

If you have diabetes, you might wonder if you can still eat sugar. The good news is yes - you can enjoy sugar **in small amounts**. There are other options like *sugar alcohols* and *non-nutritive sweeteners* (also called artificial or alternative sweeteners) that can help you manage your blood sugar. Everyone is different, so the best choice depends on your personal goals and preferences.

Sugar is a type of carbohydrate. There are two main types:

- *natural sugars* (found in foods like fruit and milk)
- *added sugars* (added during processing, like in pop, candy, and baked goods)

Both types can raise your blood sugar. However, *natural sugars* are often found in foods that also have fibre or protein, which help slow down the rise in blood sugar. *Added sugars* raise blood sugar more quickly.

All added sugars behave the same way. White sugar, brown sugar, honey, maple syrup, and molasses all provide calories and few nutrients while raising blood sugar. Focusing on the total amount of added sugar rather than the type is key. Up to 10% of your daily calories can come from added sugar, but it's best to talk to your health care team about what's right for you.

The nutrition facts table can help. Packaged foods in Canada show the total amount of "sugars" in the facts table. This includes both natural and added sugars. If the *ingredient list* doesn't mention sugar, the sugars listed in the facts table are naturally occurring.

SUGAR

raises blood sugar

SUGAR ALCOHOLS

raise blood sugar a little

ARTIFICIAL SWEETENERS

don't raise blood sugar

Sweeteners that **INCREASE** blood glucose levels

Sweetener	Forms & uses	Other things you should know
Sugars (Some examples)		
• Agave syrup • Barley malt • Brown rice syrup • Brown sugar • Cane juice • Cane syrup • Coconut sugar • Corn syrup • Date syrup • Dextrose • Fructose • Fruit juice concentrates • Glucose • High fructose corn syrup	• Honey • Icing sugar • Invert sugar • Jaggery • Lactose • Lucuma • Maltodextrins • Maltose • Maple syrup • Molasses • Palm sugar • Sucrose • Turbinado (raw) sugar • White (granulated) sugar	• Used to sweeten foods and beverages • May be found in medications • May be found in some nutritional supplements and protein powders
		• Sugars are carbohydrates that can affect your blood sugar (glucose), weight and blood fats. • There is no advantage to those with diabetes in using one type of sugar over another. • All ingredients in a product that provide sugar can be found in the brackets after the term 'Sugar' in the ingredient list. For example, Ingredients: Sugar (fruit juice concentrate, high fructose corn syrup, honey).

Sweeteners that **DON'T INCREASE** blood glucose levels

Sugar alcohols: Sugar alcohols are sweeteners with *fewer calories than sugar*. You'll often find them in foods labeled "sugar-free" or "no added sugar." Despite the name, they are not sugar or alcohol. Sugar alcohols can still raise your blood sugar, but *not as much* as regular sugar. They are listed separately under "Carbohydrates" in the Nutrition Facts table.

Non-nutrition sweeteners: Also called artificial sweeteners or sugar substitutes, non-nutritive sweeteners are *very low in calories* and *don't raise blood sugar* because your body doesn't absorb them. Since they are much sweeter than sugar, you only need a small amount. Health Canada has approved several of these sweeteners for use in food and drinks. They are considered safe for the general public, including people with diabetes.

Whether or not you use them as part of your diabetes management is up to you.

Sweetener	Forms & uses	Other things you should know
Sugar Alcohols (some examples)		
• Erythritol • Hydrogenated starch • Hydrolysates (HSH) • Isomalt (Palatinit) • Lactitol • Maltitol • Maltitol syrup • Mannitol • Polyol syrups • Sorbitol • Sorbitol Syrup • Xylitol	• Used to sweeten foods labelled "sugar free" or "no added sugar" • May be found in cough and cold syrups and other liquid medications (e.g. antacids)	• Small amounts are found naturally in fruits and vegetables. They can also be manufactured. • They are only partly absorbed by your body, have fewer calories than sugar and have no major effect on blood sugar. • Check product labels for the number of grams of sugar alcohols per serving. • If you eat more than 10 grams of sugar alcohols a day, you may experience side effects such as gas, bloating or diarrhea. • Talk to a dietitian if you are carbohydrate counting and want to use foods sweetened with sugar alcohols.
Non-nutritive sweeteners		
• Acesulfame Potassium (Ace-K) • Advantame • Aspartame • Calcium Saccharin • Monk Fruit Extract • Neotame • Saccharin • Steviol Glycosides • Sucralose	• Used to sweeten foods labelled "sugar free" or "no added sugar" • Some are used at tabletop sweeteners and alternatives to sugar • See table below for more details	• Health Canada has approved these sweeteners as safe if taken in amounts up to the Acceptable Daily Intake (ADI). These sweeteners may also be used in medications. Please read the label. Ingredients may change. New products may be available.

Non-nutritive sweeteners - additional information

Non-nutritive Sweetener	Common/Brand name	Forms & uses	Other things you should know
Acesulfame Potassium (Ace-K)	Not available for purchase as a single ingredient.	- Added to packaged foods and beverages only by food manufacturers - Available in blends with other non-nutritive sweeteners.	- Safe in pregnancy* - ADI=15 mg/kg body weight per day - For example, a 50 kg (110 lb) person could have 750 mg of Ace-K per day. - One can of diet pop contains about 42 mg of Ace-K.
Advantame	Not available for purchase as a single ingredient	Added to packaged foods and beverages only by food manufacturers	- Safe in pregnancy* - ADI = 5 mg/kg body weight per day
Aspartame	- Equal® - NutraSweet® - Private label brands	- Available in packet, tablet or granulated form - Added to packaged foods and beverages	- Safe in pregnancy* - ADI=40 mg/kg body weight per day - One can of diet pop may contain up to 200 mg of aspartame.
Calcium Saccharin	Not available for purchase as a single ingredient product	Added to select packaged foods and beverages	- Safe in pregnancy* - ADI=5 mg/kg body weight per day
Monk Fruit Extract	- Lakanto® - Sweet Monk® - Whole Earth® - Private label brand	- Available in packet, granulated, or liquid form - Available only as a tabletop sweetener	- Safe in pregnancy* - No ADI - Not allowed to be added to other packaged foods and beverages
Neotame	Not available for purchase as a single ingredient	- Added to packaged foods and beverages - Approved for use in a variety of products	- Safe in pregnancy* - ADI=2 mg/kg body weight per day
Saccharin	Hermesetas®	- Available as tablets - Allowed to be added to certain packaged foods under strict conditions	- Safe in pregnancy* - ADI=5 mg/kg body weight per day - One tablet of Hermesetas® contains 12 mg of saccharin. - Available only in pharmacies
Steviol Glycosides	Stevia-based Sweeteners: - Stevia® - Truvia® - Krisda® - Pure Via® - SweetLeaf® - Sugar Twin Stevia®	- Tabletop sweeteners - Added to packaged food and beverages	- Safe in pregnancy* - ADI= 4mg /kg body weight per day - A 30g portion of breakfast cereal may contain 11mg of stevio glycosides

Non-nutritive sweeteners - additional information (continued)

Sucralose	Splenda®	- Available in packets or granulated form - Added to packaged food and beverages	- Safe in pregnancy* - ADI=9 mg/kg body weight per day - Can be used for cooking, baking - One packet of Splenda® contains 12 mg of sucralose; one cup (250 mL) contains about 250 mg of sucralose.
Tagatose (D-tagatose)	- Not available for purchase as a single ingredient - TAGATOSE Pure Granulated - TagaSweet™ (Tagatose + Stevia blend) - TagaSweet™	- Available in powder form - Maybe used alone or blended with other sweeteners in processed foods	- No established ADI - Approved by Health Canada as a novel food ingredient and sweetener - Recognized as safe under novel food regulations and labeled as carbohydrate/ sugar on nutrition labels.

*For nutritional reasons, pregnant women should not consume excessive products containing artificial sweeteners, since such foods could replace more nutritious foods.

The table below lists sweeteners that are not approved as permitted ingredients but are permitted as table top sweeteners only.

Sweetener	Common/Brand name	Forms & uses	Other things you should know
Cyclamate	- Sucaryl® - Sugar Twin® - Sweet'N Low® - Private label brand	- Available in packets, tablets, liquid and granulated form - Not allowed to be added to packaged foods and beverages in Canada - Flavour may change when heated	- Safe in pregnancy* (Be cautious of exceeding the ADI) - ADI=11 mg/kg body weight per day - For example, a 50 kg (110 lb) person could have 550 mg of cyclamate per day. - One packet of Sugar Twin® contains 264 mg of cyclamate.

Non-nutritive sweeteners and sugar-free products are widely available and safe when used in moderation. Diabetes Canada does not recommend for or against using them. They may help some people manage blood sugar or reduce energy intake. For advice that fits your needs, speak with your health care team.