



Why is this an issue?

There is widespread confusion around the different types and sources of dietary sugar. At the same time, there are serious health concerns linked to eating too much sugar, including tooth decay and excess weight gain^{1,2}. Excess body weight is linked to an increased risk of type 2 diabetes and cardiovascular disease.

Types of sugar

Added and naturally occurring sugars are found in many foods and drinks. It is important to recognise the difference between intrinsic sugars and added sugars and to consider the overall nutrient quality of the food³.

- Intrinsic sugars are found naturally in whole foods such as fruit, vegetables and unsweetened dairy products. These foods provide essential nutrients and are an important part of a healthy diet.
- Added sugars in processed foods and drinks can enhance taste or function. Added sugars include white, raw and brown table sugars, honey, syrups, maltodextrin, glucose, coconut sugar and concentrated fruit juices⁴. While some foods with a little added sugar can offer essential nutrients, others have high amounts of added sugars and little nutritional value (such as lollies, and sugar-sweetened fizzy drinks, such as lemonade or cola). A high intake of these foods and drinks can contribute to excess energy intakes and can displace healthier options in the diet. All sugars are processed in the same way in the body.

Sources of added sugars

The main sources of added sugars in the New Zealand diet are table sugars and sweets/lollies (23%), non-alcoholic drinks (16%) and muffins, cakes and biscuits (7%)⁵. These should be occasional foods and are not recommended as part of our everyday diet⁶.

Sugar and health

Too much sugar is linked to a range of health problems, particularly:

Tooth decay

High intakes of sugary foods and drinks causes tooth decay in young children. Tooth decay can cause pain, abscesses or infection, and often results in tooth removal. Foods such as fizzy drinks and lollies are particularly harmful to teeth.

In a nutshell

- Foods containing intrinsic sugars, such as fruits, vegetables and unsweetened dairy products, can form part of a healthy diet.
- High intake of added sugar is linked to an increased risk of dental caries and excess weight gain. Excess body weight is linked to an increased risk of type 2 diabetes and cardiovascular disease.
- Children and adults should eat a variety of healthy foods and limit their intake of added sugars, found in lollies, sugar-sweetened drinks, high-sugar breakfast cereals and biscuits.

Weight gain

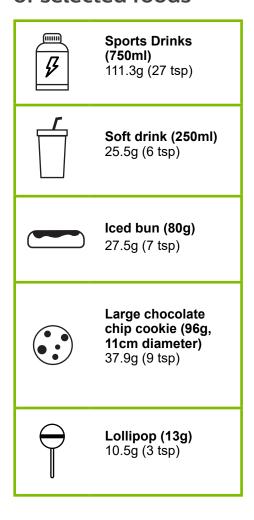
Excessive sugar intake as part of a poor diet and inactive lifestyle can lead to weight gain, which can increase the risk of developing type 2 diabetes. This is a particular concern for children and adults who drink large amounts of sugar-sweetened drinks^{7,8}. Evidence also supports limiting the intake of added sugars as one part of an eating pattern that supports a healthy heart⁹.

Recommendations for a healthy diet

The World Health Organization (WHO) recommends 'free sugars' (added sugars plus sugar from fruit juice) should be less than 10% of total energy intake per day (this is around 50g of sugar, or 12 tsp). A further reduction to less than 5% of total energy (about 25g of sugar, or 6 tsp) would provide additional health benefits¹.

The Ministry of Health recommends enjoying a wide variety of healthy foods. Foods high in added sugars should be limited to occasional treats. This includes sugar-sweetened drinks (including flavoured milk), sweets/lollies, cakes, biscuits, high-sugar breakfast cereals and muesli/breakfast/snack bars⁶.

Total sugar content of selected foods¹⁰



What about 100% fruit juice and dried fruit?

Fruit juices and dried fruit should be limited in the diet as they tend to be concentrated sources of sugar. Juices are also generally lower in fibre, and dried fruits stick to teeth easily, increasing risk of tooth decay⁶. The Ministry of Health recommends eating at least two serves of whole fruit each day. Fruits provide essential nutrients including fibre, vitamins and minerals^{3,6}.

How can I tell how much sugar is in packaged foods?

Many processed/packaged foods contain high levels of sugar. Sugars are included as part of the carbohydrates in the Nutrition Information Panel (NIP) as well as being listed separately. The amount of sugars in the NIP will include both intrinsic sugars, such as those naturally present in fruits and milk, as well as added sugar¹¹.

What about sugar replacements / artificial sweeteners?

Artificially sweetened foods and drinks are lower in sugar and may be a suitable choice for people who wish to reduce their sugar intake. For more information refer to the *Behind the hype: Sweeteners* fact sheet¹².

References

- World Health Organization (2015). Guideline: Sugars intake for adults and children. https://www.who.int/publications-detail/9789241549028. (Accessed May 2020).
- World Health Organization (2017). Sugars and dental caries. WHO Technical Information Note. https://apps.who.int/iris/bitstream/handle/10665/259413/WHO-NMH-NHD-17.12-eng.pdf?sequence=1. (Accessed May 2020).
- New Zealand Nutrition Foundation (2014). The role of Sugar in the diet of New Zealanders. Auckland: New Zealand Nutrition Foundation. https://nutritionfoundation.org.nz/sites/default/files/140601%20Sugar%20 in%20diet%20of%20NZ%20White%20Paper.pdf. (Accessed May 2020).
- Australia New Zealand Food Standard 1.1.2. Definitions used throughout the Code. https://www.legislation.gov.au/Details/F2018C00912. (Accessed May 2020).
- University of Otago and Ministry of Health (2011). A Focus on Nutrition: Key findings of the 2008/09 New Zealand Adult Nutrition Survey. Wellington: Ministry of Health.
- Ministry of Health (2015). Eating and Activity Guidelines for New Zealand Adults. Wellington: Ministry of Health.
- Malik VS, Schulze MB Hu FB (2006). Intake of sugar-sweetened beverages and weight gain: a systematic review. The American journal of clinical nutrition, 84(2), 274–288.
- Malik VS, Popkin BM, Bray GA, et al. (2010). Sugar-Sweetened Beverages and Risk of Metabolic Syndrome and Type 2 Diabetes: A Meta-analysis. Diabetes Care 33 (11): 2477–2483.
- Gorton D (2013). Sugar and the Heart. Heart Foundation. https://www. heartfoundation.org.nz/shop/submissions/sugar-and-the-heart-evidencepaper.pdf?1584909139. (Accessed May 2020).
- New Zealand Food Composition Database (2019). New Zealand Food Composition Database Online Search. The New Zealand Institute for Plant & Food Research Limited and Ministry of Health. https://www. foodcomposition.co.nz/search. (Accessed May 2020).
- Food Standards Australia New Zealand (2015). Nutrition Information Panels. https://www.foodstandards.govt.nz/consumer/labelling/panels/ Pages/default.aspx. (Accessed May 2020).
- Health Promotion Agency (2019). Behind the hype: Sweeteners. https:// www.nutritionandactivity.govt.nz/sites/default/files/Sweetners%202019.pdf.



