

# Artificial Sweeteners

*Artificial sweeteners are sweeteners that are not found in nature. These sweeteners contain few or no calories. They are often used in place of sugar or other caloric sweeteners in processed foods marketed as diet-friendly or sugar-free.*

In the United States, several artificial sweeteners have been approved for use in food. The following table lists these sweeteners, their common associated brands, and the types of products in which they are often found.

Artificial Sweetener
<p><b>Acesulfame-K (acesulfame potassium)</b></p> <ul style="list-style-type: none"> <li>· Associated brand names: Sunett®, Sweet One®, Swiss Sweet®</li> <li>· Food usage: Combined with other artificial sweeteners for a more sugar-like taste</li> </ul>
<p><b>Advantame</b></p> <ul style="list-style-type: none"> <li>· Associated brand names: None</li> <li>· Food usage: Baked goods, processed foods</li> </ul>
<p><b>Aspartame</b></p> <ul style="list-style-type: none"> <li>· Associated brand names: Equal®, NatraTaste®</li> <li>· Food usage: Instant tea and coffee, powdered drink mix, pudding, soda, yogurt, gum</li> </ul>
<p><b>Neotame</b></p> <ul style="list-style-type: none"> <li>· Associated brand names: Newtame®</li> <li>· Food usage: Baked goods, processed foods</li> </ul>
<p><b>Saccharin</b></p> <ul style="list-style-type: none"> <li>· Associated brand names: Sweet'N Low®, Sugar Twin®, Necta Sweet®</li> <li>· Food usage: Baked goods, candy, canned fruit, jam, salad dressing, soda, gum</li> <li>· Non-food usage: Lip gloss, mouthwash, toothpaste, medications, vitamin supplements</li> </ul>
<p><b>Sucralose</b></p> <ul style="list-style-type: none"> <li>· Associated brand names: Splenda®</li> <li>· Food usage: Baked goods, frozen dairy desserts, fruit juice, gelatin, soda, gum</li> </ul>
<p><b>Stevia*</b></p> <ul style="list-style-type: none"> <li>· Associated brand names: PureVia®, Rebiana®, Splenda Naturals®, Truvia®</li> <li>· Food usage: Baked goods, processed foods, soft drinks</li> </ul>

\*Natural stevia is not considered an artificial sweetener, but some brands use chemicals during processing or include additives or fillers.

## *History of Artificial Sweeteners*

Food manufacturers began developing artificial sweeteners and marketing them as healthy alternatives to refined sugar as early as 1880. These sugar substitutes became increasingly popular in the 1960s and are still widely used today. The FDA endorses the safety of artificial sweeteners, but there is a lack of high-quality, evidence-based research on humans to encourage their use.

## *Are Artificial Sweeteners Safe?*

One of the main concerns about artificial sweeteners is the uncertainty about their potential to cause harm in the body. Some artificial sweeteners have been linked to increased risk of heart disease, digestive symptoms, headaches, kidney disease, some forms of cancer, obesity, and more.<sup>1-3</sup> Artificial sweeteners are not recommended for children or pregnant women.

Another concern about artificial sweeteners is how they affect the body and brain's ability to gauge how much has been eaten. Providing sweetness without calories confuses the body's normal digestive processes. This can lead to food cravings, overeating, and metabolic diseases and disorders.<sup>4</sup> For best health, it is recommended that only minimal amounts of sugars, natural sweeteners, and artificial sweeteners be consumed regularly. A balanced diet rich in whole foods and minimal inclusion of processed foods and additives is preferred. Talk to your functional medicine provider for natural sweetener recommendations.

## *A Note About Stevia*

Stevia is marketed as a natural, no-calorie alternative sweetener. It is made from the plant *Stevia rebaudiana*, but packaged stevia and other sweeteners made with stevia aren't always 100% natural. To make it shelf-stable, some brands include additives and fillers that can cause adverse reactions to food. To be sure you choose the purest, natural form of stevia, look for brands with only one ingredient: organic stevia leaves.

## REFERENCES

1. Lohner S, Toews I, Meerpohl J. Health outcomes of non-nutritive sweeteners: analysis of the research landscape. *Nutr J*. 2017;16(1):55. doi:10.1186/s12937-017-0278-x.
2. Azad M, Abou-Setta A, Chauhan B, et al. Nonnutritive sweeteners and cardiometabolic health: a systematic review and meta-analysis of randomized controlled trials and prospective cohort studies. *CMAJ*. 2017;189(28):E929–E939. doi:10.1503/cmaj.161390.
3. Mishra A, Ahmed K, Froghi S, Dasgupta P. Systematic review of the relationship between artificial sweetener consumption and cancer in humans: analysis of 599,741 participants. *Int J Clin Pract*. 2015;69(12):1418–1426. doi:10.1111/ijcp.12703.
4. Romo-Romo A, Aguilar-Salinas CA, Brito-Córdova GX, Gómez Díaz RA, Vilchis Valentín D, Almeda-Valdes P. Effects of the non-nutritive sweeteners on glucose metabolism and appetite regulating hormones: systematic review of observational prospective studies and clinical trials. *PLoS One*. 2016;11(8):e0161264. Published 2016 Aug 18. doi:10.1371/journal.pone.0161264.

