Which Food Additives Should You Avoid?
Part 2: The Good, The Bad & The Ugly

Author: Dr. Stephen Chaney

It is getting really hard to find a food or food supplement that doesn't have any ingredients on the internet "naughty list". The problem is that many of the internet warnings about food ingredients are what I call "urban nutrition myths".

Last week I identified the top 25 food ingredients on the internet "naughty list" and told you which ones were actually "good" - OK for most people most of the time. This week I'm going to tell which ones are "bad" and which ones are truly "ugly".

Which Food Additives Should You Avoid?
The Bad

The term "bad" for the food ingredients in this list is a bit of a misnomer. These are food ingredients that some people will want to avoid, but are perfectly OK for many people. In some cases, the type of food the ingredients are added to determines whether the ingredient is OK or should be avoided.

Sodium Nitrate and Nitrite: This is a topic I have covered in a previous article titled "Nitric Oxide Benefits and Side Effects" (http://healthtipsfromtheprofessor.com/nitric-oxide-benefits-side-effects/). It is a perfect example of a food ingredient that can be "bad" in certain foods and "good" in others. Briefly:

* When sodium nitrate and/or sodium nitrate are added to processed meats, they can combine with the amino acids from the meat in the intestine to form cancer-causing nitrosamines. As you might suspect, this is not a good thing.

* On the other hand, when sodium nitrate or sodium nitrite are found in fruits are vegetables or combined with natural antioxidants such as vitamin C, they are converted to nitric oxide, which has a number of beneficial effects in the body. So when they are present in these foods or food supplements, they are actually beneficial.

Sugar & High Fructose Corn Syrup: As I said in my video "The Truth About Sugar" (http://healthtipsfromtheprofessor.com/videos/), there are no sugar villains and there are no sugar heroes. For example, high fructose corn syrup has been particularly vilified in recent years, but its chemical composition is not significantly different from honey and agave nectar, which are considered to be "good" sugars.

The problems associated with sugars of all types in the American diet are related to the amount of sugar in our diet (too much) and the kinds of foods they are found in. Let's focus on that last one for a minute.

* When sugars are consumed as a part of foods that are rich in fiber and/or protein they have much less of an effect on blood sugar levels (a lower glycemic index) than when they are consumed in sodas, juices and highly processed foods. That's important because the bad health consequences of sugars are primarily caused by foods that lead to high blood sugar levels. See, for example, my article "Can Soft Drinks Cause Heart Disease?" (http://healthtipsfromtheprofessor.com/soft-drinks-and-heart-disease/).

* Consequently, we should be focusing on the glycemic index (the effect on blood sugar levels) of the foods we eat rather than obsessing about the amount or kinds of sugar on the label.

MSG: MSG, or monosodium glutamate, is a particularly interesting case. MSG is the sodium salt of the amino acid glutamate.

Glutamate is a neurotransmitter.

* When MSG is used as a flavor enhancer in foods with a low protein content, the glutamate is very rapidly taken up by the brain and can overstimulate some neurons.

* For most people this is no problem, but a small number of people experience what used to be called "Chinese Restaurant Syndrome" due to the large amounts of MSG used in some Chinese foods.

* The common symptoms associated with "Chinese Restaurant Syndrome" are headache, sweating, skin flushing, nausea & fatigue. Allergic reactions to MSG can even be life threatening in some individuals.

Glutamate is also found in every protein we eat. Consequently, we create lots of MSG in our intestine every time we eat and digest protein. In this situation it is no more harmful than any other amino acid in the proteins we eat.

* The most logical explanation for this phenomenon is that when all of the amino acids are in our bloodstream simultaneously they compete with glutamate for uptake into the brain. This slows the entry of glutamate into the brain and prevents overstimulation of neurons.

The bottom line is that MSG as a flavor enhancer is harmless for most people, but problematic for some. MSG as a component of hydrolyzed vegetable protein or sodium caseinate is harmless because it is in balance with the other naturally occurring amino acids. Some websites claim that MSG is found in maltodextrin and citric acid. It is not.

Salt (Sodium): I could, and probably should, write a whole article on sodium intake. Suffice it to say that 1) most of us consume too much sodium, 2) most of that sodium is hidden in the foods we eat rather than added at the table, and 3) some people are more sensitive to the bad effects of sodium than others.

Refined Grains: Again, this could be a whole article. Suffice it to say that 1) whole grains are better than refined grains and 2) most of us would benefit from eating fewer grains in any form and more fruits and vegetables in their place.

Food Ingredients: The Ugly

Finally, there are some food ingredients that most experts (except for those in the food industry) agree should be avoided. I call them the dirty dozen. They are:

1) Trans fats (also known as partially hydrogenated vegetable oils).
2) Aspartame
3) Acesulfame-K
4) Sucralose
5) Artificial colors
6) Artificial flavors
7) BHA & BHT
8) Propyl gallate
9) Sodium and potassium benzoate
10) Potassium bromate
11) Potassium sorbate
12) Polysorbate 80

The Bottom Line

If you were to believe everything you read on the internet about food ingredients that you should avoid, you could end up spending most of your day reading food labels and still find very few foods that you could eat. Some of those warnings are true, some are partially true, and some are mostly myths.

To help you sort through this confusing information I have identified the top 25 food ingredient warnings and have divided them into the good, the bad and the ugly.

1) The "good" are those food ingredients that are perfectly OK for most people, most of the time. Here are some examples (see the article above for a full explanation).

- Soy: The supposed dangers of soy have been disproven by numerous clinical studies, but the myths persist. I do recommend that you choose non-GMO soy protein.
- GMO: GMO foods and proteins are a concern but purified food ingredients obtained from GMO foods pose no health risks. There are, however, possible environmental concerns due to the overuse of Roundup.
- Carrageenan and Caramel Color: In this case it is contaminants rather than the food ingredients themselves that are the problem. As long as you choose a manufacturer who performs rigorous quality control tests on their ingredients, you need not be concerned about these ingredients.

o Canola Oil, Maltodextrin and Soy lecithin: The supposed dangers of these food ingredients are myths. They are not backed up by credible clinical studies. However, they are generally derived from GMO foods, so there is a possible environmental concern.

2) The "bad" are the food ingredients that do pose a problem for some people, particularly when those ingredients are found in the wrong kinds of foods. However, those same ingredients are OK for many people when they are in the right foods.

o Sodium nitrate and nitrite: Those ingredients are a concern when added to processed meats, but are actually healthy when found in fresh fruits and vegetables or combined with antioxidants such as vitamin C.

o Sugar and High Fructose Corn Syrup: We definitely need to reduce the amount of sugar in our diet. However, when looking at individual foods we should focus more on glycemic index than on the amount or kind of sugar.

o MSG: MSG is a concern for some individuals when used as a flavor enhancer in low protein foods. However, it poses no risk when it is present as a component of partially digested proteins such as hydrolyzed vegetable protein or sodium casseinate.

3) The "ugly" are those ingredients that most experts agree we should avoid. They include trans fats, artificial sweeteners, artificial colors, artificial flavors, artificial preservatives and a few others listed above.

Dr. Steve Chaney