



Harmful Ingredients

“IF IT CAME FROM A PLANT, EAT IT. IF IT WAS MADE IN A PLANT, DON'T.” – MICHAEL POLLAN



Did you know that the average American household spends about 90% of their grocery budget on packaged, processed foods? Whether it's a toaster pastry, a frozen meal, a tube of yogurt, a can of cola, or an individually-wrapped slice of cheese – these products are often laden with various additives and chemicals to preserve the food's flavor, enhance its appearance and prolong its shelf life.

These manmade chemicals – *which are usually the unpronounceable ingredients* – often come at a dangerous price. Various food additives and chemicals are foreign to our bodies and have shown side effects which range from nausea and headaches to more serious conditions such as cancer, Alzheimer's and multiple sclerosis¹.

The best way to avoid exposure is to know what these harmful additives and chemicals are, to read ingredient labels carefully and to Keep It Real (which is to say, eat more whole, natural foods)!

Below are the 12 most pervasive and detrimental additives and substances commonly found in processed foods.

Artificial Sweeteners: Artificial sweeteners are a combination of chemicals that exist to make our foods sweeter without the calories of sugar. Artificial sweeteners have been exposed in the media for a long list of related side effects (see the Oh, Sugar document for more information on artificial sweeteners). **Found In:** Foods labeled “sugar free” or “diet”, soda, jello, desserts, gum, cereal, pudding, breathmints and kool-aid.

¹ Kent, Linda. "Livestrong." *Food Additive Side Effects*. N.p., 23 Mar 2010. Web. 15 Dec 2011.

Refined Sugar: People in the US consume 130 to 160 pounds of sugar per year.² In other words, we are consuming half a cup of sugar a day and most of us aren't even aware of it. High consumption of sugar and the corresponding elevated insulin levels can pack on pounds faster than any other ingredient and cause bloating, fatigue, arthritis, migraines, lowered immune function, obesity, cavities and cardiovascular disease. High Fructose Corn Syrup (HFCS) is a highly-refined sugar, which has become the number one source of calories in America and it's found in most processed foods.

Monosodium Glutamate (MSG): MSG is a common food additive used to enhance flavor in a variety of foods. It's known as an excitotoxin, a substance that overexcites cells to the point of damage or death. Canned vegetables, frozen entrées, fast foods and soups are just a few products that contain MSG. Many people have experienced a variety of side effects which range from migraines, itchy skin and dizziness – to respiratory, digestive, circulatory and coronary issues.³

Artificial Colors: The blues, reds, yellows and greens you commonly see in yogurts, macaroni and cheese, candy, cereals and juices don't normally come from natural sources. In fact, food coloring is usually a synthetic chemical produced by scientists to color foods and increase a product's visual appeal. Many colorings are derived from coal tar and can contain up to 10 parts per million of lead and arsenic and still be generally recognized as safe by the FDA.⁴ Artificial colors can cause allergic reactions and increase hyperactivity in children with ADD.⁵

Butylated Hydroxyanisole (BHA) and Butylated Hydroxytoluene (BHT): BHA and BHT are two preservatives commonly used in the food industry to prevent oils from going rancid. Studies have shown that BHA has caused stomach-focused carcinogens in trials involving mice, hamsters and rats. The US Department of Health and Human Services has deemed BHA "reasonably anticipated to be a human carcinogen." BHT is slightly less harmful than BHA, but should still be replaced with safer alternatives.⁶ Found in: potato chips, candy, lard, cereal, frozen sausages and shortening.

Sodium Nitrate and Nitrite: Sodium nitrate and nitrite are preservatives that are added to processed meat products (especially: bacon, hot dogs, ham, lunch meat, cured meats, corned beef and bologna) to enhance red color and flavor. These compounds transform into cancer-causing agents called nitrosamines in the stomach. Noticeable side effects include headaches, nausea, vomiting and dizziness.⁸

² "Cut back, way back, on sugar, says heart group." *MSNBC*. N.p., 24 Aug 2009. Web. 22 Dec 2011.

³ Zeratsky, Katherine. "Monosodium Glutamate (MSG): Is it Harmful?" *WebMD*. N.p., n.d. Web.

⁴ Arnell, Neev. "The Dangers of Artificial Food Colors." *Natural News*. N.p., 25 Mar 2011. Web. 6 Feb 2012.

⁵ Franco, Virginia. "Effects of Artificial Colors in Children with ADD." *Livestrong*. N.p., 25 Mar 2011. Web.

⁶ "Food Additives." *Center for Science in the Public Interest*. N.p., n.d. Web.

Partially Hydrogenated Oils/Trans Fat: Partially hydrogenated oils are made by reacting different varieties of oil with hydrogen (a process known as hydrogenation). When this occurs, the level of polyunsaturated oils (good fat) is reduced and trans-fats are created. Trans fat is added to products to enhance appearance and prevent spoiling, but it's among the most dangerous substances that you can consume. They are associated with heart disease, diabetes, breast and colon cancer, atherosclerosis and elevated inflammation and cholesterol.⁷

Found In: deep-fried foods, fast foods, chips and baked goods.

Pesticides: Every year more than two billion pounds of pesticides are added to our food supply. That's about 10 pounds per person per year. Many of the pesticides used throughout the world are carcinogenic. Pesticide consumption has been linked to birth defects, nerve damage, cancer, and other effects that might occur over a long period of time.⁸ Found on: Non-organic fruits, vegetables and grains.

Sulfur Dioxide: Sulfur additives are toxic and have been prohibited on raw fruits and vegetables. It's been linked to bronchial problems, heart disease and anaphylactic shock, and is not recommended for consumption by children. Found in: beer, soft drinks, juices, wine and vinegar.

Olestra (Olean): Olestra is a synthetic fat created by Proctor & Gamble that does not get absorbed in the digestive tract. Side-effects commonly caused by olestra include diarrhea, abdominal cramps, bloating, nausea and vomiting. Olestra inhibits the absorption of some vitamins and minerals. Found in: foods labeled "fat free", potato chips and crackers.

Brominated Vegetable Oil (BVO): Brominated vegetable oil is used to keep flavor oils in soft drinks in suspension. When consumed, it is stored in fat and over time can accumulate. This additive can lead to reproductive interference and birth defects. It has been banned in 100 countries. This additive is less used in modern food applications.

Genetically Modified Organisms (GMOs):

GMOs are plants or animals that have had their DNA modified. In the US, the majority of the corn, soybean, cotton and canola crops are now genetically modified, and one or more of these can be found in nearly every processed food. GMOs have not been proven safe and some studies show GMO's may decrease immunity to diseases in plants as well as humans. They may also cause resistance to antibiotics and could have a negative impact on genetic function.⁹

⁷ Bruen, Jude. "Partially Hydrogenated Oil vs. Hydrogenated Oil." *Livestrong*. N.p., 29 Nov 2009. Web.

⁸ Environmental Protection Agency. *Health Problems Pesticides May Pose*. 2011. Print.

⁹ "GMO Facts." *The Non-GMO Project*. N.p., n.d. Web.