

# Child health and nutrition

## The truth is out there

**A** growing number of Australians, especially those with young children, are switching to organic food, driven by a simple belief that it is safer and better for themselves and their children. But is it true? Official food agencies here and overseas are unanimous in claiming that there is no evidence of a nutritional difference between organic and conventional foods. Yet a more careful and thorough review of the science comparing organic and non-organic foods reveals that there is evidence that organic food is safer, more nutritious and better for you than non-organic food[i] – especially if you are a child.

### Organic food – why it's worth it

It is regularly claimed that pesticide residues, found in around one in three of all foods tested, are known to be safe, on the basis of official surveys with findings such as, 'The levels of pesticide residues in our food are very low and in all cases are within acceptable safety limits.' Furthermore, 'rigorous safety assessments' are claimed to confirm that pesticide residues are no threat to human health.

However many parents intuitively know that this is a false assurance. Fruits and vegetables often carry multiple pesticide residues, yet safety levels are set for individual pesticides. They do not take into account the 'cocktail effect' of combinations of pesticides in and on foods. Emerging research shows that combinations of pesticides can be hundreds of times more toxic than individual pesticides, resulting in reproductive, immune and nervous system effects not expected from the individual compounds acting alone.[ii][iii][iv][v]

Israeli researchers have linked symptoms such as headaches, tremor, lack of energy, depression, anxiety, poor memory, dermatitis, convulsions, nausea, indigestion and diarrhoea with dietary intakes of pesticides. Belgian research has found that women diagnosed with breast cancer are six to nine times more likely to have the pesticides DDT or hexachlorobenzene in their bloodstreams compared to women who did not have breast cancer. Hawaiian researchers following 8000 people for 34 years have found that increasing consumption of fruit and juice (and the pesticide residues they carry) raises the risk of Parkinson's disease.[iv] Evidence like this continues to emerge.

» Organic food is better for the health and wellbeing of young families, but don't just take BFA nutritional spokesperson **Shane Heaton's** word for it, there is a growing body of evidence to back up what many parents intuitively know.

### Children need it the most

Children's immature and developing organs, brains, detoxification and immune systems, plus their larger intake of food per kilo of body weight, make them even more susceptible to the effects of toxins than adults. American toddlers eating mostly organic food have been found to have less than one sixth the pesticide residues in their urine compared to children eating conventional foods, lowering their exposure from above to below recognised safety levels.[v]

Elizabeth Gillette's landmark 1998 paper in the journal *Environmental Health Perspectives* showed how a combination of low-level environmental, household and dietary exposures caused subtle yet measurable developmental deficits in children.[vi] Gillette compared children in two nearby isolated villages in Mexico – one in which pesticides were routinely used in farming, and one in which they were not. Everything else was the same between these two villages – genes, diet, lifestyle, climate, culture and so on. To assess childhood cognitive development, standard paediatric assessment tools were used, including hand-eye coordination, short-term memory and the ability to draw a person.

The study found impaired cognitive development in the children in the village that routinely used pesticides. For example, across the entire study group of 40 children, those exposed to pesticides drew people with an average of 1.6 recognisable body parts, while the children not exposed to pesticides drew people with an average of 4.4 recognisable body parts. The difference in cognitive development and hand-eye coordination was obvious.

Australian children and adults are

**'People are applying the precautionary principle to their own lives by purchasing food that has not been produced by industrial methods. From the simple stance of hazard avoidance, organically produced food is the best option that we have.'**

**Dr Vyvyan Howard, toxicopathologist at the University of Liverpool, UK**

similarly exposed to multiple sources of pesticides, and in 1995 a Victorian study of breastmilk found that infants are regularly exposed to several pesticides at levels greater than the 'acceptable daily intake'.[vii] In Canada a direct correlation has been observed between breastmilk pesticide contamination and middle ear infections in Inuit infants.[viii]

### Keeping food real

Many parents have a strong suspicion that artificial colourings and preservatives in food and drink contribute to hyperactivity in their children. While authorities still contest this issue, a recent study in the UK found that the proportion of hyperactive children halved when additives were removed from their diets.[ix] Many additives such as preservatives, artificial sweeteners, colourings and flavourings, MSG, hydrogenated fats and phosphoric acid are prohibited in organic food production.

Another observational study revealed that boarding-school students eating predominantly organic food for three years experienced a 'very marked decline' in colds and influenza, more rapid convalescence, excellent health generally, fewer sports injuries, a greater resilience to fractures and sprains, clear and healthy skin and improved dental health.[x]


### The bottom line

So is organic food better for you and your children? Absolutely! Decreasing their toxin burden and increasing their nutrient intake can have a significant impact on your children's long-term health and wellbeing. The most wonderful thing is that kids love

organic food because it tastes better.

Can the average family afford organic food? I'm certain they can. Official household spending statistics reveal that Australian families spend five times more on junk food, takeaway, alcohol and tobacco than on fruit and vegetables, and five times more on recreation than on fruit and vegetables. I'm often puzzled to hear people say that they can't afford organics but then I observe that they'll happily buy expensive new cars, boats, clothes, homes or holidays. It really all comes down to priorities. For me, health comes first.

In my opinion, you can have good food, or you can have cheap food, but you can't have good, cheap food. Choosing organic food is a simple way to reduce your family's exposure to pesticides and food additives, increase their nutrient intake, and perhaps even alter their consumption patterns away from less

healthy choices. Organic food isn't a luxury. It's how food is supposed to be, and a valuable contribution to the lifetime health of you and your children. 

*Shane Heaton is a nutritionist, and author of Organic Farming, Food Quality and Human Health ([www.soilassociation.org](http://www.soilassociation.org)).*

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