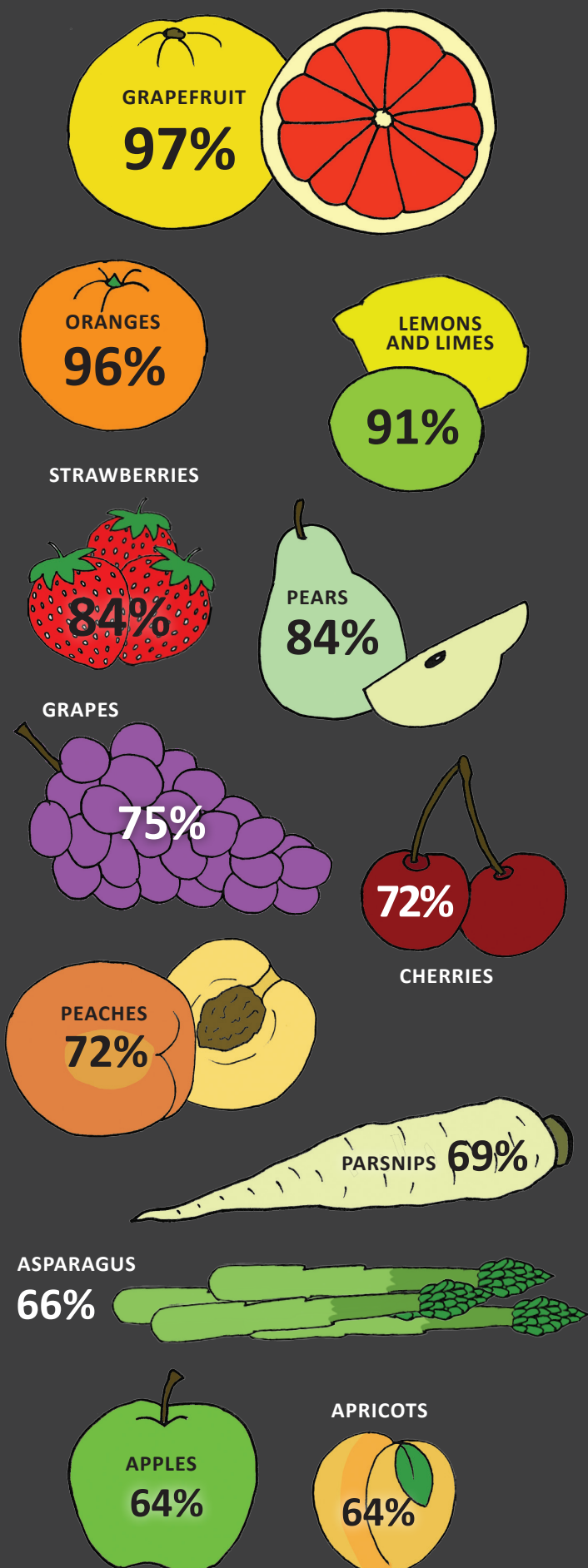
	% containing multiple residues	% with five or more residues present	% with most residues present
 Oranges	92%	36%	8% had 8 or more
 Pears	86%	37.5%	10% had 7 or more
 Apples	64%	15%	1% had 9 or more
 Rice	52%	28%	4% had 9 or more

It can be more expensive switching to an organic diet. We hope that by using the lists provided, consumers will be able to make better informed buying choices. It is also worth remembering that by buying organic the environment is generally better protected. Many of the pesticides used nowadays are 'systemic' which means that residues are contained within the entire piece of produce rather than just on the surface. As a result, peeling and washing fruit and vegetables before eating will often be insufficient to remove all pesticide residues.



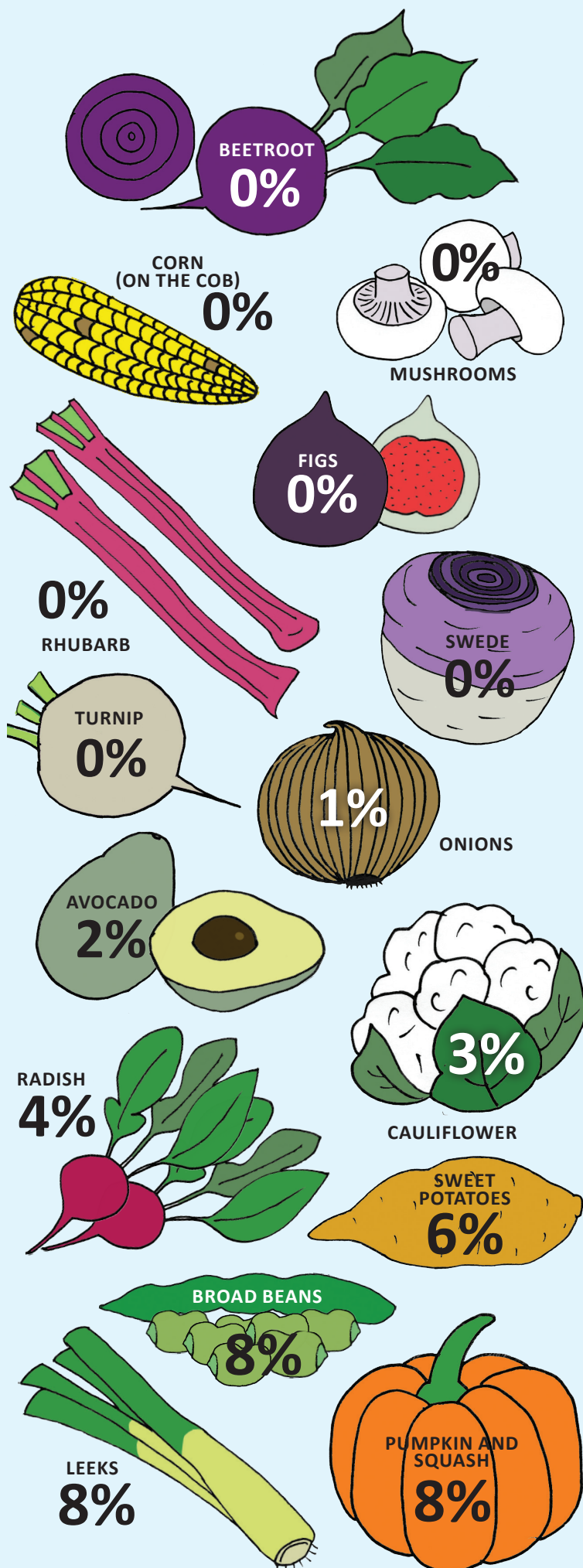
DIRTY DOZEN

% OF PRODUCE WITH MULTIPLE PESTICIDE RESIDUES*



CLEAN FIFTEEN

% OF PRODUCE WITH MULTIPLE PESTICIDE RESIDUES*



* Based on 2012 - 2017 data for multiple residues published by The Expert Committee on Pesticide Residues)