

Decades of Research Confirms How Aspartame Harms Your Health

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STORY AT-A-GLANCE

- › Aspartame, an artificial sweetener 200 times sweeter than sugar, has been linked to numerous health problems including cancer, cardiovascular disease, Alzheimer's, seizures and weight gain
- › The methanol in aspartame breaks down into formaldehyde in the body, a known carcinogen. Multiple studies have associated aspartame consumption with increased cancer risk
- › Aspartame can cause excitotoxicity in the brain, leading to neural damage. It's been linked to behavioral and cognitive issues, headaches, anxiety, depression and increased dementia risk
- › Despite being marketed for weight loss, studies show aspartame may actually contribute to weight gain, increased appetite and obesity-related diseases
- › The WHO advises against using non-sugar sweeteners for weight management, stating they offer no nutritional value and may increase risks of Type 2 diabetes and heart disease

I've been sounding the alarm on artificial sweeteners – particularly aspartame – for many years, as I believe it is one of the most pernicious products ever to make its way into our food supply. Many people have been led to believe that swapping sugar for aspartame means they're doing their health a favor. But on the contrary, this toxic sweetener is one of the worst food additives you can consume.

A recently published review¹ investigates the long history of aspartame and the dozens of health problems associated with it. I guarantee that after reading the report, you'll likely toss out all aspartame-containing products from your pantry.

Aspartame Has Been Wrecking People's Health for Decades

Touted to be 200 times sweeter than sugar, aspartame is a low-calorie artificial sweetener primarily made up of aspartic acid and phenylalanine. It was first approved by the U.S. Food and Drug Administration (FDA) to be used in foods and beverages in 1981.²

Today, it's added to almost 6,000 consumer products.³ Many diet beverages, sugar-free gum and candy, condiments such as ketchup and dressings, and even children's medicines and vitamins contain aspartame. Aspartame's claim to fame is it provides the same sweet flavor without added calories, hence making it ideal for those looking to shed excess weight.

But aspartame's existence has been rife with controversy, as it appears that the risks outweigh the benefits. A review⁴ published by the nonprofit organization U.S. Right to Know enumerates multiple independent studies conducted over the past few decades since aspartame's approval, associating this artificial sweetener with a long list of health problems. According to the featured review:

"Dozens of studies have linked the popular artificial sweetener aspartame to serious health problems, including cancer, cardiovascular disease, Alzheimer's disease, seizures, stroke and dementia, as well as negative effects such as intestinal dysbiosis, mood disorders, headaches and migraines.

Evidence also links aspartame to weight gain, increased appetite and obesity-related diseases ... This evidence raises questions about the legality of marketing aspartame-containing products, such as Diet Coke, as 'diet' drinks or weight-loss products."⁵

What Makes Aspartame So Toxic to Your Health?

To understand how aspartame wreaks havoc in your body, it's important to understand its composition. As mentioned, aspartame is primarily composed of aspartic acid and phenylalanine. To provide its sweetness, the phenylalanine has been modified to carry a methyl group. However, this bond, called a methyl ester, is very weak. It easily breaks off and forms methanol.

It's true that methanol naturally occurs in fruits and vegetables, however, in these foods, it's firmly bonded to pectin, allowing it to be safely passed through your digestive tract. The methanol in aspartame is different – it's not bonded to anything that can help remove it from your body.

Instead, methanol acts like a Trojan horse and is carried into susceptible tissues throughout your body, including your brain and bone marrow. Here, the alcohol dehydrogenase (ADH) enzyme converts methanol into formaldehyde – this is what wreaks havoc on sensitive proteins and DNA.

What's more, formaldehyde is a known carcinogen,⁶ which brings us to one of the most warned-about dangers of aspartame. Since formaldehyde is carcinogenic, then it makes sense that aspartame might be, too.

Aspartame Has Been Linked to an Increased Risk of Cancer

The U.S. Right to Know article⁷ highlights several studies linking aspartame to an increased risk of cancer. The most recent one is the World Health Organization's International Agency for Research on Cancer's (IARC) monograph⁸ on aspartame, published earlier this year.

"As announced in January, IARC found aspartame is possibly carcinogenic. The monograph notes that a minority of the working group supported classifying aspartame as 'probably carcinogenic to humans,' based on 'a combination of limited evidence for cancer in humans and sufficient evidence for cancer in

experimental animals, supported by the limited mechanistic evidence ..." U.S.

Right to Know reports.

A 2022 PLOS study⁹ also found a link between aspartame and acesulfame-K, another artificial sweetener, and a higher risk of breast and obesity-related cancers. The study authors note, "These findings provide important and novel insights for the ongoing re-evaluation of food additive sweeteners by the European Food Safety Authority and other health agencies globally."

The featured article further lists several more studies that point to aspartame's carcinogenic potential, such as:

- A 2006 lifespan rat study¹⁰ published in Environmental Health Perspectives notes that aspartame "is a multipotential carcinogenic agent, even at a daily dose of ... much less than the current acceptable daily intake."
- A 2010 study¹¹ published in the American Journal of Industrial Medicine confirms that this artificial sweetener is "a carcinogenic agent in multiple sites in rodents, and that this effect is induced in two species, rats (males and females) and mice (males)."
- A 2012 Harvard paper¹² published in the American Journal of Clinical Nutrition found a positive link between aspartame intake and Non-Hodgkin lymphoma and multiple myeloma (among males), and leukemia (in both males and females).

Early animal studies on aspartame dating to the 1970s have already shown evidence of causing brain tumors, yet no follow-up studies were conducted on this matter.¹³ What's more, further attempts to shed light on this potential hazard were either dismissed or swept under the rug. An article published in Vice magazine notes:¹⁴

"In 1996, John Olney, a professor of pathology and immunology at Washington University Medical School, claimed to have found epidemiological evidence¹⁵ that the introduction of aspartame in the U.S. was connected to an increase in an aggressive form of brain tumor called glioblastomas. But this was criticized for just being a correlation and dismissed by the FDA."

Aspartame Harms Your Brain

Aspartame's unnatural structure causes it to produce amino acids that, instead of being used by your body, harm you. These amino acids attack your cells and even cross your blood-brain barrier, leading to a toxic cellular overstimulation known as excitotoxicity.

In addition, aspartic acid can lead to neural damage. While aspartate is used as a neurotransmitter, having too much of it in your brain can kill neurons as it allows too much calcium in the cells. This influx triggers excessive amounts of free radicals, which kill the cells. Hence, it isn't surprising that aspartame has been linked to a wide array of brain-related health issues. The featured article notes:¹⁶

"Aspartame side effects may also include behavioral and cognitive problems such as learning deficits, headache, seizure, migraines, irritable moods, anxiety, depression, and insomnia, according to the researchers of a 2017 study in Nutritional Neuroscience.¹⁷ 'Aspartame consumption needs to be approached with caution due to the possible effects on neurobehavioral health.'"

Alzheimer's disease, a severe form of dementia, is now a leading cause of death. According to a 2024 report¹⁸ by the Alzheimer's Association, an estimated 6.9 million Americans are living with this illness. Unfortunately, aspartame intake may play a factor because of the methanol in it.

According to a two-part animal study^{19,20} published in the Journal of Alzheimer's Disease in 2014, chronic exposure to methanol may lead to memory loss and Alzheimer's disease symptoms. A separate study²¹ published in 2017 also found that people who consume diet soda on a daily basis had a three times higher risk of developing dementia and stroke as opposed to those who consumed it weekly or less. According to the study authors:

"Artificially sweetened beverages are typically sweetened with non-nutritive sweeteners, such as saccharin, acesulfame, aspartame, neotame or sucralose ... Collectively, these synthetic substances are much more potent than sucrose, with only trace amounts needed to generate the sensation of sweetness.

*Because our study was observational, we are unable to determine whether artificially sweetened soft drink intake increased the risk of incident dementia through diabetes mellitus or whether people with diabetes mellitus were simply more likely to consume diet beverages. Some studies have provided evidence for the former."*²²

Aspartame Doesn't Help With Weight Loss – It Actually Makes You Fat

Aspartame-containing products are usually marketed as "diet aids" that can help you achieve weight loss, but nothing could be further from the truth. The featured article also mentions this,²³ and questions the legality of marketing these products as weight loss aids, when the science clearly points otherwise.

For example, a study published in the International Journal of Obesity found that ingesting aspartame and saccharin on a long-term basis can actually lead to "greater volumes of visceral, intermuscular, and subcutaneous adipose tissue."²⁴ A separate animal study, published in the British Journal of Nutrition, also found that test subjects that were given aspartame for seven weeks experienced increased body weight, fat accumulation and reduced insulin sensitivity.²⁵

In May 2023, the WHO released a report advising against the use of "nonsugar sweeteners (NSS)" to manage body weight or minimize the risk of noncommunicable diseases (NCDs). The report also highlights that health problems may arise from these products, including Type 2 diabetes, heart disease and even increased risk of mortality.²⁶ According to Francesco Branca, WHO director for nutrition and food safety:

*"Replacing free sugars with NSS does not help with weight control in the long term. People need to consider other ways to reduce free sugars intake, such as consuming food with naturally occurring sugars, like fruit, or unsweetened food and beverages. NSS are not essential dietary factors and have no nutritional value. People should reduce the sweetness of the diet altogether, starting early in life, to improve their health."*²⁷

The List of Health Problems Associated With Aspartame Is Extensive

The featured article mentions that many scientists have questioned aspartame's approval, believing it was based on "suspect data and should be reconsidered."²⁸ I wholeheartedly agree with this, and no doubt you will too, once you see just how extensive the list of associated health problems is:

Cancer ²⁹	Brain tumors ³⁰	Anxiety ³¹ and learning deficits ³²
Cardiovascular disease ³³	Stroke, dementia ³⁴ and Alzheimer's disease ³⁵	Seizures ³⁶
Headaches and migraines ³⁷	Parkinson's disease ³⁸	Autism ³⁹
Weight gain and obesity ⁴⁰	Increased appetite ⁴¹	Diabetes and metabolic dysfunction ⁴²
Pregnancy complications (ex: preterm birth) ⁴³	Early menstruation ⁴⁴	Sperm damage ⁴⁵
Liver ⁴⁶ and kidney ⁴⁷ damage	Behavioral problems ⁴⁸ (irritability and depression)	Insomnia ⁴⁹

I encourage you to read the U.S. Right to Know article as it efficiently summarizes aspartame's toxicity. It also provides links to investigative reports about the various health concerns, background information on how industry-funded research led to its approval, and the sordid ties between the FDA and the food industry that allowed this product to infiltrate our food supply.

Ditch Artificial Sweeteners and Control Your Sweet Cravings

Eliminating artificial sweeteners from your diet may be a challenge especially if you frequently crave sweet foods, but the good news is there are strategies to help you ditch them.

One strategy is to consume sour foods like fermented vegetables or water with lemon juice whenever you're craving something sweet. You can also try drinking a glass of tea with citrus juice or eating a piece of fruit. Most fruits are naturally sweet and can be a great substitute for sweet cravings.

Being a smart shopper is also crucial – be vigilant about checking the ingredient lists on the packaging of foods and beverages. Take note that aspartame and other artificial sweeteners aren't found in just "diet" products and other sugar-free products, but also in foods you might not expect like condiments, breakfast cereals and yogurt. Focus on consuming fresh, whole foods instead.

Finally, you can also try the Emotional Freedom Techniques (EFT) whenever you crave something sweet. This psychological acupuncture tool will help you overcome the urge to consume unhealthy foods, and only involves tapping and voicing affirmations. The video above shows you how to do EFT to get rid of cravings.

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