

# Focus on Organic Food Quality: Food Additives

We eat up to two kilograms of them every year, usually without knowing. There's lots of them in conventional food, less of them in organic food, and they may be making your kids go crazy. I'm not talking about pesticide residues, but food additives. Additives in organic food products are tightly controlled and restricted, and represent an important point of difference between organic and non-organic foods, says BFA nutritionist Shane Heaton.

By SHANE HEATON

Artificial food additives are widely used in modern food processing, and it's not uncommon to find an ingredient list as long as your arm on many products. Food additives are relied upon by manufacturers to put back the taste that processing often removes, to prevent spoilage, extend shelf-life, and improve the texture, colour or flavour of foods. But they are also used to replace "real" ingredients and to make junk food seem more healthy and appealing.

Organic standards permit only a limited list of around 40 mostly natural or traditional additives, which are allowed in organic foods only if they don't compromise the authenticity of the product, and the product can't be produced or preserved without them. The full (short) list of additives allowed in organic products, just where and when they're allowed (which is also restricted), and the criteria by which they are selected or rejected are freely available for all to see in the organic standards on [www.bfa.com.au](http://www.bfa.com.au)

On the other side of the fence, over 500 food additives are permitted for use in non-organic processed foods. Many are untested, and their widespread use continues despite questions about their safety. Many food additives have been linked with symptoms such

as allergic reactions, rashes, headaches, asthma, growth retardation and hyperactivity in children.

Danish researchers using double-blind placebo controlled challenges have calculated that one to two percent of school-age children have an intolerance to food additives including preservatives, colourings and flavourings.

## HYPERACTIVE CHILDREN

A paper published recently by a team of doctors and researchers in the United Kingdom (UK) concluded that "artificial colourings and preservatives in food and drink boost levels of hyperactivity in pre-school children and urgent consideration should be given to removing them". "The additives have a significant impact on the behaviour of ordinary children and their elimination would be in the long-term interests of public health" they said.

The proportion of children with high levels of hyperactivity was halved when the additives were removed from their diet. Professor John Warner of the department of child health at Southampton University, who led the study published in Archives of Child Health, said: "These findings suggest that significant changes in children's hyperactive behaviour could be produced by the removal of artificial colourings and sodium benzoate from their diet." Professor Warner said the doses of additives used in the study were "on the low side of normal," and the effects were felt across all the children, regardless of their sensitivity to allergy causing substances.

Another recent survey in the UK found that ten of the biggest-selling soft drinks contain more than 70 additives, many linked to behavioural problems, asthma, rotting teeth and insomnia.

Although the additives have been certified safe in small quantities, critics say they may have altered effects when they are mixed together. Dr Vyvyan Howard, toxicologist at the University of Liverpool, says: "A number of these substances are related very closely to transmitter substances in the brain, with the way nerve cells talk to each other. If you interfere with that, you interfere with brain function." ►



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One common food colouring, tartrazine (102), has been consistently linked to hyperactivity in children, yet it is still added into many popular soft drinks for children to colour the drink yellow/orange. Dr Neil Ward, from the University of Surrey, decided to test what happens to minerals when drinks containing

tartrazine were consumed. He gave children either a drink with tartrazine or an identical one without. He found that adding tartrazine to drinks increased the amount of zinc excreted in the urine, perhaps by binding to zinc in the blood and

preventing it from being used by the body. In this study, like many others, he also found emotional and behavioural changes in every child who drank the drink containing tartrazine. Four out of the ten children in the study had severe reactions, three developing eczema or asthma within 45 minutes of consumption.

Tartrazine is also prohibited in organic foods and drinks.

**FATS THAT'LL KILL YOU**

No hydrogenated fats are used in organic food. Also known as 'trans-fats', they are created artificially by the hydrogenation process and are included in many processed foods to make the product more solid and

shelf-stable (for example, in biscuits and margarines). They're rare in nature, and consumption of hydrogenated fats has been directly linked to substantially increased rates of heart disease, cancer and skin disease. Higher intakes of trans-fats have been shown to increase levels of 'bad' LDL cholesterol, and decrease 'good' HDL cholesterol. The UK Committee on Medical Aspects of Food Policy recommended reducing the intake of hydrogenated fats way back in 1994, but they're still widely used and are present in many processed foods. In the United States (US) a campaign has been launched to purge trans-fats from cakes, snacks and fast foods. In 2002, a US expert committee charged with making nutritional recommendations concluded that there was no level of trans-fats in the diet that could be deemed safe.

A US nutritional group called the Center for Science in the Public Interest, based in Washington DC, now hopes that its TransFreeAmerica campaign will raise awareness of the health concerns. It is urging food manufacturers to eliminate trans-fats and advising consumers to boycott foods containing them. It is also calling on the US Food and Drug Administration to outlaw partially hydrogenated vegetable oils, which are even worse for you.

**NOT SO REFRESHING**

Phosphoric acid is banned in organic food and drinks. Phosphoric acid is a highly acidic ingredient in cola drinks, used to offset the extreme sweetness. The way the kidneys excrete it is by bonding it with calcium taken from the bones, which can then leave the bones porous and brittle, and increase the risk of osteoporosis. Athletic teenage girls who consume cola drinks have been found to have five times the risk of bone fractures of those athletic girls who do not consume cola drinks. ►

The Australia New Zealand Food Authority (ANZFA) has invited public comment on food labelling in both Australia and New Zealand as it prepares to standardise labelling procedures in both countries.

Managing director of ANZFA, Ian Lindenmayer, pointed out that standardising the procedures is a complicated process because of the differences in fair trading rules and trade practises that exist in the different countries.



*Customers who choose meals from restaurants such as the Organic Cafe in Maroochydore can be assured that no harmful trans-fats are used in certified organic food.*

**CONTINUED FROM PREVIOUS PAGE****NOT SO SWEET AND INNOCENT**

Aspartame (marketed as Nutrasweet, Equal and Spoonful) is the most widely used artificial sweetener in the world. It is found in a wide range of products including diet foods, chewing gum, fizzy drinks, sweets, breakfast cereals, frozen desserts and yoghurt. Despite assurances from the US Food and

Drug Administration that it is safe, a significant number of people have reported suffering from ill-effects as a result of aspartame consumption. Reported reactions include headaches, mood

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Respected nutritionist Patrick Holford

swings, changes in vision, nausea and diarrhoea, sleep disorders, memory loss and confusion, convulsions and seizures. Aspartame is banned in organic food and drinks.

**MSG FREE**

The flavour enhancer monosodium glutamate is banned from all organic food. It is thought to be responsible for 'Chinese restaurant syndrome' which can involve dizziness, headaches and perspiration, and may also cause asthma attacks. Australian researchers concluded that "MSG can provoke asthma...the higher the dose, the more likely the attack...and is not safe for some individuals."

It is not permitted in any baby food, and is prohibited from all organic food.

**HARD TO SWALLOW**

Sulphur dioxide often causes problems in individuals who have asthma. Foods that may contain sulphur dioxide include fruit juices, soft drinks such as squashes, dried fruit, wine, beer, sauces and pickles. Organic regulations prohibit sulphur dioxide in these foods with the exception of wine, and organic wine producers are looking for ways of creating sulphur free wines.

**THE BOTTOM LINE**

Respected nutritionist Patrick Holford says "At this point in time we really have no idea what the combined effect of the literally hundreds of man-made chemicals have on health. My advice is to avoid foods with a long list of additives."

**Choosing organic products can help consumers avoid a wide range and large quantity of potentially allergenic or harmful additives.**

**I've said it before and I'll say it again: organic food is not a luxury - it's how food is supposed to be.**

**BFA Nutritionist Shane Heaton**

Organic food represents an important safe-haven in an increasingly stressful, polluted and artificial world for anyone wanting to protect their health and that of their families. ■

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