

MSG's Many Side Effects and Aliases

This "Natural Flavor" Is Not So Natural

Even if you've never had a college course in chemistry, you're likely familiar with the acronym. MSG stands for monosodium glutamate. In the modern era, this food additive is found in nearly every processed food, and you may not realize it due to its many, many names.

The Origins of MSG

According to the FDA, MSG has been used "throughout history". If by throughout history they mean in Japan for the last hundred years, then yes, but recorded history goes back 10,000 years, not only one hundred.

Kombu dashi is a traditional Japanese broth that has been made for centuries. In 1908, chemist Ikeda Kikuanee isolated the ingredient in kombu dashi's sea kelp that gave the dish its flavor- MSG. The product that ultimately originated from Ikeda's work was patented in the U.S., France, and Japan. In Japan, he dubbed the flavor enhancer umami, which means tasty. When Ikeda partnered up with the Suzuki Chemical Company, umami was marketed under a different name, Ajinomoto, which means the essence of taste.

Initially, the Suzuki chemical company struggled to turn a profit selling MSG. For the first four years, MSG was unprofitable in Japan. Ultimately their marketing strategies shifted from targeting food manufacturers and restaurateurs to housewives. This shift in marketing turned a profit for the

company. Over time, MSG became a commonly used household ingredient in Japan. Restaurants and food manufacturers later adopted its use and the flavor enhancer came into widespread use throughout Asia and the Western world.

What is MSG?

Monosodium glutamate escaped extensive testing because it is derived from an amino acid, glutamate, one of the building blocks of protein. There are twenty such amino acids; many of which our bodies can produce on their own, while some of them our bodies cannot.

Our bodies naturally produce glutamate. The body not only uses glutamate as a constituent of protein, it also uses it as a neurotransmitter. Our bodies manufacture just enough of the amino acid at a time to maintain brain function. Too much is toxic to our nerve and brain cells. The excess of free glutamate in MSG causes excitotoxicity, a pathological condition that excites nerve cells and brain cells to the point of death.

How Much Is Too Much?

That is what the debate is all about.

MSG is often found in foods that have been heavily processed. Even if MSG is not listed on the label, it is often a by-product of processing food. Enzymes added to processed foods will break down the proteins until MSG or the free form of glutamate is created in the food. Anything hydrolyzed creates the same cause and effect. Health conscious consumers, who are trying to avoid MSG, must take care to learn the different names of ingredients that are high in MSG if they wish to avoid it. MSG is even found naturally in some foods.

Glutamate/glutamic acid comes in a bound form and a free form. The free form of glutamate or glutamic acid is found naturally

in small amounts in foods such as cheese, dairy, tomatoes, fermented soy products and seaweed. The bound form of glutamate has not been known to cause adverse reactions in people, except in rare circumstances.

The majority of MSG in the American diet is not of natural origin. The majority of MSG that Americans consume is added to processed foods or created as a by-product of the processing itself. It is also found in much of the food that is served in restaurants. The amount of MSG is particularly high in low-fat foods, canned goods, soups, and gravies.

Until recently, the easiest way to avoid MSG was to avoid processed foods, but in the late nineties, MSG became even harder to avoid. In 1998 the EPA approved the use of sprays containing free glutamic acid to be used on fruits, vegetables, and other plants. Consumers have no way of knowing how much spray has been used, how much free glutamic acid the plant has absorbed, or how much is left as residue on the plant. The spray most commonly used is AuxiGro. At present, consumers can avoid MSG sprayed produce by buying organic produce, but the industry has been requesting permission to use MSG sprays on organic produce as well. So far, organic produce is not sprayed with MSG.

How much is too much MSG? Our research and experience recommends that all MSG that is not of natural origin be avoided.

How Bad is MSG?

MSG sensitive individuals can experience these symptoms within an hour of consuming only three grams.

MSG Side Effects

- Stomach cramps
- Nausea/vomiting
- Diarrhea

- Migraine headaches
- Heart palpitations
- Rapid heartbeat
- Sharp rise in blood pressure
- Rapid drop in blood pressure
- Blurred vision
- Joint pain
- Stiffness in joints
- Achiness all over body
- Dizziness, & loss of balance
- Light headed
- Depression
- Frequent need to urinate
- A numbing or burning sensation in the mouth
- Swelling of the face
- Pain or tightness in the chest
- Shortness of breath

In studies with lab animals, research has conclusively confirmed that consuming high doses of MSG causes lesions in the hypothalamus. What is the hypothalamus for? The hypothalamus controls vital functions like heart rate, breathing, body temperature, appetite, thirst, and sleep. The hypothalamus also influences emotions and impulses like anger, fear, love, compassion, empathy, depression, and libido.

In studies with lab animals, young animals that were fed diets high in MSG showed numerous health problems. These problems persisted throughout the animals' life. Problems like obesity, malformed organs, abnormal reproductive systems, infertility, unprovoked rage, overt aggression, antisocial behavior, impaired cardiovascular responsiveness, and high triglycerides, cholesterol, and VLDL. Many of these animals also showed signs of an impaired immune system. These animals showed abnormal hypothalamic function. These results were duplicated in many different animals, not only with lab mice.

MSG also forces the pancreas to release insulin. This causes

the blood sugar to drop and typically makes one very hungry. This is why it is commonplace for individuals to become hungry only an hour or so after consuming foods high in MSG.

MSG also wrecks havoc on our hormones and causes sleep disorders and strong PMS symptoms.

What the Food Industry Does Not Want You To Know

Although the FDA requires that the ingredient monosodium glutamate be listed on food labels, it does *not* require ingredients that contain MSG to be listed as MSG. If we are to avoid MSG, we must avoid the following ingredients as well. The food industry does not want you to know about these ingredients...

Ingredients That Always Contain MSG

- Ajinomoto
- Autolyzed yeast or autolyzed yeast extract
- Calcium caseinate
- Calcium glutamate
- Gelatin
- Glutamate
- Glutamic acid
- Hydrolyzed oat flour
- Hydrolyzed plant protein
- Hydrolyzed protein or
- Hydrolyzed anything else
- Magnesium glutamate
- Monopotassium glutamate
- Plant protein extract
- Sodium caseinate
- Soy sauce extract
- Textured protein
- Torula Yeast
- Umami

- Vetsin
- Yeast extract
- Yeast food
- Yeast nutrient
- Or anything enzyme modified

Ingredients That Usually Contain MSG

(or MSG is created during their processing)

- Artificial flavors and flavorings
- Barley malt
- Bouillon
- Brewer's yeast
- Broth
- Carageenan
- Citric acid, citrate
- Cornstarch
- Enzymes
- Enzyme modified ingredients
- Malt extract
- Malt flavoring
- Malted barley
- Maltodextrin
- Monoammonium glutamate
- Sodium glutamate
- Natural flavors and flavorings
- Oligodextrin
- Pectin
- Powdered milk
- Protease
- Protein-fortified ingredients
- Seasonings
- Soy protein
- Soy protein concentrate
- Soy protein isolate
- Soy sauce
- Spices

- Stock
- Ultra-pasteurized ingredients
- Whey protein
- Whey protein concentrate
- Whey protein isolate

Unfortunately, this is not an exhaustive list. MSG is truly one of the best-hidden ingredients on the market. As you can see, it has many guises. Consumers are given other information such as cholesterol, calories, and sugars. But the degree of neurotoxicity (the amount of MSG) is mysteriously hidden on the label.

MSG does not change the actual taste of foods the way substances that are sweet, salty, bitter, or sour do. Instead it alters the taste of food by stimulating the sensation of taste. It is added to foods in the hope that consumers will become addicted. It is added to foods in many different ways, listed as many different ingredients, in the hope that we will not take the effort to learn its many names.

Neuroscientists overwhelmingly agree that MSG is toxic. It kills neurons by exciting them until the neurons die. MSG is an excitotoxin, so it is toxic for everyone, some more than others. Newborns are four times more sensitive to MSG than adults, and individuals with Parkinson's, Alzheimer's, or multiple sclerosis are more sensitive than people without neurodegenerative diseases.

Anyone who is sick and trying to heal naturopathically (which, incidentally, is the only way to actually heal), will have to stop eating MSG. Any parent with a child who exhibits behavior problems needs to find those hidden sources of MSG in their child's diet and get their kid off of MSG (and every other additive). You'll see a difference in two weeks or less. The bottom line is this: do you want to eat a food additive that kills your brain cells in addition to doing other damage throughout your body? Do you want to feed it to your child,

ever? For any reason?

The FDA assures us that MSG is safe, but a neurotoxin, in any amount, is never fit for human consumption.

Sources:

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