

HUMAN'S HEALTH AND FOOD ADDITIVES

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Shopping was easy when most food came from farms. Now factory-made foods have made chemical additives a significant part of our diet. Food additives have been used by mankind for centuries. Salt, sugar and vinegar were among the first and used to preserve foods. In the past 30 years, however, there has been a massive explosion in the chemical adulteration of foods with additives. Most people may not be able to pronounce the names of many of these chemicals, but they still want to know what the chemicals do and which ones are safe and which are poorly tested or possibly dangerous.

A food additive is any substance added to food that changes its characteristics. There are two types of food additives, direct and indirect. Additives are used in food to improve the keeping quality of a food by making it last longer on the shelf or in the fridge, or improve the taste or appearance of processed food. Their quantities in food are small, yet their impact is great.

Food additives are grouped into classes according to their function. The different types of food additives and their uses include: anti-caking agents, antioxidants, artificial sweeteners, emulsifiers Food acids, colours, humectants, flavours, flavour enhancers, mineral salts, preservatives, thickeners, stabilisers, flour treatment, glazing agent, propellants.

To check what additives are in foods, read the label. All food ingredients, including any additives, must be listed on the label of a food. To regulate these additives and inform consumers each additive is assigned a unique number. Initially these were the "E numbers" used in Europe for all approved additives. This numbering scheme has now been adopted and extended to internationally identify all additives, regardless of whether they are approved for use. E numbers are all prefixed by "E", but countries outside Europe use only the number, whether the additive is approved in Europe or not.

Most food additives are considered safe. However, some are known to be carcinogenic or toxic. Some people are sensitive to particular food additives and may have reactions like hives or diarrhoea. This doesn't mean that all foods containing additives need to be automatically treated with suspicion. Many of the food additives used occur naturally within foods that are regularly consumed.

Some food additives can cause reactions. For most people additives are not a problem. Some food additives are more likely than others to cause reactions in sensitive people. It is often the additives that are used to give a food a marketable quality, such as colour, that most commonly cause allergic reactions.

Some of these hypersensitive reactions include:

- Digestive disorders - diarrhoea and colicky pains.
- Nervous disorders - hyperactivity, insomnia and irritability.
- Respiratory problems - asthma, rhinitis and sinusitis.
- Skin problems - hives, itching, rashes and swelling.

It is important to realise that many of the symptoms experienced as a result of food sensitivities can be caused by other disorders. Medical diagnosis is important. If you try to diagnose yourself, you may restrict your diet unnecessarily and neglect an illness. The E numbers are helpful to these people because they can easily see whether the food contains an additive to which they are allergic.

For example, monosodium glutamate (MSG), commonly found in Chinese foods, can also cause adverse reactions in small groups of people. The symptoms, usually mild, include body tingling or warmth, and chest pain. These symptoms are usually mild and often last less than an hour.

Lastly, people with a rare genetic disease known as phenylketouria (PKU) should avoid foods sweetened with aspartame (Equal). Aspartame is made from two amino acids, one being phenylalanine. Individuals with PKU cannot metabolize this amino acid, and if consumed can cause serious side effects including tissue damage.

The best advice to any individual that has adverse reactions to any food additives is to read labels carefully and avoid these products whenever possible. If an adverse reaction does occur, be sure to contact your physician immediately.

Today food and color additives are more strictly studied, regulated and monitored more than any other time in history. The FDA sets safety standards, determining whether a substance is safe for its intended use. Chemicals usually are tested for an ability to cause cancer by feeding large dosages to small numbers of rats and mice. When a large dosage causes cancer, most scientists believe that a smaller amount would also cause cancer, but less frequently. Additionally, food manufacturers must prove to the FDA their product is safe before it is put on the market.

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