

There are two types of sweeteners found in food and beverages: sugars and sugar substitutes. Sugars provide calories, or energy, for our bodies and increase blood glucose, as well as overall calorie intake. All carbohydrate-containing foods, such as breads, fruits, vegetables, milk, and yogurt, increase blood sugar, even if they do not have added sugars.

How sugars appear on package ingredient lists:

- Sugar
- Corn syrup or High Fructose Corn syrup
- Honey
- Glucose
- Dextrose
- Lactose
- Sucrose
- Maltose

Sugar substitutes (artificial sweeteners) provide little or no calories or carbohydrates and do not increase blood sugar. Therefore, choosing sugar substitutes can assist with controlling carbohydrate and energy intake. Sugar alcohols are also used to replace sugar in food. Sugar alcohols are incompletely absorbed by your body and contain about half the carbohydrate and calories as sugar.

Sugar substitutes approved by the Food and Drug Administration:

- Acesulfame K
- Aspartame (NutraSweet/Equal)
- Luo han guo fruit extract (Monk Fruit)
- Neotame
- Saccharin (Sweet n' Low)
- Stevia (multiple brands)
- Sucralose (Splenda)

Sugar alcohols commonly found in food: Sorbitol, Mannitol, Xylitol, Maltitol, Isomalt

Sugar substitutes ... safe to use or not?

Are you confused about the safety of sugar substitutes? Consider the following:

Concern: Sugar substitutes may increase hunger or cause overeating at later meals. Be aware that studies have shown people are more likely to overeat foods prepared with sugar substitutes.

Benefit: Sugar substitutes offer a sweet taste without increasing blood glucose or calories. If you have diabetes check your carbohydrate intake and adjust it to help control blood sugar. Choosing sugar substitutes is one way to assist you with limiting carbohydrate intake. If you choose to use sugar substitutes or foods and drinks with less sugar, you may have more room to eat a variety of other healthy carbohydrates.

Food/Beverage	Equivalent teaspoon of sugar	Carb serving
Angel food cake, 1 slice	4	1
Graham cracker (1 full sheet)	3	1
12 ounce can of cola	9	2+
½ c of ice cream	4	1
1 tablespoon jam	3	1
1 tablespoon all fruit spread	1	Less than ½

You do not need to use sugar substitutes, even if you have diabetes. If you prefer to use sugar instead of sugar substitutes simply cut back on how much or how often you eat sugar-containing foods and beverages. Check above for a few examples. With a little planning some sugar can fit into most meal plans.

Myths and Facts

Sugar substitutes are promoted and sold as weight-control aids. While they do provide lower calorie food options it is unclear if they improve your ability to lose weight. Be aware that consuming “diet” food products alone will not improve blood glucose control or decrease weight. Remember sugar-free does not mean calorie-free or carbohydrate-free.

Another common concern is that sugar substitutes cause cancer. The most recent fact sheet from the National Cancer Institute states that there is no clear evidence that the sugar substitutes available in the United States are associated with cancer risk in humans.

Many people with diabetes think they cannot have any sugar. This is not true. Sugar is a type of carbohydrate just like bread or pasta. People with diabetes can enjoy some sugar when used within a healthy eating plan and when individual health goals are considered.

Conclusions

Most food and nutrition professionals, and their professional organizations such as the Academy of Nutrition and Dietetics, and the American Diabetes Association, consider sugar substitutes to be safe when used within the daily intake levels set by the Food and Drug Administration. These amounts are less than what most people use. Both sugar and sugar substitutes can be enjoyed safely when used in moderation.