Sugar and sweeteners

What is sugar?

Sugar is a group of simple carbohydrates that provides four calories per gram. Sugar occurs naturally in certain foods, including fruit, milk, and vegetables. Refined sugars are manufactured most often from beets and sugar cane. They are added to foods or beverages during processing and preparation for taste and/or preservation.

Added sugars are commonly found in foods and beverages such as:

- Alcoholic beverages
- Baked goods (e.g., bread, cake, cookies, pastries)
- Candy
- Dairy (e.g., chocolate milk, frozen yogurt, ice cream, yogurt)
- Jams
- Meal replacements
- Packaged nuts and seeds
- Salad dressings
- Sauces
- Soups
- Sweetened beverages (e.g., energy drinks, juice, soda, tea)

What are sugar alcohols?

Sugar alcohols, also known as polyols, are food additives that are chemically similar to sugar, but contain less calories per gram and are considered to be less sweet. While sugar alcohols are naturally found in certain foods, including apples, berries, and plums, they are often manufactured from refined sugars for large-scale production and sale.

What are sweeteners?

Sweeteners are sugar substitutes that provide little to no calories, or may be used in small quantities due to their intense sweetness, which can result in a lower intake of calories. A variety of **artificial sweeteners** (man-made) and **natural sweeteners** (derived from plants) have been approved as food additives. Sweeteners are commonly found in food and beverages, such as baked goods, candy, canned goods, jam and jelly, and soda, marketed as "diet" or "sugar-free".

Health effects of sugar and sweeteners

The following table summarizes types of sugar and sweeteners, their common sources, and associated health effects. Ingredients are organized from most to least harmful for the general population.

● = avoid ● = moderate ● = enjoy

Ingredient	Examples	Derived from	Dietary sources	Health effects
Refined sugars/ concentrated sugars	Brown sugar Corn syrup Dextrose Fructose Glucose High-fructose corn syrup (HFCS) Lactose Malt syrup Sucrose	Sugar beets Sugar cane	Alcoholic beverages Baked goods Candy Condiments Energy drinks Ice cream Jams Juice Soda Yogurt	Generally highly processed Minimal nutritional value High intake is associated with increased risk of cardiovascular disease, dental caries (cavities), type 2 diabetes, metabolic syndrome, overweight, and obesity
Artificial sweeteners	Acesulfame potassium (Ace-K) Advantame Aspartame Neotame Saccharin Sucralose	Synthetically manufactured	"Diet" and "sugar-free" food and beverages (e.g., baked goods, candy, canned goods, jam, soda)	Associated with weight gain and obesity May increase risk of certain cancers
Sugar alcohols	Erythritol Hydrogenated starch hydrolysates Isomalt Lactitol Maltitol Mannitol Sorbitol Xylitol	Naturally occur in certain fruit (e.g., apples, berries, plums) Manufactured from refined sugars	Chewing gum Cookies Sugar-free candy	May cause adverse effects in individuals with food intolerances May aggravate symptoms of functional gastrointestinal disorders (e.g., irritable bowel syndrome) High intake is associated with gastrointestinal effects (e.g., laxative)
Natural sugars	Dried fruit (e.g., dates, raisins) Honey (unpasteurized) Maple syrup Molasses	Fruit Honey Maple trees	Fruit Fruit juice Honey Milk Natural syrups	Unrefined or minimally refined Often present as a whole food; may provide fiber and other nutrients that help limit the negative effects of sugar
Natural sweeteners	Luo Han Guo extracts Steviol glycosides Thaumatin	Various plants (e.g., monk fruit, stevia, katemfe fruit)	Baked goods Canned fruit Condiments Dairy products Juices	Depending on the ingredient, may provide certain health benefits (e.g., blood sugar-lowering and blood pressure-lowering effects)

Reducing your intake of added sugar

Public health guidelines recommend limiting dietary intake of added sugars to less than 10% of daily calories. In a 2,000 calorie diet, this means:

10% of calories = 200 calories from added sugars = 50 g = approximately 12 tsp

Note: The World Health Organization states that there may be additional health benefits to reducing sugar intake further to less than 5% of daily calories (25 g or approximately 6 tsp).

Nutrition Facts

8 servings per container
Serving size **2/3 cup (55g)**

Amount per serving
Calories **230**

	% Daily Value*
Total Fat 8g	**10%**
Saturated Fat 1g	**5%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 160mg	**7%**
Total Carbohydrate 37g	**13%**
Dietary Fiber 4g	**14%**
Total Sugars 12g	
Includes 10g Added Sugars	**20%**
Protein 3g	
Vitamin D 2mcg	10%
Calcium 260mg	20%
Iron 8mg	45%
Potassium 235mg	6%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a healthy diet. 2,000 calories a day is used for general nutrition advice.

Sugar serving sizes

Check the Nutrition Facts label on food packaging to view the sugar content. The amount of sugar per serving on the Nutrition Facts labels is illustrated here.

Total sugars includes all sugar (e.g., naturally occurring and added).

Added sugars includes any sugars that have been added to the food or beverage.

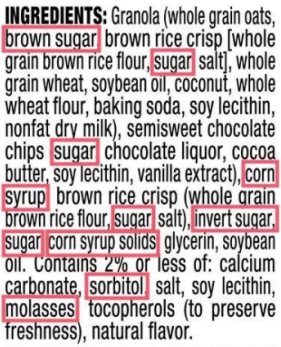
A handy conversion to keep in mind when examining the Nutrition Facts label is:

- 4 g of sugar = approximately 1 tsp
- 12 g of sugar = approximately 1 tbsp

Recognizing sugar and sweeteners

You may be aware that foods such as candy, desserts, pastries, energy drinks, and soda are high in sugar. However, there are many foods that are commonly marketed as "healthy" that are also high in added sugar or sweeteners.

Before buying a product, check the ingredient label for sugar and sweeteners. The higher the ingredient content, the closer to the top it will appear in the ingredient list.


INGREDIENTS: Granola (whole grain oats, brown sugar, brown rice crisp [whole grain brown rice flour, sugar, salt], whole grain wheat, soybean oil, coconut, whole wheat flour, baking soda, soy lecithin, nonfat dry milk), semisweet chocolate chips (sugar, chocolate liquor, cocoa butter, soy lecithin, vanilla extract), corn syrup, brown rice crisp (whole grain brown rice flour, sugar, salt), invert sugar, sugar, corn syrup solids, glycerin, soybean oil. Contains 2% or less of: calcium carbonate, sorbitol, salt, soy lecithin, molasses, tocopherols (to preserve freshness), natural flavor.

Hidden sugars

Did you know that there are over 60 different names for sugar? Typically, you will be able to recognize if an ingredient is present in a food by referring to the ingredient label. However, certain dietary ingredients may be listed under a different name or may be derived from another ingredient, making them difficult to recognize. The many names for sugar include:

- Agave nectar
- Barbados sugar
- Barley malt
- Barley malt syrup
- Beet sugar
- Brown sugar
- Buttered syrup
- Cane juice
- Cane juice crystals
- Cane sugar
- Caramel
- Carob syrup
- Castor sugar
- Confectioner's sugar
- Corn sweetener
- Corn syrup
- Corn syrup solids
- Date sugar
- Dehydrated cane juice
- Demerara sugar
- Dextrin
- Dextrose
- Evaporated cane juice
- Fructose
- Fruit juice
- Fruit juice concentrate
- Glucose
- Golden sugar
- Golden syrup
- Granulated sugar
- Grape sugar
- High-fructose corn syrup (HFCS)
- Icing sugar
- Invert sugar
- Malt syrup
- Maltodextrin
- Maltol
- Maltose
- Mannose
- Molasses
- Muscovado
- Panocha
- Powdered sugar
- Raw sugar
- Refiner's syrup
- Rice syrup
- Saccharose
- Sorghum syrup
- Sucrose
- Sweet sorghum
- Syrup
- Treacle
- Turbinado sugar
- Yellow sugar

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