

Sugar Substitutes

What are sugar substitutes?

A sugar substitute is a sweetener used instead of table sugar (sucrose). Sugar substitutes are in many foods and drinks. Some are manmade and some come from natural sources. Some have no calories or fewer calories than sugar.

Eating a lot of sugar adds extra calories and causes weight gain. Sugar substitutes allow you to have sweets with fewer calories and limit weight gain from sweets. However, even if you cut out sugar, you still need to eat fewer calories and get regular exercise in order to lose weight.

What are artificial sweeteners?

Artificial sweeteners are manmade sugar substitutes. They are many times sweeter than regular sugar and have fewer or no calories. They also have less total carbohydrate.

If you have diabetes, eating sugar can quickly raise your blood sugar. High blood sugar can cause serious problems. Sugar substitutes allow you to enjoy some sweet-tasting foods and drinks without raising your blood sugar level. However, some foods made with sugar substitutes, such as yogurt and “sugar-free” baked goods, contain other carbohydrates. They can still raise your blood sugar level.

According to the National Cancer Institute, none of the artificial sweeteners approved for use in the US cause cancer or any other serious health conditions. The Food and Drug Administration (FDA) has approved these sugar substitutes:

- **Saccharine (Sweet 'N Low, Sweet Twin, Sugar Twin, or Necta Sweet)** is the oldest sugar substitute. It is 200 to 700 times sweeter than sugar. A very small amount of this sweetener can taste as sweet as a much larger amount of sugar. This means that it adds very few calories to food. Saccharine can also be used for baking.
- **Aspartame (NutraSweet or Equal)** is 200 times sweeter than the same amount of sugar. Aspartame tends to lose sweetness in high heat, so it is rarely used for cooking. People who were born with PKU (phenylketonuria) should avoid aspartame.
- **Acesulfame potassium (Sunett or Sweet One)** is 200 times sweeter than sugar, so only small amounts are needed. It has no calories. It is often combined with other sweeteners. It is used in diet sodas, baked goods, frozen desserts, and candy. It can be used for baking and cooking.
- **Sucralose (Splenda)** is 600 times sweeter than sugar. Your body cannot absorb this sweetener so it does not add any calories to your diet. It has a long shelf life and is used in baking, cooking, and as a tabletop sweetener.
- **Neotame** is much sweeter than other no-calorie sweeteners. It is heat stable and is used to sweeten many food products, such as baked goods, soft drinks, chewing gum, and frozen desserts. It is often blended with other no-calorie sweeteners and sugar.

What are other types of sugar substitutes?

Other types of sugar substitutes include stevia and sugar alcohols.

- **Stevia** sweeteners such as TruVia and Pure Via are extracts from the stevia bush. Sweeteners made with stevia are 200 to 300 times sweeter than sugar. These products are very low calorie and don't raise blood sugar. Whole leaf stevia has not been approved by FDA.
- **Sugar alcohols** are found naturally in fruits and vegetables, or they can be manmade. Sugar alcohols raise blood sugar about half as much as sugar and have fewer calories than sugar, so they can be a better choice than sugar if you have diabetes. Sugar alcohols eaten in large amounts may cause bloating and diarrhea. Sugar alcohols approved by the FDA include:
 - Sorbitol
 - Xylitol
 - Mannitol
 - Isomalt
 - HSH, which is a combination of several sugar alcohols

What are natural sweeteners?

Natural sweeteners include:

- Maple sugar
- Grape juice concentrate
- Honey
- Agave nectar

These natural sweeteners increase blood sugar the same as table sugar and their nutrient value is much the same. There is no health benefit to using these products rather than table sugar.

Developed by RelayHealth.

This content is reviewed periodically and is subject to change as new health information becomes available. The information is intended to inform and educate and is not a replacement for medical evaluation, advice, diagnosis or treatment by a healthcare professional.