

Food Additives

Book Summary

Excitotoxins: The Taste that Kills

Russell L. Blaylock, M.D.

“Excitotoxin: a substance added to foods and beverages that literally stimulates neurons to death, causing brain damage of varying degrees. Can be found in such ingredients as monosodium glutamate (MSG), aspartame (NutraSweet ®), cysteine, hydrolyzed protein, and aspartic acid.”

Suppers reviewed Blaylock’s *Excitotoxins* because the population we serve is likely to be even more vulnerable than the average population to the neurotoxic effects of food additives. Briefly, when a brain suffers the effects of low blood sugar, various brain systems begin to malfunction. We experience it as confusion, mental fatigue, fuzzy thinking, anxiety, etc. One of the systems that is affected is the system that protects the neurons from glutamate and aspartate. Both of these are amino acids – the building blocks of protein – that also function as neurotransmitters. In a brain that is low on fuel, “even normally low doses of excitotoxins can become toxic. This toxicity can manifest itself as anxiety or confusion and as episodes of anger.”

In animal studies, it has been revealed that glutamate itself can impair the entry of glucose in the brain. “The effect appears to be dose related, that is, the larger the dose of glutamate, the greater the lowering of brain glucose.” If this applies to the human population, it means that food containing MSG in all its forms both lowers glucose levels in the brain AND causes more damage in the already low-glucose brain.

Take a look at the list of food additives that contain MSG always (Blaylock, p. 255)

- Monosodium Glutamate
- Hydrolyzed Vegetable Protein
- Hydrolyzed Protein
- Hydrolyzed Plant Protein
- Plant Protein Extract
- Sodium Caseinate
- Calcium Caseinate
- Yeast Extract
- Textured Protein
- Autolyzed Yeast
- Hydrolyzed Oat Flour

Now take a look at additives that frequently contain MSG (meaning, you can’t tell from the label because legally it might):

- Malt Extract
- Malt Flavoring
- Bouillon
- Broth
- Stock
- Flavoring
- Natural Flavoring
- Natural Beef or Chicken Flavoring
- Seasoning
- Spices

Food Additives

And additives that may contain MSG or excitotoxins include:

- Carrageenan
- Enzymes
- Soy Protein concentrate
- Soy Protein Isolate
- Whey Protein Concentrate

Dr. Blaylock reports on studies that suggest:

- Exposure to excitotoxins in children may set them up for learning or emotional difficulties
- Those food additives can damage the part of a child's brain known to control hormones and lead to endocrine problems later
- Evidence strongly suggests a relationship between artificial sweeteners in soft drinks and the increased incidence of brain tumors
- Excitotoxins may aggravate neurodegenerative diseases like Alzheimer's
- Excitotoxins are known to be triggers for migraine

The only reason for excitotoxins to be there is to boost the sales of processed food by sweetening them artificially or otherwise enhancing the taste of foods whose flavors have been lost to processing. At the same time that they stimulate taste cells in the tongue they stimulate neurons. Packaged foods like sauces, soups, gravy mixes and especially frozen and low fat prepared foods wouldn't sell for lack of flavor if they weren't artificially enhanced.

Blaylock concludes that seizures, headaches, strokes, brain injury and developmental brain disorders are "intimately related to excitotoxicity." Yet we continue to add tons of free glutamate, aspartate, and cysteine to our food and drink. "The civilized world, especially the United States, has become the largest experimental laboratory in history."

Note for Suppers: Whether you're talking about the brain toxicity of food additives, diabetes related to processed foods, the brain effects in many people of eating gluten, the increased risk of developing addictions associated with eating sugary foods, or the chronic degenerative diseases associated with trans fats, the conclusion is the same: Eat whole foods. If we eat whole foods, we really don't have to understand the science or get stressed when experts disagree with one another.