

## 12 Food Additives to Avoid

By Jean Weiss for MSN Health & Fitness

Whoever coined the term food additives had it all wrong. Including something new in a food doesn't always add up to more, at least when it comes to your health. Studies that test the safety of additives are based on animal trials. It is difficult to deduce whether the results of an animal study equate to human health, though many of these studies show that some additives could be cancer-causing.

### 1. Sodium nitrite

The list of the 12 most dangerous additives to red flag—until we know more—includes the preservative sodium nitrite, used to preserve, color, and flavor meat products. Sodium nitrite is commonly added to bacon, ham, hot dogs, luncheon meats, smoked fish, and corned beef to stabilize the red color and add flavor. The preservative prevents growth of bacteria, but studies have linked eating it to various types of cancer. "This would be at the top of my list of additives to cut from my diet," says Christine Gerbstadt, M.D., M.P.H., R.D., L.D.N., a spokesperson for the American Dietetic Association. "Under certain high-temperature cooking conditions such as grilling, it transforms into a reactive compound that has been shown to promote cancer."

### 2. BHA and BHT

Butylated hydroxyanisole (BHA) and butylated hydroxytoluene (BHT) are additional additives to red flag. They are antioxidants used to preserve common household foods by preventing them from oxidizing. Both keep fats and oils from going rancid and are found in cereals, chewing gum, potato chips, and vegetable oils, but there is concern that they may cause cancer. "The structure of BHA and BHT will change during this process [of preserving food], and may form a compound that reacts in the body," says Gerbstadt. "BHA and BHT are not stable or inert. They're not just hanging out and being excreted by the body." Gerbstadt says that they are obviously not added for the purpose of giving people cancer, but for some people, some of the time, there may be that risk.

### 3. Propyl gallate

Propyl gallate is another preservative to avoid. It's used to prevent fats and oils from spoiling and is often used in conjunction with BHA and BHT. This additive is sometimes found in meat products, chicken soup base, and chewing gum. Propyl gallate has not been proven to cause cancer, but studies done on animals have suggested that it could be linked to cancer, so it is an additive to be concerned about. "It's important to read the label," says Gerbstadt. "You really have to carry a cheat sheet around in the supermarket. I try to buy as few foods as possible containing preservatives."

### 4. Monosodium glutamate

Monosodium glutamate is an amino acid used as a flavor enhancer in soups, salad dressings, chips, frozen entrees, and restaurant food. It is commonly associated with Asian foods and flavorings. MSG can cause headaches and nausea in some people, and animal studies link it to damaging nerve cells in the brains of infant mice. Gerbstadt recommends replacing MSG with a small amount of salt when possible. "Why bother using MSG when you can live without it?" she says. "MSG can cause migraine-like headaches and create other adverse affects for certain people. It is a flavor enhancer, but you'd be better off putting in a few grains of salt."

## **5. Trans fats**

Trans fat makes it onto our dirty dozen list because eating too much of it leads to heart disease. "Trans fats are proven to cause heart disease, and make conditions perfect for stroke, heart attack, kidney failure, and limb loss due to vascular disease," says Gerbstadt. "It would be wonderful if they could be banned." Manufacturers have modified product ingredients lists to reduce the amount of trans fats, and are required to label trans fats amounts, but restaurant food, especially fast food chains, still serve foods laden with trans fats. Experts recommend we consume no more than two grams of trans fat per day, an amount easily accounted for if you eat meat and dairy.

## **6. Aspartame**

Aspartame, also known by the brand names Nutrasweet and Equal, is an additive found in so-called diet foods such as low-calorie desserts, gelatins, drink mixes and soft drinks. It also comes in individual packages used in place of sugar as a sweetener. The safety of aspartame, a combination of two amino acids and methanol, has been the focus of hundreds of scientific studies. Conclusions by the U.S. Food and Drug Administration, the World Health Organization, the ADA, and the Food and Agriculture Organization indicated that the additive is safe. Conversely, the Center for Science in the Public Interest gave it their lowest ranking in a review of food additives, quoting animal studies in 1970 and in 2007, which suggest that there is a link between aspartame and cancer. Gerbstadt, spokesperson from the ADA—an organization that supports the general safety of aspartame—says that the additive might be unhealthy for some people—especially those with the disease phenylketonuria, an enzyme disorder—because it contains phenylalanine. "Some people may be sensitive to it, and it's easy to avoid," she says.

## **7. Acesulfame-K**

This is a relatively new artificial sweetener, approved by the U.S. Food and Drug Administration in 1998 for use in soft drinks. It is also found in baked goods, chewing gum, and gelatin desserts. Acesulfame-K—the "K" is the chemistry symbol for potassium—is considered 200 times sweeter than sugar. While Gerbstadt isn't specifically concerned about this sweetener when used in moderation, there is a general concern that testing on this product has been scant. Some studies showed the additive may cause cancer in rats, but the substance makes top 12 lists of additives to avoid because further study is needed to conclude whether or not acesulfame-K is harmful.

## **8. Yellow 6**

You may think that all dangerous artificial food colorings were banned by the FDA long ago, but there are five still on the market that are linked with cancer in animal testing. "Always opt for the product without the color, if you have a choice," says Gerbstadt. "I'm not saying to avoid all coloring. Many are made from natural sources. But some specific dye colors do promote tumor formation, in the right combination and conditions." Blue 1 and 2, found in beverages, candy, baked goods and pet food, are considered low risk but have been linked to cancer in mice. Red 3, used to dye cherries, fruit cocktail, candy, and baked goods, has been shown to cause thyroid tumors in rats. Green 3, added to candy and beverages, though rarely used, has been linked to bladder cancer. Studies have linked the widely used yellow 6—added to beverages, sausage, gelatin, baked goods, and candy—to tumors of the adrenal gland and kidney.

## **9. Olestra**

Olestra, a synthetic fat known as the brand name Olean and found in some brands of potato chips, prevents fat from getting absorbed in your digestive system. This often leads to severe diarrhea, abdominal cramps, and gas. "If you eat fat when taking Olestra, the fat is going to go right through you," says Gerbstadt. More significantly, though, Olestra inhibits

healthy vitamin absorption from fat-soluble carotenoids that are found in fruits and vegetables and thought to reduce the risk of cancer and heart disease. "It blocks fat absorption, but it also blocks vitamin absorption," says Gerbstadt.

#### **10. Potassium bromate**

Potassium bromate is rare, but still legal in the U.S., and used as an additive to increase volume in white flour, breads, and rolls. Most bromate rapidly breaks down to an innocuous form, but it is known to cause cancer in animals—and even small amounts in bread can create a risk for humans. California requires a cancer warning on the product label if potassium bromate is an ingredient.

#### **11. White sugar**

Some foods, such as fruits and carrots, naturally contain sugar, but watch out for foods with added sugars, such as baked goods, cereals, crackers, even sauces and many other processed foods. Gerbstadt includes white sugar on the list of 12 because although it is non-toxic, large amounts are unsafe for our health and promote bad nutrition. "Simple sugars shouldn't take up more than about 10 percent of the total calories you consume daily," says Gerbstadt. Yet most Americans already are eating way over that amount, consuming 20, 30, or 40 percent of their calories from simple sugars, she says. Too much sugar not only leads to problems with weight control, tooth decay and blood sugar levels in diabetics; it also replaces good nutrition. "In addition to providing unnecessary calories, your body needs nutrients to metabolize sugar, so it robs your body of valuable vitamins and minerals," says Gerbstadt.

#### **12. Sodium chloride**

A dash of sodium chloride, more commonly known as salt, can certainly bring flavor to your meal. But salt is another hidden food additive that can lead to health issues. "Small amounts of salt are needed by the body and are beneficial in preserving food," says Gerbstadt. "Excessive amounts of salt can become dangerous for your health, affecting cardiovascular function, leading to high blood pressure, heart attack, stroke, and kidney failure."