

Sugars and Sweeteners

Sugar is a confusing topic because there are so many different categories - natural sugars, refined sugars, added sugars, sugar alcohols, and sugar substitutes. Furthermore, some of the sugar we eat is not easily identifiable, it hides under the guise of unfamiliar words on the ingredient label. This handout will help to sort through the sugar conundrum.

Natural vs. Refined

Natural Sugars are found in milk (lactose) and fruit (fructose), meaning nothing has been added or altered. These foods provide vitamins, minerals, fiber, and protein that help to prevent chronic disease and maintain a healthy weight.

Other types of naturally occurring sugars such as honey, maple syrup, agave nectar, and molasses are added to foods to make them sweet. It's important to understand that just because these sugars are "natural" doesn't mean that they are calorie-free or healthier than refined sugars. Limit these sugars just as you would limit table sugar or refined sugar.

Refined Sugars are manufactured to remove impurities and other components from natural sugars. Those natural sugars usually come from sugar cane, sugar beets, or corn.

- Sucrose – includes raw sugar, granulated sugar, brown sugar, confectioners' sugar, and turbinado sugar. (Fun fact: brown sugar is just white sugar with molasses added).
- High fructose corn syrup – an inexpensive sugar very similar to sucrose, but made from corn. Because of its low cost, it's used excessively in our food supply.

Added Sugar

Added sugar is any sugar source, natural or refined, added to our food to make it sweet. Added sugars, even those coming from natural sources, pose a risk for weight gain, heart disease, diabetes, high blood pressure, cancer, and even dementia. They are absorbed more rapidly into our blood stream and are linked to raising inflammation and triglycerides levels.

Added sugar is abundant in soda, fruit drinks, candy, cakes, and other desserts, and although tricky to spot, many other processed foods such as yogurt, salad dressings, crackers, bread, spaghetti sauce, barbecue sauce, ketchup, and breakfast cereals. Rather than distinguishing between added and natural sugars, nutrition labels only list "sugar" in gram amounts, making it difficult to know what has been added and what occurs naturally.

You can identify added sugars by looking at the ingredient list. Look for words ending in “ose”, such as fructose, dextrose, and maltose, and look for syrups and juices. Keep an eye out for these added sugars when you read the ingredient list:

- Agave nectar
- Brown sugar
- Cane crystals
- Cane sugar
- Corn sweetener
- Corn syrup
- Crystalline fructose
- Dextrose
- Coconut sugar
- Evaporated cane juice
- Fructose
- Fruit juice
- Glucose
- High-fructose corn syrup
- Honey
- Invert sugar
- Lactose
- Malt sugar
- Malt syrup
- Maltose
- Maple syrup
- Molasses
- Raw sugar
- Sucrose



The American Heart Association recommends limiting added sugars to 24 grams (or 6 teaspoons) per day for women and 36 grams (9 teaspoons) per day for men. They also recommend limiting the total amount of sugar, both natural and added, to about 72 grams per day (or 18 teaspoons). To put these numbers in perspective, the average American consumes about 30 teaspoons of added sugar per day. Consuming just 1 to 2 cans of soda increases the chance of developing type 2 diabetes by 26% and heart disease by 20%.

Below is a list of commonly consumed foods and the sugar amount in teaspoons:

- 12 oz. Coke – 10 tsp.
- 8 oz. orange juice – 5 tsp.
- Yoplait yogurt – 4 tsp.
- Large sweet tea (32 oz.) – 9 tsp.
- Gatorade – 13 tsp.
- Tall Starbucks Frappuccino – 11 tsp.
- 1 pack of Pop-Tarts – 9 tsp.
- 1 cup Fruit Loops – 3 tsp.
- 1 Snickers Bar – 6 tsp.
- 2 Oreos – 4 tsp.
- 1 package of Skittles – 11 tsp.

Follow these tips to avoid added sugars:

- Eliminate sodas, sports drinks, juice, sweet tea, and lemonade.
- Cut back on the amount of sugar added to foods and beverages like cereal, pancakes, coffee, tea, oatmeal, and yogurt. Try cutting the amount of sugar you add by half and wean down from there.
- Add fresh fruit (bananas, cherries or berries) or dried fruit without added sugar (raisins, cranberries, dates, figs or apricots) instead of sugar to cereal, oatmeal, and plain yogurt.
- Enhance foods with spices instead of sugar. Try ginger, allspice, cinnamon or nutmeg.
- Choose fresh or canned fruit in water or 100% juice, or no sugar added syrup (drain the juice).
- Substitute unsweetened applesauce for sugar in recipes (use equal amounts).
- Choose plain or flavored yogurt with than 15 grams of sugar per 6 oz.
- Choose marinara sauces with less than 5 grams of sugar per serving.
- Breakfast cereals, granola, protein/cereal bars, and packaged oatmeal should have less than 10 grams of sugar per serving.
- Use mustard rather than ketchup on burgers, hotdogs, and sandwiches.
- Bake your own desserts and cut down sugar by ½. Often you won't notice the difference.
- Compare labels when choosing salad dressings. Low fat dressing might have added sugars to make up for less fat.

Sugar Substitutes (nonnutritive sweeteners)

Sugar substitutes are a low or no calorie alternative to regular table sugar. They are found in a variety of “diet” and “sugar-free” foods and beverages including soft drinks, chewing gum, jellies, baked goods, candy, fruit juice, ice cream and yogurt. In recent years, sugar substitutes have been under scrutiny for causing a variety of health problems, including cancer. But, according to the National Cancer Institute, there’s no sound scientific evidence of this. Up to this point, research has shown that using sugar substitutes in moderation can help with weight management and the management of blood sugar levels for those with type 2 diabetes. Sugar substitutes are up to 200 – 8,000 times as sweet as regular sugar, therefore moderation is encouraged to prevent cravings or a preference for overly sweet flavors. When choosing a sugar substitute, we recommend using a plant-based sweetener like Truvia or Sweet Leaf.

- Acesulfame – Sweet One
- Aspartame – Equal and NutraSweet (research has linked these sweeteners to migraines and symptoms of depression)
- Saccharin – Sweet’N Low and SugarTwin
- Sucralose – Splenda
- Plant-Based Sweeteners – Truvia PureVia, Sweet Leaf

Sugar Alcohols

Sugar alcohols (mannitol, sorbitol, and xylitol) are carbohydrates that occur naturally in certain fruit and vegetables, but they can also be manufactured. Despite their name, they aren’t alcoholic. They have about half the calories of regular sugar and are often combined with sugar substitutes to replace sugar in processed foods like chocolate, candy, frozen desserts, chewing gum, toothpaste, mouthwash, baked goods, and fruit spreads. Sugar alcohols can cause stomach cramping and diarrhea in some people so be sure to check the ingredient list and limit amount consumed.