

- Avoid eating long-lasting sources of sugars such as dried fruits, fruit leathers and hard or chewy sweets as these stick to teeth and cause tooth decay.
- Remember to rinse your teeth after consuming sugars-containing food or drink, with water.
- Replace sugars-containing food and drinks with healthy and nutritious food options.
- Don't let children sleep with a bottle or suck on a feeding cup for long period of time.
- Saliva plays an important role in dental health. It helps in cleaning foods away from teeth, neutralising the acids, re-mineralising teeth and repairing tooth damage. Chewing sugar free gum after eating may also help stimulate saliva production.
- Brush your teeth twice a day, after breakfast and at bedtime with a fluoride toothpaste. Make sure to brush every surface of every tooth.
- Drinking fluoridated water (tap water) helps prevent tooth decay and strengthen the teeth.
- Engage in some form of physical activity for 20-30 minutes daily.
- Visit your dental practitioner for regular check-ups.
- Ask your dental practitioner or GP for more advice.

Sugars in commonly consumed food/ drinks

Lollies, each one = 1 teaspoon	Soft drink, one can = 8 teaspoons	Chocolate, two squares = 1 teaspoon
Cake, one slice = 4 teaspoons	Cordial, one glass = 5 teaspoons	Jam, one teaspoon = 1/2 teaspoon
Sweet biscuits = 1 teaspoon	Fruit Juice, one glass = 3 teaspoons	Ice Cream, one scoop = 1 1/2 teaspoons
Jelly, one serve = 4 teaspoons		Ice Block, one = 5 teaspoons

Figure 3: Adapted from SA Dental Service, 2015

Summary

- > Sugars in the diet come from a variety of food sources.
- > Excess intake of sugars is harmful for both general and oral health.
- > The first step towards reducing your intake of sugars is to ensure that the total energy intake from sugars does not exceed the recommended limit.
- > In addition, remember that eating a wide range of healthy and nutritious foods is the key to healthy and long life.

**High intake of added or free Sugars
= high risk of diseases**

Acknowledgement:

Colgate Oral Care

For further enquiries

Dental Practice Education Research Unit
ARCPOH, Adelaide Dental School
The University of Adelaide, SA 5005

Phone: +61 8 8313 4235

Enquiries: dperu@adelaide.edu.au

Web: adelaide.edu.au/arcpoh/dperu

 adelaide.edu.au

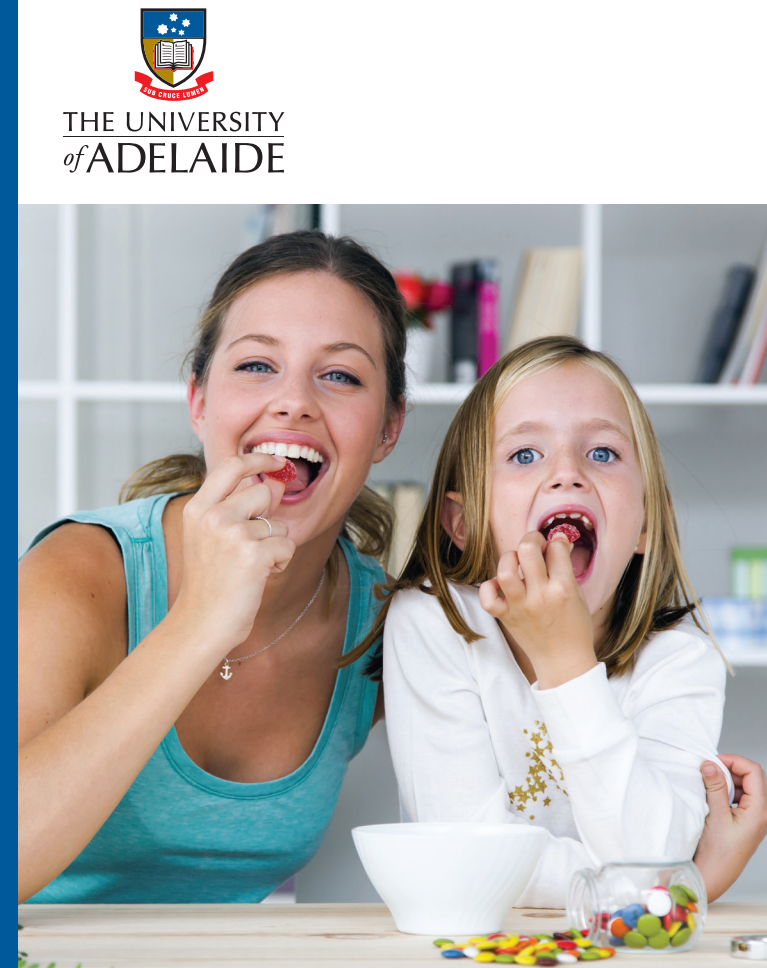
 facebook.com/uniofadelaid

 twitter.com/uniofadelaid

 youtube.com/universityofadelaid

DISCLAIMER: The information in this publication is current as at the date of printing and is subject to change. You can find updated information on our website at adelaide.edu.au. With the aim of continual improvement the University of Adelaide is committed to regular reviews of the degrees, diplomas, certificates and courses on offer. As a result the specific programs and courses available will change from time to time. Please refer to adelaide.edu.au for the most up to date information or contact us on 1800 061 459. The University of Adelaide assumes no responsibility for the accuracy of information provided by third parties.

CRICOS 00123M © The University of Adelaide. Published July 2017



Sugars and Oral Health:

Information for Patients

Special Topic Pamphlet No. 14

What are Sugars?

Sugars are a sweet crystal like substance (mainly sucrose) that is colourless or white (when pure) or brown (when less refined) and is obtained commercially from sugarcane or sugar beet. It is a common source of dietary carbohydrate that we eat on a daily basis.

Where do Sugars in our daily diet come from?

Term	Definition
Natural Sugars 	These are sugars that are naturally present in fruit (as fructose) and in dairy products (as lactose). E.g. fruit, milk and cheese These provide <i>essential</i> nutrients to the body and keep you healthy
Added Sugars (or Hidden sugars) 	These are sugars and syrups that are added to food or drinks by the manufacturer or cook during cooking, preparation and manufacturing of food E.g. regular soft drinks, energy drinks, breakfast cereals, breads, buns, pastries, fruit pies, cakes, biscuits, lollies, chocolates, ice cream, puddings and sugars-containing alcoholic beverages These provide <i>no essential</i> nutrition to the body and add extra calories that harm your body
Free Sugars 	Added sugars + sugars present in honey, syrups and fruit juices. E.g. table sugars (sucrose) commonly added to tea and coffee, fruit juice, sugar syrups and honey These provide <i>no essential</i> nutrition to the body and add extra calories that harm your body
Total Sugars	All Added + Free Sugars

How do Sugars affect your general health?

Excess consumption of sugars is harmful for both general and oral health. They can affect different parts of your body and cause health problems. For example:

- > **Brain:** Can cause addiction, impaired learning and memory loss
- > **Stress:** Can cause anxiety and irritability
- > **Face:** Can cause wrinkles, saggy skin and early ageing

- > **Heart:** Can cause heart disease (including strokes and heart attacks) and may increase cholesterol levels
- > **Liver:** Can cause fatty liver disease (damages liver)
- > **Pancreas:** Can cause type-2 diabetes, gout, cancers
- > **Ageing:** Can cause loss of elasticity, fastens ageing of all the body tissues, from skin, to organs, to arteries
- > **Weight gain:** Can cause overweight (BMI >25 and <29) and obesity (BMI ≥ 30) [Normal weight (BMI >18.5 and <25)]
- > **Blood vessels:** Can cause high blood pressure
- > **Immune system:** Weakens the body's normal defence system to fight against infection

How do Sugars affect your oral health?

Sugars are the main cause of tooth decay

Tooth decay occurs when the hard outer enamel layer of the tooth is damaged. Plaque is a sticky film of bacteria that forms a layer on teeth. Most damage to tooth enamel is caused by acids produced by bacteria in the plaque using sugars as their main source of energy. The bacterial acid penetrates the tooth surface, and dissolves some tooth minerals like calcium, phosphate and fluoride. When this occurs over several months, the enamel finally breaks and black-brown holes (referred to as dental cavities) appear.

Current amount of Sugars consumed by Australians and New Zealanders

On average, the amount of sugars consumed by Australians and New Zealanders is 14 teaspoons of sugars per day (60 grams).

Recommended amounts of Sugar intake (by World Health Organisation)

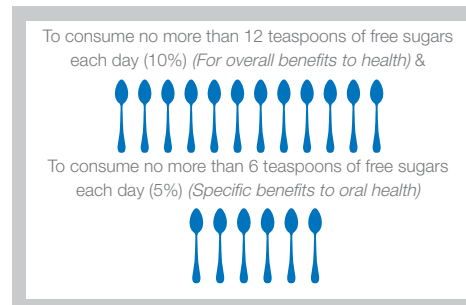


Figure 1: World Health Organisation free sugar intake recommendations

Management Plan

How can you reduce your sugars intake?

1. Choose healthy alternatives:

From	To
✗ Sugars-containing cereals	✓ Plain porridge ✓ Boiled eggs
✗ Sugars-containing drinks	✓ Tap water ✓ Low-fat, unflavoured milk ✓ Tea and coffee with no sugars
✗ Fizzy drinks, or fruit juice	✓ Freshly cut fruit ✓ Cut vegetables like carrots ✓ Wholemeal biscuits ✓ Homemade fruit salad-with no sugars or sweet syrup

2. Know the daily limit of sugars intake
3. Cook your own meals
4. Remove sugars from sight: like table sugars, fruit juice, tomato sauce
5. Avoid junk food/ take-away foods
6. Reduce overall carbohydrate intake: e.g. white bread, white rice, soft drinks, white sugars, cereals and pasta.
7. Read labels: Sometimes sugars are hidden in foods like oatmeal, salad dressing, yogurt and processed foods. Watch for high fructose corn syrup or added/free sugars

Nutrition Facts	
Serving Size: 1 bottle (20 oz)	
Total Carbohydrate	78 g 26%
Sugars	65 g
INGREDIENTS: WATER, SUCROSE, GLUCOSE, HIGH FRUCTOSE CORN SYRUP, NATURAL FLAVORS, ARTIFICIAL COLORS	

Figure 2: Adapted from How to Identify Sugar on Nutrition Labels

Tips to prevent tooth decay and stay healthy

There are many ways in which you can keep your teeth healthy. Below are some simple steps:

1. Introduce a low sugar diet for your children early in life.
2. Engage in healthy eating around children as they learn from what they see.
3. Be aware of the amount and frequency of the sugars-containing foods that you eat and drink.