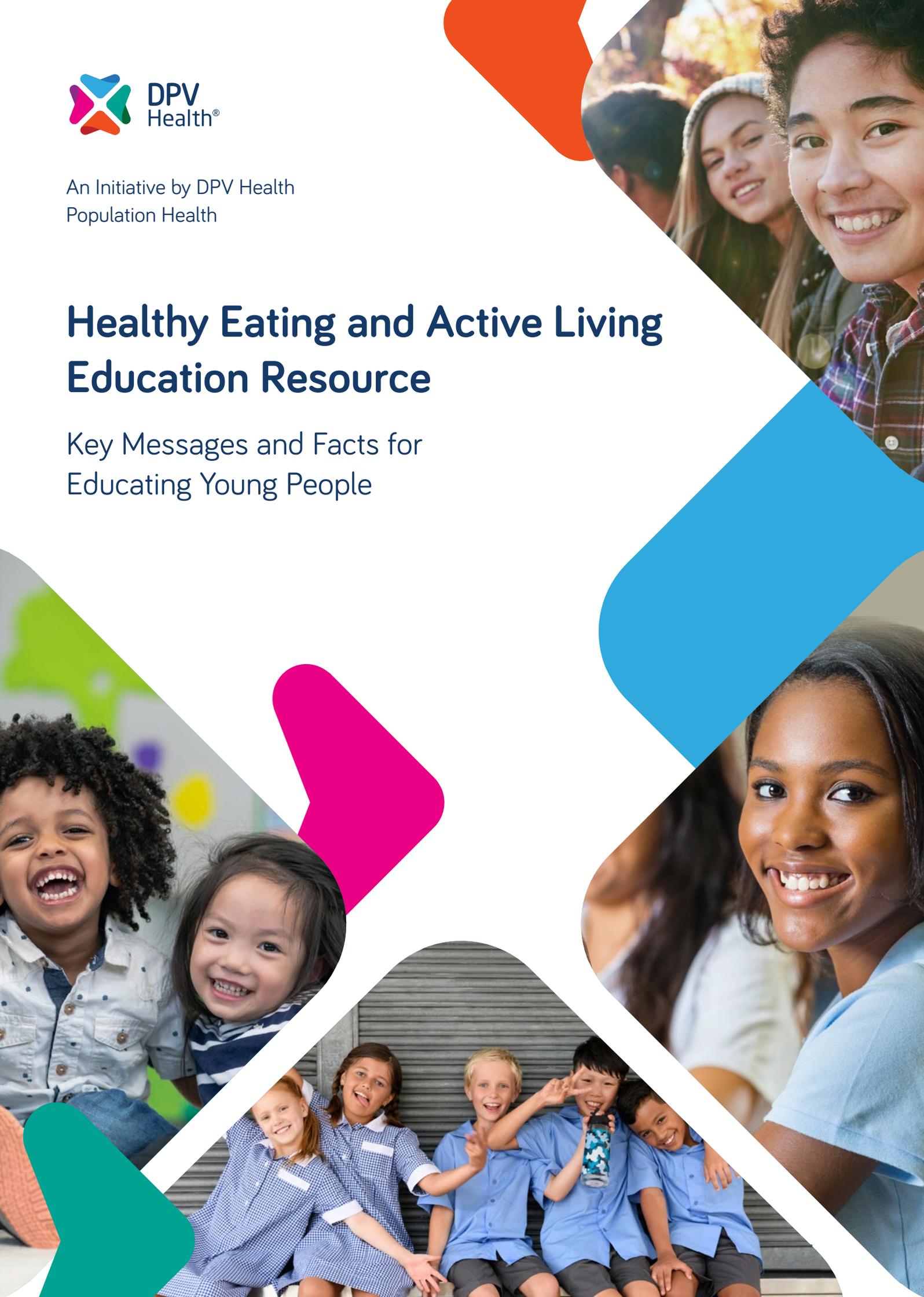




An Initiative by DPV Health
Population Health

Healthy Eating and Active Living Education Resource

Key Messages and Facts for
Educating Young People



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Introduction

Welcome to DPV Health's *Healthy Eating and Active Living Education Resource* for professionals to teach healthy eating and active living to culturally diverse young people.

It's written by health promotion professionals, experienced in:

- > nutrition
- > healthy eating
- > active living
- > healthy behaviours to help reduce chronic diseases.

Email populationhealth@dpvhealth.org.au with any questions.

This resource includes:

- > evidence-based information about healthy eating and active living
- > local statistics and data
- > interesting nutrition facts
- > learning activities

Who's it for?

Professionals who are trying to make healthy eating and active living an everyday thing for:



toddlers, early years (0–4)



primary school children (5–12)



adolescents, teenagers (secondary school, 13–18)



young adults (independent, 19–25)

This resource covers a wide range of ages, so we've specified what content is relevant to each age group by icons.

In this resource:

- > Each learning activity 'Level' corresponds to the literacy level and level of critical thinking needed.
- > Activities complement the content of each topic, but aren't aligned to curriculum outcomes.
- > **Red box** outlines learning activities for Levels 1 or 2.
- > **Purple box** highlights relevant interesting facts.
- > **Blue box** guides professionals.

Tip: Ensure your activity matches your group's literacy level.

The information and statistics in this resource will be updated as new data and evidence based recommendations and guidelines are released to ensure the document remains relevant and evidence based.

This is a collaboration project between

DPV Health and **Spectrum**

spectrumvic.org.au



Topic 1

Community Snapshot of Hume and Whittlesea

For Professionals

Introduction

Part 1 of this topic is not intended to be shown to young people. It is for the professionals who will be working with them. It includes statistics about chronic disease across Hume and Whittlesea, like obesity, and explains why professionals need to start regular conversations with young people about healthy eating and physical activity to improve their long-term health.

Because of the laws around data collection, most of the data is drawn from community members over 18.

Part 2 of this topic provides information to educate young people. It explores:

- > the importance of an overall healthy diet
- > information about specific nutrients
- > the five food groups
- > serving size recommendations from the Australian Dietary Guidelines.

The teaching objectives are:

- > to explain community health status and associated risk factors in the context of the Hume and Whittlesea Local Government Areas
- > to introduce the concept of nutrition
- > to discuss how caffeine and water affect the body.

Learning activities:

1. learn ways to bring more of the five food groups into meals
2. understand the importance of water and the impact of caffeine.

Learning outcomes:

- > a better understanding of the link between poor diet and chronic disease
- > a better understanding of Hume and Whittlesea's current health
- > a greater awareness of the Australian Dietary Guidelines and how to incorporate the five food groups into diets.

Part 1:

Health and wellbeing in Hume and Whittlesea

For Professionals



The following section is for professionals engaging with all age groups. Please note:

When working with young people, it's really important to send positive messages about healthy eating and active living. So, let's first examine health across the Hume and Whittlesea community.

This section discusses obesity rates and explains the link between obesity and the combination of sedentary behaviour with drinking sugar-sweetened beverages (SSBs). It also explains why we must educate young people about healthy eating and staying active.

Please note: Even though diet and obesity are linked, emphasising this can lead to mental or physical harm because of society's emphasis on dieting to reach the ideal of being thin. Instead, drive home the idea that strong bodies and minds, and an active lifestyle, build strength and health.

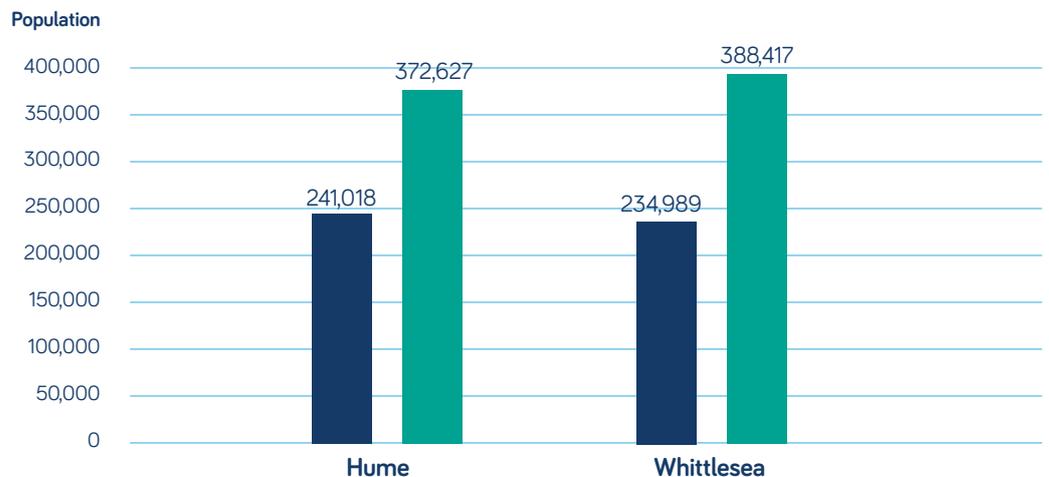
Explain how food gives us energy to focus and learn. Bringing these messages into your daily interactions with young people will help improve their long-term health and reduce their risk of chronic disease.

Current V.S. Forecast Population

- Current Population
- Forecast Population 2041

Figure 1 Current versus forecast population in Hume and Whittlesea

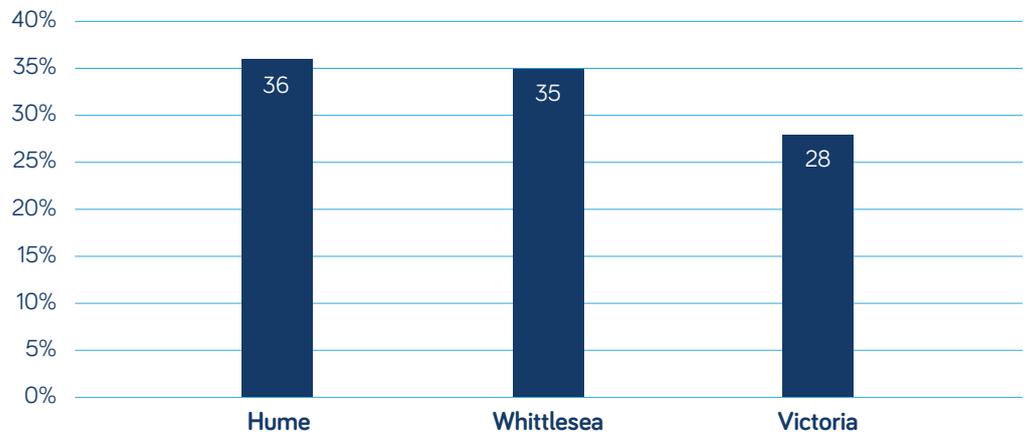
Source: Victorian Population Health survey, 2017



Population Born Overseas

Figure 2 Percentage of the population born outside Australia

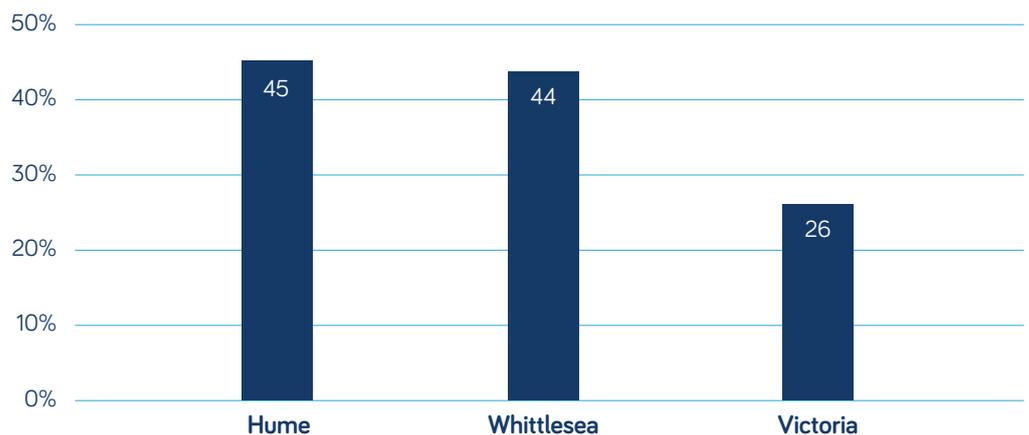
Source: Victorian Population Health survey, 2017



Percentage of population who speak a language other than English at home

Figure 3 Percentage of households where a language other than English is spoken

Source: Victorian Population Health survey, 2017



The Hume and Whittlesea populations are diverse. In 2016, 35.5% of residents in Whittlesea and 35.7% in Hume were born overseas. Nearly 50% speak a language other than English at home.

The link between lifestyle and chronic disease

A long, unhealthy life with lots of fat, sugar, salt and lack of exercise, can lead to chronic diseases. Another risk factor is smoking.

Source: Australian Health Ministers' Advisory Council, 2017

For Professionals

For professionals
engaging with all age
groups:



Let's look at coronary heart disease, Australia's leading killer, to **get you thinking about the link between what we eat, how much we move and our overall health**. Did you know that what we eat can increase the risk of having a heart attack because certain foods block arteries that pump blood around the body. Can lifestyle choices reduce this risk?

What we eat affects our health so it's crucial young people learn to eat well and stay active.

The top 10 causes of death in Australia (2018) are:

1. Coronary heart disease – a narrowing of arteries which can lead to heart attacks
2. Dementia, including Alzheimer's
3. Cerebrovascular diseases – disorders affecting blood vessels and blood supply to the brain, like stroke
4. Lung and throat related cancers
5. Asthma
6. Tumour / cancer of colon, rectum or anus
7. Diabetes
8. Tumours that affect the blood, bone marrow, lymph, and lymphatic system
9. Diseases of the urinary system
10. Prostate cancer.

Source: Australian Bureau of Statistics, Cause of Death, 2019

As figure 4 shows, vegetable consumption across Hume and Whittlesea falls a lot short of the Victorian average.

Percentage of population who met vegetable consumption guidelines

■ 2015 ■ 2017

Figure 4 Percentage of population meeting vegetable consumption guidelines (5 serves per day)

Source: Victorian Population Health survey, 2017

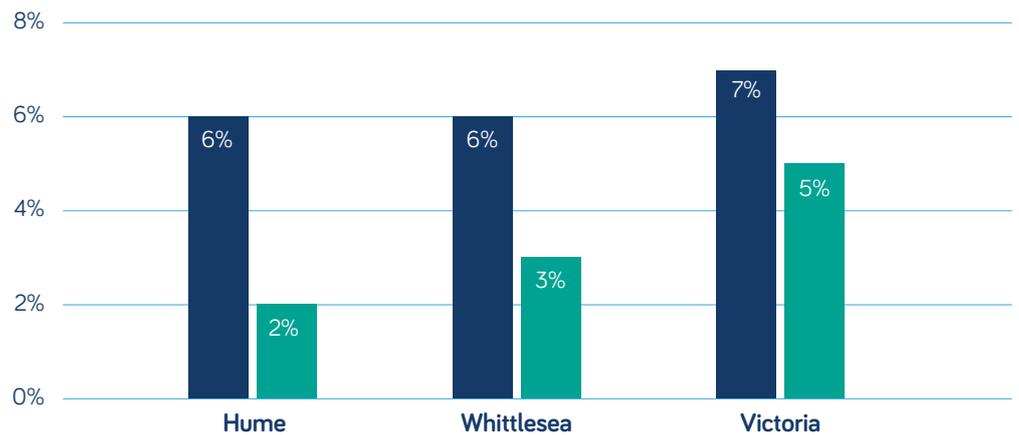


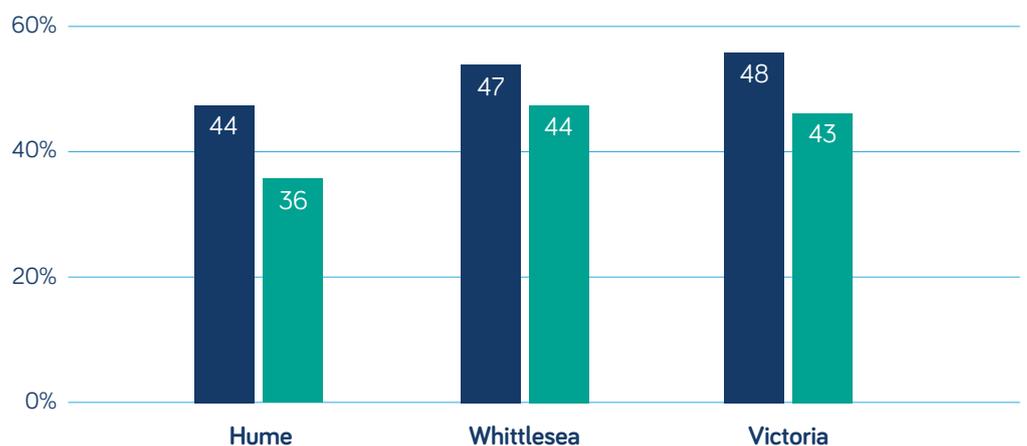
Figure 5 also shows a proportionally lower consumption of fruit across Hume and Whittlesea, compared to the Victorian average.

Percentage of population who met fruit consumption guidelines

■ 2015 ■ 2017

Figure 5 Percentage of population meeting fruit consumption guidelines (2 serves per day)

Source: Victorian Population Health survey, 2017



Not eating enough fruit and vegetables increases the likelihood of heart disease. Drinking sugary drinks and lack of exercise also increase the risk of developing heart disease.

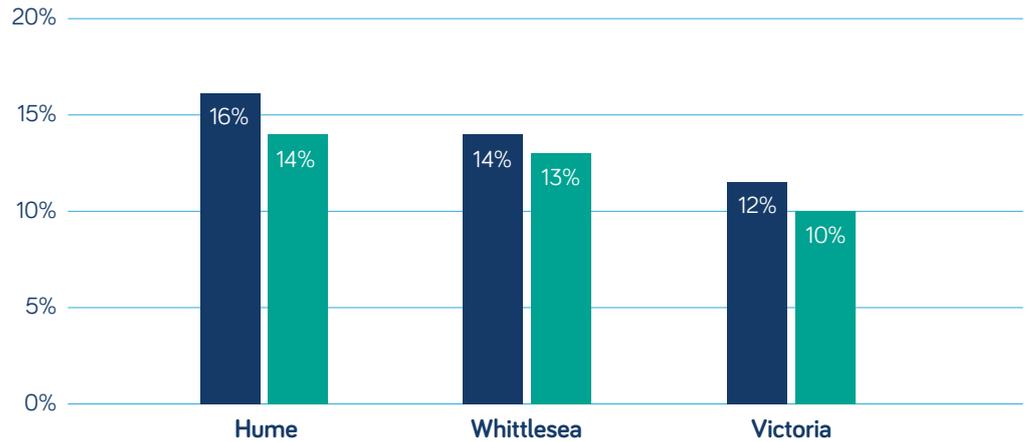
Figures 6 and 7 show very high levels of sugary drink consumption and sedentary behaviour across Hume-Whittlesea, compared with the rest of Victoria. Combining these risk factors increases a person’s chance of developing a chronic disease.

Daily consumption of sugar-sweetened beverages

■ 2015 ■ 2017

Figure 6 Proportion of adults consuming sugar-sweetened beverages daily

Source: Victorian Population Health survey, 2017



In Australia, young adults (18–24) drink the most SSBs – 61.3% drink at least one a week, while 13.6% do so daily. Adults in the most disadvantaged areas (13.8%) were three times more likely to drink SSBs daily than those in the least disadvantaged areas (4.2%).

Source: National Health Survey: First Results 2017–18 Sugar-Sweetened Drinks and Diet Drinks

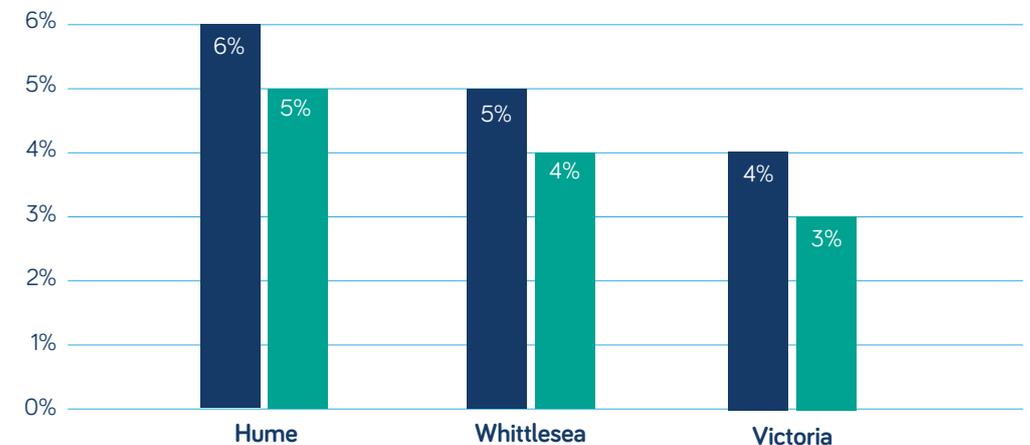
Drinking too many SSBs, along with a sedentary lifestyle, is a significant health risk for anyone. The risk is higher for toddlers, children and adolescents.

Population with sedentary lifestyle

■ 2015 ■ 2017

Figure 7 Proportion of adults reporting sedentary behaviour

Source: Victorian Population Health survey, 2017



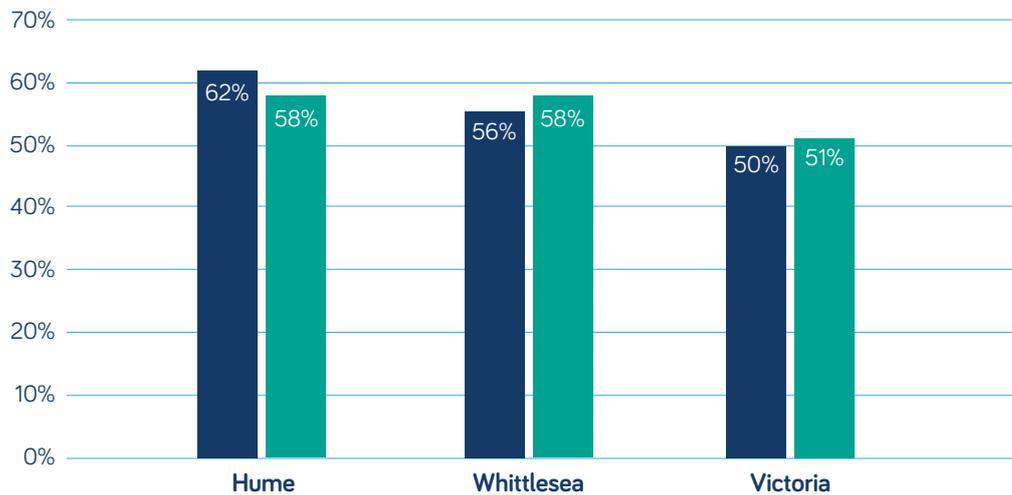
Figures 8 and 9 show the percentage of obese and overweight adults and children and the alarming rise since 2012.

Overweight and obesity in adults

■ 2015 ■ 2017

Figure 8 Percentage of adult population who are overweight or obese

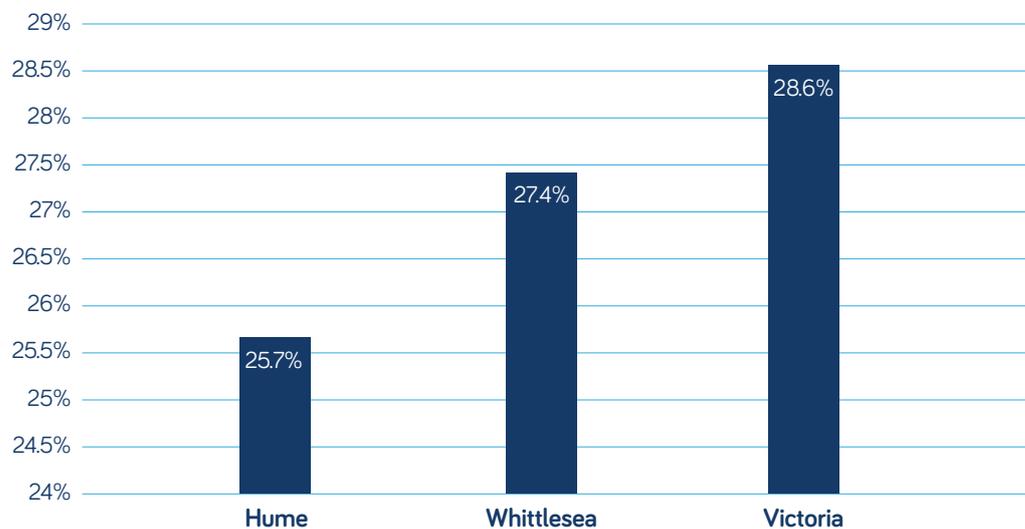
Source: Victorian Population Health survey, 2017



Percentage of overweight and obese amongst children

Figure 9 Increased prevalence of overweight and obesity among children

Source: Victorian Population Health survey, 2017



Bad eating habits and a decrease in daily exercise has led to more overweight and obesity across all ages, especially our younger people.

Percentages attributed to the top 7 causes of death

■ Hume ■ Whittlesea ■ Victoria

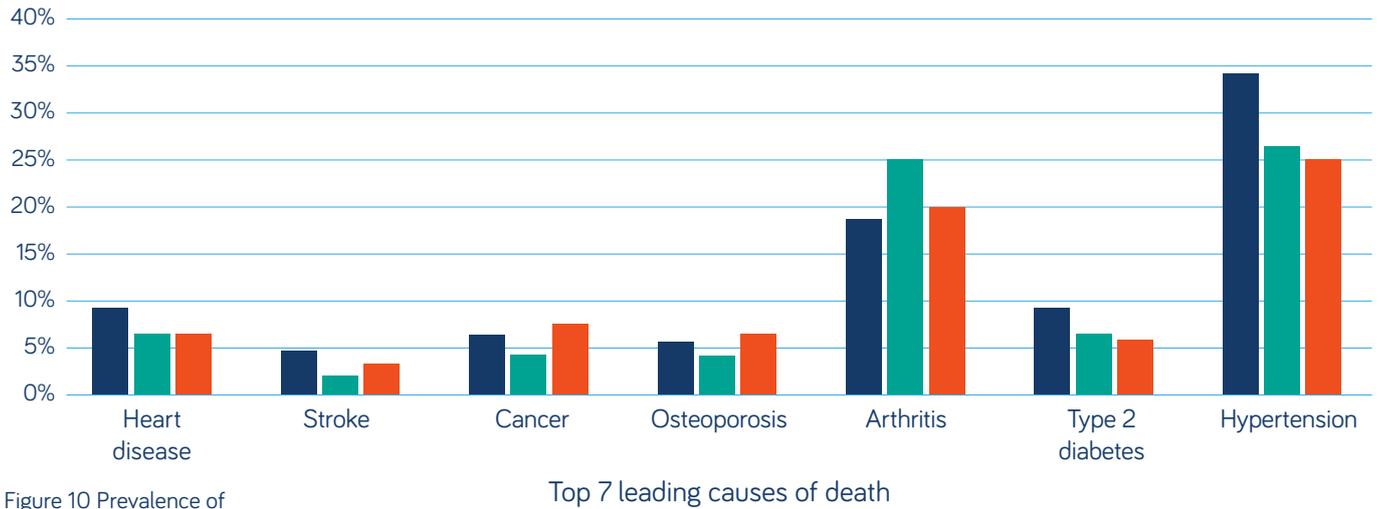
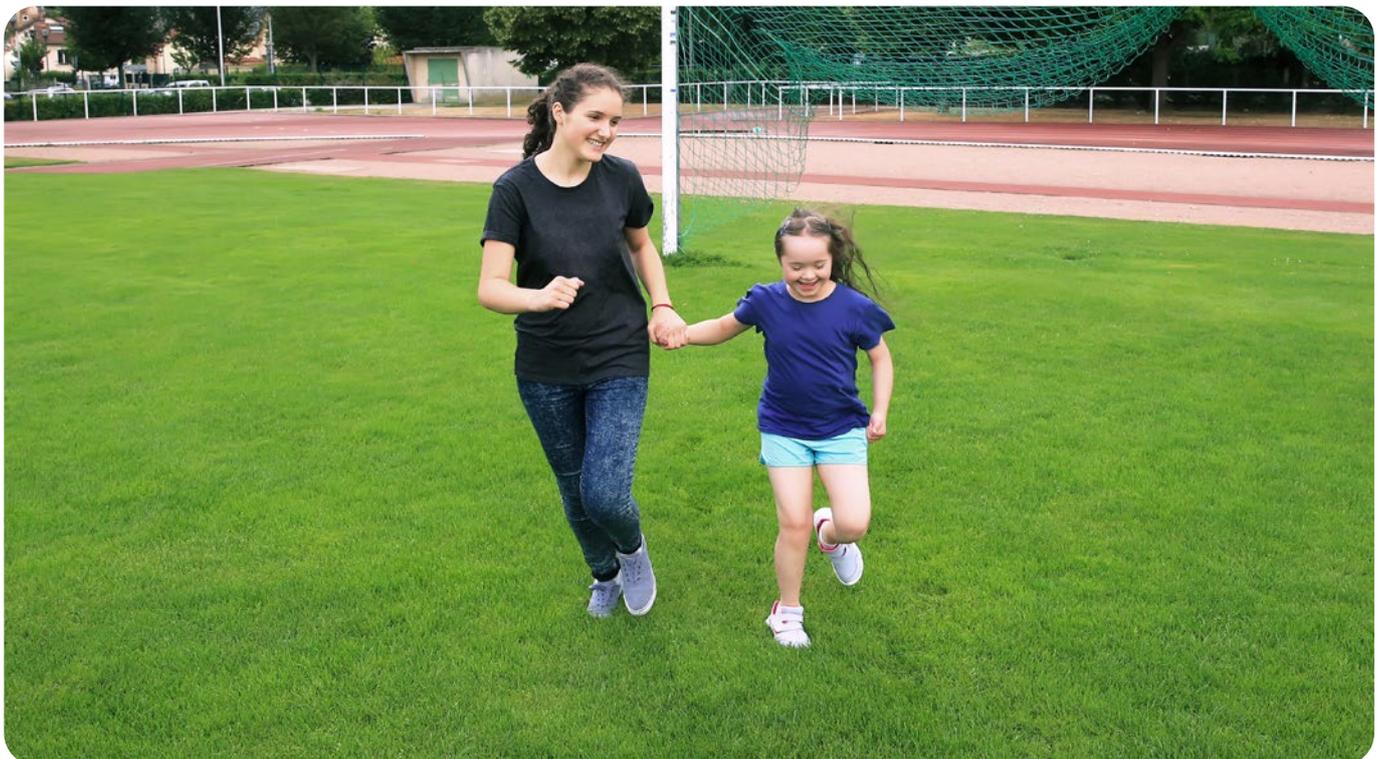


Figure 10 Prevalence of chronic disease

Source: Victorian Population Health survey, 2017

Figure 10 shows the high rates of chronic disease in Hume and Whittlesea, particularly coronary heart disease and type 2 diabetes.



Part 2: Introduction to the concept of nutrition

For Professionals

For professionals working with:



Adolescents/
teenagers



Young adults

What are nutrients?

Your body absorbs nutrients from food and drinks. It uses these to:

- > generate energy to move and learn
- > defend itself against diseases
- > help with the everyday workings of many internal processes.

Source: Whitney, Rolfes, Crowe, Cameron-Smith & Walsh, 2011

Macro-nutrients

Macro-nutrients provide energy, they include carbohydrates, fats, and proteins.

Vitamins

Key vitamins include vitamin K, vitamin C, and folate. Vitamins:

- > support bodily functions and systems, especially immunity
- > don't provide energy
- > help the body use the energy it finds in carbohydrates, fats and protein
- > sustain most of the everyday activities in your body.

Minerals

Minerals don't provide energy either. They are found in bodily fluids and help to build bones and teeth structure. Here are some of the minerals crucial to good health:

- > calcium – essential for bone and teeth health
- > iron – helps the body produce red blood cells, which transport oxygen throughout the body
- > sodium, magnesium, and potassium – all involved in muscle movement
- > zinc – affects how much protein the body can use from the food you eat and has important roles in building DNA and growing cells
- > iodine – important to the thyroid gland, which tells the body which hormones to produce and guides it through the process of maturing. This is particularly important for children and adolescents, teenagers.



Water

Our bodies are 50–75% water. It forms the base of blood, digestive juices, urine and sweat and is also found in lean muscle, fat and bones.

- > The body can last weeks without food, but only days without water.
- > The amount of water we need depends on our size, metabolism, the weather, the food we eat and our activity levels.
- > The body gets about 30% of its water needs from our food and we must drink the remaining 70%.

Water has many important roles in our bodies:

- > It keeps our body temperature down by sweating.
- > It moistens mucous membranes such as those of the lungs and mouth.
- > It lubricates and cushions joints so they can move smoothly.
- > It reduces the risk of urinary tract infections because it helps keep the bladder clear of bacteria.
- > It helps digestion and prevents constipation.
- > It moisturises the skin.
- > It carries nutrients and oxygen to cells.
- > It acts as a shock absorber inside the eyes and spinal cord, as well as in the amniotic sac, which surrounds the foetus in pregnancy.

Source: *Better Health*, 2019

Interesting Fact

Males need more water than females because most men have a higher muscle-to-fat ratio. Muscle needs more water than fat.



You may provide the following handout as a take-home sheet

How much water does your body need?

	Infant 0-6 months	0.7 litres from breastmilk or formula	
	Infant 7-12 months	0.8 litres total with 0.6 litres as fluids (breastmilk, formula, plain water, other drinks) and 0.2 from foods	
	Girls & boys 1-3 years	1 litre (about 4 cups)	
	Girls & boys 4-8 years	1.2 litres (about 5 cups)	
	Boys 9-13 years	1.6 litres (about 6 cups)	
	Boys 14-18 years	1.9 litres (about 7-8 cups)	
	Girls 9-13 years	1.4 litres (about 5-6 cups)	
	Girls 14-18 years	1.6 litres (about 6 cups)	
	Men 19 years and over	2.6 litres (about 10 cups)	
	Women 19 years and over	2.1 litres (about 8 cups)	
	Pregnant girls 14-18 years	1.8 litres (about 7 cups)	
	Pregnant women 19 years and over	2.3 litres (about 9 cups)	
	Lactating girls 14-18 years	2.3 litres (about 9 cups)	
	Lactating women 19 years and over	2.6 litres (about 10 cups)	

Please note these amounts may differ depending on your diet, activity levels and weather.

Source: Better Health, 2019

For Professionals

For professionals working with:



Adolescents/
teenagers



Young adults

Why is a healthy diet important?

Food and drinks contain a variety of nutrients (**See page 13 for more information**). We don't eat anything that's just calcium, or just iron, it's usually in food. That's why we need a healthy, well-rounded diet – to get enough of all the important nutrients our body needs to work properly.

Australians eat too much nutrient poor food. We consume a lot of alcohol and foods with too much fat, sugar and salt – all of which cause chronic diseases.

Source: Department of Health and Ageing, National Health and Medical Research Council, 2013

Heart Foundation healthy eating tips

- > Focus on the whole diet, not on a particular nutrient or food.
- > Eat plenty of fruit, vegetables and wholegrains.
- > For protein, use a variety of healthy options, such as seafood, lean meat and poultry, legumes, nuts, and seeds.
- > Try reduced-fat options for dairy, like unflavoured milk, yoghurt, and cheese.

- > We need fats but pick the healthy kinds like nuts, seeds, avocados, and olives. Use healthier cooking oils like olive, canola, rice bran and coconut oil (max 1 tbsp).
- > Use herbs and spices to flavour foods instead of salt. Try removing the salt shaker from the table.
- > Make water the drink of choice.

Affordable healthy food options

- > legumes (chickpeas, black beans, kidney beans, lentils) – often 75c per can at major supermarkets
- > soybeans and soy products (like tofu and split peas) are affordable sources of protein
- > frozen fruit
- > frozen vegetables
- > fruit cups or tinned fruit in juice (not syrup)
- > canned vegetables – rinse to get rid of the extra salt used to preserve them.



There's a difference between 'a healthy diet' and 'dieting' to lose weight. Here are some proven consequences of dieting:

- > a higher chance of weight gain afterwards – 95% of people who lose weight put back all or more within five years
- > a higher chance of developing an eating disorder or disordered eating
- > a higher risk of mental illness
- > chronic dieting in young people can increase osteoporosis risk – calcium and other minerals are drawn from the bones to increase the level of calcium in the blood
- > for women, chronic dieting can affect long term fertility because if the body doesn't have enough energy to maintain all its systems, it turns off menstruation. Having no period because of low energy availability is called amenorrhea.



Complete Learning Activity 1

Objective: Learn ways to bring more of the five food groups into meals

Level 1: 10 minutes

Impact of SSBs on child and adolescent bodies:

- > more risk of unhealthy weight gain and long-term heart disease
- > tooth decay
- > yellowing teeth
- > impacted insulin resistance (the body's ability to break down and process sugars)
- > more risk of high blood pressure
- > higher risk of Type 2 diabetes
- > dehydration of the body and skin means signs of early ageing are more likely.

Source: ABS, National Health Survey 2017–2018; Bleich and Vercammen 2018



Interesting Fact

Your body is smart. If you aim to lose weight by eating less, it tries to save energy to protect itself, by reducing functions like sweating and shivering. This is known as **adaptive thermogenesis** (Tremblay et al., 2012).

Caffeinated energy drinks

Caffeine is our most widely used stimulant and it's fine in moderation. This means:

- > up to 400 mg a day for adults
- > up to 300 mg a day during pregnancy and lactation
- > up to 2.5 mg a day for each kilogram of body weight

Drinking excessive amounts of caffeine can be toxic or even lethal. Too much, can affect:

- > fertility
- > bone density
- > heart health
- > cancer
- > behaviour

Source: Nawrot et al. 2003; Heckman 2010

Some people are more caffeine sensitive.

Children and adolescents are smaller, so smaller doses have more impact, negatively affecting sleep and making them nervous.

Adolescents aged 13–18 should not have more than 2.5 milligrams of caffeine per kilogram of body weight.

Guarana is a common additive in caffeinated energy drinks. It grows in the Brazilian Amazon and its seeds contain four times more caffeine than coffee beans. The seeds also contain other chemicals¹ which stimulate the central nervous system and can cause shakiness and nervousness.

Adults have a recommended intake of 6 tsp per day but average intake is 30 tsp per day (Source: Smiles 4 Miles training presentation February, 2020).



Red Bull energy drink

150mg caffeine
49gm sugar per 500ml can



V energy drink

155mg caffeine
66.5gm sugar per 500ml can



Monster energy drink

160mg caffeine
57gm sugar per 500ml can



Mother energy drink

160mg caffeine
51gm sugar per 500ml can

*Only some varieties of drinks are noted here. Amounts of caffeine and sugar may vary between flavours / brands.

While some are **sugar-free**, they're not necessarily healthier as they're more acidic and can break down the protective coating (enamel) on your teeth.

Source: Rethink Sugary drink, Tooth decay, 2020)

¹ For example, theobromine and theophylline. See Smith and Atroch 2007.

How long does your coffee stay in your system?

Caffeine concentration in the blood peaks after 1–1.5 hours which is when you feel its effects most strongly. But it doesn't leave your system after a couple of hours. Half a standard shot of coffee takes about five hours to metabolise – ten hours for a whole shot of coffee.

These times are approximate and vary with:

- > body size
- > caffeine tolerance (how much your body needs before you feel caffeine's effect)
- > dose (how much coffee you had)
- > genetics.

Source: Temple 2009

Caffeine affects the body by:

- > increasing the time it takes to get to sleep
- > reducing your total sleep time
- > increasing nervousness and jitteriness.

Source: Roehrs and Roth 2008

Scientific explanation:

Caffeine is an adenosine receptor antagonist. When caffeine binds to an adenosine receptor A1 (found throughout the body) it antagonises it, releasing caffeine's stimulant effects. These include increased heart rate and stimulation to the central nervous system. Caffeine can also have widespread physiological effects, mostly on the brain – reducing drowsiness while increasing mental alertness and cognitive functioning (Kerr et al. 2010, Glade 2010).



Complete Learning Activity 2

Objective: Understanding the importance of water and the impact of caffeine

Level 1: 10 minutes

Level 2: 20 minutes



Part 3: Learning Activities

Learning Activity 1

Level 1: 10 minutes



The importance of water

After you discuss the importance of drinking water throughout the day, have your young people write down how much they think they should drink daily. Show them the correct answer.

Optional: Additional 5 minutes

Get the students to fill glasses with the correct amount of water, to give them a good visual representation. Alternatively, ask them to figure out how many times they'd have to refill their drink bottle based on how many ml it holds.



Learning Activity 2

Level 1: Discussion 10–15 minutes



How many fruits and vegetables can you eat?

Ask young people how many different vegetables they ate yesterday and how they could have eaten more. This will help them think about how they can add more vegetables to their meals.

For example: I had a ham and cheese toasted sandwich for dinner. I could include sliced tomato and baby spinach to add more vegetables. Did you know spinach is a good source of iron?

Level 2: Written 20 minutes

Write the questions below on a whiteboard and have your group complete the activities in smaller groups.

> What grain products do you eat regularly and how could you include more wholegrains in your meals?

E.g. I normally eat white rice. I could mix it with brown rice to increase my fibre intake.

> Describe how to select or prepare food and drinks differently to reduce salt and sugar intake.

E.g. Roast vegetables with spices instead of salt, to reduce fat and salt intake. Add fresh fruit to water for flavour instead of drinking soft drinks.



Topic 2

Healthy Eating

Introduction

The first part of this topic covers:

- > how to read food labels
- > health benefits of the five food groups – based on the Australian Dietary Guidelines
- > food safety tips to reduce food-related illnesses.

The second part explores the importance of promoting culturally diverse foods, and simple ways to make a meal healthier.

The teaching objectives are:

- > to show young people how to read and compare food labels
- > to explain the five food groups and how to incorporate more recommended foods into meals and snacks
- > to explain how to prepare, eat and store healthy food safely
- > to increase young people's confidence with food from different cultures, giving them a range of healthy options
- > to give them healthy eating tips
- > to encourage young people to pack or ask for healthy lunches.

Learning activities:

1. Compare the food labels of two products – case study
2. Learn how different fruits and vegetables grow
3. Learn the benefits of vitamins from different coloured fruits and vegetables
4. Learn how much sugar is in popular drinks
5. Activities that complement school curriculums, working fruit and vegetables into session plans.

Learning outcomes:

- > able to read and understand food labels and choose the healthiest of several products
- > a greater knowledge of the five food groups
- > a better understanding of the benefits of eating from the five food groups and of how harmful too much processed food and drink is
- > confidence with healthy food options from a variety of cultures
- > knowledge of how to include more vegetables into meals and snacks.

Part 1:

Reading food labels

For Professionals

For professionals working with:



Children



Adolescents/
teenagers



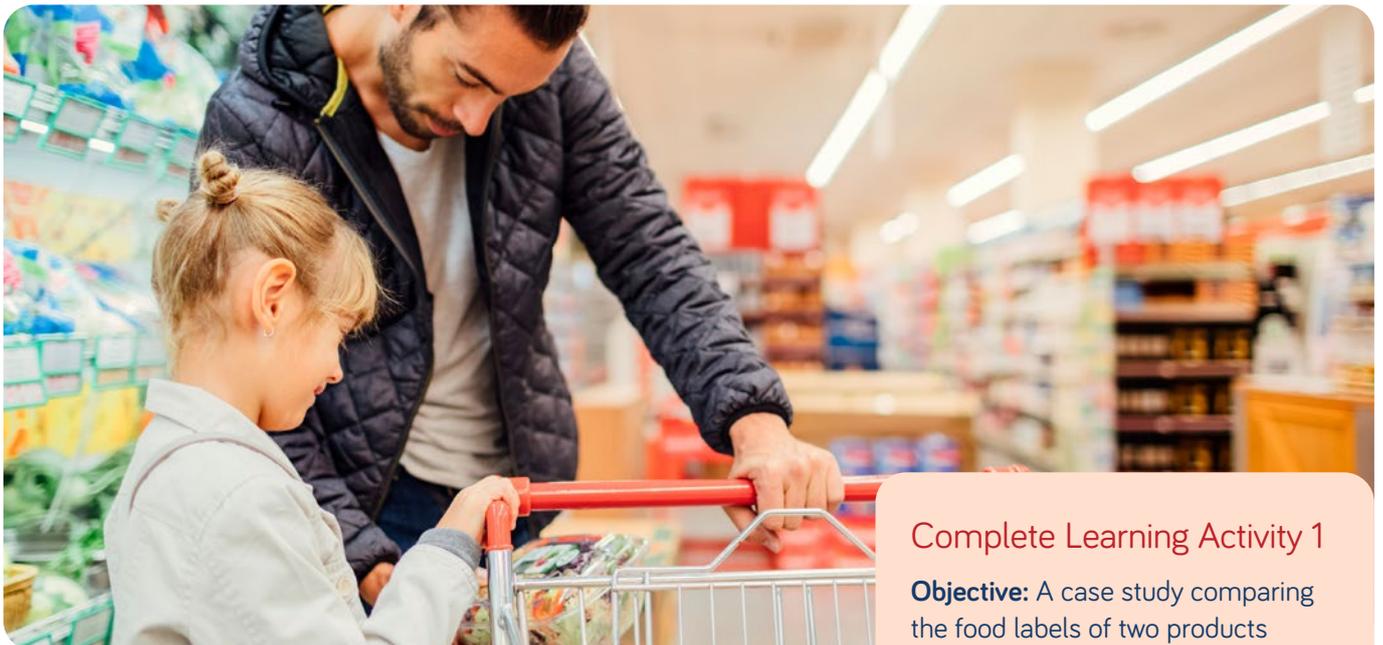
Young adults

Reading labels

Understanding the nutrition information on food and drink labels can be tricky! But they help you compare how healthy similarly looking packaged foods are.

Nutrition panels tell us which products have more carbohydrates, sodium (salt), sugars and saturated fat than others. This helps us differentiate between 'sometimes' and 'recommended' foods.

The handout below shows you how to understand a nutrition information panel and the recommended limits or minimums for various nutrients. 'Recommended' foods and drinks have nutrients that fit within the guidelines. For example in every 100g there should be less than 400mg of sodium, and at least 3g of fibre (LiveLighter, 2018).



Complete Learning Activity 1

Objective: A case study comparing the food labels of two products

Level 2: 20 minutes



late primary school children
(11-12)



adolescents, teenagers
(secondary school, 13-18)



young adults
(independent, 19-25)

The next page is a useful handout for children, adolescents, teenagers and young adults to keep after talking about how to read a nutrition panel. It can be used to choose healthier options for packaged food and drink.

Reading a nutrition panel



Total fat

Choose products with a total fat content of less than 10g per 100g.

Saturated fat

Choose products with less than 3g per 100g. Saturated fat is bad for heart health.



Sugars

- > Choose products with no added sugar if you can. (Some foods contain sugars naturally, such as dairy foods or fruit.)
- > Choose food with less than 15g of sugar per 100g.
- > Choose drinks with less than 7.5g of sugar per 100ml.



Fibre

Choose foods with at least 3g of fibre per 100g.

Nutrition Information		
Servings per package - 1		
Serving size - 420g		
	Average Quantity Per serve	Average Quantity Per 100g
Energy	1580kj	377kj
Protein	14.3g	3.4g
Fat, Total	6.7g	1.6g
Saturated	1.3g	0.3g
Carbohydrate	62.2g	14.8g
Sugars	21.0g	160mg
Fibre	4.2g	1.0g
Sodium	672mg	160mg
Ingredients: onion, thickener (1422), sauce (water, honey (6%), wheat starch), soy sauce (wheat, soy), milk solids, salt, spices, carrots, capsicum, chicken (15%), broccoli, beans. Contains gluten containing cereals, milk, sesame, soy May be present: crustacean, egg, tree nuts Made in Australia		



Average quantity per serve

This column tells you the amount of nutrients (carbohydrates, protein, fat, salt, fibre and so on) in a single serve, in this case a 420g wrap. The amount of nutrients changes depending on size.

100g



Average quantity per 100g

Use this column when comparing similar products (like two different brands of wraps) because it ignores the different sizes of two products and compares the nutrients you'd get if you ate the same amount of each.



Sodium (salt)

Look for foods with less than 400mg per 100g. Too much salt can increase the risk of diabetes, heart disease and high blood pressure.

Source: National Health and Medical Research Council, Department of Health and Ageing, 2019

For Professionals

For professionals working with:



Toddlers



Children of primary-school age

Oral hygiene

Looking after your teeth is very important.

- > Brush twice a day with a toothbrush and toothpaste.
- > Make sure toddlers and children use a small toothbrush and low-fluoride toothpaste.
- > Avoid sugary drinks and snacking between meals.
- > Avoid too much acidic food (carbonated drinks and citrus fruits).

It is **recommended that toddlers see a health care professional by the age of two** to check their teeth are developing properly.

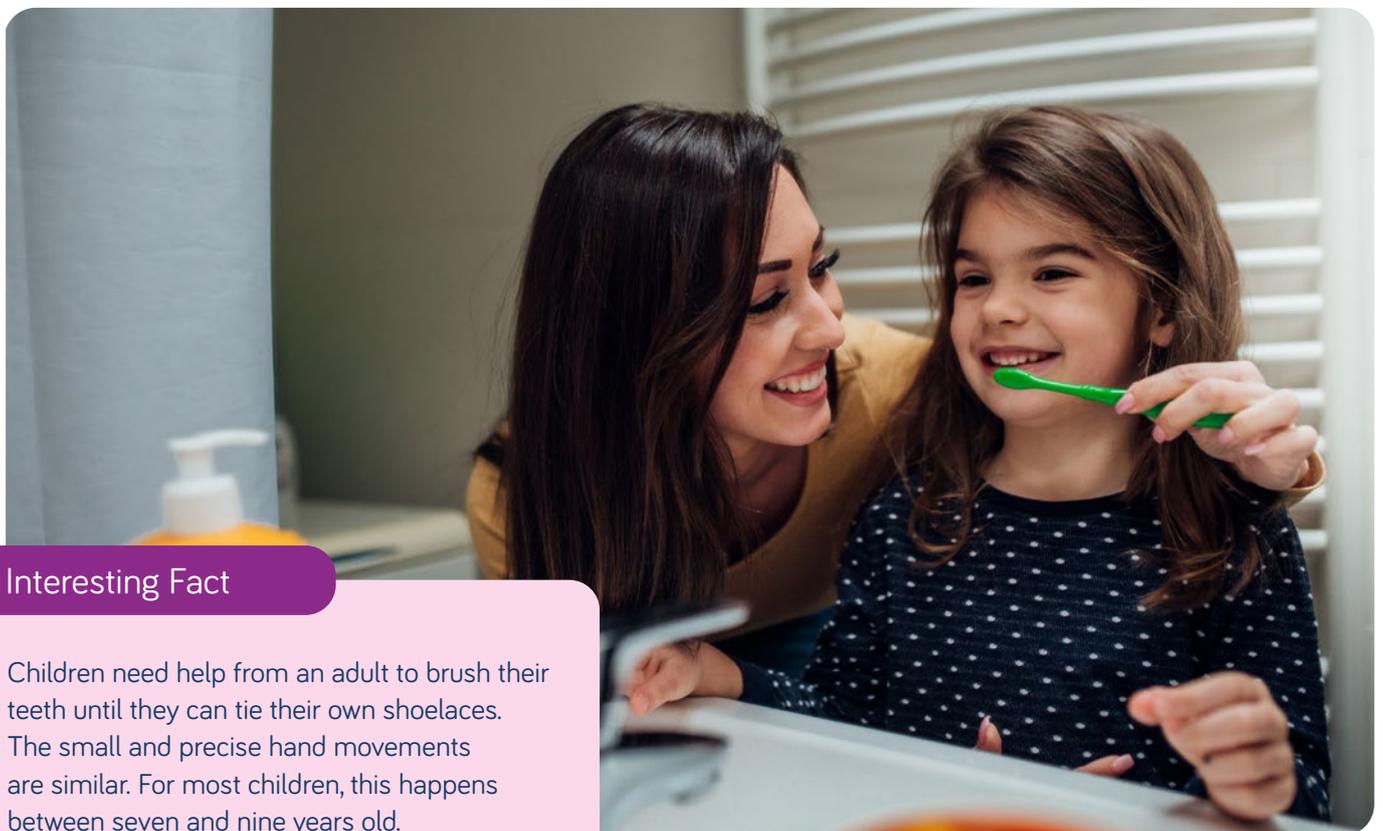
New baby teeth can be wiped with a damp cloth. You don't need toothpaste.

If teeth are not looked after when the child is young, they might get tooth decay. This can lead to:

- > malnutrition — tooth decay can make it painful to eat, or hard to bite into certain foods
- > fatigue — because the pain from tooth decay makes it difficult to sleep
- > delays in learning to speak — some of the sounds we make when we speak include the teeth. Children whose teeth have not formed properly, will find it hard or impossible to make those sounds.

Source: Australian Institute of Health and Welfare, 2019

Full reference for end of topic: Australian Institute of Health and Welfare, 2019 Oral health and dental care in Australia. Cat. no. DEN 231. Canberra: AIHW. Viewed 04 June 2020, www.aihw.gov.au/reports/dental-oral-health/oral-health-and-dental-care-in-australia



Interesting Fact

Children need help from an adult to brush their teeth until they can tie their own shoelaces. The small and precise hand movements are similar. For most children, this happens between seven and nine years old.

Australian Guide to Healthy Eating

Enjoy a wide variety of nutritious foods from these five food groups every day.

Drink plenty of water.



Grain (cereal) foods, mostly wholegrain and/or high cereal fibre varieties



Vegetables and legumes/beans



Lean meats and poultry, fish, eggs, tofu, nuts and seeds and legumes/beans



Milk, yoghurt, cheese and/or alternatives, mostly reduced fat



Fruit



Use small amounts



Only sometimes and in small amounts



Source: National Health and Medical Research Council

For Professionals

For professionals working with:



Adolescents/teenagers



Young adults

Grain foods

When it comes to grains and cereals, we need to eat wholegrains as much as possible — not refined grains like white rice and white bread.

Wholegrains reduce the risk of many chronic diseases, like:

- > cardiovascular disease
- > cancers of the colon and rectum
- > type 2 diabetes
- > obesity

Important nutrients in wholegrain foods include:

- > B-group vitamins for energy production
- > protein for strong muscles
- > fibre for a healthy gut and to keep you feeling full
- > iron to build red blood cells
- > folate to help tissues grow and cells to work and also to help the body use and make proteins
- > magnesium for good muscle contractions, including arms, legs, heart etc.

Wholegrains also make you feel fuller and stop you overeating.²

Tips for eating more wholegrains:

- > Swap refined grains (white bread, sweet biscuits, muffins and so on) for wholegrains like wholemeal / wholegrain bread, bulgur, quinoa, couscous or brown rice.
Did you know couscous is quick and easy to prepare? Just cover it in boiling water for a few minutes.
- > For a snack, try wholegrain crackers or unbuttered, unsalted popcorn.
- > Add barley to soups or casseroles.



² Better Health Channel 2017, www.betterhealth.vic.gov.au/health/healthyliving/cereals-and-wholegrain-foods

It's important for everybody to eat wholegrains, particularly vegans and vegetarians, as wholegrains contain iron and zinc.²

Wholegrains and antioxidants

The antioxidants in wholegrains protect the body against cancers and heart disease. Antioxidants can also lower cholesterol.

So why not kick the 'no carb diet' and create healthier options with a variety of grains!

What does a single serve of grains look like?³



One slice of bread or half a medium roll or flat bread



One cup breakfast cereal



Half cup cooked pasta, rice, noodles, barley, semolina, polenta, quinoa, or bulgur



Half cup cooked porridge



One quarter cup muesli

Interesting Fact

Did you know carbohydrates are the brain's favourite source of energy? If you don't eat enough, focusing and learning is harder. The body finds it tougher to break fat and protein down in to energy.



² Better Health Channel 2017, www.betterhealth.vic.gov.au/health/healthyliving/cereals-and-wholegrain-foods

³ Eat for health, 2015, www.eatforhealth.gov.au/food-essentials/how-much-do-we-need-each-day/serve-sizes

Number of recommended serves of grains for each age group*

	Grain (cereal) foods, mostly wholegrain	Approx. number of additional serves for more active, taller or older children and adolescents
Toddlers		
 1-2 years	4 serves/day 	
Boys		
 2-3 years	4 serves/day 	0-1 serve/day 
 4-8 years	4 serves/day 	0-2½ serves/day 
 9-11 years	5 serves/day 	0-3 serves/day 
 12-13 years	6 serves/day 	0-3 serves/day 
 14-18 years	7 serves/day 	0-5 serves/day 
Girls		
 2-3 years	4 serves/day 	0-1 serve/day 
 4-8 years	4 serves/day 	0-1 serve/day 
 9-11 years	4 serves/day 	0-3 serves/day 
 12-13 years	5 serves/day 	0-2½ serves/day 
 14-18 years	7 serves/day 	0-2½ serves/day 

*Includes an allowance for unsaturated spreads or oils, nuts or seeds (½ serve [4.5g] per day for children 2-3 years of age, 1 serve [7-10g] per day for children 3-12 years of age, 1 ½ serves [11-15g] per day for children 12-13 years, and 2 serves [14-20g] per day for adolescents 14-18 years of age and for pregnant and breastfeeding girls).

Source: Based on material provided by the National Health and Medical Research Council

For Professionals

For professionals working with:



Children



Adolescents/ teenagers



Young adults

Fruit and vegetables

A healthy diet needs fruit and vegetables. They provide vitamins and minerals to protect the body from chronic diseases, like heart disease, diabetes, some cancers and hypertension.

Many Australians aren't eating enough of either, especially vegetables. (Turn back to Topic 1 for statistics on Hume and Whittlesea.)

Fruit and vegetables are low in salt, fat and sugar and are an excellent source of dietary fibre and vitamins.⁴

What does a single serve of fruit or vegetables look like?³

Vegetables



One cup leafy vegetables – kale, spinach, lettuce leaves, cucumber



Half cup cooked green or cruciferous vegetables – cauliflower, cabbage, broccoli, bokchoy, okra



Half cup orange vegetables – cooked carrots, pumpkin, butternut squash



Half cup cooked lentils or beans – rinse canned varieties to remove excess salt



Half cup starchy vegetables (high in carbohydrates) – sweet potato, corn, medium potato



One medium tomato

Fruit



2 pieces small fruit – kiwi fruits, figs, apricots, plums, lychees



1 piece medium-sized fruit – banana, apple, orange, pear



1 cup cooked, diced or canned fruit in juice (not syrup)



1 cup berries – fresh or frozen

Source: Eat for health, 2015

³ Eat for health, 2015, www.eatforhealth.gov.au/food-essentials/how-much-do-we-need-each-day/serve-sizes

⁴ Better Health Channel 2017, www.betterhealth.vic.gov.au/health/healthyliving/fruit-and-vegetables

Number of recommended serves of fruit and vegetables for each age group*

		Vegetables & legumes/beans	Fruit
Toddlers			
	1-2 years	2-3 serves/day 	½ serve/day 
Boys			
	2-3 years	2½ serves/day 	1 serve/day 
	4-8 years	4½ serves/day 	1½ serves/day 
	9-11 years	5 serves/day 	2 serves/day 
	12-13 years	5½ serves/day 	2 serves/day 
	14-18 years	5½ serves/day 	2 serves/day 
Girls			
	2-3 years	2½ serves/day 	1 serve/day 
	4-8 years	4½ serves/day 	1½ serve/day 
	9-11 years	5 serves/day 	2 serves/day 
	12-13 years	5 serves/day 	2 serves/day 
	14-18 years	5 serves/day 	2 serves/day 

*Includes an allowance for unsaturated spreads or oils, nuts or seeds (½ serve [4.5g] per day for children 2-3 years of age, 1 serve [7-10g] per day for children 3-12 years of age, 1 ½ serves [11-15g] per day for children 12-13 years, and 2 serves [14-20g] per day for adolescents 14-18 years of age and for pregnant and breastfeeding girls).

Source: Based on material provided by the National Health and Medical Research Council

Tips for eating more fruit and vegetables:

- > Try a new vegetable each week – variety is good for digestive health as different fruit and vegetables mean a better range of gut bacteria.
- > Aim for three different coloured vegetables with each main meal.
- > Fruit salad kebabs make eating fruit more fun.
- > Create fruit smoothies with low fat yoghurt or milk. The protein in the milk and yogurt will make you feel full for longer.
- > Veggie soup is a great way to eat more vegetables – take it to school in a flask or freeze leftovers and reheat them later for a dinner.
- > Eat a mix of raw and cooked fruit and vegetables – cooking either increases or decreases vitamin and mineral absorption. It depends which fruit or vegetable!

Source: Better Health Channel, Food processing and nutrition, 2012



Complete Learning Activity 2

Objective: Learn how different fruits and vegetables grow

Level 1: 20–30 minutes



Complete Learning Activity 3

Objective: Learn the benefits of vitamins from different coloured fruits and vegetables

Level 2: 20 minutes



For Professionals

The following section is for professionals to educate and share with all age groups, but especially teenagers and young adults



Lean meat and protein alternatives

We can get protein from foods like lean meats (meat with the fat cut off), fish, chicken, tofu, eggs, legumes, nuts and seeds. These contain many important vitamins and minerals like healthy fats, iron, dietary fibre, and zinc which helps our immune system.

Nuts and seeds are a good way to get energy and nutrients without eating meat, fish or eggs, so they're an important part of vegetarian and vegan diets. Fish contains healthy fats essential for eye, brain and heart health.⁵

The role of protein in the body

Protein is made up of amino acids. These are the building blocks for all living tissue.

(Introduction to Protein Structure, 2012)

- > Amino acids speed up reactions in the body. They are a catalyst, which means they set off processes and reactions in molecules. So, without amino acids, all the tiny processes inside the body — even breathing and making energy — would happen too slowly to keep us alive.
- > Amino acids transport molecules like oxygen around the body.
- > Amino acids are an essential part of building a healthy immune system and muscles.

Interesting Fact

There are nine essential amino acids. 'Essential' means that the body can't produce them itself, so we have to get them in food. Non-essential amino acids are ones the body can produce, although some of those can be found in foods too.



⁵ Better Health Channel 2017, www.betterhealth.vic.gov.au/health/healthyliving/Getting-enough-protein

What does a single serve of protein look like?³



Half cup lean mince
(65g cooked, 90-100g uncooked)



One small handful
nuts or seeds (30g)



Palm-sized serve cooked
lean meats like chicken,
beef, pork or lamb



Tofu (170g)



Hand-sized serve fish or a
small can fish (no added
salt or brine)



Half cup low-fat cottage
cheese or ricotta



Two eggs



Half cup cooked lentils or
beans (if they're canned,
rinse them to get rid of
extra salt)

Proteins can be used in lots of ways. For example, you can eat nuts or seeds on their own, mix them through salads or use them as a garnish on curries or pilafs. Lentils and beans are tasty in salads, soups, pasta, or casseroles.



³ Eat for health, 2015, www.eatforhealth.gov.au/food-essentials/how-much-do-we-need-each-day/serve-sizes

Number of recommended serves of lean protein/ protein alternatives for each age group*

		Lean meat and poultry, fish, eggs, nuts and seeds, and legumes/beans	Approx. number of additional serves for more active, taller or older children and adolescents
Toddlers			
 1-2 years	1 serve/day		
Boys			
 2-3 years	1 serve/day		0-1 serve/day 
 4-8 years	1½ serves/day		0-2½ serves/day 
 9-11 years	2½ serves/day		0-3 serves/day 
 12-13 years	2½ serves/day		0-3 serves/day 
 14-18 years	2½ serves/day		0-5 serves/day 
Girls			
 2-3 years	1 serve/day		0-1 serve/day 
 4-8 years	1½ serves/day		0-1 serve/day 
 9-11 years	2½ serves/day		0-3 serves/day 
 12-13 years	2½ serves/day		0-2½ serves/day 
 14-18 years	2½ serves/day		0-2½ serves/day 

*Includes an allowance for unsaturated spreads or oils, nuts or seeds (½ serve [4.5g] per day for children 2-3 years of age, 1 serve [7-10g] per day for children 3-12 years of age, 1 ½ serves [11-15g] per day for children 12-13 years, and 2 serves [14-20g] per day for adolescents 14-18 years of age and for pregnant and breastfeeding girls).

Whole nuts and seeds are not recommended for children of this age because of the potential choking risk.

Source: Based on material provided by the National Health and Medical Research Council

For plant-based diets:

Legumes like –

- > lentils
- > tofu
- > beans.

These are a good source of protein, iron, healthy fats and dietary fibre.⁶

Tips for getting enough protein:

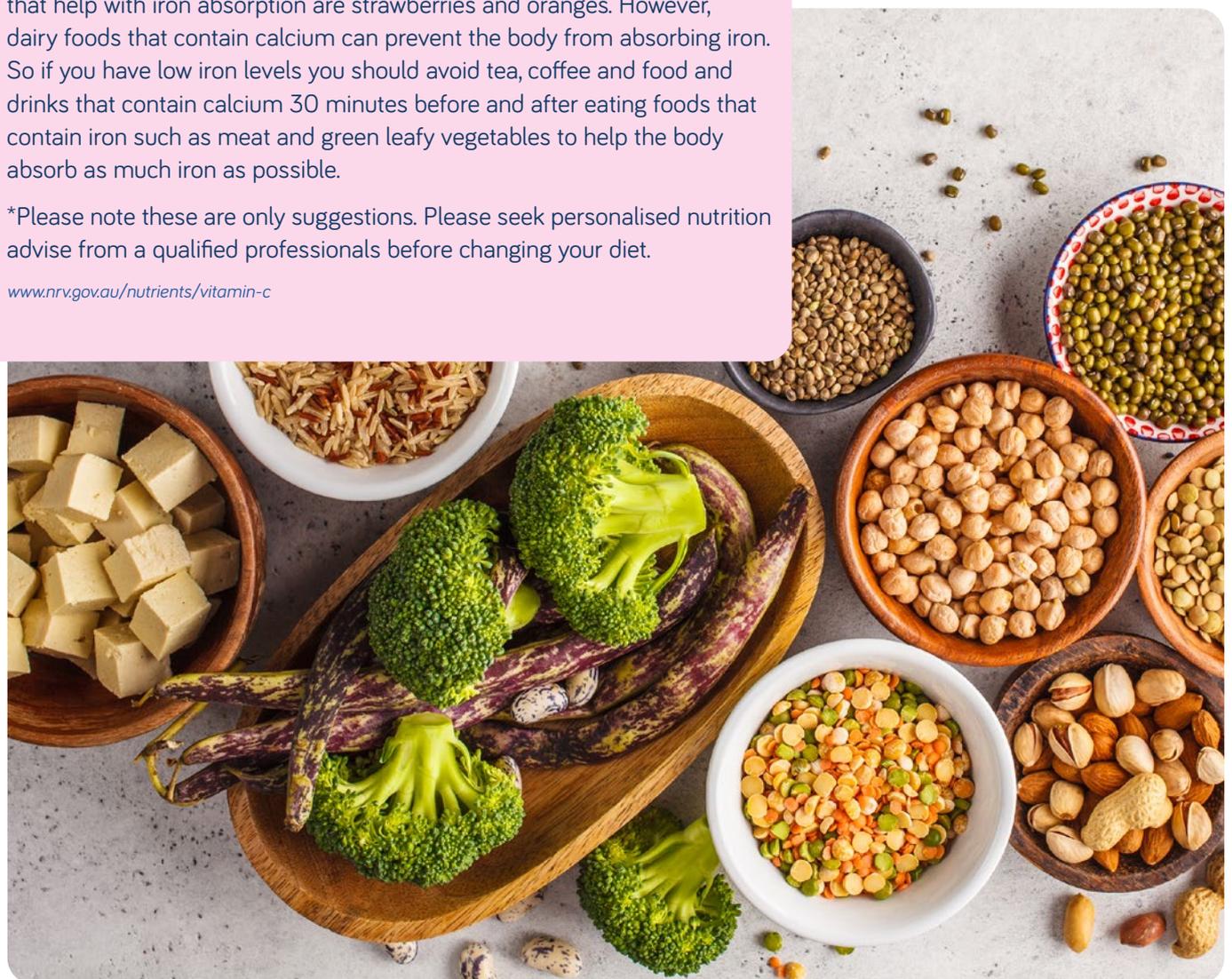
- > Cook in bulk, then freeze leftovers or have them for lunch – reheat casseroles, soups, pasta sauces, curries, meat, mince and stews.
- > To reduce saturated fat intake from red meat, enjoy one vegetarian meal a week.
- > Lentils and beans are a cost-effective choice. They're also low in saturated fat and high in fibre, so they keep you feeling full.

Interesting Fact

Eating foods that contain vitamin C, with foods that contain iron helps the body absorb more iron. Examples of foods with high levels of Vitamin C that help with iron absorption are strawberries and oranges. However, dairy foods that contain calcium can prevent the body from absorbing iron. So if you have low iron levels you should avoid tea, coffee and food and drinks that contain calcium 30 minutes before and after eating foods that contain iron such as meat and green leafy vegetables to help the body absorb as much iron as possible.

*Please note these are only suggestions. Please seek personalised nutrition advice from a qualified professional before changing your diet.

www.nrv.gov.au/nutrients/vitamin-c



⁶ Better Health Channel 2017, www.betterhealth.vic.gov.au/health/healthyliving/Getting-enough-protein

For Professionals

The following section is for professionals to educate and share with all age groups, but especially teenagers and young adults



Dairy foods and alternatives

The importance of dairy:

- > Dairy products – milk, cheeses, yoghurt – contain many nutrients, but mainly calcium.
- > Calcium plays an important role in the healthy functioning of blood and nerves, the heart and muscles.
- > Almost 99% of the body's calcium⁷ is found in the teeth and bones. Calcium is essential for building them as we grow and for keeping them healthy and strong.
- > Calcium⁷ makes bone by binding together with other minerals to form hard crystals. These give your bones strength and structure. Vitamin D helps with absorbing calcium.
- > Calcium doesn't always stay in your bones. If you lack calcium⁷, the body will draw calcium from the bones. Over a long time, this can weaken the bones leading to osteoporosis.⁷

Some high-calcium foods like cheese and yogurt, contain natural fat. But their protein slows down fat absorption, keeping you feeling fuller for longer.

Research shows dairy foods don't increase your risk of developing heart disease like other high-fat foods. This is because the saturated fat in them does not clog arteries like the saturated fat in processed or fried foods.

Source: Alexander et al., 2016

Did you know?

Bone density peaks in our early twenties, but 40% is developed during adolescence. This is why it's really important to teach young people – especially teenage girls – about the importance of high-calcium foods. Young people with a lack of calcium in their bones have a higher risk of osteoporosis. This is especially important for women because the body takes a lot of calcium from the bones and teeth during pregnancy and menopause.⁸



⁷ Better health Channel 2019, www.betterhealth.vic.gov.au/health/healthyliving/calcium

⁸ Osteoporosis Australia, www.osteoporosis.org.au/calcium

How much calcium do you need?

Boys & girls



1-3 years

500 mg/day



4-8 years

700 mg/day

Boys



9-11 years

1000 mg/day



12-13 years

1300 mg/day



14-18 years

1300 mg/day

Girls



9-11 years

1000 mg/day



12-13 years

1300 mg/day



14-18 years

1300 mg/day

Man



19 years and over

1000 mg/day

Woman



19 years and over

1000 mg/day

Pregnant/breastfeeding



14-18 years

1300 mg/day



19-30 years

1000 mg/day

Source: www.nrv.gov.au/nutrients/calcium

What does a single serve of dairy or dairy alternative look like?³



One cup milk
fat reduced
(250ml)



Half cup ricotta or
cottage cheese



Yoghurt (200g)



One cup soy, rice, or other
cereal drinks with at least
100mg of added calcium
per 100ml



Two small slices
hard cheese (40g)

Many foods like bread, milk and cereal are now fortified with calcium and are great options for vegetarians and vegans. But read the package to check for fortification!

The following foods contain about the same amount of calcium as a serve of milk, yogurt or cheese:

- > 100g almonds with skin
- > 60g sardines, canned in water
- > 1/2 cup (100g) canned pink salmon with bones
- > 100g firm tofu (check the label as calcium levels vary)

Check the image on the following page and encourage adolescents and teenagers to have the recommended number of servings of calcium per day. This will help them build enough calcium in their bones to reduce the risk of osteoporosis.



³ Eat for health, 2015, www.eatforhealth.gov.au/food-essentials/how-much-do-we-need-each-day/serve-sizes

Number of recommended serves of dairy for each age group*

	Milk, yoghurt, cheese and/or alternatives (mostly reduced fat)	Approx. number of additional serves for more active, taller or older children and adolescents
Toddlers**		
 1-2 years		
Boys		
 2-3 years		
 4-8 years	2 serves/day 	0-2½ serves/day 
 9-11 years	2½ serves/day 	0-3 serves/day 
 12-13 years	3½ serves/day 	0-3 serves/day 
 14-18 years	3½ serves/day 	0-5 serves/day 
Girls		
 2-3 years	1½ serves/day 	0-1 serve/day 
 4-8 years	1½ serves/day 	0-1 serve/day 
 9-11 years	3 serves/day 	0-3 serves/day 
 12-13 years	3½ serves/day 	0-2½ serves/day 
 14-18 years	3½ serves/day 	0-2½ serves/day 

*Includes an allowance for unsaturated spreads or oils, nuts or seeds (½ serve [4.5g] per day for children 2-3 years of age, 1 serve [7-10g] per day for children 3-12 years of age, 1 ½ serves [11-15g] per day for children 12-13 years, and 2 serves [14-20g] per day for adolescents 14-18 years of age and for pregnant and breastfeeding girls).

**An allowance for unsaturated spreads or oils or nut/seed paste of 1 serve (7-10g) per day is included. Whole nuts and seeds are not recommended for children of this age because of the potential choking risk.

Source: Based on material provided by the National Health and Medical Research Council

Did you know your body can't absorb calcium properly without vitamin D?

Vitamin D helps to build healthy bones and teeth. It assists the body to regulate how much calcium it needs, and to absorb calcium. It works with calcium to strengthen bones and guard against osteoporosis⁹. Try to include some vitamin D when eating anything with lots of calcium. The following are rich in vitamin D and calcium – a great way to get both at once:⁹

- > oily fish (salmon, tuna, herring and mackerel)
- > Australian fortified margarine
- > cheese
- > eggs (especially the yolk)
- > portobello mushrooms.

Interesting Fact

In winter we need to spend more time in the sun to absorb the vitamin D we need. People wearing cultural headdress, or who cover most of their skin for other reasons, need to spend even more time in the sun. If you can, remove coverings in the privacy of your home and sun yourself in the backyard.



⁹ Better Health Channel 2017, www.betterhealth.vic.gov.au/health/healthyliving/vitamin-d.

For Professionals

For professionals working with:



Adolescents, teenagers (secondary school, 13–18)



Young adults

Food safety tips

Discussing food safety, while making meals with young people, is a great way to help get them ready to shop, prepare and cook meals for themselves or their family.

Food safety tips: Reducing the risk of food-related illnesses

Source: Department of Health and Human Services, 2014

WASH HANDS before you prepare or eat food

Cover both your hands in soap, including fingernails, and scrub and wash them thoroughly on both sides. Cover cuts or open sores with bandages so no germs or blood goes onto food.

KEEP YOUR KITCHEN CLEAN AND SAFE while preparing food

Clean any cutting boards, utensils, and bench tops before and after food preparation.

Make sure foods are COOKED THROUGH

This is very important for red meat, chicken and seafood – high risk of illness if undercooked.

Salads are FRESH!

Salads that aren't refrigerated or washed or prepared with clean hands and utensils can be risky.

WASH FRUIT AND VEGETABLES before you prepare or eat them

This removes any risk of contamination, soil, or pesticides.

Refrigerate leftovers IMMEDIATELY after you cook them

This ensures food is still fresh next day.

Throw away MOULDY/ DISCOLOURED foods

They can make you sick!

The next page is a great tip sheet to print out and give to **young adults** learning to cook their own meals or help out in the kitchen.

How long can cooked or raw foods be stored for?

This is a general guide. Make sure you read the packaging and check food for signs of spoiling like discolouration, a strange smell, extra liquid or a sticky texture.

Food	Type	Refrigerate at 4°C or below	Freeze at -18°C or below
Salad	Egg, chicken, ham, tuna and macaroni salads	3 to 4 days	Does not freeze well
Hot dogs	Opened package	1 week	1 to 2 months
	Unopened package	2 weeks	1 to 2 months
Sandwich meat	Opened package or deli-sliced	3 to 5 days	1 to 2 months
	Unopened package	2 weeks	1 to 2 months
Bacon and sausage	Bacon	1 week	1 month
	Sausage (raw) – chicken, turkey, pork or beef	1 to 2 days	1 to 2 months
	Sausage (fully cooked) – chicken, turkey, pork or beef	1 week	1 to 2 months
Hamburger and other ground meats	Hamburger, ground beef, turkey, veal, pork, lamb and mixtures of them	1 to 2 days	3 to 4 months
Fresh beef, veal, lamb and pork	Steaks	3 to 5 days	4 to 12 months
	Chops	3 to 5 days	4 to 12 months
	Roasts	3 to 5 days	4 to 12 months
Ham	Fresh, uncured, uncooked	3 to 5 days	6 months
	Fresh, uncured, cooked	3 to 4 days	3 to 4 months
	Cured, cook-before-eating or uncooked	5 to 7 days or 'Use by' date	3 to 4 months
	Fully-cooked, vacuum-sealed at plant, unopened	'Use by' date	1 to 2 months
	Cooked, store-wrapped, whole	1 week	1 to 2 months
	Cooked, store-wrapped, slices, half or spiral cut	3 to 4 days	1 to 2 months
	Prosciutto, parma or serrano ham, dry Italian or Spanish type, cut	2 to 3 months	1 month

Topic 2 | Healthy Eating

Food	Type	Refrigerate at 4°C or below	Freeze at -18°C or below
Fresh Poultry	Chicken or turkey, whole	1 to 2 days	1 year
	Chicken or turkey, pieces	1 to 2 days	9 months
Eggs	Raw eggs in shell	3 to 5 weeks	Do not freeze. Beat yolks and whites together, then freeze
	Hard-cooked eggs	1 week	Do not freeze
	Casseroles with eggs	3 to 4 days	After baking, 2 to 3 months
	Pies: Sweet Note: Do not freeze custard pie	3 to 4 days	After baking, 1 to 2 months
	Pie: Savoury	3 to 5 days	After baking, 2 to 3 months
Soups & Stews	Vegetable or meat added	3 to 4 days	2 to 3 months
Leftovers	Cooked meat or poultry	3 to 4 days	2 to 6 months
	Chicken nuggets or patties	3 to 4 days	1 to 3 months
	Pizza	3 to 4 days	1 to 2 months



Source: United States Government, 2019

Part 2:

What does healthy eating look like in different cultures?

For Professionals

For professionals working with:



Children



Adolescents/
teenagers



Young adults

We live in a highly diverse community so when we discuss healthy eating we must acknowledge the range of different everyday cultural food practices.

For some families, the idea of school lunches is strange. For some new migrant families, finding traditional, healthy foods may not be easy, hence information about healthy and accessible food options available in Australia is crucial.

As children get older, they should be involved in preparing meals. Armed with basic skills, they'll be better prepared for independent living. To make that transition easier, we should teach them about healthy core ingredients and cooking methods. These might include simple modifications to techniques they are already familiar with.

Ingredient swaps to make something healthier:

- > When you're stir-frying ingredients for a curry, try olive oil instead of ghee.
- > Instead of cream, try reduced fat yoghurt or reduced fat cream.
- > Use reduced salt stock.
- > Avoid using butter – try spreads made from olive, sunflower or canola oil.
- > Make home-made salad dressings from balsamic vinegar or lemon juice.
- > Remove visible fat from meat.
- > Instead of adding extra salt to meals, try herbs and spices for flavour.
- > When baking, use wholegrain or wholemeal flour for extra fibre.
- > Try brown rice or other grains, such as black or wild rice.
- > Add one extra vegetable into each main meal.

Source: National Heart Foundation



Try the following with your group of young people:

- > Encourage them to enter the kitchen with their families and learn how to prepare their culture's dishes.
- > Point out foods that are culturally relevant from the five food groups listed in the Australian Dietary Guidelines.
- > Emphasise that all foods can be eaten in moderation.
- > Ask the young people you work with to draw their own guide to healthy eating using the foods their family normally cook with at home.



Interesting Fact

Healthier oils should have:

- > no more than 20g per 100ml of saturated fat
- > no more than 1g per 100ml of trans fat.

The information panel will reveal this.

Source: Heart Foundation

For Professionals

For professionals working with:



Toddlers



Children

Healthy eating with children

The early years are a time to build healthy eating habits. There are endless ads for junk food on TV, streets, public transport, and in the shops (Parents' Voice, 2015). Supermarkets put chips, chocolates, sugary cereals and cookies at the front to get a child's attention as soon as they walk in. Families are forced to decide, "Do I give this to my child? Or do I just say no?"

Sometimes it's easier to just say yes. Some families might make it an occasional treat, for others it's an everyday event. Every family has their own reasons, but advice and information can be a great help.

Remember, this is the right age to encourage a child toward preferring healthy food.

Food as a reward

According to the Department of Health (2018), using food as a reward or to comfort a child doesn't work in the long term. Children quickly learn they get a treat every time they have a bad day or cry. Instead, try creative and healthy rewards like a walk to the park, a swim, painting, hug or play time with a friend.

Using food as a reward gives a child too much energy and stops them from learning that 'sometimes foods' should only be eaten occasionally or as part of a celebration (Department of Health, 2018).

The earlier children understand about moderation, the better their dietary patterns in later life.

Importance of positive role modelling

Families, teachers and other adults play a very important role in modelling healthy behaviours and food choices for young people (Collins et al., 2016). The earlier and more often they see you eating healthily, sharing a technology-free dinner with the family, or discussing nutritious lunch choices, the more likely they'll develop healthy eating habits.

Eating together as a family bonds you and improves communication. Plus, children can learn new words and practise talking and expressing their opinions.

Young people follow the behaviour of older people, so this is an opportunity to embed lifelong healthy behaviours.

For Professionals

For professionals working with:

 Toddlers

 Children

Dealing with fussy eaters

Meal times are a great opportunity for parents and children to establish a positive relationship with food (Better Health Channel, 2017). Some parents cook more than one meal in the hope their fussy eater will at least eat something. But sometimes nothing works! Plus, cooking a special meal is exhausting and hard to keep up, and there's less opportunity for the child to build a healthy diet. By making just one meal for the whole family, the child learns to try new food and allows the parents to model healthy eating and family time at the table. A child who knows only one meal will be served, should eventually accept this routine.

Some parents may need to offer their child a new food up to 10 times, before they will eat it (Better Health Channel, 2017).

How to get a child to eat the same meal as the rest of the family:

- > Explain it's important to try the food before saying, "I don't like it" or "No."
- > Tell them you're only cooking one meal for the family. Take time to sit down and tell them why.
- > Avoid presenting more than one new food at a time.
- > Encourage them to try a bit of everything on their plate, instead of telling them to finish the lot. This encourages them to stop eating when they're full – a good way to prevent overeating.
- > Try to involve children in shopping for groceries, making dinner and discussing food at the dinner table.
- > Children will try more new foods if the whole family is eating together.
- > Cook family meals a child won't eat a few more times, so they can try it again and it becomes normal.

Source: Community Advice and Raising Children Network (2006-2017)



For Professionals

For professionals working with:



Adolescents/
teenagers



Young adults

Breakfast – the meal of champions

No matter what your age, it's important to start the day with breakfast. It helps with concentration, mood, weight management, energy and maintaining an overall balanced diet (Nutrition Australia, 2018).

Skipping breakfast can contribute to weight problems (Better Health Channel 2017b).

Some morning tips for making breakfast a daily thing

- > Get kids out of bed with enough time to have breakfast before school.
- > If children leave home at 8.30am for school, wake them at 7.30am, or earlier.
- > Dress children before breakfast – it keeps them in routine and teaches organisational skills.
- > Limit screen time in the morning.
- > Once they're old enough, teach children to prepare their own breakfast (for example, pouring their own milk onto cereal), so they can start learning to be independent.
- > For younger children, make sure breakfast is ready when they sit down.

- > Teach children to stay at the table with their food – not walk off.
- > Make sure the child does not rush their food so they can enjoy, and finish, it.
- > Always save the last 10–15 minutes for brushing teeth and putting their lunchbox in their bag.
- > Brush teeth in circular motions twice a day – after breakfast and before bed.
- > Make sure the child always brushes their teeth, even if they've only had milk, because sugars can stick to the teeth.
- > Prepare lunchboxes the night before to keep enough time for breakfast and a smooth departure for school.
- > Prepare a check list for children tick to tick off. For example, 'Make bed, get dressed, have breakfast, clean teeth, pack bag, pack hat and so on.

Source: Better Health Channel 2017b; Nutrition Australia 2018

To meet the Australian Healthy Eating Guidelines, use breakfast as a great way to start ticking off each of the five food groups. Below are just a few healthy breakfast options. There are plenty more. Remember to avoid products high in sugar, salt and saturated fat.

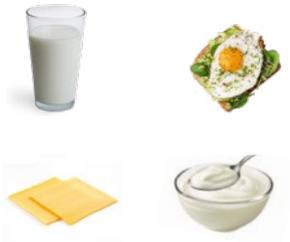
(Refer back to handout on food labels on [Page 25](#)).

Print out the breakfast ideas below to give young people ideas for breakfast and snacks.

The best way to eat healthily is to choose foods from all five food groups. Share the ideas below with your **children and teenager** groups.

Eating something from each food group gives you a balanced breakfast and keeps you full and focused.

Protein and dairy



- > milk – cow’s milk or non-dairy alternatives like soy, rice, almond milk (choose low-fat options for adults)
- > low-fat cheese – normal, ricotta or cottage cheese
- > low-fat plain yogurt – add fresh fruit for flavour
- > eggs – scramble them for quick preparation in the morning
- > homemade breakfast muffin – add egg, spinach, tomato, bacon and cheese.

Wholegrains



- > wholegrain toast or English muffin
- > cereals that don’t have too much sugar or salt, like Weetbix or Wheat Biscuits and All-Bran Wheat Flakes
- > flatbread
- > porridge (cooked oats)
- > milk rice with no added sugar.

Fruit and vegetables



- > fruit salad
- > add fresh fruit to plain yogurt for flavour
- > tomato and cheese on wholegrain or brown toast
- > yogurt smoothie with hidden greens – you can’t taste spinach
- > vegetable and ham omelette.

We are sweet enough!



- > keep a jug of fresh water in the fridge
- > provide water with meals
- > take a water bottle to work or school every day - it’s a good idea to leave one at work or school, if you often forget to pack one
- > keep water bottles for water only
- > don’t have sugary drinks too often - this includes fruit juice and fruit drinks, flavoured milk, soft drinks, flavoured mineral water, cordials, sports drinks and energy drinks.

**Save old-time favourites, like homemade pancakes, fruit juice, french toast, sugary cereal, Nutella, or granola for a special occasions.*

How much sugar is in your favourite drink?

Drink	Average quantity of sugar
 Water No sugar and essential for health & hydration	0
 Milk (low fat) 250ml (1 cup) Natural sugar	14g 3 teaspoons 
 100% fruit juice 250ml (1 cup) Natural sugar – but drinking too much can cause tooth decay	24g 6 teaspoons 
 Flavoured milk (small) 300ml Natural AND added sugar	28g+ 7 teaspoons 

The following types of drinks are very high in added sugar. Drinking too much can lead to increased weight gain and tooth decay. 6 tsp is the recommended intake of sugar per day for an adult but average intake is 30 tsp per day (Source: Smiles 4 Miles training presentation February, 20202)

 Fruit juice drink 250ml	27g+ 6.5 teaspoons 
 Energy drink 600ml	36g+ 8.5 teaspoons 
 Soft drink (can) 375ml	38g+ 9 teaspoons 
 Soft drink (buddy) 600ml	64g+ 15 teaspoons 
 Soft drink 1.25 litre bottle – 1250ml	140g+ 33 teaspoons 

Source: Australian G



Complete Learning Activity 4

Objective: Learn how much sugar is in popular drinks.

Levels 1 and 2: 20 minutes



Complete Learning Activity 5

Objective: Activities that complement school curriculums, working fruit and vegetables into session plans.

Level 2: Time varies.

Part 3: Learning Activities

Learning Activity 1

Level 2: 15 minutes



Reading food labels

For this activity, show the young people you're working with, the [Reading food labels](#) handout earlier in this section. Then give them this scenario and the labels below, asking them the questions below. The answers are included, for your own reference.

Scenario

Imagine you're at the supermarket, looking at the labels on the back of two wholegrain wrap products. Your job is to pick the healthiest wrap for your lunch.

(Refer back to handout on food labels on [Page 25](#)).

1. Which column tells you which food is more nutritious than the other?
2. Are these sugar and salt ranges healthy?
3. Which product would be better to buy, and why?

Nutrition Information PRODUCT 1		
Servings per package - 8		
Serving size - 70g (1 wrap)		
	Average Quantity Per serve	Average Quantity Per 100g
Energy	870kj	1240kj
Protein	6.4g	9.1g
Fat, Total	4.3g	6.2g
Saturated	2.2g	3.1g
Carbohydrate	33.3g	47.5g
Sugars	1.1g	1.5g
Fibre	4.3g	6.1g
Sodium	315mg	450mg
Ingredients: Contains wheat, triticale, rye and soy as indicated in bold type Water, wholemeal wheat flour (35%), mixed grains (3%), vegetable emulsifiers (471), iodised salt, wheat gluten, vitamins (folic acid), linseed May be present: Milk and sesame seeds Baked in Australia		

Nutrition Information PRODUCT 2		
Servings per package - 8		
Serving size - 70g (1 wrap)		
	Average Quantity Per serve	Average Quantity Per 100g
Energy	888kj	1250kj
Protein	6.0g	9.6g
Fat, Total	6.8g	9.6g
Saturated	3.3g	4.6g
Carbohydrate	29.7g	41.8g
Sugars	2.0g	2.8g
Fibre		
Sodium	639mg	900mg
Ingredients: Contains gluten and soy Wheat flour (30%), folic acid, water, sugar, iodised salt, food acid (297), yeast, mixed grain (15%) [wholemeal flour, wheat flour, rice flour, linseed soy flour] Baked in Australia		

Answers (Don't show these to the young people you're working with.)

- 1. They should look at the second column** 'Average quantity per 100g'. It gives an accurate comparison between the two wraps, even though they're different sizes.
- 2. For sugar: Yes, to both products.** Both of them are under the recommended range of 15g of sugar per 100g.
For sodium: No to both products. Neither is in the healthy range for sodium, because they have more than 400mg of sodium per 100g.
- 3. Product 1 is better.** It has more protein and less saturated fat, sugar, and sodium. It also has more fibre. Product 2 reports no fibre at all, however option 1 is slightly better as it is lower than option 2.

Learning Activity 2

Level 1: 20-30 minutes



Where do fruit and vegetables come from?

Objective

To teach kindergarten and early primary school children that fruits and vegetables come from plants that have to be grown – they don't just come from the supermarket!

Ask them if they've ever seen or tried any of these fruits or vegetables. You can encourage them to try new foods with their families.

- > Print and hand out the images of fruits and vegetables below. Ask the children to cut them out, then sit in groups.
- > Print out the larger images of a tree, a vine, a bush and ground/crop. Give each group a set.
- > Get the groups to discuss how each fruit and vegetable grows.

This is not a handout: this is a cheat sheet for you. There's a larger chart further down to print out for children.

 Banana: tree	 Apple: tree	 Kiwi fruit: vine	 Grapes: vine	 Strawberry: bush
 Capsicum: bush	 Cucumber: vine	 Tomato: vine	 Potato: grows under the ground	 Carrot: grows under the ground
 Jack fruit: tree	 Okra: grows under the ground	 Eggplant: Bush	 Fig: tree	 Cabbage: grows under the ground

Print out large images of a tree, a vine, a bush, and ground/crops. Give a set of images to each group.

Tree



Ground



Vine



Bush





Banana:



Apple:



Kiwi fruit:



Grapes:



Strawberry:



Capsicum:



Cucumber:



Tomato:



Potato:



Carrot:



Jack fruit:



Okra:



Eggplant:



Fig:



Cabbage:

Learning Activity 3

Level 2:



Instructions and answers for activity leaders

Print out the table ([page 61](#)). Hand out page below for students to cut out the squares and group the fruits and vegetables based on their colour and then match with the health benefit associated with each colour (optional step 2).

Red

Red fruits and vegetables are coloured by a natural plant pigment called lycopene. This powerful antioxidant lowers the risk of cancer and keeps our heart healthy.

Purple/Blue

Anthocyanin is the plant pigment that gives purple/blue fruits and vegetables their distinctive colour. Anthocyanin is an antioxidant, which protect cells from damage and helps to reduce the risk of cancer, stroke and heart disease.

Orange/Yellow

These vegetables get their vibrant colour from carotenoids. Sweet potatoes, pumpkins and carrots have a well-known carotenoid called beta-carotene. Our bodies change this into vitamin A, which helps keep our eyes and mucous membranes healthy. Another carotenoid called lutein is stored in the eye, and helps prevent cataracts and macular degeneration, which can blind us as we age.

Green

Green vegetables have carotenoids, indoles, and saponins. All of these help our bodies to fight cancers. Leafy greens like spinach and broccoli are also great sources of folate.

Brown/White

White fruits and vegetables have a lot of healthy substances, like allicin (in garlic), which fight viruses and bacteria. Some members of this brown/white group are also good sources of potassium, like bananas and potatoes.

Fruit and vegetable colour chart. This is a cheat sheet for you, not the print-out.

Red	Purple/Blue	Orange/Yellow	Green	Brown/White
Tomato	Beetroot	Carrots	Spinach	Cauliflower
Red capsicum	Red cabbage	Rockmelon	Asparagus	Brown pears
Radishes	Eggplant	Lemons	Avocados	Mushrooms
Strawberries	Asparagus	Sweet potato	Broccoli	White peaches
Rhubarb	Blackberries	Pumpkin	Peas	Garlic
Cherries	Blueberries	Pineapples	Green apples	Bananas
Red grapes	Purple grapes	Mangoes	Green grapes	Potatoes
Raspberries	Plums	Corn	Limes	Dates
Watermelon		Oranges	Kiwifruit	Onions
Red apples		Squash	Green beans	Ginger
		Peaches	Lettuce	Parsnips
		Nectarines	Cabbage	Turnips
		Apricots	Celery	
		Grapefruit	Cucumber	
			Green capsicum	

Cut and match activity



 <p>These fruits and vegetables contain lycopene, which is a powerful antioxidant that lowers the risk of cancer and helps keep our heart healthy.</p>	 <p>These vegetables have carotenoids and lutein, which help keep our eyes and mucous membranes healthy.</p>	 <p>These vegetables have carotenoids, indoles, and saponins. All of these help our bodies fight cancers. Some of them are also great sources of folate.</p>	 <p>These fruits and vegetables have a lot of healthy substances, like allicin, which fight viruses and bacteria. Some of these fruits and vegetables are also good sources of potassium.</p>	 <p>These fruits and vegetables have an antioxidant called anthocyanin. It protects cells from damage and helps reduce the risk of cancer, stroke and heart disease.</p>
Red	Purple	Orange	Brown	Green
	Blue	Yellow	White	
Tomato	Beetroot	Carrot	Spinach	Cauliflower
Red capsicum	Red cabbage	Rockmelon	Asparagus	Brown pear
Radish	Eggplant	Lemon	Avocado	Mushroom
Strawberry		Sweet potato	Broccoli	White peach
Rhubarb	Asparagus	Pumpkin	Peas	Garlic
Cherry	Blackberry	Pineapple	Green apple	Banana
Red grape	Blueberry	Mango	Green grape	Potato
Raspberry	Purple grape	Corn	Lime	Date
Watermelon	Plum	Oranges	Kiwifruit	Onion
Red apple	Grapefruit	Squash	Green bean	Ginger
Apricot	Nectarine	Peach	Lettuce	Parsnip
Cabbage	Celery	Cucumber	Cabbage	Turnip



Learning Activity 4

Level 1 and 2: 20 minutes



Discussion: (if you don't have much time)

Sort young people into pairs or small groups and ask which sugar-sweetened beverage they drink most often. Ask them to guess how much sugar is in each drink and then tell them. Answers can be found on the info sheet on [page 52](#).

Hands-on activity:

Give cut-out pictures of the different drinks to small groups. Ask them to rate the drinks from least sugar to most, then reveal the answers. Answers can be found on the info sheet on [page 52](#).

Optional extra:

If you have time, discuss the sugar handout on [page 52](#). Give the young people a bag of sugar, a teaspoon, and a plate. Ask them to physically count the teaspoons of sugar onto the plate, in front of the class.



Learning Activity 5

Level 2: Time varies



Objective

Visit phenomenom.com.au for lots of fun activities. Activities are based around the school curriculum and incorporate fruit and vegetables into maths exercises, English, science classes and more. They're free and for children of all ages.

Topic 3

Active Living

For Professionals

Introduction

The following section is for professionals working with:



Children



Adolescents/
teenagers

The first part of this topic promotes active living, based on the Australian Physical Activity Recommendations. It discusses:

- > different activities
- > how too much screen time affects health and wellbeing – mental health and active living
- > how a sense of place can affect how much activity we do.

The second part covers cheap, easy ways to stay active with the family, friends, or alone.

Learning activities:

1. Increasing activity levels by peer encouragement.
2. Mindfulness.
3. Ideas to increase movement in sedentary classrooms. (Transform-Us!).
4. Sharing ideas on ways to be active.
5. Ideas to help people be active online.

Learning outcomes:

- > Better understanding of different kinds of physical activity.
- > Familiarity with the current Australian Physical Activity recommendations, and understanding how these fit in with the statistics we saw in Topic 1 about sedentary behaviour.
- > Better knowledge of how the way we use technology in modern life puts us at risk of chronic diseases.
- > Awareness of how 'a sense of place' can help you be physically and socially active in the community.
- > Knowing some easy and affordable ways to be physically active.

Part 1: Types of physical activity

Everyone benefits from some form of activity, whatever their age and ability. Check with your doctor if you haven't been active for a while.

In bold are five different activity types,¹⁰ along with a list of activities suggested by the American Go4Life campaign, 2018.

1. Aerobics:

This low to high intensity activity raises the heart rate, gets the lungs breathing harder and builds a healthy circulatory system.

Examples are walking, running, jogging, cycling, swimming, skipping, gardening.

2. Incidental:

These ordinary, everyday movements are the easiest kind of activity.

These include looking after children, housework, taking the stairs instead of the lift, walking around the shops, walking to the bus stop, walking to get the mail.

3. Muscle strengthening:

Any activity that focuses on increasing bone strength and building

the major muscle groups (back, chest, glutes, shoulders, arms, legs).

Examples are squats, weightlifting, push-ups, sit-ups, lunges, Pilates and resistance bands.

4. Flexibility:

Any activity where the body uses a range of movement to lengthen muscles and help overall muscular balance.

Examples are yoga, Pilates and stretching.

5. Balance:

Any activity that focuses on making body movement stable and smooth, helping posture, agility and strength.

These include yoga, Pilates, tai chi and dancing.



¹⁰ Booth et al, 2012

How technology and screen time are shaping our bodies

Young people average several hours a day on screens, both at school and recreationally (Department of Health, 2017). Research shows the negative impacts of prolonged screen time and technology use on children's weight (Richards, Caldwell and Go, 2015). According to the Australian Institute of Family Studies:

- > 12–13 year olds spend up to 30% of their waking day on screens
- > alarmingly, 64% of pre-schoolers to early teens exceed the recommended two hours a day.

Australian Bureau of Statistics' figures from 2013 reveal nine in 10 Australian young people don't move enough.

Technology at a young age can reinforce sedentary behaviours, such as sitting, lying on the couch or in bed.

Late night computer or iPad sessions impact a child's:

- > mood
- > attention span
- > school grades
- > social and mental health.

Source: Raising Children Network Australia, 2006-2018

Connecting diet, physical activity and mental health

Healthy eating is closely linked to keeping active. Hume and Whittlesea residents report higher than average sedentary behaviour and lower than state average daily vegetable consumption (Victorian Population Health Survey, 2014).

So, consider these factors when talking about healthy eating and physical activity.

Less screen time and more moving sees you feeling better and more connected with your community and family (National Heart Foundation of Australia, 2018).

A sense of place and active living

'Sense of place' refers to the special connections and relationship we have with our environment and the characteristics that increase safety, comfort and cleanliness (Healthy Active by Design, 2018).

Being active and connecting with the natural environment can benefit young people you work with socially, physically, emotionally and psychologically (Healthy Active by Design, 2018).

Moving stimulates the whole body to explore, touch and attach meaning to, an environment (Healthy Active by Design, 2018). We constantly create new relationships and personal experiences with our changing world.

Explore what a 'sense of place' means to young people as it can reveal positive and negative attitudes towards being active (Healthy Active by Design, 2018).

Raising awareness of how place affects the way people fit in exercise, helps us be more creative in developing a connected, healthy and happy community with appropriate designs that motivate people to be outdoors and feel safe.



Complete Learning Activity 1

Objective: To increase activity levels by peer encouragement

Levels 1: 10 minutes



Complete Learning Activity 2

Objective: Mindfulness

Levels 1 and 2: 10 minutes.

For Professionals

For professionals engaging with:



Toddlers



Children

Being active with your family – how to encourage activity:

- > be active as a family – parents can be a positive role model here
- > play with your child – this builds strong bonds
- > dance to your favourite songs in the living room or kitchen
- > participate in after-school activities
- > try going for a walk as soon as you get home, don't just 'crash' – you'll have more energy to do homework or make a healthy dinner
- > take equipment to the park – a skipping rope or a ball for playing catch
- > take walks with family members or friends
- > for a week, see if you sleep better by taking a walk or reading a book instead of screen time before bed
- > encourage sports for all children
- > buy 'toys' like balls, skipping ropes, chalk and kites.

Source: Based on ideas from the National Heart Foundation of Australia and community experiences



Complete Learning Activity 3

Objective: To offer ideas for increasing movement in classrooms (Transform-Us!)

Levels 1 and 2: Varied time dependant on chosen brain break

Note: Program is designed for primary schools but resources can be applied to older students needing a brain break.

Transform Us! is designed for primary school aged children.

Transform Us! brain breaks are proven to increase student's concentration by 88%.



Part 2: Getting Active Online

For Professionals

For professionals working with:



Children



Adolescents/
teenagers



Young adults

Share ideas

With modern technology you can exercise at home or in the classroom.

Across Hume and Whittlesea, time constraints and a lack of sense of safety, stop people exercising (VicHealth Indicators survey, LGA Profile, 2015).

Share these online opportunities with children, teenagers and young adults. They are free, fun and doable anywhere.

Free online workouts

- > **Fitness Blender**
An American company, with over 500 free workouts and exercises that suit different fitness levels. The personal trainers go through the workouts with you, so you feel like you're exercising with someone else.
fitnessblender.com/videos
- > **Queensland Health**
Personalise your own home workout based on your desired health benefits.
healthier.qld.gov.au/fitness/exercises/
- > **BodBot**
Create a free account and try Bod Bot to build a workout that suits your lifestyle.
bodbot.com/Workout_Generator
- > **Heart Foundation**
Check out your local area to see if there is a walking group you can join.
walking.heartfoundation.org.au

Smart phone or tablet apps to get you active:

- > **C25K**
For those who enjoy running or want to build up their fitness to run.
c25kfree.com
- > **Nike Training Club**
A variety of planned workout sessions are available, designed especially for women.
nike.com/au/en_gb/c/training/nike-training-club
- > **MapMyWalk**
For those who enjoy walking.
mapmywalk.com/app/
- > **7 Minute Workout**
For those who are short of time – try fitting a few of these session into your day. 7minuteworkout.jnj.com
- > **Sworakit**
For those who want variety – choices from yoga to cardio and from stretching to strength training.
sworakit.com
- > **Daily yoga**
For those who want to feel de-stressed and focused, the app also offers meditation sessions.
dailyyoga.com/#/

Or check out the VicHealth guide for Healthy Living Apps for more ideas:

- > vichealth.vic.gov.au/media-and-resources/vichealth-apps/healthy-living-apps?page=11



Complete Learning Activity 4

Objective: For students to share ideas on ways to be active to encourage other students to try new activities.

Level 1: 10 minutes



Complete Learning Activity 5

Objective: Encourage young people to explore ways to be active using online resources.

Level 2: 10 – 15 minutes

Part 3: Learning Activities

Learning Activity 1

Level 1: 10 minutes



Peer Motivation

Each week, ask your young people to share any new experience or activity they've tried over the last week. Their drive to share every week will encourage them to try new activities.

Learning Activity 2

Levels 1 and 2: 10 minutes



Mindfulness/ grounding exercise

Move the class outside towards the end of the session.

Ask your group to observe their environment for five minutes and make a note of what they:

- > can see – have they noticed anything they've walked straight past before?
- > smell
- > feel – safe, anxious, alert etc.

Try to get the group to share thoughts and feelings. Use these to build a safer, more secure environment.



Learning Activity 3

Levels 1 and 2: Time dependant on chosen brain break activity



Deakin University's transformus.com.au is a great, evidence-based, curriculum aligned program to increase activity and boost mental performance. Get FREE ideas for brain breaks and other ways to get young people moving in traditionally sedentary learning environments.

Learning Activity 4

Levels 1: 10 minutes



Group work

Break the class in to small groups and ask them to share activities they like. Write them on the board.

Learning Activity 5

Levels 2: 10-15 minutes



Check out YouTube for fitness ideas. Each week ask a group of students to create and deliver a two minute warm up before class.

For example, the 'Simon says' game uses exercises from websites and apps the class just discussed.



Topic 4

Maintaining a Healthy Lifestyle

For Professionals

Introduction

The following section is for professionals working with:



Adolescents/
teenagers



Young adults

This section combines learnings from previous topics, with a useful summary of tips and practical suggestions to keep a healthy lifestyle. A useful resource will help learners set SMART goals to improve their health and wellbeing. Read on to bust common dieting myths and misconceptions.

The learning objectives are:

- > to increase awareness of health messaging, myths and misconceptions in the media
- > to encourage participants to set health related SMART goals.

Learning activities:

1. to discuss the five food groups and how to incorporate more items from them
2. to set SMART goals to improve long term health outcomes
3. to discuss diet myths.

Learning outcomes:

- > a better understanding of a balanced lifestyle
- > increased knowledge of health myths and misconceptions
- > increased confidence in putting knowledge into practice and setting SMART goals.

Part 1: Moving more and eating well

Exercise complements your healthy eating (Brown et al, 2007). An individual's physical health is 80% what they eat and drink and 20% about moving.

Foods high in fat, sugar and salt are designed to taste great with just the right amount of additives to keep you wanting more, even if you feel full. Their high glycaemic index gives you an energy spike followed by a sudden drop.

These foods negatively impact mental health, energy, mood and focus. Lower energy levels can also make people feel like not exercising.

What is the Glycaemic Index (GI)?

The glycaemic index (GI) ranks carbohydrates (bread, rice, breakfast cereals etc) based on how quickly the body releases insulin after eating or drinking them. Insulin is a hormone that helps muscles and blood absorb and use sugar.

The lower a food or drink's GI, the slower the release of insulin and rise in blood glucose. This is good because when sugar is slowly absorbed by the body, it gives you energy for longer (Diabetes Australia, Glycaemic Index, 2015).



Complete Learning Activity 1

Objective: Young people have a greater understanding of how the foods they choose impact energy levels

Levels 1: 10 minutes

Part 2: Goal-setting

Goal setting is a good habit for all areas of your life, including homework, exercise and eating.

Here's some activities to help your groups set SMART goals for better long-term health and wellbeing.

As said previously, it's important young people don't choose weight loss goals over goals to eat more fruit and vegetables and drink more water. Nutrition based goals will set them up for a long, healthy life.



Complete Learning Activity 2

Objective: To set SMART goals to improve long term health outcomes

Levels 1: 30 minutes



Part 3:

Diet myths and misconceptions

For Professionals

For professionals working with:



Adolescents/
teenagers



Young adults

The following section talks about different dieting techniques. Be mindful of your cohort and only use information that will educate and inform, not create concern and anxiety about food groups like carbohydrates or fat.

Young people take notice of what adults say. You can teach them about food packaging and debunk unsubstantiated media. For example:

- > 'organic' or 'natural' on a food package does not make it nutritious
- > 'naturally sweetened' does not mean it's low in sugar
- > 'gluten free' does not automatically make a product healthy – they often replace the wheat with multiple other ingredients that are highly processed.

If you hear young people talking about diets to lose weight, use this information to debunk myths and encourage a balanced diet.

Every inch of the market is saturated and reinforces, especially for girls, what they should eat to fit into today's very narrow idea of attractive. A lot of media content isn't based on scientific evidence. This can be dangerous, especially for our young and easily influenced, who are supporting growing bodies and minds. Make it clear to them that dieting to lose weight can have bad long-term physical and mental health outcomes.

These evidence-based Instagram pages will help you counter the nutritional misinformation your adolescents / teenagers obtain, especially from social media influencers.

- > [@zoe.dietitian.love.whatyoueat](#)
General nutrition
- > [@iperformance_nutrition](#)
General nutrition
- > [@the_sportsdietitian](#)
General nutrition
- > [@jonosteedman](#)
General nutrition
- > [@thesavvydietitian](#)
General nutrition
- > [@themindfuldietitian](#)
Body positivity
- > [@aidan_the_dietitian](#)
General nutrition
- > [@marikaday](#)
Coeliac
- > [@glennmackintosh](#)
Body positivity
- > [@theplantpotential](#)
Vegan
- > [@the_fitness_dietitian](#)
General nutrition

Interesting Fact

Weight cycling, through dieting, increases your risk of future weight gain. Dieting is also the strongest predictor for developing future eating disorders.

Source: Lowe et al., 2013



Complete Learning Activity 3

Objective: To discuss diet myths

Level 2: 15 minutes

High protein, low carb diet (ketogenic diet)

- > can lose weight very fast but risk high cholesterol
- > extra protein requires the kidneys to work very hard to provide enzymes to break down protein and fats
- > possibility of bingeing or overeating carbohydrates because of the restriction
- > eliminating wholegrains is not good for gut health
- > energy and wellbeing can be affected
- > carbohydrates are the brain's main source of energy so cutting them out lowers energy.

Source: Whitney et al, 2011

Sugar-free diet

- > immediate withdrawals are nausea, lethargy, diarrhoea and emotional symptoms
- > can lead to bingeing on sugary foods and drinks
- > labelling foods as good or bad can lead to bingeing – the key is moderation
- > often difficult to sustain long-term due to social life
- > does not support the idea of moderation and variety
- > there is natural sugar in fruits, vegetables, milk and other foods which you can't cut out entirely.

Source: Whitney et al, 2011

Shake diet

- > It's convenient but doesn't satisfy like chewing and eating.
- > For a medical condition a doctor might advise it, but generally they're a 'quick fix' that can:
 - > be high in salt and artificial sweeteners
 - > lack essential vitamins and minerals
 - > be unsustainable long term
 - > be generally quite expensive to maintain.

Source: Whitney et al, 2011

Gluten free diet (to lose weight)

Avoid unless you're a coeliac (eating wheat, barley and rye makes you very ill), have Crohn's disease or are gluten intolerant (Lebwohl, Cao & Zong et al, 2017).

- > Only meant for people with the above issues to help manage their health.
- > A gluten free diet eliminates pastries and other 'sometimes' foods but you can miss out on some really nutritious and healthy, high fibre foods that help your heart and digestive system (Whitney et al, 2011).

Despite claims that gluten free diets increase the risks of heart disease and obesity, research has found no such evidence or association (Lebwohl, Cao & Zong et al, 2017).

Orthorexia (obsession with eating healthy / clean)

'Sometimes' food is an important part of a balanced diet. You need to ask, "How many days of the year do I actually do this?" and "Will it ruin my health?"

Balanced eating sustains long term health and wellbeing, rather than causing bingeing or feelings of guilt about ruining 'that diet'.

Desire to achieve the 'thin' ideal

Everybody is different – influenced by height, genetics and several other factors. While you can't always love yourself, you can be body neutral. If you're talking negatively to yourself, stop and ask, "Would I talk to a friend like that?" Probably not, so why do it to yourself?

A useful analogy is comparing breeds of dog. We don't put down a sausage dog because of its short legs and wish it looked like a German Shepherd. We appreciate their differences and accept them just as they are.



Lifestyle misconceptions

“I’m too busy for exercise”

You don’t have to go to the gym. Incidental activity; like housework, walking to school, or carrying groceries instead of using a shopping trolley, will get your heart rate up.

‘Superfoods’

You do not need to eat ‘fancy’ superfoods to be healthy. Eating from the five food groups is the easiest, most cost-effective way to stay healthy.

Advertised superfoods like acai berries, goji berries, chia seeds, raw cacao and matcha powder are expensive. They are marketed as having extraordinary nutrients to help with things like inflammation, pain and poor circulation. However, there are more affordable scientifically proven ways of getting the same results (Whitney et al, 2011).

You may ask, “But why are foods, such as fish, blueberries, ginger, broccoli and garlic not on the front of that glossy magazine?” This is the power of marketing.

‘Low fat’ (97% fat free) products

Ask yourself what replaces that fat... sugar or salt! Marketing trains us to think ‘fat free’ means healthy but it’s not always the case. Yoghurt is the perfect example. Next time you are at the supermarket, look at the nutrition panels to compare the difference in sugar content per 100g between a low fat / fat free yoghurt and a regular one.

‘Good’ and ‘Bad’ food

A balanced diet can include every food and beverage. The terms ‘good’ and ‘bad’ foods reinforce a negative relationship with food and can influence a restrictive diet (Lowinger, 2016). Focus on incorporating the five food groups in your daily diet. Leave ‘sometime’ foods for a special occasion or family treat.



Part 4: Learning Activities

Learning Activity 1

Level 1: 10 minutes



Discussion

Either before or after lunch, talk to the group about food or drink they have just consumed or intend to consume. Ask them how they could have chosen more/ different food and drink that would give them longer lasting energy.

For example, choose wholemeal bread instead of white, apple instead of chips, choose sugar free variety drink instead of regular or swap energy drink for water.

Tip: Try making it a competition to encourage students who do not want to improve eating habits.



Learning Activity 2

Level 2: 30 minutes



This activity is best done as a group to help participants brainstorm goals. Remind the group that SMART goals are for personal growth – goals set by someone else won't motivate them.

S.M.A.R.T means:

Specific – Well defined, clear and unambiguous

Measurable – With specific criteria that measure your progress towards the accomplishment of the goal

Achievable – Attainable, not impossible to do

Realistic – Within reach, reasonable and relevant to your life purpose

Timely – With a clearly defined timeline, including a start and targeted end date. The purpose is to create urgency

Example of a SMART goal relating to healthy eating:

Specific – I'll make my own school lunches every day. I will pack it the night before. I will include two serves of vegetables every day this term.

Measurable – I will mark it on a calendar every day and count how many times I achieve it.

Achievable – I'll get mum or dad to buy the required vegetables every weekend on their weekly shop so I know I will have healthy food to make my lunch.

Realistic – Most days I get a canteen lunch and I want to eat healthier, so this will help.

Timely – I will pack my own lunch every night before bed. This means I will have 50 opportunities (5 days x 10 weeks) to build a healthy habit.

Example of SMART physical activity goal:

Specific – I will run three times a week for the rest of this term. I'll start at 1km then increase this by 10% a week until I can do 5kms in 25 minutes.

Measurable – I'll record the time and distance for every run on a calendar, so I track my improvement.

Achievable – I will ask for new runners for my birthday next week, so I have good shoes to run in. This will prevent injury and help me achieve my goal.

Realistic – I love my dog and want to take her for a run. It makes us both happy.

Timely – By the end of the 10 week school term I will have had 30 practice runs (3 days per week x 10 weeks).

S

Specific (What exactly, in detail, do you want to achieve?)

M

Measurable (How will you know when you've reached your goal? Quantify it!)

A

Achievable (What resources are needed - do you have them... including time?)

R

Realistic and Relevant (What's the outcome - the change - you're expecting?)

T

Timed (Break it into steps. When will each step be completed?)

Learning Activity 3

Level 2: 15 minutes



Break your children or teenagers / adolescents in to small groups to think about diets they see in the media. Then ask them the negative long-term health consequences.

Allow five minutes for group discussion and 10 minutes for class feedback.

E.g. ketogenic: Over time, this diet damages the body's ability to process sugars from carbohydrates. Limiting carbohydrates, especially wholegrains like grainy bread and brown rice, reduces good bacteria in the gut, impacting overall digestion and nutrient absorption.



Topic 5

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