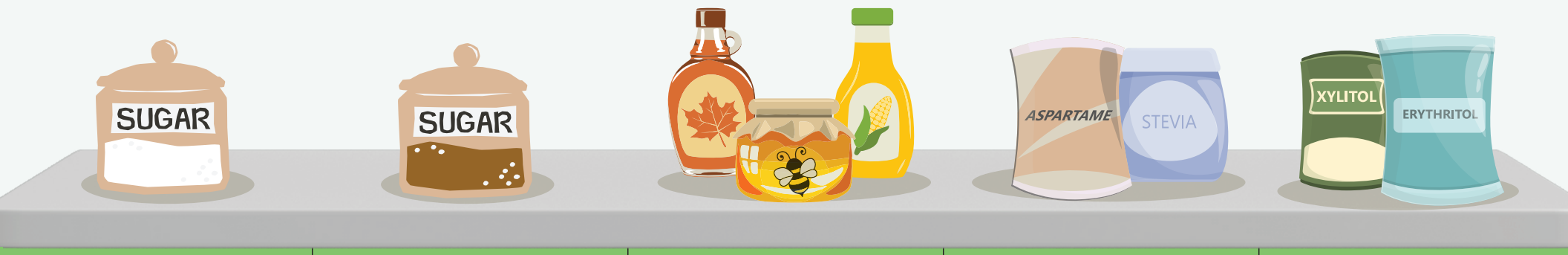
TYPES OF SUGARS AND SWEETENERS

There are many types of sugars and sweeteners

All green plants, including sugar cane and sugar beets, produce sugar (sucrose) naturally. Sucrose is the product of photosynthesis, the process by which plants transform the sun's energy into food. A wide variety of sugars are produced by purifying and crystallizing the sugar juice from sugar cane and sugar beets.

There are also many other types of caloric and non-caloric sweeteners that you may see on store shelves and on food product ingredient labels. In Canada, non-caloric sweeteners and sugar alcohols are regulated as food additives.



White Sugar

White sugar is almost pure sucrose, purified to meet Canada's food standard for sugar, which is at least 99.8% sucrose.

Includes:
Granulated sugar, coarse sugar, pearl sugar, superfine sugar, liquid sugar, and liquid invert sugar.

All provide **4 calories per gram**.

Typical Uses:
Coffee, tea, baking, dairy products, jams/jellies, candy, and packaged food.

Did You Know?
Different crystal sizes for sugar are important to provide different functions in foods and beverages.

For example, superfine sugar dissolves more easily than coarse sugar and tastes sweeter on the tongue.

Brown Sugar

Pure sugar crystals, together with small amounts of molasses, result in brown sugars with a range of colours and tastes.

Includes:
Dark brown sugar, yellow sugar, and light brown/golden sugar.

Specialty brown sugars include:
Demerara, Muscovado, and Turbinado sugars are sometimes called "raw" on package labels, but are partially purified sugars, making them safe to eat while leaving more molasses flavour and colour.

All provide **4 calories per gram**.

Typical Uses:
Baked goods, dry mixes, meat glazes and condiments.

Did You Know?
White and brown sugar have similar nutritional values but offer different functions and flavours in recipes.

Other Sugars

Examples of other sugars include: **molasses, honey, maple syrup, date sugar, coconut sugar, fruit juice concentrate and corn sweeteners** (e.g. high fructose corn syrup).

They are composed of different amounts of glucose, fructose, and sucrose.

All have **similar nutritional values to sugar**, provide approximately 4 calories per gram, and contain insignificant amounts of vitamins and minerals.

Typical Uses:
Baked goods, sugars sweetened beverages and canned products.

Did You Know?
Fruit juice concentrate is a common sweetener in food products.

Low- and Non-Caloric Sweeteners

Examples of low- and no-calorie sweeteners include: **aspartame, sucralose, saccharin, and stevia**.

Compared to sugar, these provide **low to zero calories** and higher sweetness.

Typical Uses:
Commonly used as a sugar replacement to sweeten foods and beverages.

They can replace sugar's sweetness but not all functional properties, so are often used with bulking agents or starches such as maltodextrin or polydextrose.

Note:
Canada's Food Guide suggests "sugar substitutes are not needed to help you decrease the amount of sugars you eat or drink". Instead, choosing unsweetened foods and drinks, or those will little to no added sugars, is recommended.

Sugar Alcohols

Sugar alcohols are sweeteners known as polyols. They are not a sugar or an alcohol.

Includes:
Erythritol, isomalt, lactitol, maltitol, mannitol, sorbitol, xylitol.

All **provide about half the calories of sugar**.

Typical Uses:
Food additive, bulking agent.

Note:
Can cause gut discomfort and laxative effects in some people when eaten in large quantities.

Did You Know?
Sugar alcohols and non-caloric sweeteners are regulated as food additives in Canada.

Canadian food regulations require that the Nutrition Facts table shows the amount of sugar alcohols added to a product.

Key Takeaways

- White and brown sugar and other nutritive sweeteners all have similar nutritional values but different flavours and functional properties in foods.
- Sugar substitutes often cannot replace all of sugar's functional roles, and so foods require other ingredients like starches or bulking agents to maintain functional properties.
- Canada's Food Guide does not recommend using sugar alcohols and low- and non-caloric sweeteners as a replacement for sugar.
- Choose a sugar or sweetener based on your personal taste preference and nutrition needs, as well as functional properties needed in a recipe.

References:
- https://food-guide.canada.ca/en/tips-for-healthy-eating/sugar-substitutes-and-healthy-eating/
- https://www.canada.ca/en/health-canada/services/food-nutrition/food-safety/food-additives/lists-permitted/9-sweeteners.html
- https://www.canada.ca/en/health-canada/services/food-nutrition/food-safety/food-additives/sugar-substitutes/sugar-alcohols-polyols-polydextrose-used-sweeteners-foods-food-safety.html

The Canadian Sugar Institute Nutrition Information Centre aims to gather and share up-to-date research and evidence-based information about sugars, nutrition, and health. The Nutrition Information Centre is managed by registered dietitians and nutrition researchers, and is guided by a Scientific Advisory Council.

Visit sugar.ca for more information

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