**Aspartame: By Far the Most Dangerous Substance Added to Most Foods Today**

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**By Dr. Mercola**

Aspartame is the technical name for the brand names NutraSweet and Equal (the blue packet). It was discovered by accident in 1965 when James Schlatter, a chemist of G.D. Searle Company, was testing an anti-ulcer drug.

Aspartame accounts for over 75% of the **adverse reactions to food additives reported to the FDA**. Many of these reactions are very serious, including seizures and death. A few of the 9 different documented symptoms listed in the report as part of aspartame dangers are headaches/migraines, dizziness, seizures, nausea, numbness, muscle spasms, weight gain, rashes, depression, fatigue, irritability, tachycardia, insomnia, vision problems, hearing loss, heart palpitations, breathing difficulties, anxiety attacks, slurred speech, loss of taste, tinnitus, vertigo, memory loss, and joint pain.

According to researchers and physicians studying the adverse effects of aspartame, the following chronic illnesses can be triggered or worsened by ingesting aspartame: brain tumors, multiple sclerosis, epilepsy, chronic fatigue syndrome, Parkinson's disease, Alzheimer's disease, mental retardation, lymphoma, birth defects, fibromyalgia, and diabetes.

* **How Aspartate (and Glutamate) Cause Damage**

Aspartic acid is an amino acid. Taken in its free form (unbound to proteins), it significantly raises the blood plasma level of aspartate and glutamate. The excess aspartate and glutamate in the blood plasma shortly after ingesting aspartame or products with free glutamic acid (glutamate precursor) leads to a high level of those neurotransmitters in certain areas of the brain.

Aspartate and glutamate act as neurotransmitters in the brain by facilitating the transmission of information from neuron to neuron. Too much aspartate or glutamate in the brain kills certain neurons by allowing the influx of too much calcium into the cells. This influx triggers excessive amounts of free radicals, which kill the cells. The neural cell damage that can be caused by excessive aspartate and glutamate is why they are referred to as "excitotoxins." They "excite" or stimulate the neural cells to death.

The excess glutamate and aspartate slowly begin to destroy neurons. The large majority (75 percent or more) of neural cells in a particular area of the brain are killed before any clinical symptoms of a chronic illness are noticed. A few of the many chronic illnesses that have been shown to be contributed to by long-term exposure to excitatory amino acid damage include multiple sclerosis (MS), Parkinson's disease, ALS, hypoglycemia, memory loss, AIDS, hormonal problems, dementia, epilepsy, brain lesions, Alzheimer's disease, and neuroendocrine disorders.

* **Phenylalanine (50 percent of aspartame)**

Phenylalanine is an amino acid normally found in the brain. Persons with the genetic disorder phenylketonuria (PKU) cannot metabolize phenylalanine. This leads to dangerously high levels of phenylalanine in the brain (sometimes lethal). It has been shown that ingesting aspartame, especially along with carbohydrates, can lead to excess levels of phenylalanine in the brain **even in persons who do not have PKU.**

This is not just a theory, as many people who have eaten large amounts of aspartame over a long period of time and do not have PKU have been shown to have excessive levels of phenylalanine in the blood. Excessive levels of phenylalanine in the brain can cause the levels of serotonin in the brain to decrease, leading to emotional disorders such as depression. It was shown in human testing that phenylalanine levels of the blood were increased significantly in human subjects who chronically used aspartame.

**One account** of a case of extremely high phenylalanine levels caused by aspartame was recently published by the Wednesday Journal in an article titled "An Aspartame Nightmare." John Cook began drinking six to eight diet drinks every day. His symptoms started out as memory loss and frequent headaches. He began to crave more aspartame-sweetened drinks. His condition deteriorated so much that he experienced wide mood swings and violent rages. **Even though he did not suffer from PKU**, a blood test revealed a phenylalanine level of 80 mg/dl. He also showed abnormal brain function and brain damage. After he kicked his aspartame habit, his symptoms improved dramatically.

**This Is How Aspartame Causes Obesity**

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The allure of artificial sweeteners — zero calories and a sweet taste — is a strong one, such that up to 180 million Americans use them routinely.

There have been concerns from the beginning, however, that consuming **synthetic (man-made)** compounds with hypersweetness (200 times that of sugar in the case of aspartame) has some serious drawbacks.

One of the most appalling, especially to those consuming artificially sweetened sugar-free and diet products in the hopes of losing weight, is their propensity to fuel weight gain. Researchers wrote in the Yale Journal of Biology and Medicine:

"Intuitively, people choose non-caloric artificial sweeteners over sugar to lose or maintain weight. […] weight conscious public often consider artificial sweeteners "health food." But do artificial sweeteners actually help reduce weight?

Surprisingly, epidemiologic data suggest the contrary. Several large scale prospective cohort studies found positive **correlation** **between** artificial sweetener use and weight gain."

Although their reputation as a weight-loss aid has held strong since the beginning, it's been known for years that they seem to have the opposite effect.

* **Artificial Sweeteners Linked to Weight Gain Since the 1980s**

Artificial sweeteners are still viewed as a weight-loss aid in 2016 even though their hindrances to weight loss have been documented since at least the 1980s.

Then, the San Antonio Heart Study, which involved nearly 4,000 adults, found **drinkers of artificially sweetened beverages consistently had higher BMIs (body mass index) than non-drinkers.**

Again in the early 1980s, a study of nearly 78,700 women found artificial sweetener usage increased with relative weight, and users were significantly **more likely** to gain weight compared to those who did not use artificial sweeteners.

Such associations have only continued to grow over the passing decades. Artificially sweetened beverages, including diet soda, are among the key culprits, with intake **associated** **with** "striking" increases in waist circumference among older adults, according to one study.

Research published in PLOS One also found regularly consuming artificially sweetened soft drinks is **associated** **with** several disorders of metabolic syndrome, including abdominal obesity, insulin resistance, impaired glucose intolerance, abnormally elevated fats in the blood, and high blood pressure

The study found drinking aspartame-sweetened diet soda daily increased the risk of type 2 diabetes by 67 percent (regardless of whether they gained weight or not) and the risk of metabolic syndrome 36 percent.

A 2010 review published in the Yale Journal of Biology and Medicine

revealed the **correlation** **between** increased usage of artificial

sweeteners in food and drinks and the corresponding rise in obesity.

More than 11,650 children aged 9 to 14 were included in this study.

Each daily serving of diet beverage was **associated with** a

body mass index (BMI) increase of 0.16 kg/m2.

You can see the trends for yourself in the Yale Journal of

Biology and Medicine graph (🡪), which clearly refutes the

beverage industry's claims that artificially sweetened diet

soda aids weight loss.

**Artificial Sweeteners Cause Cancer**

articles.mercola.com/sites/articles/archive/2016/03/30/artificial-sweeteners-cause-cancer.aspx

If you've added the artificial sweetener sucralose (brand name Splenda) to your diet because you think it's a healthy alternative to sugar, you're being dangerously misled. Research from the

Ramazzini Institute has **linked** the popular sugar alternative to cancer, specifically leukemia.

The findings were first presented at a London cancer conference in 2012 and prompted The Center for Science in the Public Interest (CSPI) to downgrade Splenda from its "safe" category to one of "caution."

Now that the study has been published in a peer-reviewed journal, CSPI has again downgraded

Splenda, this time from "caution" to "avoid."

* **Splenda May Increase Risk of Cancer in Mice**

The researchers fed mice Splenda beginning prenatally and continuing for their entire lifespan. The mice were fed varying concentrations of the artificial sweetener: 0 ppm (parts per million), 500 ppm, 2,000 ppm, 8,000 ppm or 16,000 ppm.

A significant increase in cancerous tumors was seen among male mice, and the risk increased along with the dose. The risk of leukemia in male mice also significantly increased, especially at Splenda doses of 2,000 to 16,000 ppm. According to the study:

"These findings do not support previous data that sucralose is biologically inert. More studies are necessary to show the safety of sucralose, including new and more adequate carcinogenic bioassay on rats. Considering that millions of people are likely exposed, follow-up studies are urgent."

After more than a decade, **CSPI has finally gotten it right** about Splenda in recommending that

consumers avoid it. For the record, however, **CSPI is generally an organization whose guidelines**

**need to be taken with a grain of salt.**

For instance, while recommending that people avoid artificial sweeteners like sucralose, aspartame and saccharin, they still consider drinking diet soda to be safer than drinking regular soda.

**Are There Safer Artificial Sweeteners?**

The best **natural sugar substitute** is from the plant kingdom. Stevia, a highly sweet herb derived from the leaf of the South American stevia plant, is sold as a supplement. It's **completely safe in its natural form** and can be used to sweeten most dishes and drinks.