

MSG and Aspartame Scorch Brain Cells



“Red alert! Red alert! Excitotoxins have penetrated the barrier! Forced work destroying many! Little time left! Death imminent!”

If only excitotoxins were a movie we could enjoy the action of the plot, and once the credits rolled never worry about it again. But unfortunately, excitotoxins are real life assassins.

Though there are 70 known excitotoxins, the majority of attention has been given to Monosodium Glutamate (MSG) and Aspartame. Our society, metaphorically speaking, is swimming in these substances. Aspartame is a non-caloric sweetener used mostly, but not exclusively, in diet products. Whereas, MSG is as abundant in our food supply as water is in our faucets.

What is MSG and Aspartame?

Both are made from amino acids. MSG contains glutamate and sodium. Aspartame is made from two aminos and a poison, aspartic acid (40%), phenylalanine (50%) and methanol (10%). One may think eliminating the poison, methanol, would cure the problem. After all, the body has to have amino acids to survive, right? Right; and no, removing methanol will not cure the problem. We live in a complicated world, and for each of us it starts with our bodies.

Attack of the Singular Aminos

Amino acids were designed to work as a group. Humans possess 20 standard amino acids. When they are ingested as a unit each performs like the cogwheels of a clock, everything fitting together perfectly, moving in unison, with little friction. When the body is overloaded with singular amino acids the meaning of the word ‘acid’ takes over. Specifically, the trouble created from an excessive amount of glutamate and aspartate culminates in an assault to the brain.

Of all the parts of the body, the brain is the most protected. The skull is its armor; and the blood-brain barrier acts as guards at the gate, making sure all that want to enter have the proper authority. The blood-brain barrier would work well to keep excessive amounts of glutamate and aspartate out if it weren’t for three troublesome facts.

First, all the guards are at the front door, no one is minding the other doors. This means seepage into unprotected parts of the brain, like the hypothalamus and pineal gland, can eventually lead to a breach of the entire brain. And, since these amino acids are difficult for the body to eliminate they accumulate adding more and more potential for leakage into the brain.

Second, the brain uses glucose as its main fuel. As glutamate levels rise they begin to reduce the availability of glucose to the brain. The brain has to have fresh glucose, as it has no way to store it for use later. This creates a vicious circle for the brain. As it has less fuel on hand it becomes easier for glutamates to percolate into the brain, which causes less fuel, creating more glutamate seepage. In the end major damage to the brain occurs.

Third, and this is the kicker. The blood-brain barrier has glutamate receptors on both the outside and inside of its structure. In other words, glutamate has been given a golden key to the brain. This just shows how important the amino acid is to a healthy brain. The problem arises with the deluge created when an excitotoxin is ingested as a single amino acid.

When enough excitotoxins attach to the receptors of the neuron (nerve cell) the cell goes into a form of overdrive. It begins a rapid firing across the surface of the cell. The excitotoxin pushes the cell to exhaustion. Then a short time later the neuron dies. The death of a neuron is a big deal to the brain as it can not be replaced.

Excitotoxin Damage Changes DNA

Wow, this is extremely scary stuff. Not only do excitotoxins breakdown the neurotransmitter system leading to neurodegenerative diseases like Alzheimer's, Parkinson's, Huntington's, Amyotrophic Lateral Sclerosis and Multiple Sclerosis, but with each generation these diseases start to affect younger people. With many of these diseases a large quantity of neurons have to be destroyed, up to 80%, before the symptoms of the illness come to the forefront. Besides causing physical ailments, excitotoxins will actually start tearing up the DNA.

Children are the most susceptible to excitotoxin damage. Harm can begin in the womb as excitotoxins are able to leak through the placental barrier, then attack the forming brain. Children in general suffer more because of the immaturity of their brain, and their smaller size.

Of Mice and Men

There has been hundreds of studies of excitotoxins done on mice. Everything from causing obesity to retina damage has been discovered to occur in these rodents. And, humans are five times more sensitive to excitotoxins than mice. In fact, humans are the most sensitive to excitotoxins than any other tested animal.

Removing the Toxins

Excitotoxins are difficult to remove from the brain. The only known method of removing any portion of them is through sweating and drinking water. Saunas are the best method to induce a sweat. Promolife sells a variety of different saunas. The important thing is not the method of sweating, but the quality. Sweating must be sustained for as long as the individual can tolerate. This would be an added problem for some people, like those with Multiple Sclerosis, as heat irritates their condition.

With excitotoxins, prevention is of the utmost importance. Eating organic food, eliminating processed foods and choosing healthy restaurants is the first step. Reading food labels is equally important. Aspartame is also called aspartic acid and aspartate. MSG has so many names, and is in many other products without being labeled. It has become quite a job to find it. But, here is a fairly complete list: glutamate ~ monosodium glutamate ~ yeast extract ~ hydrolyzed protein ~ glutamic acid ~ calcium caseinate ~ yeast food ~ hydrolyzed corn gluten ~ gelatin ~ textured protein ~ yeast nutrient ~ autolyzed yeast ~ sodium glutamate ~ carrageenin ~ natural pork flavoring ~ bouillon and broth ~ natural beef flavoring ~ stock ~ whey protein concentrate ~ whey protein ~ whey protein isolate ~ maltodextrin ~ citric acid ~ natural chicken flavoring ~ ultra-pasteurized ~ barley malt ~ pectin ~ protease ~ protease enzymes ~ malt extract ~ malt flavoring ~ soy protein isolate ~ soy sauce ~ soy protein ~ soy protein concentrate ~ anything protein fortified ~ anything enzyme modified ~ anything fermented ~ seasonings ~ hydrolyzed vegetable protein ~ hydrolyzed plant protein ~ plant protein extract ~ sodium caseinate ~ autolyzed yeast ~ hydrolyzed flour ~ spices.

It has been discovered magnesium will actually block glutamates from damaging the neuron. Along with magnesium, antioxidant supplements, like CoQ10 and Alpha-Lipoic Acid, will help to protect from damage. Of course, it would be nice if the FDA would just do its job, then we would not have to worry about being bombarded with these killers.



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