

## *The Dirty Dozen*

For thousands of years, when man was hungry, he went out into the wilderness and gathered fruits, vegetables and hunted for meat. He brought the food home and ate it. Today, we head to the supermarket and pull our food off the shelf. Much of it is loaded with potentially harmful additive chemicals. Processed foods can contain food coloring, flavoring, flavor enhancers, preservatives and artificial sweeteners. Some of these, in small amounts may be harmless, some are questionable and some are outright dangerous. We should all be alarmed about this trend given the quantity of these additives that the average American consumes in their diet.

As a consumer we need to educate ourselves on the hidden dangers in our everyday food. Becoming a label reader is the first step in understanding what you are putting into your body and how it can affect your health. Even though we should strictly limit the amount of any food chemicals in our diet, the following are the most dangerous.

1. **Butylated Hydroxytoluene (BHT)**. Legal in North America, but banned in England because of its strong association with liver and kidney damage, behavioral problems, infertility, weakened immune systems, birth defects and cancer. BHT and its cousin BHA are used to preserve fats in packaged foods to provide a longer shelf life. It can be found in many cereals, baked goods and snack foods.
2. **Partially Hydrogenated Vegetable Oil**. These are commonly known as Trans Fats and are created through an industrial process that adds hydrogen to liquid vegetable oils to make them more solid. Trans fats raise your bad cholesterol (LDL) levels and lower your good cholesterol (HDL). As a result of consuming trans fats, you are at an increased risk for developing heart disease and stroke. It has also been associated with the alarming increase in the number of type 2 diabetes cases and obesity in western society.
3. **High Fructose Corn Syrup (HFCS)**. This highly refined clear liquid is derived from corn starch. Food manufacturers love to use it as a sweetener because of its prolonged shelf life and low cost. Since HFCS's introduction in the 1980's, North American obesity rates have skyrocketed. When ingested, this sugary substance travels straight to the liver and is stored as fat. As a result the pancreas does not produce insulin and the full feeling message is not relayed to the brain. HFCS is found in a majority of packaged food on the shelves today. The biggest culprits include soft drinks salad dressings and condiments. Ironically, low fat diet foods are among the worst offenders.
4. **Monosodium Glutamate (MSG)**. MSG is a popular flavor enhancer commonly found in Chinese food, canned soups and vegetables, processed meats and many snack foods. This controversial food chemical is known to cause reactions in a percentage of the population including headaches, flushing, burning and tingling sensations, numbness, sweating, high blood pressure, heart palpitations, chest pain, shortness of breath, nausea, weakness, muscle aches, nervous system and reproductive system disorders, and itchy rashes.

5. **Artificial Sweeteners.** Sold and used commercially under names like Aspartame, NutraSweet Equal, Sweet’N Low, Sucralose, Splenda and Sorbitol . These compounds are found in over 6,000 food products on the shelves today in North America. They are most commonly found in sugar free soft drinks, zero calorie and low calorie diet food, gum, mints and even in toothpaste. Studies on these substances reveal that they are carcinogenic - materials that promote the development of cancer. These chemical sweeteners have also been directly linked to many neurological conditions including multiple sclerosis, epilepsy, Parkinson’s, birth defects and brain tumors.
6. **Nitrates.** Another food chemical that is converted by the body into a carcinogen. Nitrates are used regularly in processed meats to help them hold their color and maintain microbial safety. This includes foods that are typically pink in color like bologna, salami, pepperoni, hotdogs, corned beef, pastrami, bacon, and cured ham.
7. **Olestra.** Olestra is an artificial fat used to make non-fat potato chips and other fat free and low fat snacks. This synthetic zero calorie non-food has been shown to bind with fat-soluble vitamins A, D, E, and K and rob them from your bodies. These vitamins are vital for immune system health and thought to prevent some cancers. Olestra has also caused digestive upset in some people, especially when large quantities are eaten.
8. **Artificial Colors.** The coloring from processed food rarely comes from the food itself. Thousands of foods are primed with artificial, brightly colored synthetic dyes that are much cheaper and usually more stable than the natural versions. Most food is colored with combinations of synthetic dyes like Blue No. 2, Green No. 3, Red No. 40, and Yellow No. 5. Several of these dyes are known to cause learning and behavioral problems mostly in children and occasionally in adults. They are also a common allergen causing hives, runny nose and difficulty breathing in some people.
9. **Propyl Gallate.** This preservative, used to prevent fats and oils from spoiling, is suspected to cause cancer. It is degraded in the intestine to propanol and gallic acid. Gallic acid can cause eczema, stomach problems and hyperactivity. It’s used in vegetable oil, meat products, potato sticks, chicken soup base and chewing gum, and is often used with BHA and BHT.
10. **Sodium Benzoate.** Sodium Benzoate is used as a preservative, effectively killing most yeast, bacteria and fungi. It is used primarily in foods such as preserves, salad dressings, carbonated drinks, jams, and fruit juices. Moderately toxic by ingestion, this chemical has caused birth defects in experimental animals. It is also known to cause nettle rash, and aggravate asthma in humans.
11. **Paraffins.** Used to produce a shiny coating on sweets, candy, vitamin tablets and dried fruit. It is also sometimes used in the processing of yeast. This synthetic mix of hydrocarbons is thought to inhibit the absorption of fat soluble vitamins and have a laxative effect. Paraffins have also been linked to bowel cancer.

**12. Artificial Flavors.** Over 1000 different synthetic chemicals are used to artificially flavor a huge array of processed foods including candy, seasoning mixes, salad dressings and sauces. It is much more economical for manufacturers to chemically reproduce these flavors than to extract them naturally from fruits and vegetables. These chemicals have been known to cause severe allergic reactions in sensitive people.

If you look at the research results related to most of the above mentioned additives, studies reveal that they are safe to consume on occasion in small quantities. Therefore, if you eat processed food on a rare occasion, the negative effects on your body would likely be minimal if at all. However, the average American eats far more than the amounts approved for safe consumption. Your liver has the job of processing and eliminating the toxins you put in your body. When you feed your body more synthetic chemicals than the liver can effectively process, the remainder of the harmful toxins build up in your system and resulting in the negative effects mentioned above.

As you start the New Year and are looking for new ways to improve your health, eating more natural foods is a great place to start. While this may seem daunting at first, taking a little more time at the grocery store to read labels and in the kitchen preparing foods in their natural state will go a long way. Simply eating more fresh fruits and vegetables, avoiding artificial sweeteners and flavors and opting for less processed food alternatives will help you avoid the Dirty Dozen and you will likely notice an improvement in your overall health and energy level in just a few weeks.