

Sugar



Keeping tabs on how much sugar you're swallowing is an important part of a heart-healthy lifestyle, especially if you've been diagnosed with diabetes or pre-diabetes. Consuming too much sugar is associated with heart disease, stroke, weight gain, diabetes, high triglycerides (a type of 'bad' fat in the blood), cancer and dental cavities.

Sugars Terms

- *Free Sugars*: are added to foods and beverages by the manufacturer, cook or consumer. It also includes sugars naturally present in honey, syrups, fruit juices and fruit juice concentrates. Free sugar in foods or drinks adds extra calories to food but no nutrients. It's easy to have too much because it doesn't satisfy hunger.
- *Natural Sugars*: are the naturally occurring sugars found in whole, unprocessed foods such as fruits (fructose), vegetables, milk (lactose), honey and some grains.
- *Added Sugars*: are any sugars or caloric sweeteners that are *added* to foods or beverages during processing or preparation (such as putting sugar in your coffee or adding sugar to your cereal). Added sugars (or added sweeteners) can include natural sugars such as white sugar, brown sugar and honey as well as other caloric sweeteners that are chemically manufactured (such as high fructose corn syrup).

What happens to sugar in your body?

When you eat refined sugar, it is broken down in your small intestine into two molecules, one is called glucose and the other is fructose, and fructose is the sweet molecule that we crave. Your pancreas releases insulin, which brings the glucose to cells in your body where it is used as fuel. Meanwhile, fructose goes to your liver, where it can be metabolised into energy. But there is a limit to how much sugar the liver can metabolise. If you go over that limit and the liver can't process all that energy, it has no choice but to turn that excess into liver fat. The build-up of fat in liver cells is called non-alcoholic fatty liver disease and it can lead to cirrhosis, liver cancer and liver failure.



Based on the evidence about the detrimental impact of a high sugar diet, the World Health Organization (WHO) recommends people should reduce their intakes of 'free sugars' to around 5 per cent of total energy. This equates to about six teaspoons for adults and five teaspoons for children. Four grams of sugar is equal to one teaspoon.

Simple Sugar Math

To translate from calories to grams to teaspoons, use the 'divide by 4' rule. Take the calories and divide by 4 to get the grams of added sugar. For example, 200 calories would be 50 grams and to convert this to teaspoons, divide by 4 again to get around 12 teaspoons of added sugars.



Names of sugar

Sugar can be called many different names.

Look out for these common forms of free sugar on the food label

- Agave nectar
- Coconut sugar
- Deionised fruit juice
- Dextrose
- Fructose
- Fruit juice
- Glucose
- Honey
- Maple syrup
- Raw sugar
- Rice malt syrup
- Sucrose
- Sugar
- Treacle

How to Cut Down on Sugar

The good news is that cutting down on sugar may be easier than you think with these steps:

- Rather than focusing on single nutrients, we recommend you enjoy a way of eating that focuses mostly on whole and less-processed foods, as part of a heart healthy diet.
- Toss the table sugar (white and brown), syrup, honey and molasses. Cut back on the amount of sugar added to things you eat or drink regularly like cereal, pancakes, coffee or tea. Try cutting the usual amount of sugar you add by half and wean down from there.
- Replace sugary drinks with water, you could try bubbly water and add some hints of flavour e.g. lemon or lime slices, mint leaves, or chopped up fruit. Even diet 'sugar-free' drinks can be a better choice than sugary drinks.
- Eat fresh, frozen, dried or canned fruit. Choose fruit canned in water or natural juice. Avoid fruit canned in syrup, especially heavy syrup. Drain and rinse in a colander to remove excess syrup or juice.
- Add fruit instead of adding sugar to cereal or oatmeal

- When baking cookies, brownies or cakes, cut the sugar called for in your recipe by one-third to one-half. You could also use extracts like almond, vanilla, orange or lemon as sugar alternatives.
- Replace it completely. Enhance foods with spices instead of sugar. Try ginger, allspice, cinnamon or nutmeg.
- Keep foods or drinks that are high in added sugar for special occasions only (e.g. cakes, biscuits, sweets). Try cutting back on these and replacing them with healthier options like fruit, unsweetened yoghurt and nuts.



Content Sources:

1. National Health and Medical Research Council (2013) *Australian Dietary Guidelines*. Canberra: National Health and Medical Research Council.
2. World Health Organisation (2015) Guideline: Sugars intake for adults and children. Geneva: World Health Organization. Retrieved from: https://www.who.int/nutrition/publications/guidelines/sugars_intake/en.
3. Healthdirect. *How to cut down on sugar*. Retrieved from: <https://www.healthdirect.gov.au/cutting-down-on-sugars>.