

# SUGAR SUBSTITUTES



## THE USE OF SUGAR SUBSTITUTES

It is estimated that over 140 million Americans use sugar substitutes. This number includes 25% of all children, with 80% consuming sugar substitutes daily. In the last 25 years, the use of sugar substitutes has increased by about 50% in adults and 200% in children.

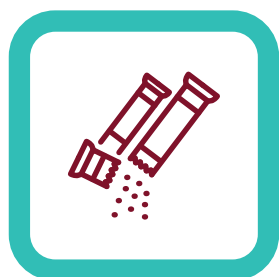
## WHY DO WE USE SUGAR SUBSTITUTES?

We use sugar substitutes because it has been increasingly recognized that sugar is both unhealthy and addictive. Refined White Sugar comes from sugar cane and sugar beets. Processing, including bleaching, changes their natural forms into a white fine granular powder. A small amount of sugar in this form can give you a quick burst of energy.

The use of sugar substitutes is thought to be a move to a healthier lifestyle. But is it? The scientific evidence is still unsettled, so we must proceed with caution and in moderation. Most, if not all, sugar substitutes result in sugar cravings.

## WHAT ARE THE TYPES OF SUGAR SUBSTITUTES?

*There are four types of sugar substitutes.*



**Synthetic  
Sweeteners**



**Sugar  
Alcohols**



**Natural  
Sweeteners**



**Plant or Fruit-based  
Sweeteners**



# SUGAR SUBSTITUTES



## SYNTHETIC SWEETENERS



The FDA has approved six synthetic sweeteners:

- **Aspartame:** Brand names are Equal, Nutrasweet, Sugar Twin.
- **Acesulfame potassium (Ace-K):** Sweet One and Sunett are brand names.
- **Sucralose:** Brand name is Splenda.
- **Neotame:** Brand name is Newtame.
- **Advantame:** Brand name is Advantame.
- **Saccharin:** Brand names are Sweet and Low, Sweet Twin, Sweet 'N Low, Necta Sweet.

While FDA approval indicates that these additives are healthy, that might not be the case. Multiple studies show we should be cautious when consuming artificial sweeteners. The World Health Organization has classified Aspartame as a possible carcinogen. Artificial sweeteners are linked to higher risks of cancer, heart disease, in addition to increased insulin resistance. Many are poorly digested and can disrupt the critical microbiome of our intestinal tract, resulting in inflammation. They do not convert to energy for your body.

## SUGAR ALCOHOLS



This term is misleading as sugar alcohols contain neither alcohol nor sugar. They are a type of carbohydrate and have a chemical structure that's similar to sugar. Food manufacturers use sugar alcohols to sweeten their products while reducing calories. Sugar alcohols are about one half as sweet as natural sugar and not nearly as sweet as artificial sweeteners. In general, sugar alcohols may be somewhat healthier than Synthetic Sweeteners, but the side effects are still being studied. The principal types are:

- **Xylitol** is often in sugar-free desserts and candies.
- **Erythritol** is one of the fastest-growing sugar substitutes in the food industry, ingesting it as a sugar substitute can raise blood levels more than 1,000 fold, and take days before returning to baseline levels,
- **Isomalt** comes from beet sugar.
- **Lactitol** is made from milk.
- **Maltitol** is made from corn, wheat and potatoes and catalytic hydrogenation.
- **Mannitol** is mainly made from the hydrogenation of fructose at high temperatures.
- **Sorbitol** is made from potato starch.

In studies, these sweeteners are frequently associated with digestive issues, with several not being filtered by the liver but going directly into the digestive tract. They also don't provide your body with any energy or nutrients. Xylitol is shown to be highly toxic to pets, with further human studies under review.

## NATURAL SWEETENERS



These include molasses, maple syrup, and honey. These aren't much different from sugar. They typically contain a little less fructose and have very good nutritional value, packed with vitamins and antioxidants. So it's somewhat better than sugar, but not much.

Natural sweeteners don't spike your energy level, but in moderation, they can slow down your glucose levels, giving you fuel for a longer period of time. When consumed in moderation, natural sweeteners are the best sugar substitute.

## PLANT & FRUIT-BASED SWEETENERS



This category is healthier than synthetic sweeteners and sugar alcohols but not as healthy as natural sweeteners.

- **Stevia**, representing extracts from the Stevia plant. Brand names are Truvia®, PureVia®, Enliten®.
- **Monk fruit**, representing extracts from monk fruit (also known as Swingle fruit or Luo Han Guo). Brand names are Nectresse®, Monk Fruit in the Raw®, PureLo®.
- **Thaumatococcus**, proteins isolated from the West African Katemfe fruit. Brand name is Talin®.
- **Allulose** occurs in trace amounts naturally in honey, figs, raisins and wheat. What is marketed, though, is manufactured through a process that starts with corn starch. It is far less sweet than Stevia and is absorbed by the body rather than metabolized. Brand names are Allulose Truvia and Durelife. The FDA classifies Allulose as a carbohydrate and not added sugar. Recent studies have shown that Allulose may improve insulin resistance and metabolic health.

These sweeteners are also not to be consumed without caution. Many forms are overly processed, resulting in added chemicals in your system. It's important to find these in their purist form. As with the other sweeteners, they increase insulin, resulting in a higher risk of diabetes.

