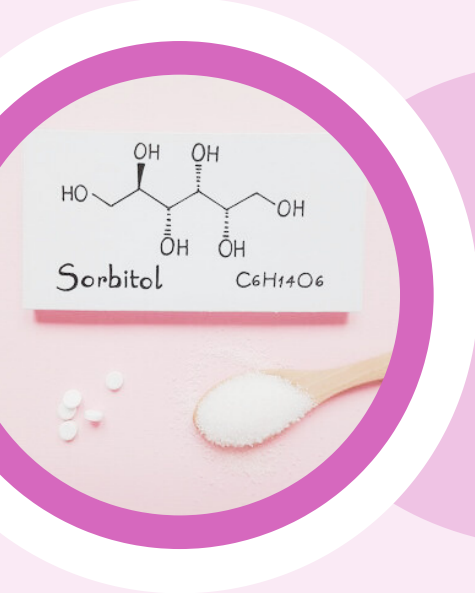


Sugar Substitutes: How Sweet are They?

Types of sugar substitutes:

- **Non-nutritive sweeteners:** Created synthetically and contain no calories or sugar. The following are FDA-approved:
 - Aspartame (Equal, Nutrasweet)*
 - Sucralose (Splenda)*
 - Saccharin (Sweet N' Low)*
 - Acesulfame Potassium (Sweet One, Sunett)
 - Neotame (Newtame)
 - Advantame (Advantame)

* The Center for Science in the Public Interest designates these as unsafe.



- **Sugar alcohols:** Created synthetically and generally have about half as many calories as sugar. May cause gastrointestinal distress. The FDA designates them as GRAS (Generally Regarded As Safe).
 - Erythritol
 - Isomalt
 - Lactitol
 - Maltitol
 - Sorbitol
 - Xylitol

- **Novel Sweeteners:** Derived from natural sources and are not significant sources of calories or sugar. The FDA designates them as GRAS (Generally Regarded As Safe).
 - Allulose
 - Monk fruit
 - Steviol glycosides (Truvia, PureVia)
 - Tagatose



Safety Considerations

- Children should avoid long-term use of sugar substitutes due to unknown effects.
- For various reasons, some sugar substitutes do not have an “acceptable daily intake” established. These include sugar alcohols, allulose, monk fruit and tagatose.
- Safety information about these sweeteners continues to evolve as more long-term research is conducted.

Efficacy Considerations

- In 2018, a systematic review of 56 studies concluded that:
 - there were no clear differences in health outcomes between those who used sugar substitutes and those who did not.
 - there were no clear health benefits to consuming sugar substitutes, but potential harms could not be excluded.
 - the quality of research on this topic is low.
- In 2023, the World Health Organization advised against using sugar substitutes to reduce body weight and lower the risk of diet-related diseases.
- The current trend of research on sugar substitutes includes examining the metabolic impact of these sweeteners, as well their effect on the gut microbiome.

Where does that leave us?

- Focus on lowering intake of both added sugars and sugar substitutes, so that you minimize your overall cravings for sweetness.
- A product that contains sugar substitutes is not automatically “healthy.” Consider the overall nutrient-density of that food or beverage before consuming.
- Stay mindful of how sugar substitutes may impact your mindset and behaviors (i.e. “I had a Diet coke with dinner so now I can have dessert!”)