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We don't eat additives, we eat healthy foods by Sue Dengate

Which natural colour can cause as many problems as artificial colours?

Which fruit can cause the same reactions as additives in some people?

How can a product that says "no MSG" cause an MSG-type reaction?

Which additives are most often associated with childhood asthma?

Sue Dengate, author and operator of Australia's Food Intolerance Network answers these questions and more ...

It is common for people to say, 'we don't eat additives, we eat healthy foods'. Unfortunately, as food manufacturers scramble to make their products 'seem' additive-free, there are still many traps for consumers.

Natural food additives are generally considered to be safe, which is why Marlene Stein from Las Vegas, Nevada wants her story known – to save others from the same experience. For more than 40 years, Marlene suffered from bloating, gastrointestinal pain and diarrhoea that slowly became more severe until she was diagnosed with Irritable Bowel Syndrome. A month's trip to Europe provided a clue when her symptoms disappeared except after one cup of coffee with a non-dairy product on the plane. Back in the States, Marlene found her symptoms recurred with both Coffee Mate and vanilla ice cream. What those foods had in common was a natural yellow colour (annatto, 160b) often used to make foods look creamier. After further investigation, Marlene now avoids annatto and has remained symptom-free.

When her case was published in a medical journal, Professor Martin Floch from the Section of Digestive Diseases at the Yale University School of Medicine wrote, 'Much to my surprise, no one in our institution, including the allergists and immunologists, knew anything about annatto ... the subject opened up the possibility of a whole world of reactions to so-called food additives that come from natural substances'.¹ (Annatto is processed from the seed pod of a tropical tree (*Bixa orellana*), and is native to South America, Central America and the Caribbean.)

Adverse reactions to annatto were first identified in a study that found this natural colour affected more people with urticaria (hives) than any artificial colours.² The Food Intolerance Network register of food additive reactions has also received reports of annatto-related migraines, asthma, head banging in young children and children's behaviour problems. One mother who thought she was avoiding food additives by buying mostly whole foods wrote that annatto turned her normally playful and intelligent five year old into 'a screaming, angry, yelling, defiant and hysterical little monster'.

With an industry-wide move towards natural colours, annatto is increasingly used in foods including spreads, yoghurts, ice creams, drinks, cereals and biscuits. Natural colour betacarotene (160a), widely used in Europe, seems to be a safe alternative for people with food intolerance. However, it is possible that some of the other plant-derived natural colours now appearing in our food supply may cause problems for some people due to their salicylate content.

Flavours and salicylates

In the 1970s when food additives and processed foods were just becoming widespread, Dr Ben Feingold, then Chief of Allergy at the Kaiser Foundation Hospital in California, identified flavour additives, colours and preservatives as a major cause of children's behaviour disturbances.³ He was also the first to realise that salicylates - natural pesticides that are present in varying amounts in most fruit and some vegetables - could cause the same problems as additives in salicylate-sensitive people. From the chemical point of view, there is no difference between an artificial strawberry flavour, a natural strawberry flavour, or a bowl of real strawberries. The only difference is in the amount or dose of additive used. The higher the dose, the more likely there will be a reaction. In addition, while artificial flavours are less expensive they are often more concentrated, and therefore more likely a reaction can occur.

Salicylates are increasing in our food supply, due to the use of strong flavour additives, natural preservatives that are high in salicylates, concentrated high

salicylate foods such as tomato and onion powder in processed foods, and the increased availability of out-of-season fruit

Foods high in salicylates include most fruit especially berries and citrus; fruit juices; sultanas, prunes and other dried fruits; and some vegetables especially tomato-based sauces. Spices and herbs such as rosemary can also be very high in salicylates. This is why rosemary extract, now used as a natural preservative, affects some people so badly. Salicylate sensitivity can also be aggravated by salicylate-containing medications such as aspirin, eucalyptus rub and herbal remedies.

People rarely realise they are affected by salicylates or other food chemicals until they eat a very large dose over a short period of time (eg. at Christmas, or summer fruit season) or until they reduce their intake. This is because these food chemicals are eaten so frequently that the effects fluctuate and can build up very slowly. One mother wrote: "I cut back my five year old daughter's intake of fruit to about a quarter of what she normally had. Within days we saw dramatic changes. Her behaviour evened out ... she was more sensible and obliging, less aggressive and defiant - and altogether much more pleasant to live with."

Hidden MSG

Monosodium glutamate (MSG) is another common pitfall, especially for people who eat out or use any form of soup stock. First recognised as Chinese Restaurant Syndrome in 1968, reactions to MSG can include tightness in the chest, tingling, numbness or pain sometimes radiating down the arm, heart palpitations, asthma and other symptoms of food intolerance.

Starting in the mid 1990s, a new set of flavour enhancers known as ribonucleotides were introduced into our food supply. These additives (disodium guanylate 627, disodium inosinate 631 and ribonucleotides 635) were designed to boost the effects of MSG up to 15 times. Our adverse reactions register is full of reports from outraged consumers who have experienced a wide range of problems especially itchy rashes after eating these new additives.

Although many consumers wouldn't agree, MSG is regarded as natural by food regulators. It can appear in product ingredient lists under natural-sounding names such as yeast extract, hydrolysed vegetable protein or 'flavour' that combines with the new flavour enhancers. Technically, MSG (flavour enhancer 621) hasn't been added but the results are the same. A mother whose migraines are MSG-related phoned a noodle bar regarding an office lunch and was assured they didn't use MSG. Following two days off work with a severe migraine, she phoned them back and asked if they used flavour enhancers. After some prodding they said they had used MSG, but that it was legal. She assured them she knew it was legal, but that they should disclose this to their customers.

Additives and asthma

The additives most commonly associated with childhood asthma – sulphur dioxide and other sulphite preservatives (220-228) - are not natural, but they are widely used throughout our food supply, sometimes in unpackaged, unlabelled foods that consumers may perceive as healthy. The effect of these additives on asthmatics can be so serious that in 1999, the World Health Organisation issued a warning to food regulators. Yet according to a Food Intolerance Network survey last year, two thirds of parents are unaware of this connection.

Seemingly 'fresh' foods that can contain high levels of sulphites include dried fruit especially apricots; fresh prawns and fresh sausages including chicken and gourmet. While it is illegal to use sulphites in minced meat, a 2004 NSW Food Authority survey found that 58 per cent of samples tested contained illegal sulphites, showing that butchers will use sulphites in mince unless there is constant monitoring. Consumers can avoid these additives in mince by buying organic, or by testing sulphite levels for themselves. The Food Intolerance Network sells sulphite test strips at cost for this purpose.

Where to start

It is more difficult to recognise additives in foods now than it was ten years ago, due to the food industry's emphasis on so-called 'clean labels' – that is, foods without obvious additives. The Food Intolerance Network considers that dirty tricks such as disguising propionic acid (preservative 280) in ingredients listed as cultured wheat, cultured whey or whey solids, or hiding synthetic antioxidants and glutamates in 'flavours' shouldn't be permitted. Consumers need to understand ingredient labels and what they really mean. For people with any symptoms of food intolerance, it is worth considering a change of diet.

Unlike true allergies (a quick, relatively rare, obvious reaction to the proteins in foods such as peanuts), intolerances are dose-related, delayed reactions to the chemicals in foods, which is what makes them so hard to identify. Research shows that most people won't make the connection if a food reaction occurs more than 30 minutes after ingestion. Since there are no scientifically proven laboratory tests for food intolerance, the scientific way to do it is to

remove problematic food chemicals from the diet for several weeks then reintroduce them one group at a time.

Salicylates are usually the biggest culprits. In a study of 229 food sensitive patients with irritable bowel symptoms, migraines or behaviour problems at Sydney's Royal Prince Alfred Hospital Allergy Unit, 60-70 per cent reacted to salicylates and preservatives and 40-60 per cent to colours, flavour enhancers and other natural food chemicals called amines (found in protein foods such as cheese, processed meats, and fish). A smaller number of people were sensitive to dairy foods (less than 30 per cent) or gluten (20 per cent or less).⁴ Similarly, in a study of 516 children with behaviour problems in which 80 per cent improved on a low additive, low salicylate diet, only 24 per cent were sensitive to dairy foods and 8 per cent to grains, leading researchers to conclude that 'these foods should not be excluded by everyone trialling diet initially'.⁵

Some people see good results from just cutting down and switching to preservative-free bread, avoiding other nasty additives (see box), drinking water as their main drink, eating two pieces of fresh fruit a day – pears and golden or red delicious apples are two of the safest – and avoiding fruit-flavoured or tomato-based products.

For people with severe food intolerance symptoms, a 3-6 week trial of the strict additive-free diet low in salicylates, amines and glutamates, dairy foods and gluten, followed by food challenges – under the supervision of an experienced dietitian – is the quickest way to identify offending food chemicals. (Refer The Food Intolerance Network for contacts).

Most people are reluctant to reduce their fruit intake and I can understand that. It took me six years to try the diet with my family, but when we did, there were such massive improvements for all of us that I was sorry I hadn't done it earlier. Since then I have devoted my time to spreading the word that this approach really works, through my books, DVD, talks and website.

One mother wrote recently that she had been trying for three months to convince her husband to watch our DVD. Although he was happy to go additive free, like most people he wasn't keen to do the strict elimination diet. At the end of the DVD he turned to her and said 'I think we have to do it'. She concluded, 'We're now in week five of the elimination diet, with huge changes for the whole family'.

Additives to avoid

COLOURS

102 tartrazine, 104 quinoline, 110 sunset yellow
122 carmoisine, 123 amaranth, 124 ponceau
127 erythrosine, 129 allura red, 132 indigotine
133 brilliant blue, 142 green S, 143 fast green FCF
151 brilliant black, 155 brown HT, 160b annatto

PRESERVATIVES

200-203 sorbates
210-213 benzoates
220-228 sulphites
280-283 propionates
249-252 nitrates, nitrites

SYNTHETIC ANTIOXIDANTS

310-312 gallates
319-320 TBHQ, BHA, BHT

FLAVOUR ENHANCERS

621 MSG
627 disodium inosinate
631 disodium guanylate
635 ribonucleotides
HVP, HPP, hydrolysed/autolyzed/formulated
plant/vegetable/wheat/soy protein
yeast, yeast extracts, 'flavour/s'

Some symptoms of food intolerance

- * headaches or migraines
- * eczema and other itchy rashes
- * oppositional defiance, irritability, restlessness

- * difficulty falling asleep, frequent night waking
- * mood swings, anxiety, depression, panic attacks
- * inattention, difficulty concentrating, unexplained fatigue
- * IBS, constipation and/or diarrhoea, 'sneaky poos'
- * asthma, stuffy or runny nose, frequent colds and flu

BIO

Sue Dengate is the bestselling author of *Fed Up* and the *Failsafe Cookbook: reducing food chemicals for calm, happy families* (both Random House Australia) and the DVD *Fed Up with Children's Behaviour*. She runs the Food Intolerance Network through the website www.fedup.com.au

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