

The Tuesday Minute

Nutritional information.... one byte at a time

This Week's Topic

Food Additives... Toxic To The Brain

There's no doubt, the right nutrient in the right situation can make a profound difference. But sometimes we encounter what I call "Global Factors" which affect one's health so negatively that even the right nutrients can't have their maximum benefit if these "global" factors are in play. Mainly, hydrogenated oils, NutraSweet, dehydration, lack of probiotics in the bowel and consumption of gluten when food sensitivity is present.

But perhaps the most innocuous of the Global Factors is MSG and the hidden flavor enhancers present in one's diet. You can watch the lecture below, by Dr Russell Blaylock, a noted neurosurgeon. He goes into greater detail which will leave you stunned, but here's the short version.

"Flavor enhancers" are really "Excitotoxins" added in large doses under misleading names that sound harmless. Excitotoxins are "toxins" or "poisons" that cause excitement in the brain. Certain brain cells get excited and they fire their cells rapidly. Cells become exhausted and in 1 hour they suddenly die. Excitotoxins are free radical generators. Glutamate, aspartate, and L-cysteine can stimulate large amounts of free radicals within exposed neurons. In time, this results in the progressive death of these motor neurons which can lead to neurodegenerative diseases.

Excess excitotoxic stimulation results in the buildup of free radicals eventually "overwhelming" the cell's ability to neutralize them. Free radicals in the brain can also damage

mitochondrial DNA and reduce the brain's ability to make energy. These excitotoxins are in almost all packaged foods and are disguised with names like: vegetable protein hydrolyzed vegetable protein, textured vegetable protein, sodium or calcium caseinate, enzymes, spices, autolyzed yeast, yeast extract, natural flavor, carrageen, broth or stock. You can print out a comprehensive list below.

Infant formulas are loaded with flavor enhancers like MSG. Many baby foods, especially toddler foods, have large amounts of MSG added to them and are harmful for the developing brains of children. We have an epidemic of attention deficit disorder, autism, mood disorders, outbursts of anger, and other mental illness' that are diagnosed in children!

I've had several calls from young moms with babies that develop seizures in the first year of life. Doctors prescribe drugs with dangerous side effects for these seizures. I've recommended Mixed EFAs and organic or homemade baby food. "Mysteriously" the seizures disappear.

I have treated many children whose mothers were desperate for answers when their children presented behavioral problems that are routinely treated with drugs. In every case I found low blood sugar to be a major factor. When their diet was changed, their behaviors remarkably improved and not one has needed to resort to medications.

The elderly are at risk as well. Let's face it, neurodegenerative diseases are at an all time high and rising.

Food industry lobbyists go to drastic means to prevent knowledge from being made public. Also, the food industry uses deceiving methods to keep consumers from knowing what has been added to foods. We are told that only small amounts are being used and are not harmful based upon animal research. The truth is: humans are more susceptible to MSG than ANY experimental animals; our brains are 5 times more sensitive than mice, and 20 times more sensitive than the rhesus monkey.

Another deception is that the blood brain barrier protects our brain from these additives. That's not exactly true. The brain receives the same blood that flows through the body. Therefore, it is exposed to high concentrations of chemicals in the blood from metabolism and from the diet. Some of these chemicals are toxic to the brain. Without the blood brain barrier these chemicals' would do serious damage to the brain and spinal cord. This barrier excludes some substances while allowing others free passage.

Some parts of the brain, however, never develop a barrier system at all. The hypothalamus, pineal, and the pituitary glands are without barrier protection. The pituitary, which is called the "master gland," is controlled by the hypothalamus. This gland controls all the endocrine functions of the body. As a result, the chemicals in our blood also affect these vital glands.

The blood brain barrier that does protect the brain can also be disrupted with the use of the sweetener NutraSweet. NutraSweet opens the blood brain barrier and glutamate that is in your

blood seeps into the brain. In fact, a person with multiple sclerosis can get significantly worse for days or weeks after eating just 1 serving of a food containing flavor enhancers.

This important brain barrier can be stabilized in two major ways. First, avoid ANY additives in our diet that can cause excessive neuron damage. Secondly, use supplements to assist the cell's ability to combat the accumulation of free radicals by supplying antioxidants. Use supplements like N-Acetyl-L-Cysteine which enters the cell and is converted to glutathione. Glutathione can also regenerate vitamin C and vitamin E which can become effective free radical scavengers.

Also Coenzyme Q10 blocks lipid peroxidation; L-Carnitine improves long-term memory and significantly improves cellular energy production including the brain cells. Taurine is an amino acid found in high concentrations in the brain to protect it and stabilizes nervous system excitability. Acetyl-L-Carnitine is a natural biochemical component of all cells. It has neurotransmitter properties. It is an antioxidant and increases mitochondrial energy production. It stabilizes cell membranes, increases memory and chelates iron. This important compound has been shown to defend brain cells against lipid peroxidation, and increases cellular glutathione and concentrates of a reduced form of CoQ10.

Along with these supplements, let's get back to eating "real" food. It has properties we haven't even dreamed of; and Oh, yes, we won't have to worry about "Global Factors" or the destruction of one of our most valuable assets... our brain. Thanks for reading this weeks edition. See you next Tuesday.