

UNCORRECTED PAGE PROOFS



**FIT FOR LIFE LEVEL 7 + 8
STUDENT BOOK
ISBN: 9780170498036**

Customer Service: 1300 790 853
nelsonsecondary.com.au

 Nelson

GET SMART ABOUT DRUGS



<credit to come>

IN THIS CHAPTER

You will learn about drugs and alcohol – what they are and what effect they can have on you, your family and the community. Legal and illegal drugs are examined, as well as the role of drugs in sport.

By the end of this chapter, you should be able to:

⇒ Investigate the factors that influence the use of alcohol and other drugs

⇒ evaluate how behaviours, actions and responses to drug-related situations can change depending on whether you are by yourself, with friends or with family

WHAT ARE DRUGS? 4

HOW CAN I USE MEDICINE SAFELY? 6

WHAT ARE TRADITIONAL AND ALTERNATIVE MEDICINES? 9

HOW WILL DRUG USE AFFECT MY BODY? 14

- ⇒ explore and refine skills and strategies needed to communicate assertively and engage in relationships in respectful ways
- ⇒ examine different strategies or resources to support or persuade others to seek help
- ⇒ explore help-seeking scenarios young people encounter and share strategies for dealing with each situation
- ⇒ collaborate with peers to propose strategies they could use if they are being encouraged to use a substance such as alcohol, cannabis or inhalants
- ⇒ consider different social and cultural perspectives in relation to illegal drugs, legal drugs, prescription medicines, over-the-counter products, bush medicines, alternatives to medicines and performance-enhancing drugs
- ⇒ evaluate the credibility, validity and relevance of health messages conveyed by different sources and apply credible information to drug-related decisions
- ⇒ explore and evaluate the accessibility and reliability of health information sources.

Quizzes:

- Pre-chapter (p.4)
- How can I use medicine safely? (p.8)
- What are traditional and alternative medicines? (p.13)
- How will drug use affect my body? (p.36)
- What factors influence the use of drugs and alcohol? (p.44)
- How can I make informed decisions about drugs? (p.49)
- How will drugs use affect my performance in sport? (p.55)

Videos:

- Smoking (p.21)
- Caffeine (p.27)

Worksheets:

- Worksheet 1.1 (p.4)
- Worksheet 1.2 (p.6)
- Worksheet 1.3 (p.3)
- Worksheet 1.4 (p.10)
- Worksheet 1.5 (p.16)
- Worksheet 1.6 (p.16)
- Worksheet 1.7 (p.19)
- Worksheet 1.8 (p.22)
- Worksheet 1.9 (p.23)
- Worksheet 1.10 (p.23)
- Worksheet 1.11 (p.27)
- Worksheet 1.12 (p.28)
- Worksheet 1.13 (p.32)
- Worksheet 1.14 (p.32)
- Worksheet 1.15 (p.32)
- Worksheet 1.16 (p.32)
- Worksheet 1.17 (p.35)
- Worksheet 1.18 (p.36)
- Worksheet 1.19 (p.38)
- Worksheet 1.20 (p.41)
- Worksheet 1.21 (p.49)
- Worksheet 1.22 (p.50)
- Worksheet 1.23 (p.51)
- Worksheet 1.24 (p.56)

 Nelson MindTap

To access resources above, visit
cengage.com.au/nelsonmindtap



WHAT FACTORS INFLUENCE
THE USE OF DRUGS AND
ALCOHOL? 38

HOW CAN I MAKE
INFORMED DECISIONS
ABOUT DRUGS? 41

HOW WILL DRUG USE
AFFECT MY PERFORMANCE
IN SPORT? 50

WHAT ARE DRUGS?



Quiz
Pre-chapter



Worksheet
1.1

drugs chemical substances that can alter the biological functioning and structure of a living organism. Drugs can either be synthetic (human-made) or natural.

psychoactive having an effect on your mind and your senses

synthetic a manufactured substance, not natural

Before you start, take the pre-chapter quiz to find out how much you already know.

The human body is a complicated organism. You begin life as a single cell and develop into a highly complex, multicellular machine. To remain healthy as you grow, you must balance your physical activity with eating nutritious food and getting enough sleep.

Unfortunately, although the human body is very strong, the effects of alcohol, tobacco and other **drugs** can be damaging and long lasting, leaving the body vulnerable to illness, disease and dangerous situations.

Drugs are substances containing chemicals that can affect the way you think, feel and behave. These are known as **psychoactive** substances, because they work on the mind and your senses, and can change the way the body functions. Once a drug reaches the brain, it can change the messages the brain cells send, both to each other and to the rest of the body.

Some drugs are legal, but many are illegal. Examples of legal drugs include prescription medication, over-the-counter medicines (OTCs), caffeine, tobacco and alcohol. Illegal drugs include substances such as cannabis, ecstasy and cocaine.

There are thousands of different types of drugs. Some drugs occur naturally, coming from plants and animals, while others are **synthetic**. Penicillin is an example of a medicine that was first produced from the *Penicillium* fungus.

FAST FACT

In the 1940s, a team led by Australian scientist Howard Florey discovered the healing properties of penicillin. Penicillin is an antibiotic that is now widely used to treat many serious diseases and infections. You may have been prescribed penicillin by your doctor when you had a bacterial infection such as tonsillitis or a chest infection.

While many young people avoid taking drugs that may be harmful to their health and wellbeing, some adolescents experiment with a variety of drugs, including alcohol, tobacco and cannabis. These substances can become addictive, which means it is very hard to stop using them. Addiction can lead to many physical, social and mental problems.

FAST FACT

Smoking is the leading cause of preventable deaths worldwide, killing more than 5 million people annually. This is approximately one death every six seconds. In Victoria, smoking causes around 4400 deaths every year.

Source: <https://www.tobaccoaustralia.org.au/>, <https://www.health.vic.gov.au/your-health-report-of-the-chief-health-officer-victoria-2018/healthy-living/tobacco-free-living>

Identify

What do you do when you don't feel good and want to feel better? Perhaps you talk to someone, or do something fun? Having lots of options can be helpful.



This activity has been developed in collaboration with Dr David Bakker of MoodMission

Understand

Coping with a problem means finding a way of dealing with it. We might deal with the problem directly or, if this is not possible, find a way to deal with the bad feelings caused by the problem.

People use drugs or alcohol for a wide range of reasons, but relying on them for coping can lead to problems. Drugs and alcohol can sometimes make people feel good and help them forget their problems for a little while, but they cause a lot more problems in the long term. The problems don't go away, and they also usually get worse!

Having lots of healthy ways of coping can make drugs and alcohol less tempting.

Practise

- 1 Think back to the last time you felt bad. Maybe you felt sad, nervous, stressed or frustrated. It doesn't have to be a big emotion. How did you cope with it? What did you do to feel better?
- 2 Now think about other times you've felt bad. Did you use different ways of coping then?
- 3 Let's make a list of the things you've done in the past to feel better. Remember, different coping strategies are suited to different problems. You might include things like 'talk to a friend' or 'go for a run'.
- 4 What are some strategies you haven't used in the past, but might like to try in the future? These may be things you've learned at school, seen friends or family do, or found on apps like MoodMission.
- 5 Pair up with a classmate and share your strategies. Did your partner list any strategies you think you could try too? If so, add them to your list.
- 6 The next time you feel like you need a pick-me-up, take a look at the list you've written and try the option that best suits the way you're feeling. If it's not as helpful as you would have liked, try one of the others.

Reflect

Have you ever felt tempted to use alcohol or drugs to cope? Which strategies on your list could you use instead of alcohol or drugs?

REVIEW

- 1 Identify three legal drugs.
- 2 Identify three illegal drugs.
- 3 What is addiction?

REFLECT

- 1 Make a poster listing all the different types of drugs you have heard of.
 - a Classify each of these drugs as legal or illegal.
 - b Can you think of other names for these drugs? For example, cannabis is sometimes called weed. Discuss as a class and make sure your poster includes all the different names for each drug.

EXTEND

- 1 Everyone has personal character strengths, and these can help you deal with challenging situations in life, including situations you might find yourself in with drugs and alcohol.
 - a Can you think of five character strengths you have?
 - b Complete an online test, such as the VIA Character Strengths Survey for Youth For Ages 13–17 on the VIA website, to help you identify your strengths.
 - c Compare your answer in 1a, to the results of the VIA Character Strengths Survey, 1b. Were there any similarities or surprises?



Weblink
VIA Character Strengths Survey



Worksheet
1.2

HOW CAN I USE MEDICINE SAFELY?

Advances in science have led to many new medicines being manufactured. Medicines are made up of chemicals and compounds. They are used to treat a variety of illnesses and ailments and, ultimately, to improve people's lives.

PRESCRIPTION MEDICATION

Medicines are generally prescribed by an authorised healthcare professional such as a doctor, but some can be purchased 'over the counter' from a pharmacy or supermarket. Prescription medicines are licensed and regulated by law; it is illegal to supply prescription medication without a prescription from a doctor. There are heavy penalties for people who do this, including fines and prison sentences.



Figure 1.1 Prescription drugs

Shutterstock.com/Rob Byron

Over-the-counter medicines (OTCs) are readily available and do not require a prescription from a healthcare professional. They are also known as non-prescription medicines. Examples of OTCs include cough medicine and paracetamol.

How medicines are administered

Drugs used to treat illnesses and infections are usually taken in the form of a tablet or pill. However, there are many different ways drugs can be administered. These are listed in Table 1.1.



Figure 1.2 You can purchase over-the-counter medication without a prescription.

Table 1.1 Different forms of prescribed or OTC medication

Form of medicine	Example
Liquids	Cough mixture
Sprays/inhalers	For asthma or hay fever control
Drops	For ears and eyes
Patches	Skin patches to control smoking
Creams, gels or other ointments	Steroid creams for skin disorders
Tablets/capsules	Antibiotics
Injections	Vaccinations , such as the flu vaccine
Intravenous	Fluids inserted into veins by medically trained staff

FAST FACT

Heroin and prescription **opioids**, including opiate-based analgesics (such as codeine and oxycodone) and synthetic opioid prescriptions (such as tramadol and fentanyl), cause the majority of deaths by **overdose** in Australia.

HEALTHY, SAFE AND ACTIVE CHOICES

When people think of **drug abuse** in Australia, they often focus on illegal street drugs such as ecstasy and cannabis. But the misuse of prescription drugs is actually a major drug issue in Australia. Prescription drug abuse occurs when medicine is obtained with a prescription but used in a manner not 'prescribed' by the healthcare professional. Using prescription drugs that have not been prescribed by a doctor can be just as dangerous as using illegal drugs. The most commonly abused prescription drugs include benzodiazepines and opiate-based drugs.

steroid a human-made chemical substance that closely resembles cortisol, a naturally occurring hormone found in the human body; used to reduce inflammation

vaccinations medicines used to help the body's immune system prevent disease

opioids any legal or illegal drug made from the opium poppy, including pain-relievers and heroin

overdose the excessive use of a drug, either accidental or intentional, resulting in serious illness or death

drug abuse the harmful misuse of illegal, prescription or over-the-counter drugs that can ultimately lead to adverse health effects, addiction or dependency

Prescription drug use

Benzodiazepines – also known as ‘minor tranquillisers’ – are depressants, which slow down the messages sent between the brain and the body. They are prescribed by doctors to relieve the symptoms of stress and anxiety, and also help people to sleep. Side effects can include depression, confusion, memory loss and slurred speech.

narcotic dulling the senses and promoting drowsiness



Quiz
How can I use medicine safely?



Worksheet
1.3

Opioids have a **narcotic** effect and are highly addictive. There are many drugs that fall into this category, including codeine, morphine, fentanyl and OxyContin. Opioids are commonly prescribed by doctors because of their effectiveness in providing pain relief. Side effects can include nausea, drowsiness, mental fog, constipation and slowed breathing.

There are many reasons why people choose to abuse prescription drugs. Some people believe that prescription drugs are safer than illicit street drugs. Unfortunately, this is a very common misconception. However, prescription drugs are intended to be used only by the individual the drugs were prescribed for. Second, prescription drugs are seen as being more readily available than illicit drugs. Users may see more than one doctor at a time and obtain a number of prescriptions for the same product. Finally, many people don't believe that taking prescription drugs is against the law. This is another misconception; any form of problematic prescription drug use is against the law.

CASE STUDY

PRESCRIPTION DRUG USE

Identify

People think prescription drugs are safe because they are sourced from a doctor. Consider the following scenario to determine what Fiona should do.

Understand

Fiona felt unwell and had a headache. She took some over-the-counter pain relieving tablets, but the pain didn't go away. While Fiona lay in bed, she remembered that her mother had been prescribed OxyContin, an opioid medication, for back pain. Fiona decided to take a couple of her mother's OxyContin tablets, thinking that if they had been prescribed by a doctor, they would be safe to take.

Discuss

- 1 State the drug classification OxyContin is in.
- 2 Research some of the short- and long-term effects of OxyContin.
- 3 If Fiona was your friend, decide what advice would you give her?



Weblink
Australia's prescription drug crisis.

FAST FACT

One in ten Australians who take prescription medication are addicted.

REVIEW

- 1 Explain the difference between over-the-counter medication and prescription medication.
- 2 Many people believe that prescription drugs are 'safe' because they have been prescribed by a doctor. Explain why this view is incorrect.
- 3 Summarise the side effects of:
 - a opioids
 - b benzodiazepines.

REFLECT

- 1 When you visit the doctor, explain why it is important to tell them about any medical conditions you may have, and the various medicines and supplements, both over-the-counter and prescribed, that you may currently be taking.
- 2 At a gathering, your friend offers you an opioid tablet that was prescribed for their father. Determine what you would do and why.

EXTEND

- 1 Your friend appears stressed about an upcoming maths test. She appears to be having trouble concentrating and has mentioned taking pills that were prescribed for her sister to help her concentrate in Year 12. Decide what advice you would give to your friend and why.

WHAT ARE **TRADITIONAL** **AND ALTERNATIVE** MEDICINES?

In addition to the medicines available from doctors and pharmacies, there is a wide range of other medicines and treatments available to the consumer, including traditional and alternative medicines.

TRADITIONAL MEDICINES

Traditional medicines are used by many cultures around the world. For thousands of years, the Chinese have used **herbal remedies** to cure a wide range of ailments and diseases, from headaches to stomach problems. Chinese herbal remedies include a tea made from the leaves of the sweet wormwood tree, which is used to treat chills and fevers, and the dried and ground roots of the ginseng plant, which have been used for more than 2000 years to help boost energy, increase endurance and reduce stress. The ancient Chinese also treated coughs and colds using the root of the liquorice plant, which was ground into a powder and drunk as a tea. The ancient Egyptians also used herbs and plants to produce traditional medicines. To cure coughs and colds, they used

herbal remedies
medicines made from
plants or parts of plants

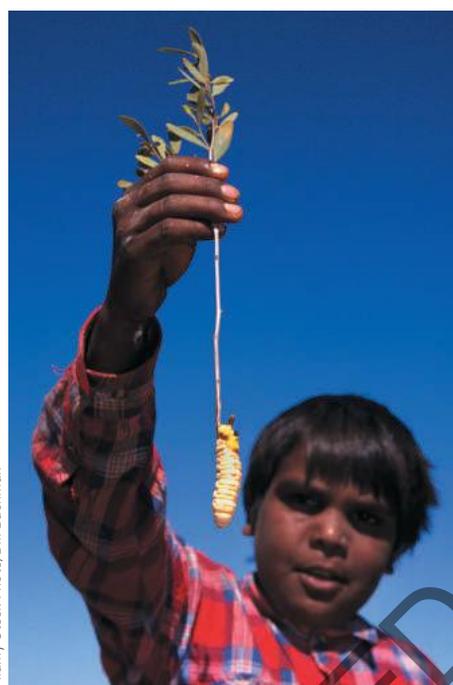


Worksheet
1.4

extracts from the hibiscus plant, which were placed in a hot bath so the patient could inhale the steam. The ancient Egyptians also used garlic to give them vitality.

Australian bush medicines

First Nations Peoples have long relied on the environment around them to provide the medicines they need for daily life. The term 'bush medicine' refers to the traditional medicinal practices that First Nations Peoples have used for thousands of years to promote healing and maintain health and wellbeing.



Alamy Stock Photo/Bill Bachman

Figure 1.3 Witchetty grubs are a traditional treatment used by First Nations Peoples for burns and wounds.



Alamy Stock Photo/Travelscape Images

Figure 1.4 A traditional Chinese medicine practitioner at work

CASE STUDY

REDEFINING BUSH MEDICINE: THE JOURNEY OF TWO INDIGENOUS DOCTORS

Identify

Growing up Indigenous in the Kimberley, their dream to become doctors seemed far-fetched. But Steph and Cath defied the odds to do it together – and provide their own brand of holistic care.

Figure 1.5 Arrethe leaves are ground down in a mortar and pestle to create a rub used to treat colds and flu.



Reproduced by permission of the Australian Broadcasting Corporation – Library Sales.
Emma Haskin © 2019 ABC

Understand

Growing up in the Kimberley, best friends Dr Stephanie Trust and Dr Catherine Engelke never imagined becoming doctors. As First Nations women and descendants of the Stolen Generations, they faced immense challenges, but their determination led them to redefine healthcare in their community.

Starting as nurses, they shared a dream of providing holistic, culturally grounded care. When Engelke suggested medical school, Trust immediately agreed. Despite facing racism and barriers, they supported each other through years of study at the University of Western Australia, balancing family, financial struggles, and cultural displacement.

Now, Dr Trust leads the Wunan Health and Well-Being Centre in Kununurra, while Dr Engelke is a senior medical officer at the local hospital. Their unique approach blends Western medicine with Indigenous healing traditions, focusing on the concept of *liyan* – a spiritual sense of well-being. Bush medicine, such as *lowuni*, is also integrated into their practice, respecting traditional knowledge passed down through generations.

With over 850 Indigenous doctors now practising in Australia, their success has inspired the next generation. They are no longer exceptions but pioneers of a movement that honours First Nations wisdom while bridging gaps in modern healthcare.

Discuss

- 1 Explain how Dr Trust and Dr Engelke incorporate Indigenous perspectives into their medical practice.
- 2 Describe the role that bush medicine plays in their approach to healthcare.
- 3 Identify the challenges they faced in their journey to becoming doctors and how they overcame them.
- 4 Discuss why having more First Nations doctors in Australia is important, particularly in rural and remote communities.

Top ten First Nations Peoples' bush medicines

Tea tree oil: crushed tea tree leaves are used to treat wounds and throat ailments. Tea tree oil has been scientifically proven to have strong antiseptic properties.

Eucalyptus oil: used to treat pains, fevers and chills.

Billygoat plum/kakadu plum: this fruit contains 50 times more vitamin C than an orange. It is the world's richest source of vitamin C.

Desert mushroom: when sucked, these mushrooms cure sore mouths and lips. Also used as a natural teething ring for babies.

Emu bush: the leaves of this bush are used to wash sores and cuts, and are occasionally gargled. The leaves have been found to have similar properties to some antibiotics.

Witchetty grub: crushed witchetty grubs are used to treat burns. The grubs are made into a paste, then applied to the wound and covered with a bandage. They are also a good source of food.

Snake vine: crushed vine is used to treat headaches and arthritis; the sap and leaves are used to treat wounds.

Sandpaper fig and stinking passion flower: the rough leaves of the sandpaper fig and the crushed fruit of the stinking passion flower are used together to relieve itching and to treat fungal skin infections.

Kangaroo apple: crushed fruit is used to treat swollen joints.

Goat's foot leaves: used to relieve the pain of stonefish and stingray stings.

Source: Adapted from 'Top 10 Aboriginal bush medicines', *Australian Geographic*, 8 February 2011

ALTERNATIVE MEDICINES IN AUSTRALIA

conventional medicine treatment of illnesses and injuries by healthcare professionals such as doctors and nurses, using drugs, radiation or surgery

holistic health an approach that considers the health of the whole body, including mental, physical, spiritual, emotional and social health

Increasing numbers of Australians use alternative methods of healing in addition to **conventional medicine**. Many alternative practices use natural and **holistic** processes that claim to have healing properties, including ayurvedic medicine, yoga, acupuncture and massage.

Ayurvedic medicine

Ayurvedic medicine refers to the traditional medicinal practices of ancient India. Ayurveda is often referred to as the 'science of life' (*ayu* means 'life' and *veda* means 'knowledge'). This 5000-year-old medicinal practice relates to the health and wellbeing of the mind and body, using a combination of diet, herbal medicine, massage, meditation, yoga and breathing exercises.

Yoga

Yoga is another practice that originated in ancient India. Yoga exercises focus on developing strength, increasing flexibility and improving posture. Yoga can also develop mental and emotional wellbeing by relaxing the mind and raising spiritual awareness. Many different practices of yoga exist, and each has a particular emphasis. Bikram Yoga is a 90-minute yoga workout completed in a 40°C studio with 40 per cent humidity, while yin yoga is slower paced, and postures are held for longer.



Figure 1.6 Many ayurvedic medicines are based on herbal ingredients, including bark from various trees and shrubs, plant and tree roots, seeds and herbs.



Figure 1.7 Yoga is practised to strengthen the body and increase overall wellbeing.

FAST FACT

- 1 A 2020 study found that approximately two-thirds of Australians had used alternative medicines in the past year.
- 2 Sixty per cent agreed that alternative medicines helped improve their wellbeing.

Acupuncture

Acupuncture is used to alleviate pain and nausea. It is one of the world's oldest forms of medicine and is very popular in Australia. Acupuncture is an ancient Chinese system of healing that stimulates the mind and the body's healing response. This traditional

practice involves inserting very fine needles into the skin at specific points. The needles are left in place for around 30 minutes.

Massage

Massage therapy has been around for thousands of years and is used to treat a variety of health-related issues. Its benefits include pain relief, management of stress and anxiety, rehabilitation of sports injuries and general wellbeing.

Pilates

Pilates is a very popular workout that focuses on building core muscle strength to improve flexibility, posture and balance. Pilates was developed in the 1920s and is named after its creator, Joseph Pilates. While the moves are similar to yoga, the main emphasis of Pilates is on building the body's core and improving muscle endurance and control.

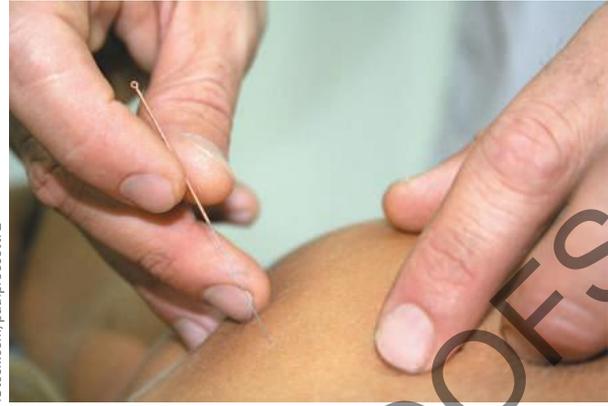


Figure 1.8 Acupuncture originated in ancient China and is one of the best-known alternative medicine practices.

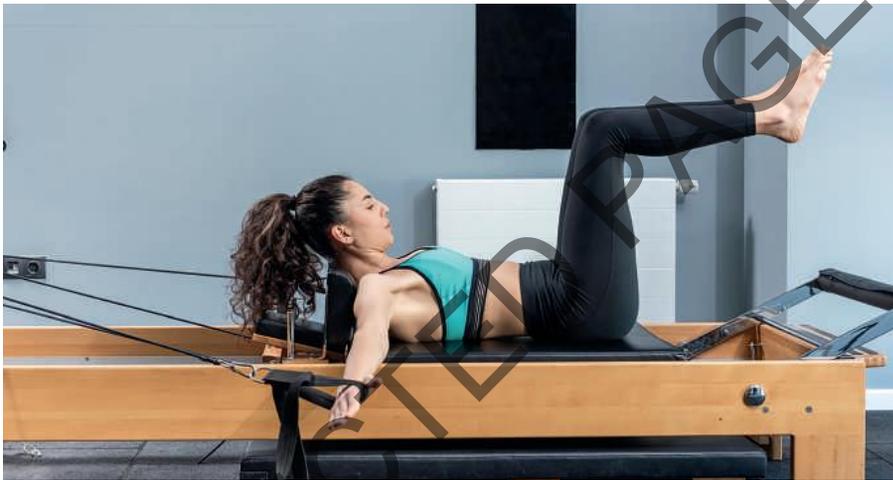


Figure 1.9 Pilates can use special machines to assist with a full body workout.



Quiz
What are traditional and alternative medicines?

REVIEW

- 1 Name and describe the use of four different First Nations Peoples' bush medicines.
- 2 Describe two herbs used as traditional herbal remedies.
- 3 Explain the difference between yoga and Pilates.

REFLECT

- 1 Bikram and yin are just two types of yoga. Research three other types of yoga. Ensure you identify the main health-related focus of each yoga type.
- 2 In small groups, design a garden for your school with indigenous plants that are known to have medicinal properties.
 - Investigate the plants used by First Nations Peoples that provide medicine to include in your garden.
 - Consider the layout of your garden (position of plants in the sun or shade, water access, and preferred soil type).
 - Create informative signage for your plants. Include plant information and medicinal properties.

EXTEND

1 Create a school-wide campaign to raise awareness of alternative medicines. Subject to time and resources available, campaign materials could include:

- campaign message
- school announcements
- slogans
- guest speakers.
- posters/flyers

Be creative with your campaign. You may wish to enlist school administrators and other teachers to support your campaign.

HOW WILL DRUG USE AFFECT MY BODY?

A psychoactive drug contains chemical substances that can adversely affect the functioning of the central nervous system and can alter a person's conscious state. This can result in confusion, as well as changes in mood, behaviour and level of consciousness.

CLASSIFICATION OF DRUGS

Drugs can be grouped within three main categories: depressants, stimulants and hallucinogens. It is important to understand that legal and illegal drugs can be found within each category, and that all drugs can lead to addiction and dependency.

Depressants

Depressants do not necessarily make people feel depressed; in fact, they are among the most commonly used drugs in the world. Depressants affect the body's central nervous system by slowing down the messages sent between the brain and the body. People who take depressants in small quantities may feel more relaxed and drowsy and experience a slower heart rate. Their concentration and coordination may also be affected. When taken in larger quantities, depressants can induce panic attacks, paranoia, headaches, aggression, vomiting, comas and, ultimately, death. Some common examples of depressants include:

- ⇒ alcohol
- ⇒ cannabis
- ⇒ opiates and opioids (heroin, morphine, codeine)
- ⇒ barbiturates
- ⇒ inhalants (solvents, aerosols, gases, nitrites).

Stimulants

In contrast to depressants, stimulants speed up brain activity. Stimulants can make people feel more alert and awake by increasing their heart rate, body temperature and blood pressure. There are many side effects of stimulant abuse, including suppressed appetite, anxiety and insomnia. Caffeine is an example of a natural legal stimulant; it is found in coffee, tea, energy drinks and even chocolate. Other common examples of stimulants include:

- ⇒ nicotine (found in tobacco)
- ⇒ cocaine

- ⇒ amphetamines (ice, methamphetamine, speed)
- ⇒ ecstasy (MDMA)
- ⇒ ephedrine
- ⇒ khat.



Figure 1.10 Examples of stimulants: (1) cocaine plant, (2) khat plant, (3) ecstasy pills



Figure 1.11 (1) Cannabis and (2) 'magic' mushrooms are examples of hallucinogenic drugs.

Hallucinogens

Hallucinogens, also referred to as 'psychedelics', can alter the way a person perceives reality. Hallucinogens alter the way the mind works by affecting all the senses and emotions. They can initiate hallucinations, causing people to see or hear things that don't exist. Hallucinogens are either made in laboratories or occur naturally in some trees, vines, seeds, fungi and leaves. Examples of hallucinogens include:

- ⇒ 'magic' mushrooms
- ⇒ cannabis
- ⇒ MDMA (ecstasy)
- ⇒ ketamine
- ⇒ LSD.

Polydrug use

Polydrug use is when more than one drug is used at the same time, or during the same occasion. It can also refer to the practice of using one drug to counteract the effects of another. A polydrug user may mix legal with illegal drugs.

One common legal drug used by polydrug users is alcohol. The effects of combining multiple drugs can be very dangerous and unpredictable, especially when drugs of unknown content and purity are mixed together. Polydrug use can cause overdose, violence and aggression, unwanted sexual activity, **psychosis** and even death.

psychosis mental illness associated with the loss of contact with reality and severe changes in mood and personality

FAST FACT

Alcohol is known by a variety of names, including booze, grog, bevvie and coldie.



Worksheet
1.5

ALCOHOL

Drug classification: depressant

Alcohol is a popular recreational drug. Pure alcohol is so strong that its concentration in most alcoholic drinks is relatively low. There are four main types of alcoholic drink:



Shutterstock.com/Maria Fomina

Figure 1.12 There are four main types of alcoholic drinks.

- 1 Wine:** made from fermented fruits (usually grapes). The alcohol content of wine is around 9–16 per cent.
- 2 Beer:** prepared by brewing and fermenting water, barley, yeast and hops together. The alcohol content of beer is usually around 4–6 per cent.
- 3 Spirits:** made from grains such as barley and rye and produced by fermentation and distillation. Examples include vodka, rum, whiskey and gin. Often spirits are mixed with other beverages to produce cocktails. Spirits have a high alcohol content, usually 20–40 per cent.
- 4 Liqueur:** made by adding flavourings and sugar to spirits. Generally sweet, liqueurs typically contain 15–30 per cent alcohol.

Alcohol-related harm



Worksheet
1.6

FAST FACT

- 1** In 2022–23, nearly two-thirds (65 per cent) of secondary school students in Australia reported having consumed alcohol, including just a few sips, at least once. Overall, 44 per cent had consumed an alcoholic drink in the past year, 22 per cent had drunk in the past month, and around one in ten (11 per cent) had drunk in the past week.
- 2** Six minutes is all it takes for the brain to start feeling the effects of alcohol.
- 3** In some states in Australia, it is illegal to provide alcohol to a person under 18 in a private home without their parents' approval.
- 4** The legal drinking age in Victoria is 18. Underage drinking can lead to legal consequences and poses significant health risks, including potential impacts on brain development and increased risk of alcohol-related harms.
- 5** Alcopops are sweet, fruit-flavoured, fizzy alcoholic drinks popular among young people. Some alcopops can contain as much as three standard drinks in one bottle!

After tobacco, alcohol is the second-largest contributor to drug-related harm in Australia. Unfortunately, the social acceptance of alcohol prevents many people from recognising the harmful long-term effects of this drug. Alcohol has been culturally and socially accepted since British colonisation of Australia in 1788. In those days, convicts were partially paid with rum!

For many young people in Australia, drinking alcohol is regarded as a sign of maturity. Many adults mark the transition from work to home with an alcoholic drink. Many people consume alcohol with food, to celebrate a special occasion, to relax or to unwind and have fun.

What is a hangover?

A hangover is the body's reaction to drinking too much alcohol. There are many unpleasant effects of a hangover.

Table 1.2 Symptoms of a hangover

Mental symptoms of a hangover	Physical symptoms of a hangover
⇒ poor motivation	⇒ headache
⇒ poor concentration	⇒ tiredness
⇒ vertigo (loss of balance or dizziness)	⇒ dehydration
⇒ anxiety	⇒ nausea
⇒ irritability	⇒ vomiting
⇒ depression	⇒ sweating

There are two main reasons why people suffer a hangover after a night of drinking. First, alcohol is a diuretic, meaning it causes the drinker to become dehydrated. Second, alcohol being broken down in the body creates toxic by-products that can affect many of the body's internal systems. The more alcohol consumed, the worse the hangover will be.

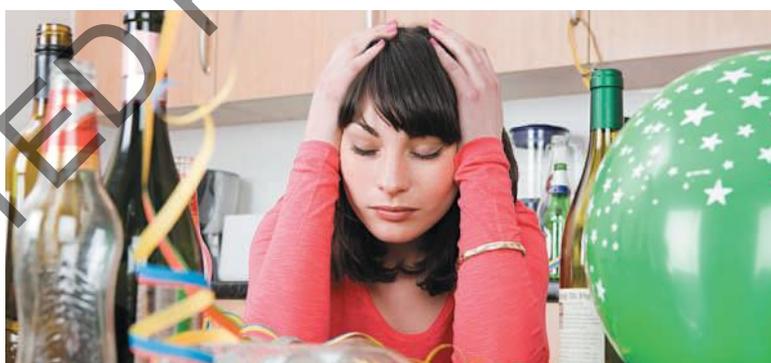


Figure 1.13 Hangovers cause both mental and physical symptoms.

What is a standard drink?

In Australia, a standard drink contains approximately 10 grams of alcohol. One standard drink will always contain the same amount of alcohol, regardless of the size of the bottle or can, or the type of alcoholic drink.

Table 1.3 These are the standard drink logos that appear on bottles and cans of beer, spirits and wine. The number on the logo identifies the number of standard drinks contained in the bottle or can – this varies depending on the size of the container and the type of alcohol involved.

Beer	Spirit	Wine
Standard Drinks 1.3	STANDARD DRINKS 1.0 APPROX	Standard Drinks 8.3

Source: Distilled Spirits Industry Council of Australia, the Australasian Associated Brewers Inc. and the Winemakers Federation of Australia



Figure 1.14 Standard servings of beer, wine and spirits, adapted from *Australian guidelines to reduce health risks from drinking alcohol*

Standard drinks guide © Commonwealth of Australia | Department of Health

Standard drinks guide © Commonwealth of Australia | Department of Health

Standard drinks guide © Commonwealth of Australia | Department of Health

Effects of alcohol

1

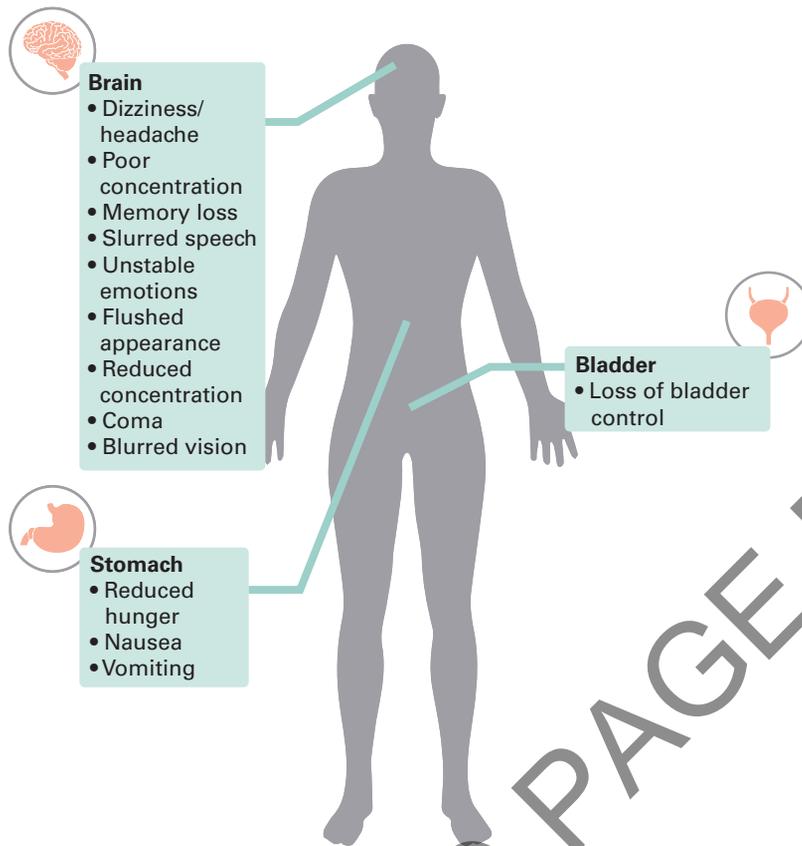


Figure 1.15 The short-term effects of alcohol

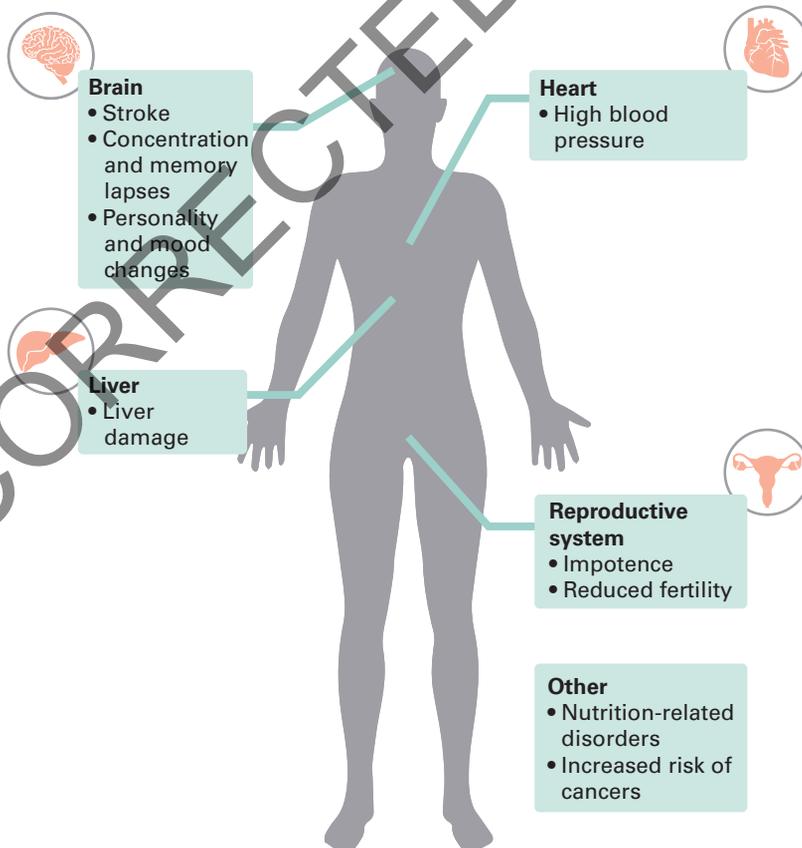


Figure 1.16 The long-term effects of alcohol

Alcohol and the law

Although alcohol is usually considered a socially acceptable legal drug, it is illegal for people to sell alcohol to those aged under 18, and for those under 18 to purchase it. In Australia, a zero blood alcohol concentration limit applies to all learner and probationary/provisional driver's licence holders, regardless of age.

INVESTIGATION

ALCOHOL AND THE BRAIN

Purpose

The human brain is the focal point of the human body, responsible for all of our body's functions. The brain operates like a control centre, sending and receiving messages via the central nervous system. The brain controls everything from our thoughts, emotions, speech, movement and memory to our vital organs, such as our kidneys and heart. In this investigation, you will explore the effects of alcohol on the brain.

Method

Temporal lobe

A centre for information processing located behind the ear. The temporal lobes have several functions in the human body, including the processing of auditory information, memories, speech, language, emotions and visual perception.

Hypothalamus

Responsible for keeping the body in a healthy and balanced state otherwise known as homeostasis. Essential functions include the release of hormones to help regulate body temperature, blood pressure and heart rate, thirst, emotions, hunger and sexual development.

Frontal lobe

Responsible for your personality. Around the age of 25, the frontal lobes have become the centre for decision-making, emotional expression, memory, problem-solving and judgement.

Cerebellum

Responsible for all physical movement, including balance, coordination, eye movement and motor learning (e.g. throwing a baseball or playing the drums).

Brain stem

Controls the flow of information between the brain and the rest of the body, and regulates important functions such as breathing and swallowing.

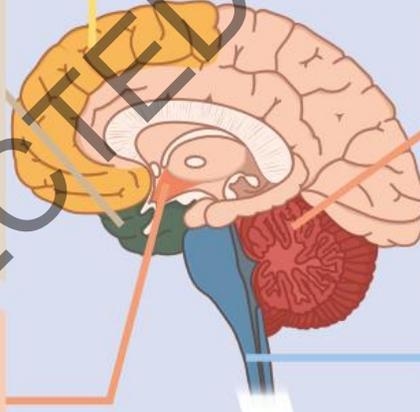


Figure 1.17 Functions of areas of the brain

- 1 Using the internet, research the impact of alcohol on each of the following areas:
 - ⇒ Frontal lobe
 - ⇒ Temporal lobe
 - ⇒ Cerebellum
 - ⇒ Hypothalamus
 - ⇒ Brain stem
- 2 Present your results in a report format.
- 3 Conduct further research to answer the following discussion questions.

Discussion

- 1 Compare the impact of alcohol on the developing brain with non-alcohol using teenagers.
- 2 Identify the part of the brain responsible for effective decision-making. Suggest how alcohol consumption would affect your ability to make decisions.
- 3 Recall the part of the brain responsible for motor learning. Describe how alcohol affects your ability to walk in a straight line.
- 4 Review the DrinkWise website to investigate how Australian drinking habits are changing. Do you think Australians have a positive or negative relationship with alcohol? Give reasons for your answer.
- 5 Predict what you believe the Australian drinking landscape will be in the future. Provide reasons.

Weblink
Alcohol and the
teenage brain

DrinkWise

FAST FACT

- 1 The human brain weighs around 1.5 kilograms.
- 2 The brain accounts for around 2 per cent of our total weight.
- 3 Male brains are marginally larger than female brains.

TOBACCO

Drug classification: stimulant

In Australia, tobacco smoking has been practised for more than 300 years. It was first introduced to First Nations communities in northern Australia by Indonesian fisherfolk in the early 1700s. After British colonisation in 1788, tobacco smoking was a popular pastime, and the habit became an accepted part of Australian society.

FAST FACT

Tobacco is known by a variety of names, including smokes, cigs and ciggies.

FAST FACT

- 1 Smoking has been linked to at least 19 forms of cancer.
- 2 Daily smoking rates for Australians aged 18 and over dropped from 22.4 per cent in 2001 to 13.8 per cent in 2024–25.
- 3 In 2022–23, 62 per cent of daily smokers had tried to quit or cut back their smoking over the past year.



Video
Smoking

Why do people smoke? How can we further reduce smoking rates? Watch the video and start the discussion!

What's in a cigarette?

The main ingredient in a cigarette is tobacco. Tobacco is made from the leaves of the tobacco plant, which is grown in warm climates around the world. The leaves are picked and dried, then processed by machines. Chemicals and artificial flavours are added to the dried tobacco by cigarette manufacturers.

Cigarettes contain approximately 600 ingredients. When smoked, these ingredients will produce more than 7000 chemicals. Around 70 of these chemicals are **carcinogens**, known to cause cancer, and can have deadly effects. Some of the main chemicals and substances found in cigarettes are shown in Table 1.4.

carcinogens
substances that cause
cancer

Table 1.4 Chemicals and substances in cigarettes

Nicotine	An addictive drug that makes people want to smoke more. Also used as an insecticide.
Ammonia	Commonly found in household cleaning products. Used to boost the effect of nicotine.
Carbon monoxide	Toxic, tasteless, odourless gas found in motor vehicle exhausts.
Methanol	A key component of rocket fuel.
Acetone	A solvent commonly used to remove nail polish.
Pesticides	Toxic chemicals used to kill insects.
Formaldehyde	A chemical found in a variety of products, from disinfectants to cosmetics. Used also to delay the decomposition of dead bodies!
Hydrogen cyanide	A toxic gas used in gas chambers.
Arsenic	An ingredient in rat poison.
Tar	Used to surface roads.
Butane	A highly flammable substance found in lighter fuel.
Radon	A radioactive gas.
Cadmium	An active component of battery acid.

Tobacco packaging in Australia

In order to reduce tobacco consumption, all tobacco products in Australia must be sold in standardised plain, logo-free, drab, dark brown packaging. The company brand name must be a certain size, in a certain font and in a certain place on the pack. No colours, logos or promotional text can be featured. Additionally, health warnings and other legally required information, such as toxic ingredients, must be identified on the packaging. The health warning must cover 75 per cent of the front of the pack and 90 per cent of the back.



Figure 1.18 Cigarette packs are required by law to display graphic anti-smoking messages, designed to 'scare' consumers into thinking about the implications of smoking.

Effects of smoking

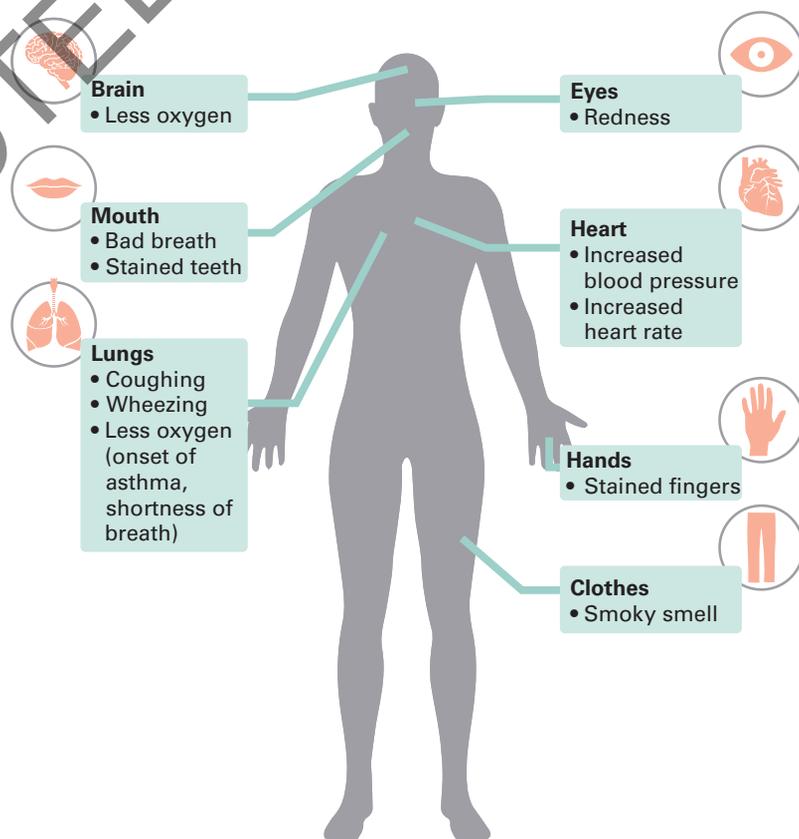


Figure 1.19 Short-term effects of smoking

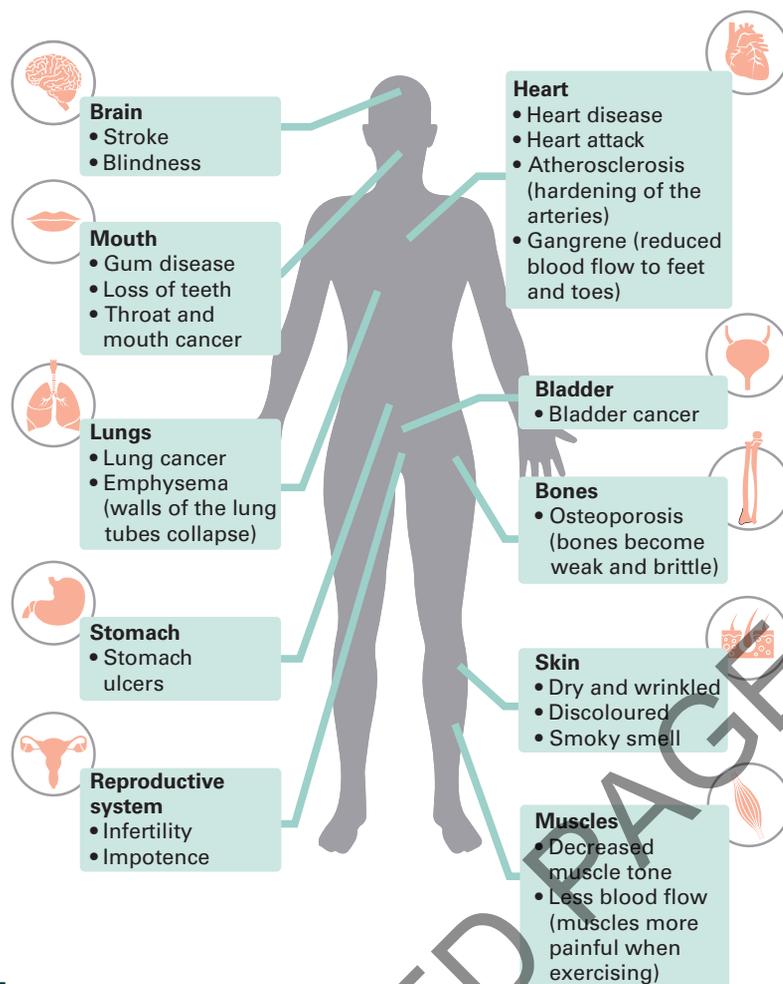


Figure 1.20 Long-term effects of smoking



Explore the Smokefree website to see the damaging effects of smoking on your body.

Tobacco and the law

Although tobacco is a legal drug, it is illegal for tobacco products to be sold to those aged under 18, and for those under 18 to purchase them.

In Australia, there are severe restrictions on smoking in public areas, such as shopping centres, bars and restaurants, and within the workplace. It is also against the law to smoke in a car carrying a person under 18 years of age.

Smoking is now prohibited by almost all airlines around the world. People caught smoking on an aeroplane may face a hefty fine or jail term.

Vaping and e-cigarettes

Vaping refers to the inhaling of a vapour produced by an electronic device or e-cigarette.

Unlike an actual cigarette, an e-cigarette does not produce tobacco smoke, but rather a vapour, which is often mistaken for water vapour. These battery-operated devices heat the fluid-filled cartridges, and vaporised doses are then inhaled by the user in an act known as vaping. The vapour released by these electronic devices typically contains nicotine, flavourings and other toxic chemicals.

While vaping is a relatively new trend, the concept of vaping has been around for a very long time. Shisha, a traditional smoking device, was introduced to India thousands of years ago, and even ancient Egyptians



Worksheet 1.9
Worksheet 1.10

FAST FACT

E-cigarettes are known by a variety of names, including e-cigs, vape pens, hookah pens, e-hookahs, vapes and mods.



Figure 1.21 Vaping products

used hot stones to vape herbs. These ancient methods have led to the vaping methods we have today. In 1927, Joseph Robinson was the first person to initiate the idea of an e-cigarette to help inhale vapours, in what was considered a safer alternative to cigarette smoking. In 1963, Herbert Gilbert invented the first 'smokeless' e-cigarette, but no businesses were interested in manufacturing the product. In 2004, electronic cigarettes or e-cigarettes were released into the Chinese market. A Chinese pharmacist, Hon Lik, was credited with inventing a safer and more environmentally friendly method of inhaling

nicotine in an attempt to reduce the harmful effects associated with tobacco smoking. Global internet sales saw the e-cigarette grow in popularity.

Warning: The lithium-ion batteries within e-cigarettes or 'vapes' have been known to explode resulting in serious injury and even death. While the explosions are rare, they are very dangerous.

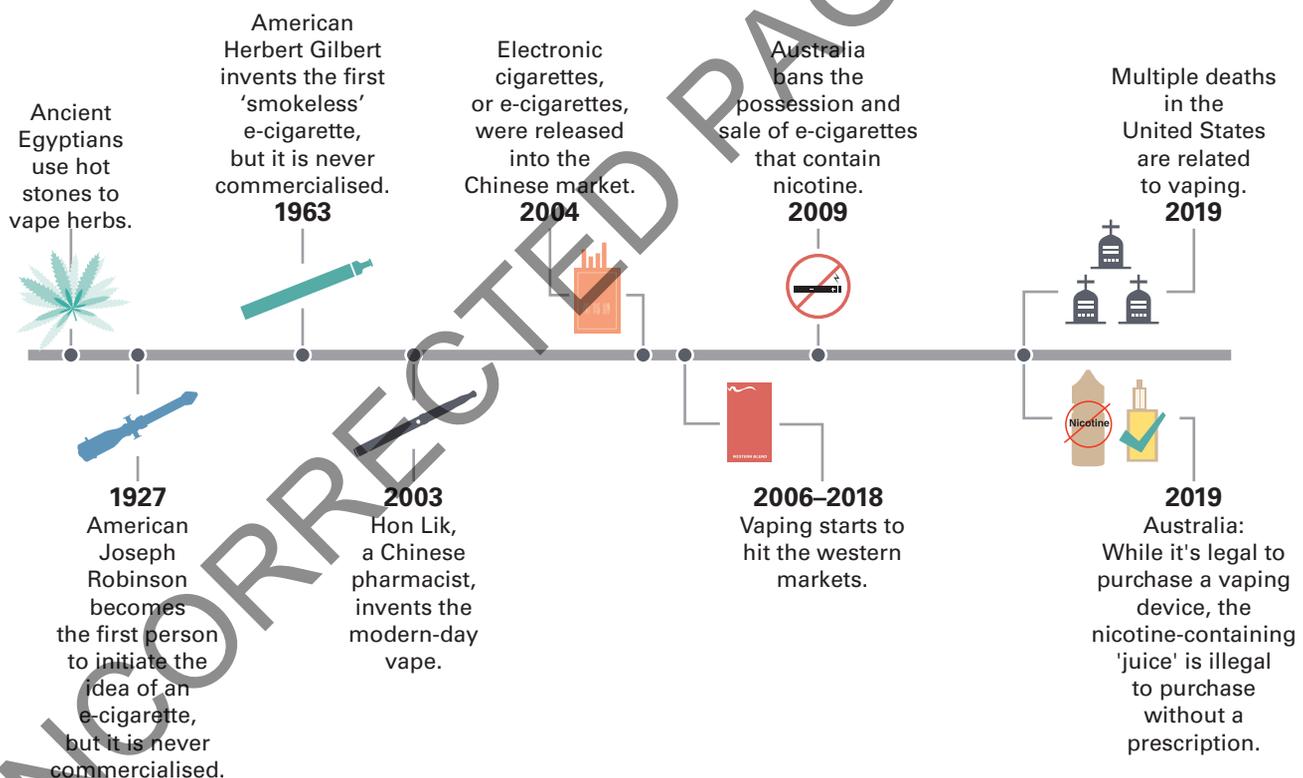


Figure 1.22 Timeline showing the development of e-cigarettes

Effects of vaping

Vaping has not been around long enough for researchers to know all the harmful effects on the body. However, there is mounting evidence to suggest that the toxic chemicals in the vapour have been linked to cancer, heart disease and serious lung damage, which has resulted in death.

What are vaping devices?

Vaping devices are battery-powered tools used to inhale an aerosol, which often contains nicotine, flavourings and other chemicals. These devices can take various forms: some resemble traditional cigarettes, cigars or pipes, while others look like common objects such as pens or USB drives.

Some models have refillable tanks and come in different shapes and sizes. Despite their differences in design, most vaping devices function in a similar way and share common components.

How do vaping devices work?

Most vaping devices have four main parts:

- ⇒ a cartridge, reservoir or pod that contains a liquid mixture (e-liquid or e-juice) with varying amounts of nicotine, flavouring and other chemicals
- ⇒ a heating element, known as an atomiser, which warms the liquid
- ⇒ a battery that powers the device
- ⇒ a mouthpiece through which the user inhales.

In many e-cigarettes, taking a puff activates the battery, which powers the heating element to vaporise the liquid. The user then inhales the produced aerosol, a process commonly referred to as vaping.



Figure 1.23 Different types of vapes

CASE STUDY

STUDENTS REVEAL EXTENT OF SCHOOL VAPING CRISIS, VICTORIAN INQUIRY HEARS

Identify

Victorian students as young as primary school age are turning to vapes out of desire to experiment and fit in with their peers, and senior pupils who continue to use e-cigarettes are most likely addicted, an inquiry has been told.

Understand

Victorian students, some as young as Year 4, are turning to vaping due to peer pressure and curiosity, while senior students who continue vaping are likely addicted, according to a recent inquiry. The Victorian Student Representative Council (VicSRC) emphasised that punitive measures won't solve the problem. Instead, schools should build trust with students and focus on a health-based approach.

Students reported that vaping became widespread in Year 7, with many starting in late primary school. Some see it as cool or an escape mechanism, highlighting the need for better mental health support. However, many students aren't aware of available support services.

The Victorian Principals Association revealed that students obtain vapes through siblings, older friends, and even parents, with some even finding them on school grounds. Some schools have installed vape detectors in bathrooms, but while they prevent usage in those areas, they don't stop students from vaping elsewhere.

Concerns were also raised over teachers conducting physical searches for vapes, including checking waistbands and clothing, which erodes trust between students and staff.

Meanwhile, Victoria's illicit vape market is estimated to be worth \$500 million, with major tobacco companies urging the government to implement stronger regulations. Authorities are also battling an increase in arson attacks linked to illegal tobacco sales.

Discuss

- 1 Discuss why young students start vaping, and what role peer pressure plays.
- 2 Highlight the challenges in enforcing vaping bans in schools.
- 3 Explain how schools can better support students struggling with vaping addiction.
- 4 What legal measures should be taken to control the illegal vape market in Victoria?



Source: News article edited from The Australian: <https://www.theaustralian.com.au/nation/politics/students-reveal-extent-of-school-vaping-crisis-victorian-inquiry-hears/news-story/319a443b5b8e102a87e651057a5b25e>

Figure 1.24 <caption to come>



Figure 1.25 Coffee culture is booming in Australia.

CAFFEINE

Drug classification: stimulant

Caffeine is a naturally occurring compound found in the leaves, seeds and fruits of a variety of plants, including cocoa, coffee beans and tea leaves. Drinking caffeine triggers the release of adrenaline, a hormone that acts on the central nervous system by speeding up messages that are sent to and from the brain. In small amounts, caffeine can make you feel alert, more focused and able to think and react more quickly. However, larger amounts of caffeine may lead to heightened irritability, anxiety and difficulty sleeping.

FAST FACT

- Australia has a booming coffee culture. Seventy-five per cent of all Australians enjoy at least one coffee a day, and 28 per cent have three or more cups a day! Apparently one in four Australians (27 per cent) say they cannot survive the day without coffee.
- Australians spend more than \$500 million a year on energy drinks. Energy drinks can contain as much as 160 milligrams of caffeine per can.
- Children and teenagers should not consume more than 2.5 milligrams of caffeine per kilogram of body weight per day. For a teenager weighing 50 kilograms, that means no more than 125 milligrams of caffeine per day. Healthy adults should consume no more than 400 milligrams of caffeine a day.



Video
Caffeine

Why is coffee so popular? Do you think there should be restrictions on caffeine for teens and children? Watch the video and join the discussion!

Caffeine has been around for thousands of years. Even though the coffee 'tree' originated from Ethiopia, it was the Arabs who first cultivated the plant and used it as a drink. Although coffee was well established in the Islamic world in the 16th century, it was not until the 17th and 18th centuries that it became popular in European coffee shops. Today, 120 000 tonnes of caffeine are produced globally each year. Caffeine is found in a variety of food and beverage products, including:

- ⇒ coffee
- ⇒ tea
- ⇒ chocolate
- ⇒ energy drinks
- ⇒ energy bars
- ⇒ over-the-counter medications (such as cough medicines)
- ⇒ cola drinks
- ⇒ chocolate milk.

FAST FACT

The chemical name for caffeine is 1,3,7-trimethylxanthine. This chemical is also used as a pesticide to kill frogs, but is best known as the world's most popular drug.

FAST FACT

A traditional Ethiopian story: One day, a farmer moved his herd of goats to a new pasture and noticed they were becoming restless and irritable. After watching the goats closely, the farmer noticed they were grazing on small seeds. These seeds were later dried and called 'coffee beans'.

Energy drinks

Energy drinks are non-alcoholic carbonated drinks that contain substances known to boost energy levels, such as caffeine or guarana, a herbal source of caffeine. The energy drink industry in Australia is booming. There are hundreds of different energy drinks available, ranging from energy shots to massive 500 millilitre cans! Australia has even produced an energy drink in a powdered form.

Energy drinks should not be confused with sports drinks, which are designed to rehydrate and replace **electrolytes** lost during physical activity. Sports drinks provide carbohydrates that the body requires to create energy for muscular contraction. Energy drinks contain higher concentrations of caffeine, producing a sense of alertness and focus. Some energy drinks contain twice as much caffeine as many soft drinks.

FAST FACT

Caffeine: The legal limit of caffeine in a 250 millilitre energy drink in Australia is equivalent to 1 cup of coffee (80mg).



Worksheet
1.11

electrolytes
inorganic compounds used to create electrical energy for a variety of bodily functions; an example is salt

What's in energy drinks?

- ⇒ Caffeine: a 250 millilitre can of energy drink contains 80 milligrams of caffeine. A 500 millilitre can contains around 160 milligrams of caffeine. These levels are well over the recommended limits for a child.
- ⇒ Herbal extracts: guarana and ginseng
- ⇒ Protein: taurine, an amino acid, is added to energy drinks
- ⇒ Sugar: typically around 13 teaspoons per can
- ⇒ Vitamin B

FAST FACT

Thirty-one per cent of 12–19 year olds regularly consume energy drinks.



iStock.com/skiddnell

Figure 1.26 Energy drinks often contain more caffeine than the daily recommendation for a child.

The harmful effects of energy drinks

The risks associated with the long-term use of energy drinks are not yet known. However, recent data collected by the Australian Poisons Centre highlights the most common side effects associated with over-consumption of energy drinks. These include:

- ⇒ palpitations/faster than normal heartbeat
- ⇒ tremors
- ⇒ agitation
- ⇒ upset stomach
- ⇒ chest pain
- ⇒ dizziness
- ⇒ tingling/numbing skin
- ⇒ difficulty sleeping
- ⇒ breathing problems
- ⇒ headaches.

CASE STUDY

HEALTH WARNING AS DRINKS PULLED FROM SHELVES

Identify

Energy drinks with as much caffeine as nine cans of Coca-Cola have been removed from store shelves in a major crackdown blitz.

Understand

South Australian health officials have seized 700 energy drinks from retailers after discovering they contained nearly double the legal caffeine limit of 320 mg per litre. Some brands, including GFUEL, Bang and Raze Energy, had 300 mg of caffeine per can, equivalent to nine cans of Coca-Cola or three shots of coffee.

Excessive caffeine consumption can cause insomnia, anxiety, heart issues, and even seizures. SA Health inspectors found 18 stores selling these high-caffeine drinks, leading to \$3000 fines for two businesses and warning letters for 13 others. Officials have also issued eight holding orders to prevent further sales of non-compliant products.

Acting Chief Public Health Officer Chris Lease stated that many of these drinks were imported illegally, with some retailers unaware of the regulations. Efforts are being made to educate businesses and enforce stricter compliance.

Health Minister Chris Picton warned that these drinks are often marketed toward children, featuring video game and cartoon characters. He urged businesses to check caffeine levels before selling products and encouraged consumers to read labels carefully.

FPO

Insert Figure 4> Picture from article
<https://www.theaustralian.com.au/breaking-news/check-the-label-health-warning-as-drinks-pulled-from-shelves/news-story/d87e31d274dcfb4c5c594e1b678fd9>

Link not open

Discuss

- 1 Discuss why excessive caffeine consumption is dangerous for young people.
- 2 Evaluate whether stricter laws should be introduced to prevent high-caffeine drinks being sold.
- 3 Examine how energy drink companies target teenagers in their marketing.
- 4 Assess the role businesses should play in ensuring products comply with regulations.

Energy drinks and alcohol consumption

Recent research suggests the combination of alcohol and energy drinks could be more harmful than drinking alcohol alone. There has been an alarming increase in the number of people choosing to drink energy drinks with 'shots' of alcohol. This polydrug use combines a depressant (alcohol) with a stimulant (caffeine-laden energy drink). This blend will allow the person to feel the effects of alcohol while remaining more alert and awake, with the energy drink masking the tiredness and relaxed state associated with alcohol consumption.

People who combine alcohol with energy drinks often falsely perceive themselves to be more confident and alert, and subsequently take more risks, including driving while under the influence of alcohol. They may increase their chances of experiencing alcohol-related accidents.



Figure 1.27 The combination of alcohol and energy drinks can have fatal consequences.

Table 1.5 Caffeine content in food and drink

Drink/product		Amount	Caffeine content
Brewed black tea (medium strength)		mg/100ml	22.5
Coffee		mg/100ml	101.9
⇒ Cappuccino			86.9
⇒ Flat white			74.7
⇒ Long black			194.0
⇒ Espresso style			
Cola		mg/100ml	
Coca Cola			9.7
Diet Coke			9.7
Coke Zero			9.6
Energy drink (Red Bull)		mg/100ml	32.0
Milk chocolate bar		mg/100ml	20.0
Dark chocolate bar		mg/100ml	59.0

Source: Australian Drug Foundation. Adapted from Food Regulation Standing Committee, Caffeine Working Group. (2013). The regulation of caffeine in foods.

From top to bottom: Shutterstock.com/Nitr; Shutterstock.com/komee; iStock.com/gvictoria; Shutterstock.com/Baranov E; Shutterstock.com/AndriJuss; Shutterstock.com/Andreat971

FACE TO FACE

Calculating your caffeine intake

It is recommended that children and teenagers consume no more than 2.5 milligrams of caffeine per kilogram of body weight per day. Based on this recommendation, calculate how much caffeine you are allowed to consume on a daily basis. Now, using the information in Table 1.5, work out which products you can consume that will keep you within your recommended daily allowance. Discuss your findings with the rest of the class.

Effects of caffeine

The effects of caffeine can be felt in as little as five minutes after consumption, and can last for up to 12 hours. As with all drugs, the side effects can differ among individuals. Symptoms are more likely to increase if consumption increases.

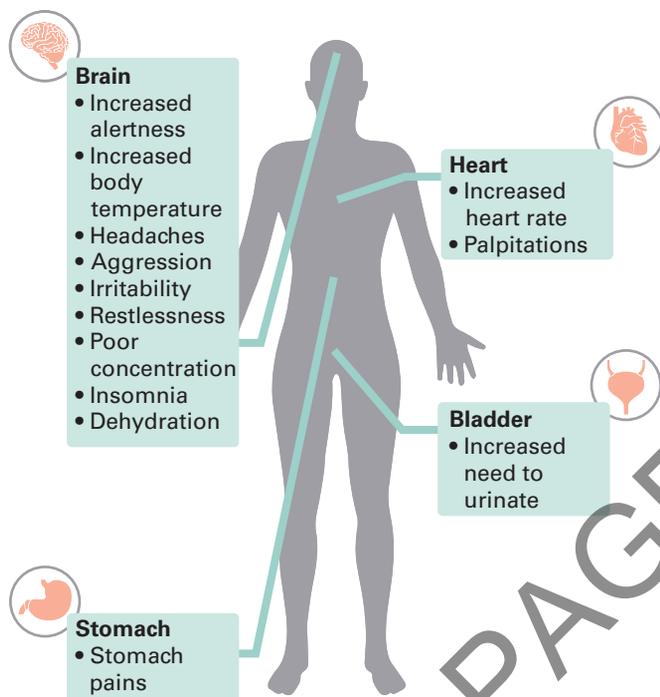


Figure 1.28
Short-term effects of caffeine

Caffeine and the law

In Australia, it is legal to purchase and sell caffeinated products. There is no legal limit on the consumption of caffeine, and it is considered socially acceptable.

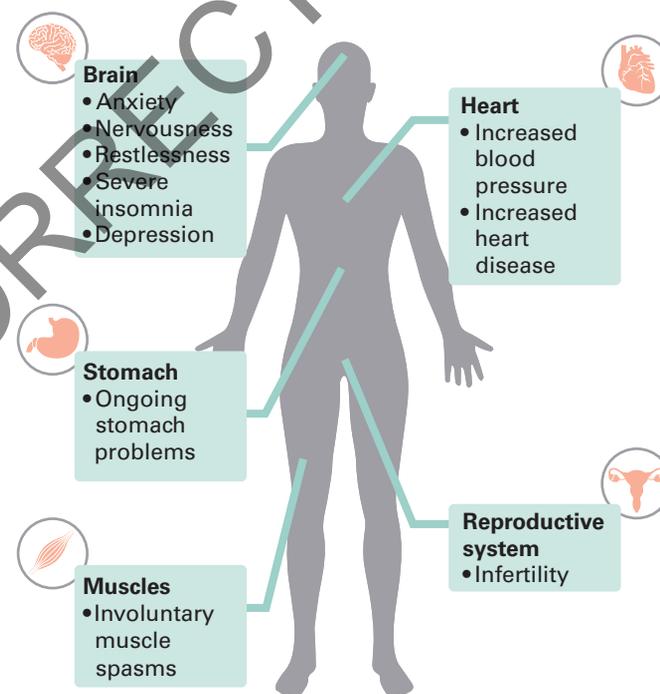


Figure 1.29
Long-term effects of caffeine



Worksheet
1.13

FAST FACT

Cannabis is known by a variety of names, including marijuana, grass, pot, dope, hash, weed, ganja, head, bud, doobie, mary jane and bhong.



Worksheet
1.14

FAST FACT

Approximately 36.4 per cent of Australian youths aged 12–17 have used cannabis at least once in their lifetime.

Source: https://www.unsw.edu.au/research/ndarc/resources/cannabis-use-among-australian-youth?utm_source=chatgpt.com



Worksheet
1.15

Worksheet
1.16

CANNABIS

Drug classification: depressant (small doses); hallucinogen (larger doses)

Cannabis is an illegal drug made from the leaves and dried flowers of the cannabis plant. There are two species of cannabis plant, *Cannabis sativa* and *Cannabis indica*. Each species produces different effects on the body. The leaves of the cannabis plant have very distinct characteristics, with between five and seven arrow-shaped leaflets attached to a centre point. The greyish-green dried plant matter can either be smoked or prepared as an edible ingredient.

The main active ingredient in cannabis is a chemical called delta-9-tetrahydrocannabinol, otherwise known as THC. The concentration of THC varies depending on the part of the plant being used and its growing conditions. This ingredient causes the 'high' associated with cannabis use, leaving the user with feelings of happiness and euphoria.

Cannabis has been around for thousands of years. It is the only plant in the world cultivated for its fibre, used in the manufacture of cloth and also used for its psychoactive properties. Early Chinese records dating back to 2737 BCE refer to cannabis being used to treat conditions such as rheumatism and malaria. Originally, there was mention of the intoxicating properties of cannabis, but the medicinal properties were considered more important. Recreationally, the drug was used in India and by Muslims in place of alcohol, which is forbidden by the Qur'an.

Effects of cannabis

The effects of cannabis usually occur within the first few minutes of the drug being smoked, and may last for up to two or three hours, depending on the concentration of THC. If cannabis is eaten, the effects are slower to occur and may last longer than when smoked.

Over time, the regular use of cannabis may result in a number of health-related problems.

Medicinal cannabis

Medicinal cannabis refers to the legal use of high quality and regulated cannabis products prescribed by doctors to ease the symptoms associated with a medical condition. Unlike recreational cannabis, medicinal cannabis is taken by those suffering either chronic

or terminal illnesses to alleviate debilitating side effects. It is prescribed where conventional medicine has failed to be effective, and is not a cure. Cannabis has been used for medicinal purposes for thousands of years to treat various conditions. The cannabis plant contains a vast number of unique compounds, known as cannabinoids. Over 100 different cannabinoids have been identified. The main two active ingredients are Delta-9-tetrahydrocannabinol (THC) and Cannabidiol (CBD).

Research suggests these cannabinoids may help to:

- ⇒ relieve anxiety
- ⇒ reduce inflammation
- ⇒ alleviate pain
- ⇒ control vomiting and nausea
- ⇒ relax muscle groups
- ⇒ increase appetite
- ⇒ improve weight gain
- ⇒ treat cancer.



Figure 1.30 The dried leaves and flowers of the cannabis plant are known as marijuana.

In 2016, the use of medicinal cannabis was legalised in Australia. While there has been much debate over the legalisation of medicinal cannabis, the Australian government openly supports further research into the medicinal properties of cannabis and its regulation in order to safeguard patient access.

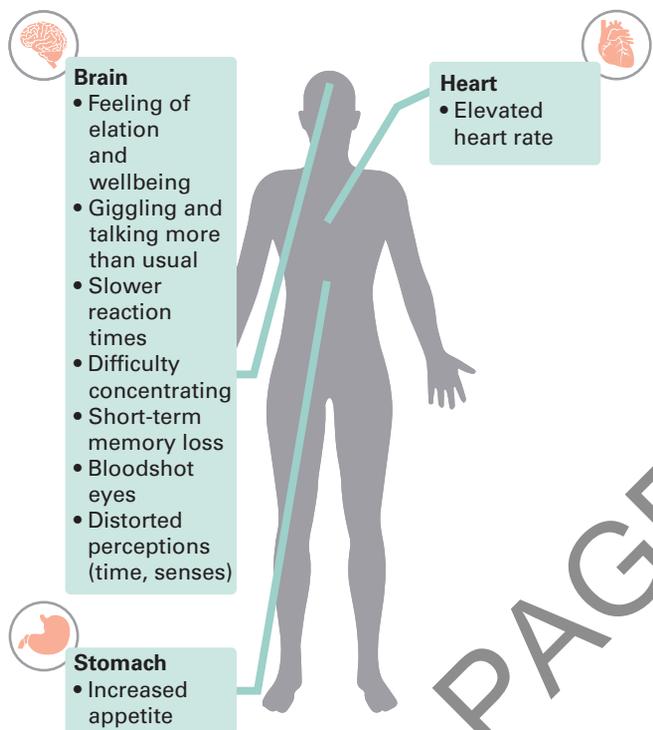


Figure 1.31 Short-term effects of cannabis use

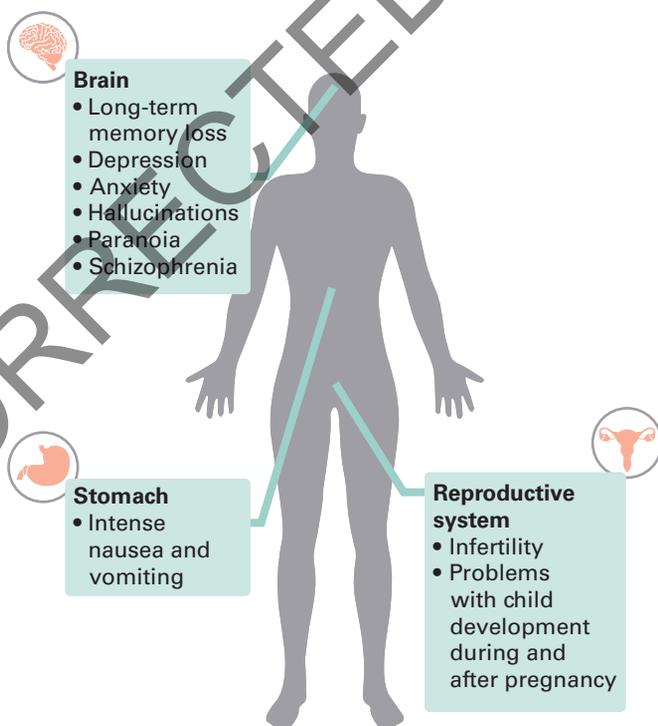


Figure 1.32 Long-term effects of cannabis use

CASE STUDY

WE NEED TO TALK ABOUT MEDICINAL CANNABIS

Identify

Despite weak evidence supporting its use, about half a million Australians have been prescribed it, fuelled by a system where doctors are paid for every prescription they write.

Understand

The debate over medicinal cannabis remains controversial, despite its increasing use. Cannabis has been used historically for both recreational and medicinal purposes, but its psychoactive effects, including hallucinations, paranoia, and long-term mental health risks, led to widespread criminalisation. However, modern interest in its medical benefits has led to its legalisation in many places, including Australia in 2016.

The main active components of cannabis are tetrahydrocannabinol (THC), which causes psychoactive effects, and cannabidiol (CBD), which does not. While some medicinal uses are supported by evidence – such as treating epilepsy, multiple sclerosis symptoms and chemotherapy-induced nausea – many other claims lack strong scientific backing.

Since its legalisation, medicinal cannabis prescriptions in Australia have surged, largely due to a simplified online application process. Over half a million Australians have now received prescriptions. However, concerns are growing about its rapid expansion. The Therapeutic Goods Administration (TGA) lacks the resources to regulate all applications, and an increasing number of prescriptions contain high THC levels.

Another issue is the rise of direct-to-consumer advertising and the involvement of commercial interests in prescribing and supplying cannabis. Some doctors receive minimal training through short courses run by companies with financial ties to cannabis manufacturers. Many telehealth clinics operate solely to prescribe cannabis, creating ethical concerns.

With medicinal cannabis now a billion-dollar industry, critics argue that its widespread prescription should be based on stronger scientific evidence and better regulatory oversight to protect patients from commercial exploitation.

Discuss

- 1 Name the two main chemicals found in cannabis and explain what they do.
- 2 When was medicinal cannabis legalised in Australia?
- 3 Explain why some people are worried about how medicinal cannabis is prescribed.
- 4 Discuss the potential risk that cannabis containing high levels of THC may pose for patients and society.

FPO

Insert Figure 5> Picture from article
<https://www.theaustralian.com.au/health/its-time-to-rethink-medicinal-cannabis-in-australia/news-story/64d7348abee1a6e897f7f932fd638712>

Link not open

Cannabis and the Law

Although medicinal cannabis has been legalised, it is illegal to use, sell or give cannabis to someone else in Victoria. Serious penalties such as substantial fines or prison terms apply to those convicted of supplying cannabis or being in possession of items used to smoke cannabis, such as pipes and bongs.

ECSTASY

Drug classification: stimulant, hallucinogen (rare)

Ecstasy, or molly, is the common name for the synthetic drug MDMA (methylenedioxymethamphetamine). Primarily a stimulant, ecstasy is an illegal psychoactive drug with hallucinogenic properties. People taking ecstasy may feel physically energised and emotionally relaxed. Depending on the contents of the drug, there may also be some hallucinogenic effects, including distortions in reality.

MDMA was originally manufactured in Germany in the early 1900s. In the 1970s and early 1980s, MDMA was used experimentally by psychotherapists to help people understand their feelings by promoting deep inner thinking and enhancing communication. MDMA has been used in nightclubs and on the 'party' scene since the 1980s.

Forms of ecstasy

Ecstasy can be supplied as a tablet, capsule or a powder. Tablets (or pills) are the most common forms of MDMA. They come in a variety of colours, shapes and sizes, and usually display popular imprinted commercial logos or graphic designs. Ecstasy is primarily swallowed, but can also be injected or snorted.

It is important to note that not all ecstasy tablets contain MDMA. Although MDMA is usually the main ingredient in ecstasy, it is becoming difficult to source, so alternative ingredients are being used to mimic its effects. These alternatives include caffeine, amphetamine, ephedrine, methamphetamine and talcum powder. Some ecstasy tablets may contain no MDMA at all. The majority of the ecstasy sold in Australia is amphetamine-based.



Figure 1.33 Ecstasy tablets are sold in a variety of forms, usually with a distinctive design.

FAST FACT

According to the 2022–23 Australian Secondary Schools' Survey, one in 100 students (1 per cent) aged 12–17 used MDMA/ecstasy in the past month.

Source: <https://positivechoices.org.au/teachers/ecstasy-and-mdma-factsheet#:~:text=How%20many%20young%20people%20have,ecstasy%20in%20the%20past%20month.>

FAST FACT

Other names for ecstasy include Molly, E, pingers, the love drug, pills, eccy, candy and e-bomb.

Effects of ecstasy

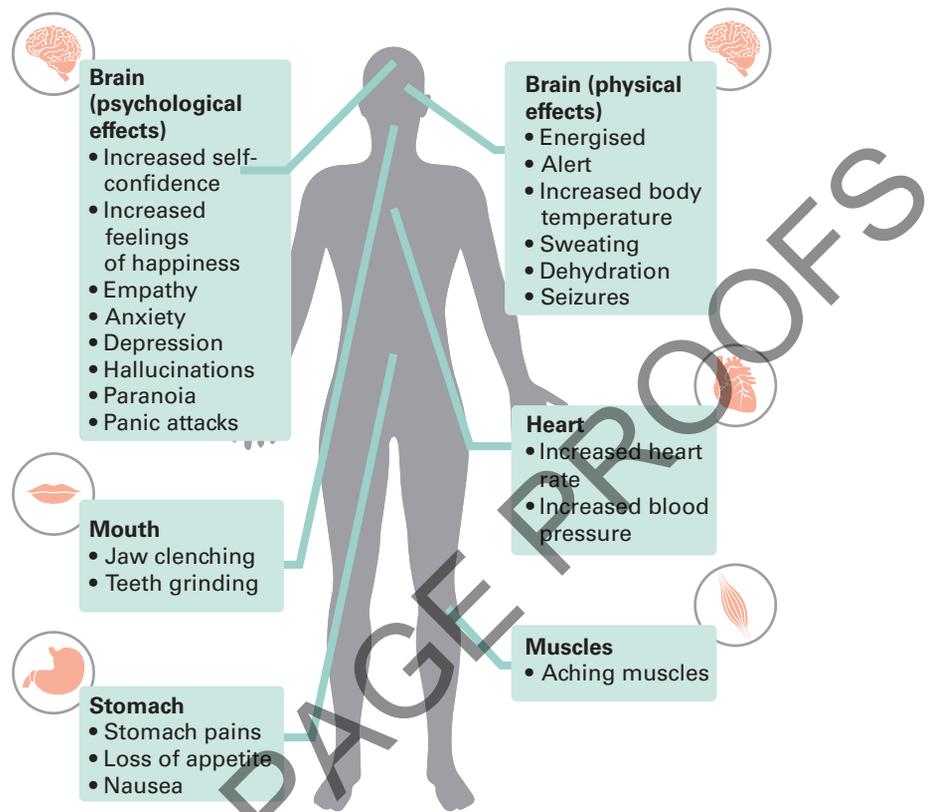


Figure 1.34
Short-term effects of ecstasy

Long-term effects of ecstasy

Unfortunately, little is known about the long-term physiological effects of ecstasy use. Some evidence suggests that long-term use can cause damage to organs such as the liver, heart and brain. In addition, research suggests that those who regularly use ecstasy are exposed to an array of mental health issues and may experience irrational emotional behaviour, poor memory and concentration, anxiety, paranoia, irritability, depression and personality changes. Long-term use can lead to dependency.

Ecstasy and the law

It is illegal to use, sell or give ecstasy to someone else in Australia. Serious penalties such as substantial fines or prison terms apply to those convicted of supplying ecstasy.



Worksheet
1.18



Weblinks
National Institute on Drug Abuse for Teens
National Drug & Alcohol IQ Challenge



Quiz
How will drug use affect my body?

FACE TO FACE

Debate on drugs

In groups of four, formulate an argument on one of the following drug-related topics. You will be asked to debate your argument either for or against the motion selected, against another team of four.

- ⇒ Cannabis is an evil weed leading to harder drugs.
- ⇒ Alcohol is the most damaging drug in society.
- ⇒ Is vaping more dangerous than smoking?
- ⇒ Should energy drinks be banned?

REVIEW

- 1 Explain the difference between a depressant and a stimulant. Give two examples of each.
- 2 Reorganise the following list of drugs under their correct drug classification. Remember, a drug may be listed under more than one heading:

Depressants	Stimulants	Hallucinogens
Magic Mushrooms	Coffee	Alcohol
Cannabis	Ecstasy	Cocaine
Khat	LSD	Ketamine
Heroin	Inhalants	Nicotine
Codeine	Ephedrine	Ice

- 3 Compare and contrast the short-term effects of alcohol and caffeine.
- 4 Define polydrug use and provide an example.
- 5 Outline the four main types of alcohol.

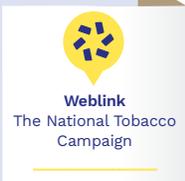
REFLECT

The National Tobacco Campaign is an Australian Government program aimed at reducing smoking rates in Australia. Launched in 1997, this is one of Australia’s longest-running public health campaigns. In 2024, the campaign was expanded to include risks and harms of vaping.

- 1 Explain why the National Tobacco Campaign is important. Use facts from the website.
- 2 Identify what the campaign aims to achieve.

‘Give up for good’ is the latest national smoking and vaping cessation public health campaign that targets young people. Click on the link on the campaign page and answer the following questions

- 1 Read ‘Why are we still vaping? – The facts’. Explain why it is illegal for tobacconists, vape shops and convenience stores to sell any type of vape or vape product.
- 2 Identify five harmful side effects of chemical exposure from vaping.
- 3 Most vapes in Australia contain nicotine, even if the label claims otherwise. Nicotine is highly addictive and can affect brain development, impacting memory, attention and mood. Name three organisations that provide support and assistance for people who want to quit vaping.



EXTEND

- 1 Many young people believe cannabis is no big deal, and that cannabis should be legalised in Australia for both recreational and medicinal use. Although the media has been sending mixed messages about the use of cannabis, the risks associated with this drug are very real and should not be ignored.
Use the internet to research information on the effects of cannabis. Create a 20-second radio commercial giving listeners important health information relating to why cannabis could lead to lower academic grades at school.

- 2 In groups, debate whether cannabis should be legalised. Research information to prepare your argument for or against the legalisation of cannabis and draw a conclusion. Justify your group decision using facts from your research.
- 3 In Australia, cigarette advertising is banned and cigarette packaging must display anti-smoking messages. Should these rules also apply to e-cigarette use?



WHAT FACTORS INFLUENCE THE USE OF DRUGS AND ALCOHOL?

Young people choose to take drugs for a variety of reasons. They are influenced by three main factors: personal, environmental and social. Understanding these factors and the risks associated with drug use will help you to make responsible, safe and informed decisions.

PERSONAL FACTORS: DO YOU HAVE A FRIEND LIKE MICAH?

Micah had been going out with Lina for nearly three years. Lina ended the relationship by text message. She gave no reason, only saying she didn't want to go out with Micah anymore. Micah pretended the break-up didn't bother him, but deep inside he was struggling to come to terms with it. After a while, Micah began to feel depressed and wanted to find a way to deal with his emotions. He started drinking energy drinks to pick him up and was soon drinking up to four energy drinks a day.

Stress and self-esteem are two personal factors that could lead to drug use.

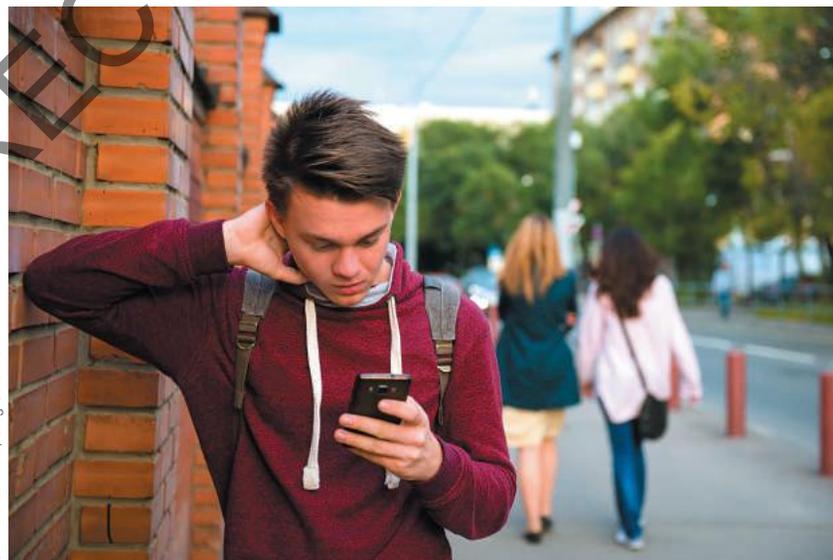


Figure 1.35 Stress and low self-esteem can influence the use of drugs and alcohol.

Stress

From time to time, everyone will experience stress. People handle stress in many different ways. In Micah's case, he was unable to deal with the break-up and needed to find a way to ease his emotions. Unfortunately, substance use does not address the underlying factors causing the stress. Micah's need for a caffeine rush may make the situation worse.

Self-esteem

Low self-esteem can significantly increase the likelihood of drug use in young people, as they are less likely to consider the consequences associated with their actions.

SOCIAL FACTORS: DO YOU HAVE A FRIEND LIKE EMILIA?

Emilia is 16 years old and has smoked four cigarettes a day since she was 12. She first started smoking when she was offered a cigarette by one of her older brother's friends. Now, whenever Emilia hangs out with her friends, they smoke. She has also tried marijuana, for a laugh and because it made her feel part of the in-crowd. Emilia says she can stop smoking at any time, but she is yet to do so.

Peer pressure, role models and socio-economic background are all social factors that could influence young people to use drugs.

Peer pressure

In Emilia's case, she first smoked a cigarette because she wanted to be accepted by her brother's friend. She may also have felt pressure from her peers.

Role models

Some teenagers may have seen their role models on television or in movies smoking, looking cool and unconcerned. This 'glamorisation' of drug use could influence teenagers' decisions to use drugs.

Socio-economic background

Poverty, financial stress at home and mental and physical abuse may prompt teenagers to use drugs as a way of coping with certain situations. Often, drug accessibility is more prevalent in low socio-economic areas, as some people may sell drugs as a means of overcoming poverty.



Figure 1.36 Peer pressure, role models and socio-economic background all influence drug use.

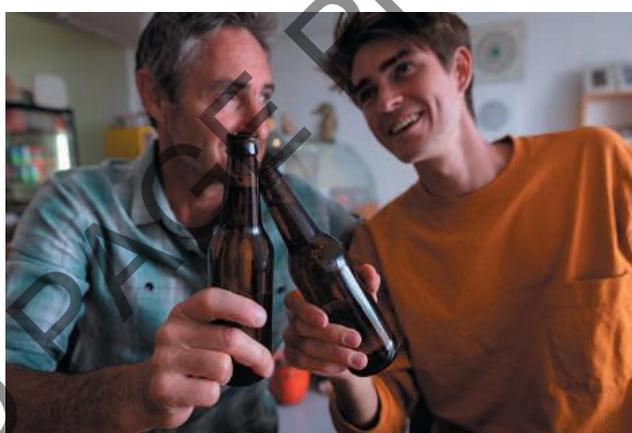


Figure 1.37 Family members, conflict and education can all influence drug use.

ENVIRONMENTAL FACTORS: DO YOU HAVE A FRIEND LIKE SAMIR?

Every night, Samir's father would come home from work and head straight for the fridge. He would drink an average of six bottles of beer a night, often asking Samir to get another one for the 'old man'. After a couple of beers, Samir found that his father grew funnier, and he loved listening to the stories he told. One day, when Samir was 16, he asked his father if he could have a beer too. His father gave him a pat on his back and said, 'Go for it, son!'

There are a number of environmental factors that may influence teenagers to use drugs, including family members, family conflict and education.

Influence of family members

Family members who smoke or drink alcohol are more likely to influence young people living in the same household to do the same, as they start to see the drug use as a normal part of everyday life.

Family conflict and home-management issues

Family conflict, lack of support and direction, divorce or separation are all factors that may contribute to the increased risk of drug taking. Family transition and moving house may also add stress to young people.

Education

A student's performance and participation at school can be a major risk factor associated with drug use. Expulsion, truancy, boredom and poor academic achievement, coupled with a lack of motivation and commitment, can also increase the risk of drug use.

RISK FACTORS ASSOCIATED WITH DRUG USE

Anyone can become dependent on drugs. It can happen to people of any age, economic status or gender. There are, however, certain risk factors that can increase the likelihood of becoming dependent on drugs.

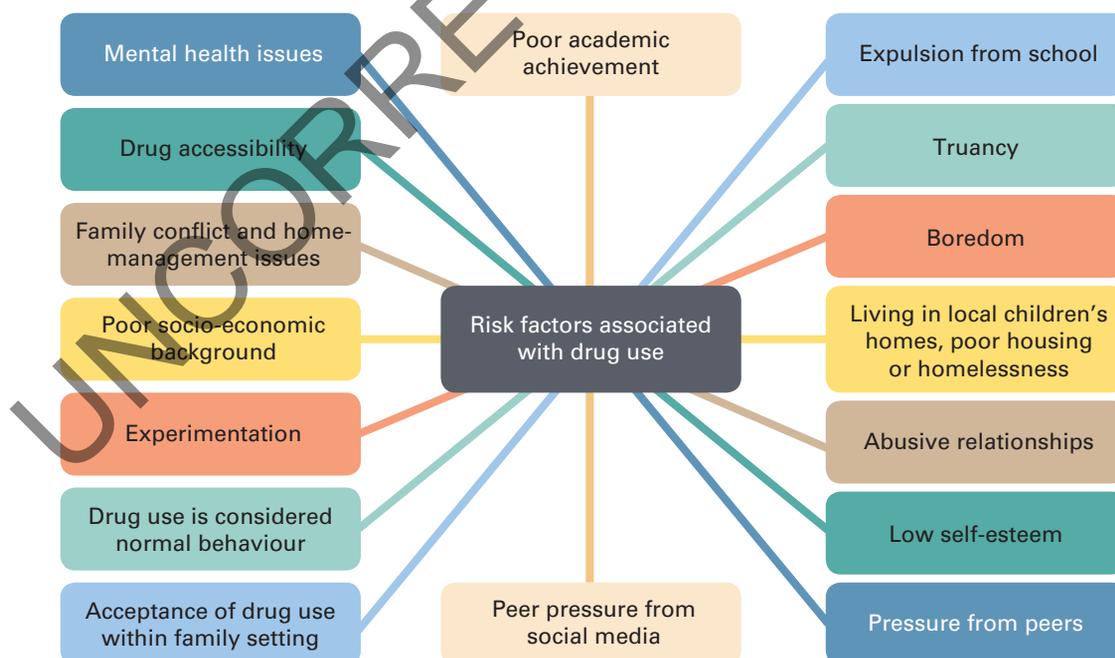


Figure 1.38 Risk factors that can increase likelihood of becoming drug dependent

REVIEW

- 1 There are many factors that can influence the use of drugs and alcohol. Under each of the following headings, identify the factors that may contribute to the use of drugs and alcohol:
 - Personal
 - Social
 - Environmental



Quiz
What factors influence the use of drugs and alcohol?

REFLECT

- 1 Ninety per cent of all addictions start when people are in their teenage years. Certain risk factors can increase a person's chances of taking drugs. A risk factor for one person may not be the same for another. Review the list of risk factors associated with drug use and identify the five risk factors that you think are the most likely causes of drug use. In pairs, discuss your lists and identify the similarities and differences.

EXTEND

- 1 Review the three scenarios detailed in this section (Micah, Emilia and Samir). What advice or help would you give each of these teens if you were friends with them?

HOW CAN I MAKE INFORMED DECISIONS ABOUT DRUGS?



Worksheet
1.20

DECISION-MAKING AND PROBLEM-SOLVING

Typically, a person can make around 2000 decisions a day. This might sound like a lot, but most of these decisions are very minor, such as which clothes to wear or what to eat for breakfast. More complex decisions may require more thought and have more consequences linked to them. If these decisions are rushed or emotionally driven, poor decisions can be made. The ability to make decisions and problem-solve are useful tools, as they can help us to make smart choices.

USING VALUES AND EMOTIONS TO MAKE DECISIONS

Values are fundamental behaviours and beliefs that inform our actions and attitudes. They help us decide what is important in life. Values mould us into the person we want to be; they determine how we treat ourselves and others and how we interact in our communities. Values are principles that help us determine what is right and what is wrong. They describe our personal qualities that enable us to guide our behaviour. When we make decisions, we consider our values first.

Emotions are strong **feelings** usually accompanied by specific physical changes including an increased heart or respiratory rate, shaking or crying. Emotions can be triggered by the people you are with or a situation you may find yourself in.

emotions strong feelings usually accompanied by specific physical changes

feelings a reaction or emotion such as anger or sadness

FACE TO FACE

Values and decision-making

In pairs discuss the following questions:

- 1 Create a list of values that are important to you.
- 2 Why it is important to consider your values when making decisions?
- 3 What factors influence your emotions?
- 4 Read the following two scenarios and make a decision about what actions you would take if you were involved in the scenario. Consider your values and emotions:

Scenario	Identify the values that would be important in making a decision	Identify the factors that would influence your emotions
You are enjoying the day at the beach with friends. Your friend's brother asks if you want a beer.		
You are riding your dirt bike with your best friend. You stop for a break and she offers you a cigarette.		

UP AND MOVING

Class debate and reflection activity: alcohol, drugs and decision-making

Instructions

- 1 **Think-Pair-Share:** Read the following statements and decide whether you **agree**, **disagree** or are **unsure**.
- 2 **Group discussion:** In small groups, discuss your thoughts, considering different perspectives and real-world implications.
- 3 **Reflection:** After your discussions, write a short response on how your personal values influenced your opinions.

Statements

- Adolescents should support and encourage their parents to quit smoking.
- Cannabis should be legalised for medical and/or recreational use.
- The legal drinking age should be raised from 18 to 21 years.
- Schools should provide pain relief medication for students with headaches.
- The minimum driving age should be set at 18 years.
- Smoking should be allowed in designated areas on planes.
- Parents are responsible when teenagers misuse alcohol or drugs.
- Prescription and over-the-counter medications are completely safe.

SEVEN STEPS TO EFFECTIVE DECISION-MAKING

A step-by-step decision-making process can help you solve problems by considering all the relevant information and related consequences. This decision-making tool can help you choose the most appropriate path to take.



Figure 1.39 The seven steps to effective decision-making

FACE TO FACE

Decision-making in action

1 Scenario challenge

In small groups, choose one of the following scenarios. Each group must apply the **seven steps** to solve the problem and prepare a short explanation.

- You're deciding whether to take a part-time job that might interfere with school.
- A friend is pressuring you to try alcohol at a party. What do you do?
- You have limited time and must choose between studying for an exam and attending a family event.

2 Class discussion and reflection

Each group shares their decision-making process. Discuss how the seven steps helped your group make a thoughtful decision.



WebLink
Brené Brown
on Empathy

DEVELOPING SENSITIVITY, EMPATHY AND COMPASSION

The term 'empathy' refers to being able to sense another person's emotions and feelings coupled with the ability to visualise what someone else may be thinking or feeling. Empathy and sensitivity are important skills to add to our toolkits. They help us to solve problems, consider things from another person's point of view (or perspective) as well as cope with our own and others' emotions while avoiding disagreements. Compassion is empathy plus action, where understanding someone's pain leads to a genuine effort to help and support them.

FACE TO FACE

1 To help you develop sensitivity, empathy and compassion, in pairs, read the following scenario and choose the most appropriate option to respond with.

Scenario – Your brother comes home from school and starts telling you about his mate, Jarran, who seems to be really cranky recently.

Which response would you choose?

Option A: 'Well, you're always cranky... so what?'

Option B: 'I'd say just leave him alone for a while, he'll get over it.'

Option C: ASK QUESTIONS.

'Right, well tell me how Jarran has been acting.'

'What do you think has been going on with him lately.'

'What do you think could make him act this way?'

'Is there anything you can do to help him?'

'If you were Jarran, what would you like others to do?'

2 In pairs, create a drug-related scenario and provide three options. Develop a 'most appropriate option' that demonstrates sensitivity, empathy and compassion. Once complete, swap scenarios with another pair to solve.

ASSERTIVE BEHAVIOURS

Being assertive means being able to communicate thoughts and feelings freely and confidently while also considering the thoughts and feelings of others. When communicating with others, you will have a choice of three types of communication styles.

Passive communication

Passive communicators are often hesitant and nervous. They tend to place others' needs before their own. They tend to allow others to decide the outcome of a situation, are regularly indecisive and lack self-esteem. Assumption and silence are key indicators of a passive communicator.

Assertive communication

Assertive communicators are able to freely express opinions, feelings and thoughts in a positive, open, honest and respectful manner, without hurting others. Assertive communicators are confident in the way they speak and are receptive to the needs of others.

Aggressive communication

Aggressive communicators tend to express their thoughts and feelings in a defensive, demanding and hostile manner, often at the expense of others. While this dominant behaviour may result in short-term gains, relationships with others will suffer in the long term.

These styles are all situation specific. While assertive communication seems like the most appropriate and healthiest method, it may not always be the best choice. Some situations will require a more passive or aggressive approach. Being assertive is often seen as the balance point between passive and aggressive behaviour. It's important to become familiar with all three methods of communication so you can choose the most effective option for each situation and build respectful, lasting relationships.

FACE TO FACE

Assertiveness think-pair-share activity

In pairs, discuss and reflect on the following questions:

- 1 Why do people struggle to communicate appropriately? Consider emotions, culture and social pressures.
- 2 What are your communication 'pet peeves'?
- 3 Do you have communication habits you'd like to improve?
- 4 How can you recognise effective communication?
- 5 List situations where you want to be more assertive.
- 6 Recall a time you wish you had been assertive. Write a statement you could have used.
- 7 Role-play a situation where you practise assertive communication.
- 8 Create and share a list of assertive communication strategies.



Figure 1.40 You have the right to say no to anything that makes you uncomfortable.

Your rights

As an individual you have many rights. You have the right to:

- ⇒ make your own decisions
- ⇒ express your own thoughts and feelings
- ⇒ ask for what you want
- ⇒ say 'no' without feeling guilty
- ⇒ be treated with respect
- ⇒ maintain self-control
- ⇒ listen to the views of others (whether you agree or disagree)
- ⇒ change your mind
- ⇒ take reasonable risks
- ⇒ make mistakes as well as apologise
- ⇒ choose not to be assertive
- ⇒ identify your needs
- ⇒ take time to stop and think.

Being assertive does not necessarily mean winning an argument. It does, however, mean you have the responsibility to express your thoughts and feelings in an appropriate manner.

FACE TO FACE

Your rights

In pairs, discuss the following questions:

- 1 How many of the above rights do you feel you currently have?
- 2 Identify which of these rights are the most difficult to carry out.

Steps to being assertive

- 1 Keep to the point; avoid lengthy explanations.
- 2 Maintain eye contact with the person you are talking to.
- 3 Remain calm and avoid anger.
- 4 Be polite, yet firm.

HARM MINIMISATION

Harm minimisation focuses on ways of reducing the harmful effects of alcohol and drugs on individuals, families and communities.

In order to minimise the harmful effects of alcohol and other drugs, it is important to understand these facts:

- ⇒ Alcohol and drugs are prevalent in society.
- ⇒ It is impossible to permanently remove drugs from society.
- ⇒ The removal of drugs may increase the risk of harm to society.

Harm minimisation aims to improve the health, social and economic situations for individuals and the communities in which they live. There are many strategies used to inform people about the risks associated with alcohol and drug use. In Australia, the federal and state governments have adopted a number of strategies aimed at addressing alcohol and drug-related issues.

Shock tactics

Over the years, the Australian Government has run many confronting campaigns designed to shock people into breaking habits that may have a deadly effect on their health. These campaigns have highlighted the effects of smoking, drink- or drug-driving and even binge drinking on individuals, families and their communities.

Awareness of blood borne viruses (BBVs)

A blood borne virus (BBV) is a virus that is carried in the blood or in other bodily fluids including vaginal fluid, semen and breast milk. A BBV is passed on from one person to another via blood-to-blood contact. Risky behaviours such as unprotected sex or sharing injection needles associated with alcohol and other drug use are frequent causes of BBV transmission. The three most common BBVs include:

- ⇒ HIV (human immunodeficiency virus)
- ⇒ hepatitis B
- ⇒ hepatitis C.

All too often people with a BBV may not even be aware that they are carrying a virus so it is important to consider ways to reduce your chances of contracting a BBV. To reduce the risk of BBV transmission, it is recommended that you practise good personal hygiene and wash hands thoroughly.

PEER INFLUENCE

Deciding whether to take drugs is an individual choice. Dealing with life's pressures can be difficult at times, but seeking help and advice from friends and family can help you make the right decision and feel in control of your choices. While friends can have a positive influence, some may encourage you to do something you wouldn't normally do. This is known as 'peer influence' or 'peer pressure'. Don't be afraid to say no. A true friend will respect your decisions, even if they choose to act differently.

Making informed decisions is a key factor in minimising harm and reducing associated risks. Before you make a decision, consider the consequences. It's important to remember that it's not all about you. Consider the impact of your decision on your friends and family, too. Anyone can reduce risky behaviour by adopting a safe attitude. A safe attitude can help you focus on your own safety and the health and wellbeing of those around you. Don't tell yourself 'it won't happen to me'; it's important to accept responsibility for your own health and safety.

Where can you go to seek help?

When you're a teenager, it may seem as though other teenagers are the only people who can really understand you. Talking to a friend may be easier than talking to an adult. However, it is important to speak to someone you can trust. It might be your favourite teacher, a close friend or a member of your family.

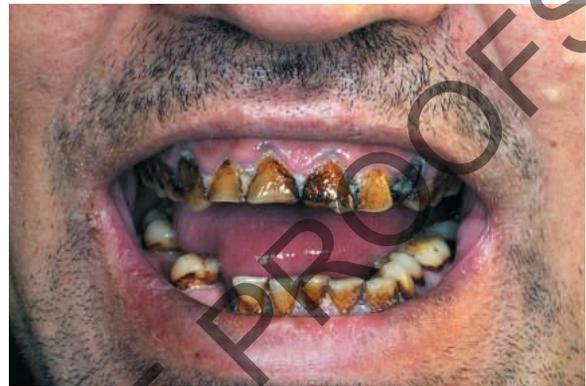


Figure 1.41 Graphic photos are used in government campaigns to stop people smoking.

Science Photo Library



Weblink
Kids Helpline
Lifeline
Beyond Blue



Figure 1.42 Peer groups can put pressure on individuals.

Shutterstock.com/Monkey Business Images



There are also many places where you can go to get help. Medical professionals and school counsellors can offer advice and can even refer you to a community drug program appropriate for your needs. If you do not want to talk to anyone at school, don't be afraid to pick up the phone and call a helpline such as Lifeline (13 11 14 or text: 0477 13 11 14), Kids Helpline (1800 55 1800) or Beyond Blue (1300 22 4636). You can also check them out online.

There are a number of alcohol and drug information services across Australia. The Australian Alcohol and Drug Foundation is committed to minimising drug- and alcohol-related problems in Australian communities. Its website also provides an in-depth list of support services for those with drug-related problems.



Figure 1.43a Lifeline can provide support if you or a friend need help.



Figure 1.43b Kids Helpline is Australia's only free (even from a mobile), confidential 24/7 online and phone counselling service for young people aged 5 to 25. You can reach the Kids Helpline phone counselling service on 1800 55 1800.

WELLBEING CHECK IN

ASKING FOR HELP

Identify

Sometimes it's hard to ask for help, but it can actually be the most helpful thing you can do.



This activity has been developed in collaboration with Dr David Bakker of MoodMission

Understand

Humans are social animals. We need connections to other people to feel okay. However, lots of things can get in the way of this, such as not trusting others, fear of burdening people with our problems, or feeling like there's no actual way others can help. When these barriers crop up, it's important to remind ourselves of the power of help – both giving and receiving.

Practise

- 1 Think of a problem you're currently facing. Maybe you're feeling stressed about schoolwork, or are having trouble with friends.
- 2 Now think of one thing you could ask for that would help with the problem. It might not be something specific – it could just be the opportunity to talk to someone, and get your worries off your chest.
- 3 Who could help you? It might be a friend or family member, for example.
- 4 Now that you have identified a problem, something you could ask for, and the person you could ask to help, make a plan to do it! Will you send them a message, or talk to them face to face?

Reflect

Can you think of a time where asking for help would have made a situation easier to navigate? There are often many barriers that prevent us from asking for help. But it's always worth trying. You might be surprised at how much people want to help.

BASIC FIRST AID

Would you be able to assist a friend if they needed first aid? If you think your friend has taken something they shouldn't have and is having a bad reaction, the following tips may help:

- ⇒ If you're not sure how serious the problem is, **always call 000**. It is better to get immediate medical assistance than to delay. Never avoid calling an ambulance because you don't want to get the police involved or you don't want to get into trouble. It's not about you, it's about your friend. Any delay could have severe consequences. Monitor your friend carefully while you wait for help to arrive.
- ⇒ If your friend is unconscious but breathing, place them on their side, in the recovery position, making sure their head is tilted back so they can breathe and avoid choking on any vomit.
- ⇒ If your friend has stopped breathing, start CPR (cardiopulmonary resuscitation). Don't panic! If you call 000, the operator will talk you through this process while the ambulance is on its way. You could save your friend's life.



Worksheet
1.21



Quiz
How can I make informed decisions about drugs?

REVIEW

- 1 Identify the seven steps for effective decision-making.
- 2 Describe three forms of communication style.
- 3 Differentiate between a 'value' and an 'emotion'.
- 4 Recall three support services you could contact if you need help.

REFLECT

- 1 Read the following three role-play situations with a partner. Provide the 'opening line' for your partner to respond to. The opening lines are written in brackets after each situation.
 - a Responding to someone who has asked if you want to buy some cannabis.
(Hey, it's super high quality, and cheap! You know you want it!')
 - b Responding to a friend who wants to borrow money to buy some alcohol for a party that night.
(Come on, loan me \$50. You owe me a favour anyway!')
 - c Confronting a friend who has been self-administering prescription pain killers for a painful knee.
(Give me a break, I'm playing in the basketball semi-finals tomorrow night and I need to get this knee in shape!')
 - d Deciding whether to call an ambulance for a friend who has collapsed after binge drinking.
(No! We can't call an ambulance. My dad is going to be so mad at me if he finds out I've been drinking!')

- 2 A powerful, yet subtle, anti-smoking campaign highlights the link between smoking and the risk of stroke. Visit the Quit website and watch the clips in the Smokes Lead to Strokes section. This particular campaign uses interviews with survivors of strokes. Other campaigns may use shock tactics instead, although many people say shock tactics don't work.



Weblink
Quit: Smokes
lead to
strokes

In pairs, discuss the following questions:

- a What is a stroke and how can smoking increase your risk of suffering a stroke? How did you feel after watching the interviews?
- b Do you think this is an effective campaign or do you think shock tactics would work better?
- c Are shock tactics a good way to inform young people about the dangers of drug use?

EXTEND

- 1 Research two online drug and alcohol support services available in your local community. Use the information you find to justify which one is your preferred service. Consider criteria such as accessibility, needs and cost.



Worksheet
1.22

ergogenic aids any substance or factor that may improve sporting performance

performance-enhancing substances substances taken by athletes to improve sporting performance

HOW WILL DRUG USE AFFECT MY PERFORMANCE IN SPORT?

More than 6 billion people around the world play sport regularly. Many people play sport to stay healthy, socialise and relax, as well as to have fun. For others, sport is a business, and some athletes will risk anything in order to win. **Ergogenic aids** are substances used to improve performance and recovery times. These can include both legal and illegal **performance-enhancing substances**. Testing for illegal performance-enhancing drugs has improved over the years, so to avoid the risk of a lifetime ban from the sport, coaches are turning to legal alternatives.

Athletes put themselves under enormous pressure to be the best, with most expecting to make a lot of money if they are successful. The overwhelming desire for fame and fortune can cause some athletes to make the wrong decision. Many athletes' careers are relatively short, so they need to reach peak performance quickly. This can motivate some to seek alternative aids to help them to succeed.

There are a number of reasons why athletes choose to use both legal and illegal ergogenic aids. These include peer pressure and the pressure from other athletes to excel. Athletes use performance-enhancing substances for many reasons, including to:

- ⇒ improve performance and 'win'
- ⇒ control appetite and lose weight
- ⇒ manage an injury
- ⇒ improve physical appearance
- ⇒ improve recovery rate
- ⇒ build confidence
- ⇒ enhance self-esteem.

FAST FACT

If one athlete on an Olympic team (e.g. 4 × 100 metre relay) is found guilty of using performance-enhancing drugs, the entire team may be disqualified and forced to return any medals they may have won.

Source: Did You Know About Drug Use in Sports?
© 2020 ProCon.org

CASE STUDY

MELBOURNE DEMONS PLAYER HANDED FOUR-YEAR AFL BAN FOR COCAINE

Identify

Joel Smith, an AFL player for the Melbourne Demons, has been banned from playing Australian Rules football until 9 January 2028 following multiple anti-doping violations.

Understand

Joel Smith tested positive for cocaine after a match on 20 August 2023. Cocaine is a powerful stimulant drug that affects the central nervous system. It can create feelings of euphoria, increased energy and confidence, but it also has serious health risks and legal consequences. Smith was found to have been involved in trafficking or attempting to traffic cocaine on multiple occasions between 2020 and 2022. He was also found in possession of cocaine on 9 September 2022. Sport Integrity Australia (SIA), the AFL and the World Anti-Doping Agency agreed on his suspension. While banned from playing, Smith will be allowed to return to training in November 2027. He has not been charged with a criminal offence.

Discuss

- 1 Justify why anti-doping rules are important in sports.
- 2 Analyse the impact a long-term ban has on an athlete's career.
- 3 Explain how governing bodies like the AFL and SIA ensure fair play and integrity in sports?
- 4 Discuss the consequences of substance abuse in professional sports and everyday life.



Figure 1.44 Joel Smith has been banned from playing AFL or Australian Rules football in any form until 2028 as part of a sanction for cocaine use and trafficking.

Source: News article edited from The Guardian: <https://www.theguardian.com/sport/2024/nov/01/joel-smith-melbourne-demons-afl-ban-four-years-cocaine-use-trafficking-ntwnfb>

LEGAL PERFORMANCE-ENHANCING DRUGS IN SPORT

There are many different ways athletes can legally enhance their performance. Some legal substances and practices include:

- ⇒ bicarbonate of soda
- ⇒ sports drinks
- ⇒ caffeine



Worksheet
1.23



Figure 1.45 Some of the supplements readily available to athletes to enhance sporting performance

- ⇒ creatine supplements
- ⇒ sports gels
- ⇒ carbohydrate loading.

It is not necessary to ‘cheat’ to enhance sporting performance. Many of these legal performance-enhancing products can be found on supermarket shelves. However, each legal ergogenic aid has its own advantages and disadvantages, as seen in Table 1.6.

Ergogenic aids used to enhance performance can be mechanical (practical), pharmacological (drugs), nutritional (diet), physiological and psychological (mind).

Table 1.6 Advantages and disadvantages of legal ergogenic aids

Drug	Advantages	Disadvantages	Sports/athletes most associated with its use
Sodium bicarbonate	Creates a buffer against the build-up of lactate in the muscle, delaying muscle fatigue	Vomiting Stomach problems Diarrhoea	Sprint cycling Rowing
Sports drinks (e.g. Powerade/ Gatorade)	Rehydration Immediate source of energy	No known problems associated with the consumption of sports drinks	All sporting activities
Caffeine (coffee/energy drinks)	Increases alertness, reaction times and arousal levels	Increased urine production Irritability Lack of sleep	Tennis Volleyball
Creatine supplements	Increased training volume and decreased recovery time	Stomach problems Muscle cramping Increased water retention	Sprinters Javelin/shot-put
Sports gels	Concentrated form of carbohydrates for energy production Easy to carry	Stomach problems Psychological dependency	Endurance athletes
Carbohydrate loading (e.g. pasta/rice)	Diet of starchy foods designed to increase carbohydrate reserves in muscles	Increases water absorption, leading to weight gain	Endurance athletes

INVESTIGATION

ERGOGENIC AIDS

1

Purpose

To investigate the advantages and disadvantages of five categories of legal ergogenic aids (mechanical, pharmacological, nutritional, physiological and psychological) and their effect on an athlete's health and performance in sport.

Method

- 1 Using the internet, research the five categories of ergogenic aids:
 - » Mechanical
 - » Pharmacological
 - » Nutritional
 - » Physiological
 - » Psychological
- 2 Identify one ergogenic aid of interest from each category and explain one advantage and one disadvantage of each aid.
- 3 Create a diagram of each aid.

Discussion

- 1 How can the use of ergogenic aids affect sporting performance?
- 2 Why might an athlete choose to use ergogenic aids to improve performance? Discuss possible motivating factors.
- 3 Would these motivating factors vary from sport to sport?
- 4 Consider your own sporting performance. Do you currently use any products to enhance your own sporting performance?

HOW DOES THE MEDIA INFLUENCE DRUG USE?

Have you ever tried to model yourself on your favourite sportsperson? The media plays an important role in creating what is considered to be the 'desirable' **body image** for men and women. Television, the internet, magazines, movies and newspapers are all influential in creating perceptions of the 'ideal' man or woman. Many famous athletes have used their bodies to advertise well-known products. Can you think of any athletes and the products they advertise?

body image the way a person feels about their own body

Unfortunately, many people resort to exercise and dieting in order to transform their body into what they perceive to be the ideal. Eating disorders are very common among female athletes, especially those in competitive sports. Some sports, such as gymnastics, trampoline, beach volleyball and diving, require perfect body presentation. Unfortunately, some athletes resort to taking appetite suppressants to keep their weight under control.

Appetite suppressants

Appetite suppressants (or diet pills) are readily available in Australia from a doctor or pharmacy. As their name suggests, these drugs are used to reduce feelings of hunger, but their dangers far outweigh the benefits of any potential weight loss.

FAST FACT

The dangers of appetite suppressants include:

- increased risk of heart attack or stroke. Diet pills are stimulants, known to increase the risk of heart-related problems or blood clotting
- dependency. Diet pills often contain a cocktail of highly addictive drugs, including amphetamines, anti-anxiety drugs and anti-depressants
- multiple side effects, including constipation, headaches, stomach upsets and mood swings
- misleading claims. All too often, claims that diet pills promote weight loss are misleading. Many diet pills contain a combination of caffeine, a stimulant, and a diuretic, which promotes fluid loss. You may seem slimmer on the scales, but this is the result of water loss, not fat loss.

HEALTHY PERFORMANCE-ENHANCING STRATEGIES

Here are a few tips to help you improve your performance and give you that ‘winning edge’ without using performance-enhancing supplements.

- ⇒ Eat a nutritious, balanced diet, including carbohydrates, protein, fruit and vegetables.
- ⇒ Include protein for recovery. Protein is needed for growth and muscle repair. Sources of protein include fish, red meat, chicken and beans.
- ⇒ Include aerobic exercise, such as running, walking, swimming or any other active sport as part of your fitness routine.
- ⇒ Avoid power lifting. Lifting weights at a young age can cause problems in your development. Wait until you are at least 16 years old before commencing a weight-training program.

An athlete training to compete in a marathon should consume a well-balanced diet with plenty of carbohydrates, fresh fruit and vegetables, lean protein and healthy fats.



Figure 1.46 Aerobic exercise should be a key part of your fitness routine.

Shutterstock.com/Doug James

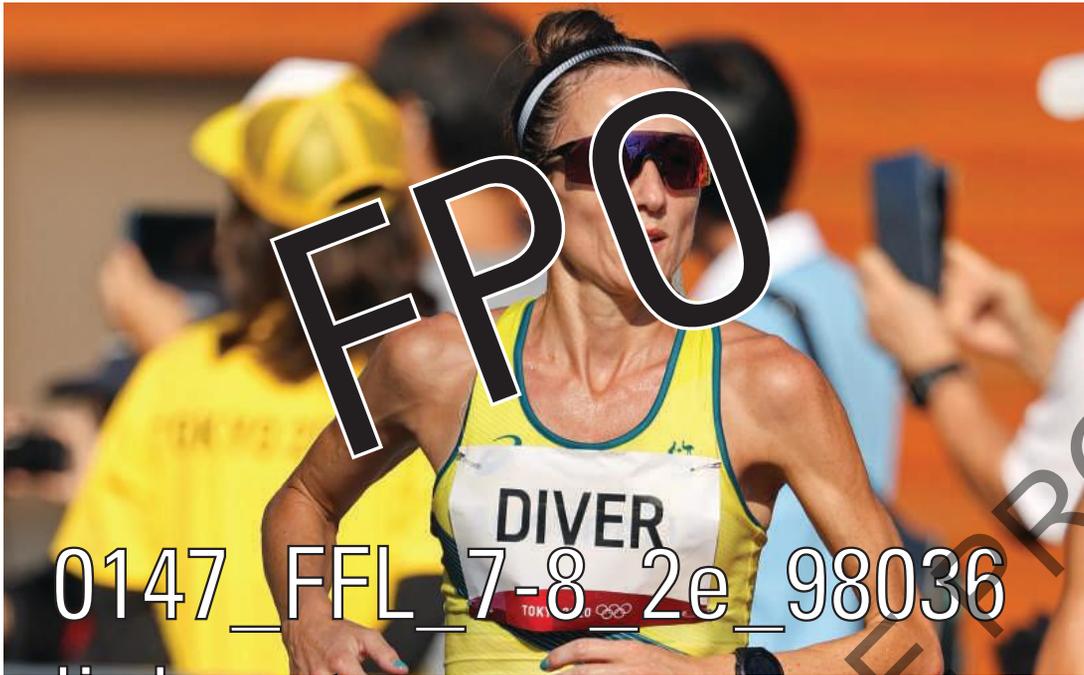


Figure 1.47 Jessica Stenson and Genevieve Gregson gave an incredible performance in the women's marathon on 11 August 2024, the event that marked the closure of the Paris Olympic Games. Stenson recorded one of the best finishes in Australian Olympic history, joining ranks with Lisa Ondieki (1984 and 1988), Sinead Diver (2020) and Kerryn McCann (2000) as the only women placing higher than 13th.

REVIEW

- 1 Define the term 'ergogenic aid'.
- 2 Identify three legal ergogenic aids and outline how they assist sporting performance.

REFLECT

- 1 Discuss how athletes justify using illegal performance enhancing drugs
- 2 Review Table 1.6 and recommend a legal ergogenic aid for each of the following scenarios:
 - a A tennis player looking to increase their energy levels during a game
 - b A marathon runner on the day of a race
 - c A rower looking to improve in the lead-up to a race

EXTEND

- 1 Use the internet to research an athlete who has taken illegal ergogenic aids and been exposed as a drug cheat. Answer the following questions:
 - a Who was the athlete and what was their chosen sport?
 - b What illegal substance did the athlete take and what category of ergogenic aid does this substance fall under?
 - c How was the substance detected?
 - d What was the outcome of the detection?



Quiz
How will drug use affect my performance in sport?



Worksheet
1.24

CHAPTER 1 REVIEW

- 1 What is the meaning of the term 'drug use'?
- 2 What is the difference between over-the-counter drugs and prescription medication?
- 3 Why is it dangerous to take a prescription drug for any reason other than its intended purpose?
- 4 What is meant by the term 'bush medicine'?
- 5 Explain the three main classifications of drugs.
- 6 Name three short-term and three long-term effects of alcohol on the body.
- 7 How many grams of alcohol are in a standard drink, and why is it important to be aware of the alcoholic content of a standard drink?
- 8 Name three short-term and three long-term effects of smoking on the body.
- 9 Why is vaping considered to be harmful to your health?
- 10 Alcohol is considered to be the most harmful legal drug available. Explain five reasons why this is the case.
- 11 Energy drinks can be potentially dangerous when consumed in large quantities. Identify the main drug found in these drinks and list five common side effects of the over-consumption of energy drinks.
- 12 Discuss the dangers of ecstasy use.
- 13 Explain the social factors that could influence a person's decision to use drugs.
- 14 In Australia, the harm caused by drug use in communities can be very costly. In what ways does drug use affect Australian communities?
- 15 Discuss the meaning of being assertive. Do you think someone who lacks confidence or is shy can still be assertive? Explain your answer.
- 16 The Australian Government has released many confronting campaigns designed to 'shock' people into breaking a habit that may have a deadly effect on their health. Identify one such campaign and explain how it aims to raise awareness among the Australian population.
- 17 You find your friend on the floor, unconscious but breathing. What would you do?
- 18 There are numerous ways of enhancing sporting performance without resorting to banned substances. Discuss the various legal aids that can be used to enhance performance.



UNCORRECTED PAGE PROOFS

EAT WELL,

LIVE

WELL



Shutterstock.com/Nicoseeya

IN THIS CHAPTER

You will learn about the importance of good nutrition at all stages of your life.

HOW CAN I EAT A HEALTHY, BALANCED DIET? 60

WHAT ARE MY NUTRITIONAL NEEDS? 72

HOW IS MY DIET INFLUENCED? 82

By the end of this chapter, you should be able to:

- ⇒ understand energy and nutrition requirements for healthy living and performance
- ⇒ consider and manage factors that influence eating habits
- ⇒ make informed and justifiable decisions about eating

- ⇒ analyse eating habits and propose strategies for improvement
- ⇒ demonstrate an understanding of the trends and consequences of eating habits in Australia and the cultural and contextual factors that shape these trends.

2

Video:

- What do we mean by 'healthy eating' in Australia? (p.61)

Quizzes:

- Pre-chapter (p.60)
- How can I eat a healthy, balanced diet? (p.71)
- What are my nutritional needs? (p.82)
- How is my diet influenced? (p.84)
- How can I understand food labelling? (p.91)
- What is the impact of advertising on my diet? (p.97)
- How can I eat sustainably? (p.101)

Scaffold:

- Australian Guide to Healthy Eating: What do you already know? (p.61)
- Australian Guide to Healthy Eating: Yesterday I ate ... (p.63)
- Meal and snack plan (p.72)
- Shopping list (p.72)

 Nelson MindTap

To access resources above, visit cengage.com.au/nelsonmindtap



HOW CAN I UNDERSTAND
FOOD LABELLING? 86

WHAT IS THE IMPACT OF
ADVERTISING ON MY DIET? 92

HOW CAN I EAT
SUSTAINABLY? 97

HOW CAN I EAT A HEALTHY, BALANCED DIET?



Quiz
Pre-chapter

Before you start, take the pre-chapter quiz to find out how much you already know.

diet the usual food and drink consumed by a person; not to be confused with 'dieting', which is the practice of eating food according to a regulated or restricted system to cause a change in body weight

When considering **diet**, nutrition, food choices and eating habits, it is important to find the most appropriate and relevant information, from the most trusted sources available. This isn't always easy, as information about diet can come from many different sources, and not all of these sources have your health interests at heart.



Shutterstock.com/Robyn Mackenzie

Figure 2.1 Examples of healthy foods from different food groups

HOW TO STAY INFORMED ABOUT NUTRITION

How do you find nutritional information you can trust? You can usually rely on well-researched, credible information from government or educational organisations such as the Department of Health or the National Health and Medical Research Council (NHMRC). Organisations such as these are the leading experts in health research, promotion and standards and, perhaps most importantly, they're not selling anything.

Fortunately, there is a lot of clear dietary and nutritional information, advice and support available to the Australian community. That information is the focus of this chapter.



Worksheet
2.1



FACE TO FACE Nutrition

- 1 What does 'nutrition' mean to you? Provide a definition based on your own understanding.
- 2 Compare and contrast your definition with your classmates. You may notice some similarities and differences between your definitions. Write down two differences that you noticed between your definition of nutrition and your classmates' definitions.
- 3 Propose how people develop different ideas about what nutrition means. What influences people to have these different ideas?
- 4 Compare your definition of nutrition to the dictionary definition (you may need your teacher to help with this, or perhaps search online). Evaluate how similar your definition was to the one in the dictionary.

Video
What do we mean by 'healthy eating' in Australia?

Australians' diets: What do we mean by 'healthy eating'? What changes could we make to our diets to be healthier? Watch the video on Nelson MindTap and join the discussion!

Nutrition is the process of obtaining the food necessary for health and growth. There are two documents that all Australians should use to guide their daily food and drink choices: the *Australian Guide to Healthy Eating* and the *Australian Dietary Guidelines*. There are five guidelines in the *Australian Dietary Guidelines*, but this chapter will focus only on the first three. The fourth and fifth guidelines refer to breastfeeding infants and the preparation and storage of food.

THE AUSTRALIAN GUIDE TO HEALTHY EATING

The *Australian Guide to Healthy Eating* separates food into five main groups:

- ⇒ grain foods
- ⇒ vegetable and **legumes**/beans
- ⇒ milk, yoghurt and cheese
- ⇒ fruit
- ⇒ meat, fish, eggs and nuts.

legume seed or pod that is eaten in either the green immature form (e.g. peas and beans) or the mature form as dried peas, beans, lentils and chickpeas

FACE TO FACE What do you already know?

Before looking at the *Australian Guide to Healthy Eating*, consider what you already know about food groups.

- 1 Using the five groups listed, try to match them to the five segments in this diagram. You can create your own in your exercise book or access a blank template on Nelson MindTap.
- 2 Identify how the segments differ in size. This represents how much of each food group should be eaten – the larger segments represent the food groups you should eat more of.
- 3 Determine which food groups you think are the most important part of a healthy diet, and assign them to the largest segments.
- 4 Once you have matched all five groups, check with a classmate and compare and contrast for similarities and differences.



Source: National Health and Medical Research Council



Worksheet
2.2



Scaffold
Australian Guide to Healthy Eating: What do you already know?

After completing the activity, examine the actual *Australian Guide to Healthy Eating* and judge how close you came to matching the food groups to the correct segments. Correct your answers if you need to.



Figure 2.2 Australian Guide to Healthy Eating

There are several other pieces of information included in the *Australian Guide to Healthy Eating* that will help guide you in your daily food choices. You already know that the food groups in the larger segments, such as the vegetable and legumes and the grains food groups, should make up more of your daily food intake than the smaller

food groups, such as fruit, milk, yoghurt and cheese, and meat, fish, eggs and nuts. What else can you infer from the diagram? Consider these points:

- ⇒ The examples of foods in each segment are healthy choices, e.g. lean meats, wholegrain breads, high-fibre cereals.
- ⇒ There is a large variety of foods in each food group. Eating a wide range of vegetables provides a better balance of nutrients than eating the same few vegetables all the time. This also applies to other food groups, such as meats, grains, fruit and dairy products.
- ⇒ Plenty of water should be consumed.
- ⇒ Oils are included, but should only be consumed in small amounts.
- ⇒ **Discretionary foods**, which are those high in sugar and fat, and highly processed foods and drinks, should be consumed in small amounts, and only occasionally.

discretionary foods foods and drinks that do not fit into the five food groups because they are not necessary for a healthy diet. These foods can be too high in saturated fat and/or added sugars, added salt or alcohol, low in fibre and contain too many kilojoules (energy). Many tend to have low levels of essential nutrients, so are often referred to as 'energy-dense' but 'nutrient-poor' foods.

FACE TO FACE

Monitor your intake

How well do your daily eating choices match up with the recommendations made by the Australian Guide to Healthy Eating?

- 1 Using the blank template, identify all the food and drinks you consumed yesterday and represent them with a drawing or image from the web. You can draw your own in your exercise book or access a blank template online in Nelson MindTap.

Make sure you represent all ingredients in each meal, and categorise them into the correct location. For example, if you had a chicken and salad sandwich for lunch, depending on the exact ingredients, you might need to illustrate chicken, margarine, bread and the various salad ingredients. Draw in the approximate amount of glasses of water (or other drinks) consumed, as well as any discretionary foods.

- 2 Critique your finished diagram and determine if you have the right proportions of foods in each segment. You should have more drawings in the grains and vegetables segments than any of the others.

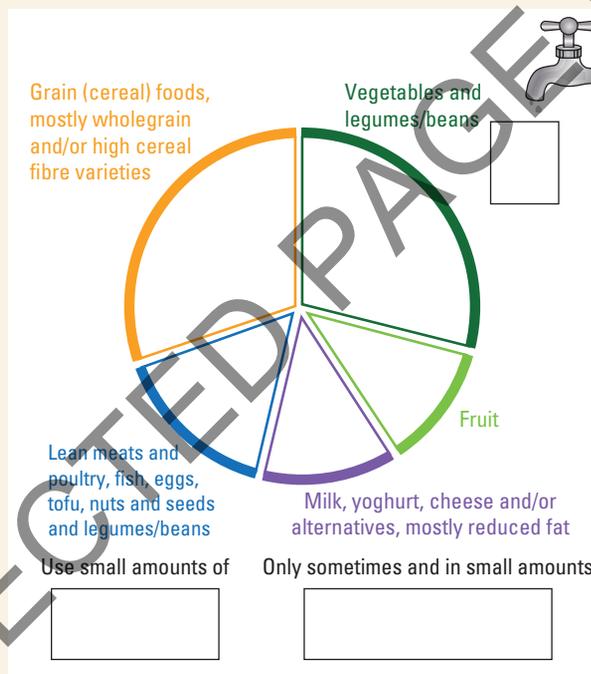


Figure 2.3 Australian Guide to Healthy Eating template

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



Scaffold
Australian Guide to Healthy Eating: Yesterday I ate ...

Identify any segments that you think had too many items in them, and also note any segments that didn't have enough.

Segments with too many food items	Segments with too few food items

- When it comes to discretionary foods, you should aim to have as few as possible. Identify how many you have, and adjudicate if this is a healthy amount or too much.
- Analyse the variety of foods you included in your diagram. Appraise the range of different meats, vegetables, fruits and sources of dairy, grains and cereals you have. More is better! Speculate how you could try to include more variety in your daily diet.

satiety the feeling of being well fed, full and gratified, after a satisfying meal

EATING ISN'T JUST ABOUT ENERGY

Biologically, people really only need to eat and drink for two reasons:

- To obtain the energy needed to survive, grow and function properly.
- To obtain the nutrients needed to survive, grow and function properly.

There are other, more complex reasons why people eat, such as **satiety** or satisfaction, cultural or religious occasions, emotional fulfilment or as a part of socialising. We will explore some of these later in the chapter.

The foods you eat may contain large or small amounts of energy, as well as large or small amounts of various nutrients. Your body needs the following nutrients on a regular basis:

- ⇒ a range of vitamins
- ⇒ a range of minerals
- ⇒ fibre
- ⇒ water
- ⇒ protein
- ⇒ fats
- ⇒ carbohydrates.

Your top priority should always be providing your body with what it needs to function at its best. Unfortunately, many people believe this means consuming large amounts of energy-rich food and drinks. This belief is partly due to the marketing of high-energy food and drink, which encourages people to include more of these products in their diet. This energy-driven focus usually comes at the expense of consuming a complete range of nutrients, such as vitamins, minerals, fibre and water.

VARIETY, BALANCE AND MODERATION

The *Australian Guide to Healthy Eating* shows the wide range of food that is needed in order to provide all the nutrients the body requires to function properly.

No single food item can provide the body with all of the required nutrients. Most food items provide a good amount of some nutrients, but very little or none of others. That is why it's important to consume as wide a variety of foods as possible to make sure you get all the nutrients you need. Some foods contain very few of the necessary nutrients, but high amounts of 'energy', often in the form of simple sugars. Eating too

much or not enough of any food (whether you consider it a ‘health food’ or ‘junk food’) can be harmful to your health.

Some nutrients can actually be harmful if excess quantities are consumed, or if the body is not able to store them. This means that you can’t just eat large amounts of food rich in a certain nutrient on one day, such as broccoli and oranges for vitamin C, and then not need any more vitamin C for the rest of the week. You need small amounts of each and every nutrient, every day. While dietary energy isn’t a nutrient, your body can store it for long periods of time.

In terms of variety, balance and **moderation**, the best advice is to eat small quantities of each of a wide range of nutrient-rich foods, every day. Try to avoid energy-dense, nutrient-poor foods. These are usually considered ‘discretionary foods’, which yield high amounts of energy and few nutrients. The surplus energy provided by these foods is often stored as dangerous body fat, which stops your body from functioning properly and causes a wide range of diseases and health conditions. The high levels of **kilojoules**, saturated fat, added sugars and salt contained in these foods can increase the risk of obesity and chronic disease such as heart disease, stroke, type 2 diabetes and some forms of cancer.



Figure 2.4 Energy-dense, nutrient-poor foods can be very tempting.

moderation within a limit, not extreme or excessive

kilojoules a measure of the energy in food, used by the scientific community. It is the accepted standard in Australia, and is found on the packaging and labels of food and drink products.

WELLBEING CHECK IN

GOOD FOOD MEANS GOOD MOOD

Identify

You are what you eat, and you’re not just your body – you’re also your mind. What we eat can affect our mood.



This activity has been developed in collaboration with Dr David Bakker of MoodMission

Understand

Unhealthy or sugar-rich foods can mess with the body’s energy supply, creating highs and lows in our blood glucose instead of a nice, consistent level. This is why you might get a burst of energy after having something sugary, but then crash soon after. Eating well can help make us feel good by providing our brains with a consistent supply of energy. Just like any machine, if our brain doesn’t have enough fuel, it can start to malfunction. The prefrontal cortex is one of the most important parts of our brains for planning, concentrating and exercising self-control. It is also sensitive to blood glucose levels, so if we don’t eat healthy foods that give us a steady energy supply, our ability to pay attention and control emotional impulses can quickly deteriorate.

Practise

- 1 When do you eat? It is important to eat food throughout the day so your body has a constant, reliable source of energy. Identify which of the following meals you usually eat:
 - Breakfast
 - Morning tea
 - Lunch
 - Afternoon tea/snack when you get home from school
 - Dinner
- 2 Some students do not have breakfast, lunch and dinner either by choice or their personal circumstances. Discuss the effect this might have on their development in terms of growth, immunity, concentration, etc.
- 3 Don't like breakfast? Maybe it's a case of finding the right sort of food – something that you will enjoy in the morning. Review the options laid out in this chapter and then list five breakfast ideas. Which choices do you think would be the best to give your body and brain the nutrition and energy they need?
- 4 Skip lunch? Maybe you need to take more food to school so you have a wider variety to choose from, or so you don't eat it all at recess. Identify some nutritional lunch options.
- 5 Skip dinner or have it alone? Having dinner together with family or friends can be a great way of maintaining regularity in meals and debriefing about your day.
- 6 One of the main symptoms of anxiety is having an upset stomach. If you find yourself unable to eat because of stomach pain, consider how anxious you are feeling. If you think anxiety is the culprit, try some of the strategies outlined in this book or talk to your parent or caregiver about seeing a doctor and getting help.

Reflect

Propose what you think are the main barriers to you eating healthily and regularly. Is it availability of good foods? The temptation of bad foods? Feeling too busy to take time to eat well? Or maybe anxiety is reducing your appetite? If any of these apply, what's something you could do to overcome this barrier?

HOW MUCH IS ENOUGH?

Every day, from the moment you wake up in the morning until the time you go to bed, you are faced with many decisions around what to eat and drink. Some people even interrupt their sleep to eat or drink! Eating and drinking are things we do several times a day, every single day, so it's no wonder that the decisions we make and, more importantly, the habits that are established can have a dramatic effect on our health (both short term and long term), and influence how well we cope with daily life.

Here are some of the daily decisions we face around eating and drinking:

- ⇒ what to eat or drink
- ⇒ when to eat or drink
- ⇒ how much to eat or drink
- ⇒ how often to eat or drink.

The Australian Guide to Healthy Eating is clear about the proportion of daily food and drink required from the five main food groups, as well as oils and discretionary foods. But exactly how much food is that?

Food intake is planned and measured using **serv**es and **port**ions. You will see the words 'serves' or 'serving size' in lots of nutritional advice, including on the labels of

serve the recommended set amount of a certain food. This should be used along with the 'serves per day' information to work out the total amount of food required each day from each of the five food groups.

portion the amount individuals actually eat, depending on energy requirements and level of hunger

packaged food (see page 87). Portions refer to the amount of food you actually eat – for instance, a tall male who is very active will probably eat a larger portion than a small female, even if she is also fairly active. If you choose to eat portions that are smaller than the recommended serving size, you won't be getting the recommended amount of that particular food group, so you may need to eat from that food group more often. If you eat portion sizes that are larger than the serving size, you will need to eat from that food group less often.



Weblink
Healthy Eating Quiz



Visit the Dietitians Association of Australia website and complete the Healthy Eating Quiz.

Standard serving sizes of foods from the five food groups

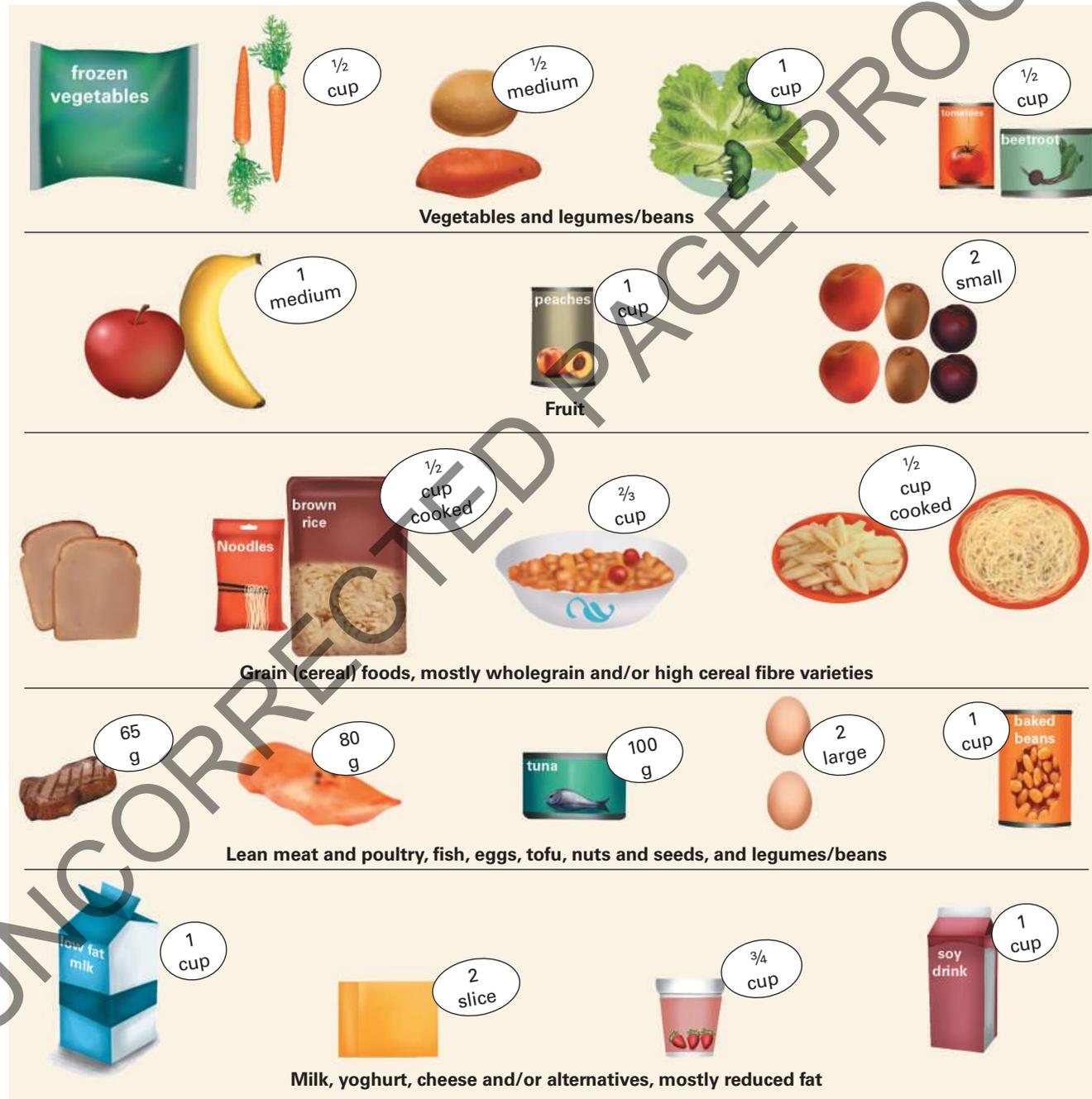


Figure 2.5 Standard serving sizes of foods from the five food groups

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

Table 2.1 Standard serves

Vegetables (75 g or 100–350 kJ)		Fruit (150 g or 350 kJ)		Grains or cereals (500 kJ)		Meat, eggs, nuts, seeds (500–600 kJ)		Dairy (500–600 kJ)	
½ cup	Cooked green or orange vegetables	1 medium	Apple, banana, orange or pear	1 slice	Bread	65 g	Cooked lean meats	1 cup	Fresh or long-life milk
½ cup	Cooked, dried or canned beans, peas or lentils	2 small	Apricots, kiwi fruits or plums	½ medium	Roll or flat bread	80 g	Cooked lean poultry	½ cup	Evaporated milk
1 cup	Green leafy or raw salad	1 cup	Diced or canned fruit	½ cup	Cooked rice, pasta, barley, noodles, polenta, bulgur or quinoa	100 g	Cooked fish fillets	2 slices	Hard cheese
½ cup	Sweet corn	Or only occasionally:		½ cup	Cooked porridge	2 large	Eggs	½ cup	Ricotta
½ medium	Potato	125 mL	Fruit juice	⅔ cup	Wheat cereal flakes	1 cup	Cooked or canned legumes	¾ cup	Yoghurt
½ medium	Tomato	30 g	Dried fruit	¼ cup	Muesli	170 g	Tofu	1 cup	Soy or rice milk
				3	Crispbreads	30 g	Nuts, seeds or peanut butter		
				1	Crumpet				
				1 small	English muffin or scone				

PORTION SIZES

One of the hardest parts of maintaining a healthy diet is managing the size of the portions we eat. We know that the more food there is on a plate or in a package in front of us, the more we eat.

Here is a handy visual guide for different types of food:

'Handy' portion guide

Using visual cues is an easy way to get to know your portion/serve sizes.

Visual cue	Approximate portion size or serve size
Your fist 	<ul style="list-style-type: none"> • 1 cup of raw salad vegetables • 1 piece of medium fresh fruit • 1 cup diced or canned fruit • 1 cup of cooked or canned legumes/beans
Cupped hand 	<ul style="list-style-type: none"> • 1 small piece of fruit • ½ cup cooked vegetables or legumes/beans • ½ cup cooked porridge • ½ cup of cooked rice, pasta, noodles, barley, buckwheat, semolina, polenta, bulgur or quinoa • ½ medium potato
Palm 	<ul style="list-style-type: none"> • 100g raw meat or poultry • 100g cooked fish • 1 slice of bread
Thumb 	<ul style="list-style-type: none"> • 1 Tbsp. salad dressing • 1 Tbsp oil • 1 Tbsp peanut butter • 20g hard cheese (½ serve)
Thumb tip 	<ul style="list-style-type: none"> • 1 tsp sugar • 1 tsp oil • 1 tsp margarine or butter • 1 tsp mayonnaise

Figure 2.6 A 'handy' method to estimate portion sizes

Use Figure 2.6 to approximate how much of each type of food you eat in a sitting. Practise today with your lunch or dinner to see if you are getting your portion sizes correct.

There is a lot of official advice and many guidelines and recommendations about what makes a healthy diet and why you should be trying to eat healthily. Managing all this information can be difficult!

This is a consensus document from Dietitian/ Nutritionists from the Nutrition Education Materials Online, "NEMO", team. Developed: July 2018. Licensed under Creative Commons Attribution-NoDerivs 3.0 Australia. Link to license: <https://creativecommons.org/licenses/by-nd/3.0/au/deed.en>

cured food that has been preserved by salting, drying or smoking



Weblinks
Nutrition Australia
Live Lighter

Visit the Live Lighter and Nutrition Australia websites for some tasty and healthy food suggestions.

FOOD CHOICES

Here are some quick and easy tips and tricks to use whenever you are deciding which food and drinks to consume.

- ⇒ Use low-fat versions of dairy products.
- ⇒ Choose unsaturated fats over saturated fats. This information is included on all food packaging.
- ⇒ Eat a nutritious breakfast, as this will make you less likely to snack on unhealthy foods later in the day.
- ⇒ If having fast food, choose bread-based foods such as wraps, sandwiches or kebabs instead of pastry or deep-fried options. Limit your use of sauces, and only 'upsize' if it is a salad option.
- ⇒ Choose lean meats, not over-processed or **cured** meats.
- ⇒ Trim skin and fat from meat and poultry.
- ⇒ Sip water throughout the day, and have water before and during your main meals.
- ⇒ Choose a range of different coloured vegetables to ensure a variety of vitamins and minerals.
- ⇒ Choose wholemeal bread and wholegrain cereals.
- ⇒ Choose regulated sizes when snacking on discretionary foods. For example, have an ice-cream on a stick instead of dishing up a bowl of ice-cream out of a tub.
- ⇒ Eat slowly, without distractions like TV, and give your body time to respond. Put your cutlery down between mouthfuls while chewing, and sip water in between bites of food to slow your pace. Concentrate on how your meal looks, smells, tastes and feels in your mouth before you swallow. You will enjoy food more and end up eating smaller portions.

HEALTHY OPTIONS

In this section you'll find some good examples of meals and snacks. You will then have an opportunity to plan your own meals.

Sample meal plans and snack ideas

Table 2.2 contains samples of healthy meals and snacks for an adult. Remember, you should be eating less than these adult serves.



Figure 2.7 This meal just looks healthy!



Figure 2.8 The more colours on the plate, the wider the range of vitamins and minerals.



Figure 2.9 Eating ice-cream on a stick instead of dishing up a bowl of ice-cream is a clever way to minimise your portion size.

UNCORRECTED PROOFS

Table 2.2 Suggested healthy menu for an adult for one day

Breakfast	Wholegrain breakfast cereal with reduced-fat milk OR Wholemeal toast with baked beans and grilled tomato Glass of milk OR reduced-fat yoghurt	 <small>Shutterstock.com/ MaraZe; Shutterstock.com/ Joe Gough</small>
Morning break	Apple Coffee with milk	 <small>Shutterstock.com/ Benjamin L. Farnos</small>
Lunch	Sandwich with salad and chicken OR Roast beef, salad and cheese sandwich	 <small>Shutterstock.com/ Yeko Photo Studio</small>
Afternoon break	Coffee with milk Unsalted mixed nuts	 <small>iStock.com/ kaanates</small>
Evening meal	Pasta with lean beef mince and red kidney beans Green salad with olive oil and vinegar dressing OR Grilled fish on rice with lemon juice and vegetables	 <small>Shutterstock.com/fabiru; Shutterstock.com/farbled</small>
Evening snack	Fruit salad and reduced-fat yoghurt	 <small>Shutterstock.com/Gaak</small>
Drink plenty of water throughout the day		



Weblink
Eat This Much

The Eat This Much website can automatically generate a range of meal options based on the amount of energy you think you need for the day. You will need to convert kilojoules to calories first (1 kJ = 260 cal).



Weblink
Calorie King

The Calorie King website is a very handy resource for determining the nutritional and energy information in common foods, and the breakdown of energy from fats, protein and carbohydrates.



Quiz
How can I eat a healthy, balanced diet?

REVIEW

- 1 Define nutrition.
- 2 List the five main food groups according to the *Australian Guide to Healthy Eating*. Identify three food items that fall into each group.
- 3 When should you eat discretionary foods?

REFLECT

- 1 a Brainstorm a week's worth of school lunches and snacks (five days). There needs to be a snack for the morning and one for the afternoon. Consider everything you know about what makes a healthy diet. Remember: variety, balance and moderation are the keys.
- b Once you have created your meal and snack plan, make a shopping list for all the ingredients you will need.
- c Now you can put your plan into action! Take your menu and shopping list home and discuss the task with your parents or caregivers. Join them on their next grocery-shopping trip, and make sure you don't forget anything. You might also need a parent or caregiver to help you prepare some of your lunches or snacks.
- d One week later ...
After you completed your planning and shopping activities, reflect back on the week and complete these questions.
 - In what ways did your menu and snack plan differ from your usual weekly eating habits?
 - Overall, were these differences healthier or less healthy? Why?
 - Did you notice any change in the way you felt and acted by the end of the week? Explain some possible reasons for this change in attitude and behaviour.
 - With your parents, compare the cost of the foods and drinks on your shopping list with what they normally spend on your school lunches and snacks for a week. Discuss possible reasons for any differences in cost.
 - Propose some reasons why someone would not stick to a menu and snack plan such as this.



EXTEND

- 1 Consider the following statement: 'When young people are involved in family meal decision-making and preparation, they develop healthier eating habits for life.' Identify as many different stages and methods of family meal decision-making and food preparation as you can. Evaluate your own involvement in these stages and processes within your family. Could your involvement be increased? How could you propose this to your parents or caregivers?
- 2 Describe what the terms 'variety', 'balance' and 'moderation' mean to you and your diet, and how you will use these principles to guide your daily food choices. Predict some barriers in your day-to-day life that might limit your ability to follow these principles.

WHAT ARE MY NUTRITIONAL NEEDS?

You may have heard the phrase 'You are what you eat'. While you may not turn into a cabbage or a hot dog anytime soon, the foods that you eat do dictate how well you can function, whether that's out on the sporting field, concentrating in the classroom, leading a long and productive life or just getting through the day successfully. So what does it mean to make healthy choices regarding food and nutrition?

WHAT DO YOU NEED, AND WHAT HAPPENS WHEN YOU DON'T GET IT?

The five food groups promote the consumption of foods that provide your body with a wide range of nutrients. Remember, your body cannot store many of these nutrients, so you need to consume small amounts of each nutrient every day. Each of these nutrients plays an important role in the way your body functions.



Figure 2.10 Eating healthily is a choice.

Table 2.3 Nutrients in the five food groups

	Grain or cereal foods	Vegetables and legumes/beans	Fruit	Milk, yoghurt or cheese	Lean meat, poultry, eggs, nuts and seeds
Main nutrients	carbohydrate protein iron dietary fibre thiamine folate iodine	beta-carotene and other carotenoids vitamin C folate dietary fibre	vitamin C dietary fibre	calcium protein riboflavin vitamin B ₁₂	protein iron zinc vitamin B ₁₂ (animal foods only) omega-3 fatty acids
Other important nutrients	magnesium zinc riboflavin niacin vitamin E	carbohydrate magnesium iron potassium	carbohydrate folate beta-carotene potassium	fat carbohydrate magnesium zinc potassium	dietary fibre (plant foods only) essential fatty acids niacin vitamin E (seeds, nuts)

Carbohydrates

Carbohydrates are the body's primary (and preferred) source of fuel. Simple carbohydrates (sugars) are used more quickly for energy than complex carbohydrates (starches), but they don't last as long.

Protein

Protein provides the building blocks for all the cells in the body. Bodies are constantly breaking down and making new tissues such as blood cells, muscle fibres, enzymes, hormones, skin and hair, so daily intake of protein is essential. Protein can also be used as an energy source in extreme circumstances.



Figure 2.11 Pasta is a popular source of carbohydrates.

Vitamins and minerals

There are many different vitamins and minerals, and the functions they perform are many and varied. Generally, they support the body's biochemical processes and regulate metabolism. Examples of vitamins include A, C, niacin and folate. Minerals include calcium, iron and potassium.

Dietary fibre

Dietary fibre is technically classed as a carbohydrate, but because it can't be completely broken down, your body doesn't extract the same amount of energy from fibre as it does from other carbohydrates. The primary benefit of fibre is the effect it has on your digestive system. Fibre aids in digestion and helps prevent gastrointestinal problems.



Figure 2.12 While meat is a common source of protein, there are many other great options.

Shutterstock.com/Africa Studio



Figure 2.13 Vegetables and fruit should make up a large part of any healthy diet.

Shutterstock.com/Melissa



Figure 2.14 A range of sources of dietary fibre is critical to good health.

Shutterstock.com/Khudoily

Fats

Fats are an essential part of a healthy diet, as some nutrients such as vitamins A, D, E and K are fat-soluble. This means they are best absorbed when consumed with fats, and are stored within the body's fatty tissue. Fat cells can be an insulating and protective barrier around internal organs. Fats contribute to the function of cell membranes and the immune system, and can also be a source of energy. There are 'good' and 'bad' fats. Bad fats are saturated fats and trans fatty acids, which are known to contribute to cardiovascular disease and should be avoided where possible. These types of fats are normally found in highly processed or manufactured foods, particularly deep-fried takeaway foods and commercially baked goods (biscuits, pastries, pies). Good fats are monounsaturated and polyunsaturated fats, including omega-3 and omega-6, and small amounts are essential in your diet.



Figure 2.15 Some sources of fats are healthier than others.

Shutterstock.com/Barbara Dudzinska



Figure 2.16 Many discretionary foods are high in 'bad fats'.

Shutterstock.com/joesayhello

Water

Water is the most essential nutrient of all – you wouldn't survive more than a few days without it. Water is present in all of the cells in all organs of the body; it helps to regulate body temperature and transport nutrients, hormones and waste products around the body. You constantly use and lose water due to chemical processes inside your body, as well as when using the toilet, sweating and even exhaling. That water must be constantly replaced. There is varied advice on how much water to consume daily, but you should aim to drink around 2 litres per day, and more on days when you are very active or the weather is hot. If your urine is clear, light in colour and regular, and you aren't thirsty, you are probably drinking enough.



Figure 2.17 Tap water is the best water!

DOES MY WEIGHT MATTER?

Obesity

Making sure you are consuming an appropriate amount of energy to match your daily needs is critical for good health. Obesity is now the leading cause of premature death and illness in Australia, and if current trends continue, by 2030 75 per cent of Australian adults will be **overweight** or **obese**. Obesity is usually accompanied by many health disorders, such as cardiovascular disease, type 2 diabetes and some cancers.

Healthy body weight can be estimated using three different methods: body mass index (BMI), waist measurement and waist-to-hip ratio (WHR).

Body mass index (BMI)

BMI is a method used to estimate total body fat. This helps to determine if your weight is within the normal range or if you are underweight or overweight. There are exceptions to this measure, such as elite athletes with large muscle mass, which can render a BMI figure inaccurate. BMI is calculated using the following formula: weight (kilograms) divided by height² (metres).

The chart shown in Figure 2.18 makes it easy to determine which weight range you are in without having to do any calculations. Just find your weight along the y-axis (left side) and your height on the x-axis (bottom) and trace the point where these two meet.

Waist measurement

This method is suitable for adults only. Using a tape measure, measure the width of an adult's body at their waist (about level with their belly button). The tape should be above their hip bones and below their rib bones. Compare the measurement with the information in Table 2.4.

overweight adults with a BMI from 25 to 30

obese adults with a BMI of 30 or higher

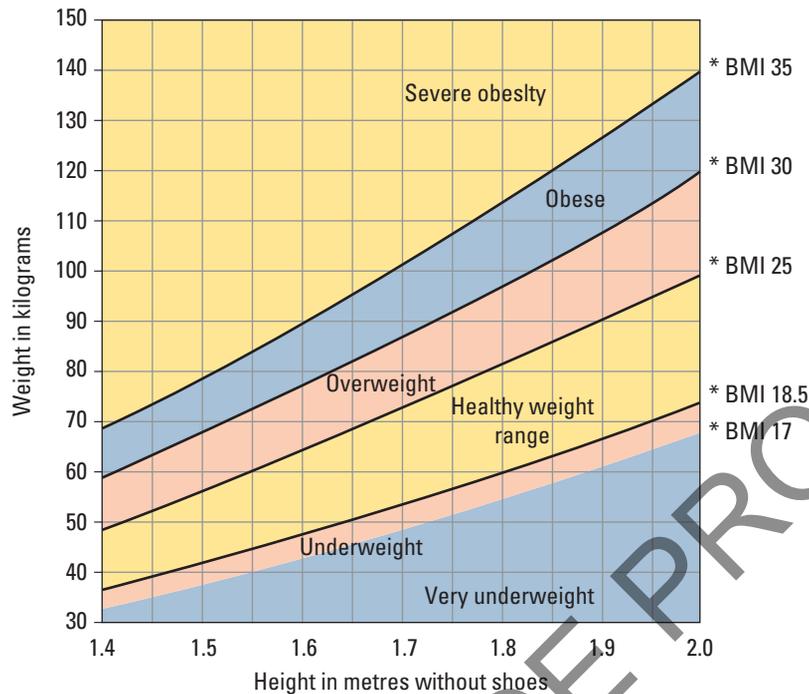


Figure 2.18 Body Mass Index (BMI) = Weight (kg)/Height² (m)

Table 2.4 What waist measurement means for health

Waist measurement	Weight-related health risk
Men less than 94 centimetres Women less than 80 centimetres	Low risk
Men 94–101 centimetres Women 80–88 centimetres	Increased risk, especially if their BMI is more than 25
Men more than 101 centimetres Women more than 88 centimetres	High risk

Waist-to-hip ratio (WHR)

This also applies only to adults. The waist-to-hip ratio requires a measurement of the width of an adult's body at their waist (this is the same as the waist measurement discussed above) and also of their hips. The width of the hips is measured by passing the tape measure around the body, level with the big bony parts of the hips. Waist-to-hip ratio is then calculated by dividing the waist measurement by the hip measurement.

A WHR of greater than 0.9 for men and 0.8 for women indicates an increased health risk.

THE AUSTRALIAN DIETARY GUIDELINES

The Australian Dietary Guidelines were created by the National Health and Medical Research Council, an Australian government body that develops guidelines on health-related matters for Australians. The Australian Dietary Guidelines provide information on the types and amounts of food required to promote health and wellbeing, reduce the risk of diet-related conditions and reduce chronic disease in the Australian population.

- ⇒ **Guideline 1:** To achieve and maintain a healthy weight, be physically active and choose amounts of nutritious food and drinks to meet your energy needs.
- ⇒ **Guideline 2:** Enjoy a wide variety of nutritious foods from the five main food groups every day, and drink plenty of water.
- ⇒ **Guideline 3:** Limit intake of foods containing saturated fat, added salt, added sugars and alcohol.
- ⇒ These three guidelines will be explored in further detail within this chapter.

ENERGY: INTAKE VERSUS EXPENDITURE

The energy you need to maintain a healthy, active lifestyle comes from the food and drink you consume. The more active you are every day, the more energy you need. In countries like Australia, where food is plentiful and relatively cheap, it can be quite easy to consume more than you need. This is a major cause of the increase in obesity and health conditions such as cardiovascular disease, diabetes and many types of cancer. These types of **lifestyle diseases** are the leading cause of death in Australia. Many people try **yo-yo dieting** programs to lose weight, but they can be expensive and don't work in the long term.

Energy expenditure

There are three parts to energy expenditure:

- 1 **basal metabolic rate** (BMR)
- 2 the amount of energy used in the process of eating and digesting food
- 3 physical activity.

Of these three parts, the only one that you really have any control over is physical activity.

Then and now

Early in the 20th century, hard, physical work was common, especially around the home. People chopped firewood, scrubbed clothes by hand, grew their own vegetables and fruit, pumped or carried water by hand, and walked or rode horses or cycled everywhere. There were no 24-hour gyms, treadmills, personal trainers, aerobics classes or drastic weight-loss diets. All of these physical chores and duties were done without 'energy drinks' or 'energy snacks'. Very few people were overweight.

In the past 20 years, 'energy drinks' and 'energy snacks' have become popular, and the companies that make and sell these products have made billions of dollars worldwide. The advertising for these items promises that they will provide the 'boost of energy' needed to be able to work, play sports or party with friends.

At the same time, advances in technology have made life much easier, more relaxing and more convenient. As a result of all of the money, technology and time dedicated to making their lives physically easier, people are now spending time and money to attend gyms or invest in personal trainers in order to compensate for their more **sedentary** lifestyles.

lifestyle disease

a disease that potentially can be prevented by changes in diet, environment and lifestyle, such as heart disease, stroke, obesity and osteoporosis

yo-yo dieting

the practice of repeatedly losing weight by dieting and subsequently regaining it. Most overweight or obese people have an imbalance between their energy intake and energy expenditure. Getting this back into proper balance requires making long-term, sustainable changes to a person's entire lifestyle, not a drastic six-week weight-loss program.

basal metabolic rate

the energy used when at rest, in order to maintain life (breathing, brain function, heart function, etc.)

sedentary

a type of activity that does not use much energy, such as sitting



Alamy Stock Photo/imageBROKER



iStock.com/fatihhoca

0233_FFL_7-8_2e_98036
link not open

Figure 2.19 Sedentary lifestyles were uncommon in previous generations. Household tasks often involved physical labour, such as chopping wood or washing clothes by hand. Modern technology, including electric or gas stoves and dishwashers, has enabled us to lead our lives with less physical labour.



Alamy Stock Photo/ClassicStock



iStock.com/Geber86

0234_FFL_7-8_2e_98036
link not open

Figure 2.20 The food we eat and how or where we eat it has also changed dramatically over the past century. With the faster pace of life today and the convenience of takeaway food, there has been a rise in eating on the run, rather than sitting down to a home-cooked meal, which was more common in the past.

Extra food

When more energy is eaten than used, the body tends to store the surplus energy in fat cells. This happens even if fat is not part of your diet, because your body can convert all forms of unused energy into fat. These fat cells become a back-up fuel tank.

This is why it is so important to limit discretionary foods (those that are high in energy, low in nutritional value) and make sure you are maintaining high levels of activity. Physical activity is not just playing sport, but also walking to school or helping with the gardening or housework!

This process works both ways. If you expend more energy than you consume in a day, your body can use stored fat cells for energy, which may reduce your body weight. One kilogram of body fat contains 37 000 kilojoules of energy, which is the daily recommended energy intake for an average adult for four days!

FAST FACT

In Australia in 2022, 66 per cent of adults were obese or overweight. In 1980, 60 per cent of Australian adults had a healthy weight, and only 10 per cent were obese.

HOW MUCH ENERGY DO YOU NEED?

Energy is not a nutrient but a fuel necessary for your body to function, every minute of every day. Energy is measured in either **calories** (Cal) or kilojoules (kJ). One kilojoule equals 0.24 calories, and 1 calorie equals 4.2 kilojoules.

It can be difficult to work out exactly how much energy a person needs, as age, sex, body size and shape, and daily activity levels all help determine the amount of energy required. Children and adolescents, whose bodies are growing rapidly, require extra energy. Some teenagers with healthy body weight can get into the habit of consuming a lot of sugar or fat without gaining body fat. This habit sometimes stays with them when (as adults) they are no longer growing and don't need the extra energy. When all that extra energy isn't being used to grow upwards, it can result in growth outwards!

Estimating daily energy requirements

There are several websites and apps that can be used to estimate how much energy you use, and need to consume, on a daily basis. Make sure you're using reliable sources and up-to-date information, and look for information in kilojoules instead of calories, as this will match the information you see on food and drink packaging. Refer to Worksheet 2.6 for some methods of estimating your daily energy requirements.

THE BEST SOURCES OF ENERGY

The total amount of energy you receive is the result of several factors:

- ⇒ how often you eat (the number of snacks, meals and drinks other than water)
- ⇒ how much you eat (the size of drinks, meals and drinks other than water)
- ⇒ the types of foods you eat (foods with higher sugar or fat content will yield more energy).

Energy comes from most of the things you eat and drink, except water. The combination of carbohydrates (sugars and starches), protein and fat are your body's sources of energy.

Carbohydrates and protein give 16 to 17 kilojoules of energy per gram, whereas fat gives 37 kilojoules of energy per gram – more than double! Of these three sources of energy (carbohydrates, protein and fat), your body's preferred fuel supply is carbohydrates, particularly if you are performing physical activity.

But wherever your energy comes from, if the total energy intake is higher than your expenditure, the extra energy will be stored as body fat.

The recommended balance of energy sources is shown in Table 2.5.

If you follow the variety, balance and moderation described earlier in this chapter, and consume the right



Figure 2.21 Excess energy leads in only one direction!

calories a measure of the energy in food (a single calorie is the amount of energy needed to heat a gram of water by one degree Celsius). This measure is more common in other countries, but in Australia it may still come up in diets, books and everyday discussion



Worksheet
2.6

Table 2.5 Daily energy allowance by source

Energy source	Percentage of daily energy allowance
Protein	15–25
Carbohydrates	45–65
Saturated fats	20–30



Figure 2.22 Which of these images best represents the recommended balance of energy sources?

amount from each of the five main food groups, you are probably already meeting this balance of energy sources!

Despite the messages from advertisements and other persuasive marketing campaigns, most people don't need to eat foods that contain large amounts of energy. Even elite athletes, who expend much more energy than the average person, can usually meet their energy needs from a regular healthy diet, without needing special energy drinks or snacks.

Ask yourself, 'What else am I providing my body with when I consume this energy-rich food?' Food or drink that contains a range of vitamins and minerals as well as energy is much healthier than food or drink with lots of energy but almost no other nutrients.



Worksheet
2.7

glycogen the substance that is the main form of stored carbohydrates

WHAT DO ATHLETES NEED?

Carbohydrates are the preferred fuel to provide the energy required for vigorous exercise, while protein and fat are used to provide energy to the muscles during rest and lower intensity exercise. The body can store carbohydrates in the form of **glycogen** in the muscles and liver, but this storage capacity is limited. If vigorous physical activity lasts longer than an hour, extra carbohydrates are needed. (For example, a football player may eat fruit during half-time of a game that lasts about 90 minutes.) Sometimes a small energy-rich snack should be eaten just prior to a game or competition, to 'top up' glycogen reserves. (This strategy should be used with a healthy regular diet, not instead of it.)

Immediately after vigorous sport, give your body the fuel and nutrients it needs to recover so you will be ready for more activity in the following days. Usually the best option is a small snack of carbohydrates and protein, such as tuna on crackers or muesli with yoghurt. This should not replace your regular healthy meals and snacks.

hydration combination with or absorption of water

Hydration is also vital for good physical activity. You only need to lose 2 per cent of your normal fluid stores to experience a decrease in your physical and mental effectiveness. On top of your daily needs, extra water is needed when exercising, particularly over a long period of activity or in hot conditions. Planning ahead is the key! Ensure your body is already hydrated before game day, and bring along a water bottle. Try to drink small amounts early and often during your activity. Replace any fluids you lose by drinking water after you have stopped playing or training. If you have lost

weight while exercising, you must replace this fluid. If you have been replacing lost water properly, your body weight should return to its pre-exercise level by the following morning. Your urine should be regular and a light colour.

Sports drinks

You may be tempted to consume 'sports drinks', which have a range of additives such as sugar, salt, electrolytes or other minerals, and even protein or caffeine. These drinks are sometimes useful for athletes who are doing many hours of vigorous activity each week, but most people don't need them. They aren't that much different from cordial, or even soft drink.



Figure 2.23 Hydration is essential for optimal performance.

REVIEW

- 1 Summarise the three guidelines from the Australian Dietary Guidelines.
- 2 Compare the three Australian Dietary Guidelines with the Australian Guide to Healthy Eating. See if you can find at least three similarities, and discuss them with a classmate.
- 3 What is the purpose of the Australian Dietary Guidelines? Discuss reasons why they are developed and communicated to the Australian public.

REFLECT

- 1 Take a few moments to read the section headed 'Then and now' on page 77, and reflect on what our modern lifestyle means to you. Share your response with a friend or the class. Do you predict an ongoing trend?
- 2 Draw two more scales like Figure 2.23 and fill in the missing words in the sentences below. Your diagrams need to reflect the imbalance of energy intake and energy expenditure.

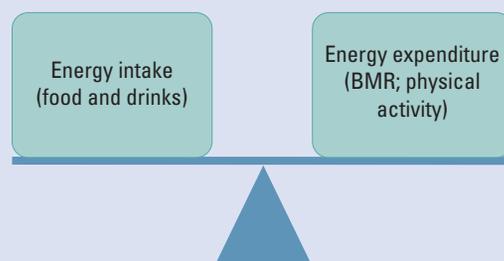


Figure 2.24 In this example, the amount of energy consumed (intake) is evenly matched by how much is used (expenditure). Body weight would be stable.

- a In this example, the amount of energy consumed (intake) is less than the amount used (expenditure). Body weight would _____.
- b In this example, the amount of energy consumed (intake) is higher than the amount used (expenditure). Body weight would _____.

EXTEND

- 1 Consider the following scenario: Next week is your school athletics carnival. You have been attending training and working hard on improving your results. Your Physical Education teacher thinks you might go close to being champion for your age group this year. Last year you were on track to achieve this, but with so many events to compete in and the weather being warm, your performances faded over the course of the day. You felt weak and light-headed, and had trouble focusing. By the end of the day you weren't even getting close to the personal bests you had achieved at training.

But that's not going to happen this year! To assist your performance, you want to be as prepared as possible. Apparently what you eat and drink the day before competing is important, so you are going to make sure to pack lunch, snacks and drinks for carnival day.

Develop a strategy for the days leading into the event and for event day itself. Consider the types and quantity of foods and drinks that will help you reach optimal performance levels. Construct a plan to represent your strategy in an organised format. Be sure to justify the different elements of your strategy.



Quiz
What are my nutritional needs?



Worksheet
2.8

HOW IS MY DIET **INFLUENCED?**

There are many factors that influence your eating decisions and habits. It is important to know how to recognise and manage them, particularly if they are influencing your decisions and habits in a negative way.

FACTORS THAT INFLUENCE YOUR EATING HABITS

Each time you make a decision around food and eating, you make a justification, either consciously or subconsciously. An example could be, 'I don't think I will have any breakfast today because I ate so much last night before bed', or 'I'd better have a yoghurt and fruit snack after school today, as I already had some chocolate with my lunch.'

NUTRITION AND SOCIETY

Most Australians enjoy a high standard of food choices and nutritional health, along with easily accessible information about healthy diets and food choices. However, many Australians do not eat enough vegetables, fruit, wholegrain cereals and healthy dairy products. Many people eat large amounts of fast food, even though they know it is unhealthy.

Some people living in remote rural areas don't have the same access to healthy foods as those in cities, and this is often reflected in their overall health. The availability and cost of fresh fruit and vegetables can also be an issue for people living in remote locations.



Figure 2.25 Choices can be limited in some rural towns.

Shutterstock.com/ArifAtoz2205

People on limited incomes may have trouble following nutritional guidelines because of the perception that the cheapest foods are often unhealthy choices. Areas with low **socio-economic status** have twice as many fast-food outlets as more affluent suburbs. However, studies show that diets high in fast food or pre-cooked meals are actually more expensive than those where meals are cooked at home using items purchased from supermarkets.

socio-economic status a measure of advantage or disadvantage of an individual or population group based on factors such as income, education and occupation

I DON'T ALWAYS MAKE GOOD CHOICES BECAUSE...

While Australians generally have access to an excellent range of healthy foods and plenty of exposure to sound nutritional advice, there are millions of people around the world who do not.

Still, many Australians make bad decisions when it comes to their diet. They ignore advice about healthy eating, and they choose unhealthy foods and drinks over healthier options. Why?

Everyone is tempted occasionally by the prospect of a treat, even though it may not be a healthy choice. It's important to remember that there can be a place for high-sugar and high-fat treats in your diet, just not many of them and not all the time. Learning to eat food in moderation will help you with your choices.



Newspix/Gary Merrin

Figure 2.26 The amount of choice can be overwhelming.



Getty Images/IAN HOOTON/SPL

Figure 2.27 Childhood habits can be hard to break.



Shutterstock.com/Roman Samokhin

Figure 2.28 Sweet treats can be enjoyed in moderation!

FACE TO FACE

Choices, choices ...

Identify some possible reasons for not always making healthy dietary choices. For most people, there will be several reasons. Share your answers with your class and see how many you can come up with. Try working in small groups to survey or interview people in your school or local community.

TRYING NEW FOODS

Identify

Sometimes it's hard to try new things. We might even find ourselves sticking to old things because it feels too risky to try something new. But what if the new thing is actually really good?



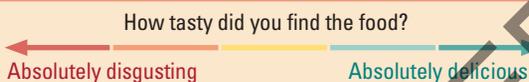
This activity has been developed in collaboration with Dr David Bakker of MoodMission

Understand

Eating familiar foods can be comforting, especially when compared to the risks of trying something new. Some people find themselves refusing to try new foods because they're afraid they won't like them. But trying new things and being able to cope with things that we don't like is an important emotional skill. This process can actually build resilience, especially when something bad happens and we realise that it's not actually the end of the world – it's just a bad taste that passes quickly.

Practise

- 1 Think of a food you've never tried before. It doesn't have to be an obscure delicacy, it can just be something you've seen other people eat but you haven't had the chance to try yet. You might like to talk to a friend about what they eat to come up with ideas.
- 2 Now make a plan to try the food. Will you need to talk to an adult, or can you get it from the shop yourself?
- 3 Once you've tried it, rate how much you enjoyed it on the scales below.



Reflect

- 1 Did you find it scary to try the new food? If you did, what do you think you were scared of? Do you think you were right to be scared, or did you feel more fear than you needed to? If you didn't find it scary, what do you think you learned from trying the new food? Was it just learning that you did or didn't like the food, or did you learn something else about how you deal with feelings?

REVIEW

Table 2.6 lists the factors that have been known to influence decisions people make about what, when, how much and how often they eat. Copy the table and rank each of the influences from 1 to 16, with '1' being the most influential to your decisions and habits about eating and drinking, and '16' the least influential. This may take you a few attempts. Then compare your results with the rest of the class.



Quiz
How is my diet influenced?

Table 2.6 Knowing your influences

	My rank	Influence
Most influential ↑ ↓ Least influential		Taste
		Hunger cravings
		Cravings for a specific food
		Convenience – easy to prepare or eat
		Food availability – if food is there, eat it
		Parental influence
		Peer influence
		Health benefits
		Mood
		Body image
		Habit
		Cost
		Time considerations
		Media and advertising
		Cultural or lifestyle decisions such as being vegetarian, or observing religious or cultural practices
	Certain social settings – at a sporting event or going to the movies	
My top three influences		Class top three influences
My bottom three influences		Class bottom three influences

REFLECT

- 1 Compare your rankings with your classmates: are there any trends?
- 2 Share your top three influences and bottom three influences with the class.
- 3 Devise a class tally, either on the whiteboard or in a spreadsheet.
- 4 You should now be able to see which influences from the list have the most and least impact on the class's decisions and habits about eating and drinking. What are some similarities and differences between your classmates' influencing factors and your own?
- 5 Do your top three influences tend to make you eat healthily or unhealthily? Give an example.
- 6 Now that you have an understanding of influencing factors, how can you use this knowledge? Plan a way to maximise the times when you are influenced to eat healthily and minimise the times you are influenced to eat unhealthily.

EXTEND

- 1 Conduct online research into the following statement: 'A healthy diet is cheaper than junk food.' Access at least three articles that appear to be credible.
 - a Summarise the key points by each author and compare these across the three articles, noting similarities and differences.
 - b Evaluate how applicable you believe this statement is to you or your family. Justify your perspective from a financial and health basis.

HOW CAN I UNDERSTAND FOOD LABELLING?

What do you already know about food packaging? As a general rule, the less packaging a food has, the better that food is for your body and the environment. Although some foods need packaging to retain their freshness, packaging is usually included for marketing purposes, featuring visually appealing designs and claims about taste, health and value for money.

WHAT ARE YOU PUTTING INTO YOUR BODY?

Some of the information on food and drink packaging is reliable, but most of it is not closely regulated. Food manufacturers carefully choose the words on their packaging to encourage you to buy their products. The following are some of the techniques used.

- ⇒ Stating obvious facts that make a food item sound healthier. For example, the label on a bottle of olive oil might state that it's 'cholesterol free'. But in fact, *all* plant-based foods have zero cholesterol, including canola, peanut and sunflower oil. While the statement is true, it is misleading.
- ⇒ Making big, bold but unfinished claims such as '25% less added salt' but leaving the consumer to find the small print underpinning these claims.
- ⇒ Making health-related claims using vague words such as 'support' or 'promote' instead of 'prevent' or 'protect'. An example is 'supports the immune system'. Using vague words means the statement doesn't have to be factually true.
- ⇒ Using the terms 'light' or 'lite', which don't necessarily refer to the amount of fat, sugar or energy. They may refer to the taste, texture or colour of the food.
- ⇒ Using terms such as 'natural', 'diet' and 'homemade', which all imply a higher level of nutrition. There are no regulations on how these words can be used and what they represent, so it is best to ignore them.
- ⇒ Stating that a product has 'no added sugar' doesn't mean it is low in sugar – many products with fruit as ingredients will have high levels of sugar even without any more being added.
- ⇒ Labelling something '90% fat-free' – this sounds quite healthy, but it actually means that the product is 10 per cent fat, which is a large amount!
- ⇒ Along with some other states, the Victorian Government has introduced a kilojoule labelling scheme for large chain restaurants. The requirements mean that fast food restaurants have to display the kilojoule content of their food and drinks so people can make healthier choices when eating fast food.



Weblink
Victorian Govt kilojoule
labelling scheme

INVESTIGATION

MYTHBUSTING

Purpose

You will determine the prevalence of misleading statements on food packaging by analysing the observations of food products. The list of packaging techniques provided above is a **secondary source**. This investigation will develop a **primary source** of marketing myths promoted by food brands to increase sales.

Materials

- A digital camera or smartphone, if visiting a supermarket personally
- A computer for searching online catalogues and for data analysis
- For some ideas, watch 'Healthy Labelling' on the ABC's *The Checkout* on ABC iView.

secondary source typically the interpretation or evaluation of primary sources. Secondary sources often describe or explain primary sources.

primary source a first-hand account of an event by someone who experienced it directly and is considered authoritative. Primary sources report on discoveries and represent original thinking.

Method

- 1 As a class, allocate a food product group to each pair of students, e.g. breakfast cereals, yoghurt, lunch/snack bars, bread, cooking oils, etc.
- 2 As a pair, either visit a supermarket personally or access a supermarket catalogue online.
- 3 Record how many different products exist for your food product group (look for different brands/manufacturers). Tally this as a figure, but also take photos in the supermarket aisle or screenshots from online catalogues.
- 4 Record how many occurrences you observe of each of the different marketing techniques listed above. Some products will use more than one technique, and you may come across some other techniques not listed above, so be prepared to record these too.
- 5 Tally your findings and include your accompanying photos and screenshots to support your observations.
- 6 Determine the prevalence of misleading statements on food packages by calculating the ratio of products that contain these types of statements compared to those that do not.



Weblink
'Healthy Labelling'

Discussion

- 1 How prevalent were the misleading techniques used on food packages compared to products that choose not to?
- 2 Which particular misleading statements were most common for your food product group? Can you propose some reasons for this?
- 3 Share your findings with your class and compare results. What were the similarities and differences in results for the various food product groups? Why would these exist? Consider having a competition among your class – who can find the product with the most outrageous or nonsensical health claim?

WHAT'S ON THE PACKAGE?

The really useful information is often written in small print on the back or side of the packaging. The following are the most important items to check:

- ⇒ 'use by' date – make sure your food is fresh
- ⇒ nutrition information panel – this is required for all foods with packaging and is your main source of reliable information
- ⇒ ingredients – listed in order of most to least, by weight
- ⇒ storage or preparation instructions – to make sure your food stays fresh and is prepared safely
- ⇒ allergy advice – for those with allergies, even if the list of ingredients doesn't mention the item you are allergic to
- ⇒ daily intake guide – shows the percentage of the recommended daily intake of energy or nutrients you would receive by consuming one serve of this food or drink.

In recent years we have seen the introduction of the Health Star Rating system (see Figure 2.31), which was designed to provide consumers with an easier way to compare similar food and drink products and make healthier choices. People who don't take the time to read the nutrition information panel now get an at-a-glance overall rating of the healthiness of a product.



Figure 2.29 Daily intake guide for energy per serve

Nutrition Information		
Servings per package – 16 Serving size – 30 g (2/3 cup)		
	Per serve	Per 100 g
Energy	432 kJ	1441 kJ
Protein	2.8 g	9.3 g
Fat		
Total	0.4 g	1.2 g
Saturated	0.1 g	0.3 g
Carbohydrate		
Total	18.9 g	62.9 g
Sugars	3.5 g	11.8 g
Fibre	6.4 g	21.2 g
Sodium	65 mg	215 mg
Ingredients: Cereals (76%) (wheat, oatbran, barley), psyllium husk (11%), sugar, rice, malt extract, honey, salt, vitamins.		

Figure 2.30 An example of nutrition information



HOW TO UNDERSTAND FOOD LABELS

What to look for...

Don't rely on health claims on labels as your guide. Instead learn a few simple label reading tips to choose healthy foods and drinks, for yourself. You can also use the label to help you lose weight by limiting foods that are high in energy per serve.

Nutrition Information		
Servings per package – 16		
Serving size – 30g (2/3 cup)		
	Per serve	Per 100g
Energy	432kJ	1441kJ
Protein	2.8g	9.3g
Fat		
Total	0.4g	1.2g
Saturated	0.1g	0.3g
Carbohydrate		
Total	18.9g	62.9g
Sugars	3.5g	11.8g
Fibre	6.4g	21.2g
Sodium	65mg	215mg
Ingredients: Cereals (76%) (wheat, oatbran, barley), psyllium husk (11%, sugar, rice, malt extract, honey, salt, vitamins.		
Ingredients ▲ Listed from greatest to smallest by weight. Use this to check the first three ingredients for items high in saturated fat, sodium (salt) or added sugar.		

Total Fat ▶
Generally choose foods with less than **10g per 100g**.
For milk, yogurt and icecream, choose less than **2g per 100g**.
For cheese, choose less than **15g per 100g**.

Saturated Fat ▶
Aim for the lowest, per 100g. **Less than 3g per 100g is best.**

Other names for ingredients high in saturated fat: Animal fat/oil, beef fat, butter, chocolate, milk solids, coconut, coconut oil/milk/cream, copha, cream, ghee, dripping, lard, suet, palm oil, sour cream, vegetable shortening.

Fibre ▶
Not all labels include fibre. Choose breads and cereals with **3g or more per serve**

◀ 100g Column and Serving Size
If comparing nutrients in similar food products **use the per 100g column**. If calculating how much of a nutrient, or how many kilojoules you will actually eat, use the per serve column. But check whether your portion size is the same as the serve size.

Energy
Check how many kJ per serve to decide how much is a serve of a 'discretionary' food, which has 600kJ per serve.

Sugars
Avoiding sugar completely is not necessary, but try to avoid larger amounts of added sugars. If sugar content per 100g is more than 15g, check that sugar (or alternative names for added sugar) is not listed high on the ingredient list.

◀ Sodium (Salt)
Choose lower sodium options among similar foods. **Food with less than 400mg per 100g are good, and less than 120mg per 100g is best.**

Other names for added sugar: Dextrose, fructose, glucose, golden syrup, honey, maple syrup, sucrose, malt, maltose, lactose, brown sugar, caster sugar, raw sugar.

Other names for high salt ingredients: Baking powder, celery salt, garlic salt, meat/yeast extract, monosodium glutamate, (MSG), onion salt, rock salt, sea salt, sodium, sodium ascorbate, sodium bicarbonate, sodium nitrate/nitrite, stock cubes, vegetable salt.

Figure 2.31 Tips for reading a nutrition information panel

Source: National Health and Medical Research Council

Using the Health Star Ratings



Make healthier choices by using the health stars to compare similar packaged foods.



Eating healthier food helps maintain a healthier you.

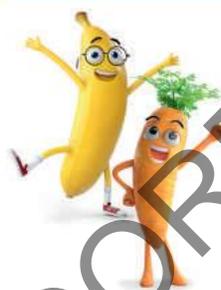
Health Star Ratings are applied using a strict calculation.



Health stars are on the front of many packaged foods.



Health stars are simple to use: the more the stars the healthier.



Fresh is best, but when buying packaged food use the health stars.



ENERGY	SAT FAT	SUGARS	SODIUM	FIBRE
244kJ	0.3g	4.6g	431mg	2.0g
	LOW	LOW		

PER 100g

Health stars can provide information about key nutrients.

To find out more, visit: healthstarrating.gov.au

The Health Star Rating

A joint Australian, State and Territory governments initiative in partnership with industry, public health and consumer groups.



The more stars, the healthier.

Figure 2.32 A quick guide to using the Health Star Ratings



Quiz
How can I understand
food labelling?

Shutterstock.com/LADO



Figure 2.33 Get into the habit of reading the nutrition labels of food products.

REVIEW

- 1 Propose five useful tips for reading labels, and describe how you would put them into practice on a daily basis.
- 2 Find the nutrition information label on an item of food from your home, cut it out and bring it to your next lesson. Hand it to your teacher, who will spread the labels out on a table at the front of the room. As a class, see if you can arrange the labels in order from least healthy to most healthy. You don't need to know what foods they come from, just what those foods contain. There are lots of things to consider, such as the ingredients and nutrients and their varying amounts, so be prepared to discuss and justify your input. It is not always easy to agree on exactly what is healthy!

REFLECT

Look closely at Figure 2.30 and then complete the following.

- 1 Of all of the labels your class brought in from home, how many would you classify as coming from 'healthy foods'? Why?
- 2 Was there any particular aspect of a label(s) that caused a lot of debate or disagreement? Why?
- 3 Explain what was the most difficult part of putting all of the labels in order.
- 4 Discuss how you will use nutritional information on labels to guide your food choices in the future.

EXTEND

- 1 Typically when a new public health policy or initiative is introduced, we have a great opportunity to review its impact. How were things working before its introduction? What is different since its introduction?

Let's provide our own critique of the Health Star Rating system.

- a Do you think the introduction of the Health Star Rating system has been effective?
- b Is it something you use when deciding what food or drink product to buy? Justify why or why not?
- c Do you tend to buy healthier products when you use the system?
- d Could you propose some suggestions for improvements?
- e How would your family members and friends answer these questions? Design a survey to gather responses.
- f How do experts and academics evaluate the Health Star Rating system? Conduct web searches to ascertain their findings. Look for discussion about the design of the system, its implementation and suggestions for improvements. It is always good practice to find multiple articles from different authors. Compare their findings and develop a summary.



Weblink
Health Star Rating
system

WHAT IS THE IMPACT OF ADVERTISING ON MY DIET?

Advertisements for food and drink products are everywhere; you see them several times a day. In fact, sometimes you see so many advertisements that you don't even notice them. But your brain takes in a lot of information about brands and products without you really thinking about it, and the people responsible for marketing foods know this. How much food and drink advertising do you think you are actually exposed to?

CASE STUDY

JUNK FOOD ADVERTISING

Identify

Health promotion groups such as Cancer Council Victoria, Diabetes Victoria and the Heart Foundation are calling on the Victorian Government to remove unhealthy food and drink advertising from public transport and within 500 metres of schools.

Understand

Research released by Cancer Council Victoria today shows Victorian kids are bombarded by unhealthy food advertising as they travel to and from school on public transport.

Of food and drink advertisements found on government-controlled public transport across Victoria, nearly 6 in 10 (58 per cent) promoted unhealthy junk foods.

Fast food meals, sugary drinks, desserts and confectionery were among the unhealthy products being advertised on routes to and from 50 Victorian schools, linking major train stations including Flinders Street, Clayton, Dandenong, Sunshine, Essendon and Bendigo.

A staggering 9 in 10 (91 per cent) food ads located within 500 metres of schools promoted unhealthy food and drinks rather than healthier food options. However, outside this radius a much smaller proportion (57 per cent) of food ads promoted unhealthy options.

The highest proportion of junk food ads were found on tram stops (44 per cent), followed by buses (29 per cent), inside train stations (16 per cent) and on bus shelters (11 per cent).

Cancer Council Victoria CEO, Todd Harper, announced the launch of a new wave of its 'Food Fight' campaign today, advocating for junk food ads to be removed from public transport, transport infrastructure (train stations and bus shelters) and within 500 metres of schools in Victoria.

'This harmful marketing has a powerful influence, shaping what our kids eat, ask for and spend their pocket money on,' Mr Harper says.

'It's alarming to think our kids are bombarded with at least 25 of these unhealthy ads daily.'

'While industry profits from every junk food ad placed and product sold, it's our children's health that pays the ultimate price.'



Reproduced with permission from Cancer Council Western Australia

Figure 2.34 Junk food advertising directed at children on a bus. The Cancer Council is leading a campaign to ban this kind of advertising across Victoria's public transport sector.

Healthy eating is a cornerstone of maintaining a healthy weight, which helps to reduce the risk of developing type 2 diabetes.

Research shows 80 per cent of Victorian parents are in favour of government action to remove unhealthy food and drink ads near schools, and 66 per cent support action to remove these ads from public transport.

Since launching in 2022, more than 10 000 Victorians and over 40 public health and community organisations have thrown their support behind Food Fight.

Around the world, places like Amsterdam, London and Canberra have removed junk food ads from government public transport assets.

Victorians are being urged to sign up to Food Fight and take actions to support the campaign, including writing to their local MP, photographing unhealthy food ads they see on public transport or at stops, and sharing their support on social media.

Source: Extract from 'Victorian kids can't escape junk food ads on public transport' on Diabetes Victoria website, <https://www.diabetesvic.org.au/victorian-kids-cant-escape-junk-food-ads-on-public-transport/>

Discuss

- 1 Junk food and drink advertising on public transport and near schools is the target of this campaign. Describe the rationale of this approach.
- 2 Reflect on your own personal experience commuting to and from school. Provide your opinion on whether you think there is too much junk food and drink advertising near schools and on public transport infrastructure.
- 3 Propose what could be done with the advertising space if all junk food and drink ads were removed. Who would be responsible for this, and how would it be paid for?

UP AND MOVING

Jingle battles

Pair up with a classmate and take turns singing a line of a jingle (catchy song) from an advertisement for a food or drink product. Whoever can't come up with another jingle on their turn loses that battle, and then pairs up with a new opponent who also lost their first battle. Winners pair up with other winners, and keep facing off until we have a Jingle Battle champion (the last remaining undefeated student). If needed, the game can be made easier by saying catchphrases as well as jingles.

WHO CAN YOU TRUST?

Food marketing and manufacturing companies exist to make profit, and they achieve this by encouraging you to believe whatever is necessary to make you buy their products. At times, certain brands will fund or sponsor community events or junior sports programs. Most companies do this as a way to build up **goodwill** among their potential markets.

It gets even trickier when food companies or food industry bodies fund research into the benefits of their products. You will not be surprised to know that the results of this type of research are usually quite favourable for the company paying for the research. An ever-increasing source of misinformation can be celebrity social media influencers. These people use their public profile and online popularity as a basis for providing seemingly 'expert' nutritional advice without any formal qualifications, and usually in an attempt to generate income for themselves. Doctors are asking consumers to re-think the messages and nutritional advice promoted online, which could be placing people's health at risk.



Worksheet
2.9

goodwill a good relationship, a friendly attitude



Weblink
Damaging diet advice by social media influencers



Figure 2.35 Three brands known for clever use of marketing strategies

Advertising works, and it works very well. Food and drink manufacturers spend millions of dollars each year on marketing and advertising because they know it generates sales. They wouldn't do it otherwise.

Some advertising messages are directly relevant to what the product provides, such as an energy drink advertisement describing how energetic you will feel after drinking the product. Other advertising campaigns just give the vague, general perception that if you use the advertised product, you will be cooler, more popular, more athletic, smarter or experience a better lifestyle. They can convey this idea without explicitly saying or writing these things; in fact, some advertisements have no spoken or written words at all!

Certain brands also use the power of 'nagging', or 'pester power'. These advertisements are aimed at children and rely on the child nagging their parents to buy them the product. Toys, giveaways and links to movies or superheroes are common examples of this strategy. Remember, most food and drink advertisements are for items you don't really need, so companies need to convince you otherwise!



Figure 2.36 Some brands pay a lot of money to have their image very visible.

INVESTIGATION

TALLY IT UP

2

Purpose

To analyse the factors that act as enablers or barriers to healthy eating among youth.

Method

There are three parts to this activity. It may take a week to complete them.

- 1 For a 24-hour period, make a note every time you see or hear an advertisement for a food or drink product. Note whether it was for a 'discretionary food' (low nutrient, high fat or sugar snack or drink, fast food or junk food). After 24 hours, add up how many food or drink advertisements you saw and how many of those ads were for discretionary foods.
- 2 Watch an hour of commercial free-to-air TV, during a show aimed at children or teenagers (these will usually be aired just as you get home from school). Record how many advertisements for food or drink you see, and note how many of the advertised foods would be classified as 'discretionary'.

Watch another hour of commercial free-to-air TV, when the show is not just for children or teenagers – the news might be a good example. Don't pick a sport program (see part 3). Record how many advertisements for food or drink you see, and note how many of the advertised foods would be classified as 'discretionary'.

- 3 Watch your favourite sport, either on TV or by going to the game live. Again, record how many advertisements for food or drink you see, and note how many of the advertised foods would be classified as 'discretionary'.

You will now have three tables of data that you can analyse during your next Health lesson. Here are three examples:

Part 1: Daily exposure

Number of food or drink advertisements	Number of discretionary food or drink advertisements
--	--

Part 2: TV shows

	Number of food or drink advertisements	Number of discretionary food or drink advertisements
TV show 1: _____		
TV show 2: _____		

Part 3: Sport

	Number of food or drink advertisements	Number of discretionary food or drink advertisements
Sport: _____		

Discussion

- 1 Create a graph(s) that will represent your data in a clear and logical way. You may choose to do this manually on paper or by using spreadsheet software. Think carefully about the type and format of your graph(s).
- 2 Identify and discuss two trends you have noticed in your data.
- 3 Why do you think these trends exist? Is it a deliberate strategy or just a coincidence?
- 4 Considering the increases in obesity and lifestyle diseases in Australia, do you think current advertising strategies are appropriate?
- 5 If not, what do you think can be done about this?
- 6 Were you surprised by any of the results of this activity? Give reasons for your answer.

REVIEW

- 1 Describe three different advertising strategies used to sell food and drink.
- 2 Describe the concept of 'goodwill' towards a company.

REFLECT

- 1 Reflect back on an occasion when you have been enticed into buying something, not necessarily because you really wanted or needed it, but because of the effectiveness of the advertising. What was the product, and what was the advertising strategy?
- 2 If faced with a similar situation in the future, what techniques could you use to help you resist temptation?
- 3 Examine the image in Figure 2.36. Why do you think this particular company would use an image like this to try and sell more products? Who are they targeting and how are they doing it?
- 4 Using the internet or magazines and newspapers, gather a range of images that you can use to create a mural or poster. Your images need to represent as wide a range of advertising strategies as possible, from a range of different brands and products.



Alamy Stock Photo/Jeff Morgan 16

Figure 2.37 Well, if it's good enough for Santa Claus ...

EXTEND

- 1 The marketing of discretionary food products to children is self-regulated by the food and beverage industry, which is usually represented by lobby groups such as the Australian Food and Grocery Council. They utilise initiatives that aim to 'reduce advertising and marketing to children for food and drinks that are not healthier choices' and 'only advertising healthier choices to children'. (Source: Australian Food and Grocery Council)

Let's put this to the test.

- a Can you find examples of discretionary food and drink products that appear to be marketed at children? Gather evidence via photos, screenshots, or downloads from the web.

- b What techniques are used to target children?
- c Make a determination on how fair it is for companies to specifically target children when advertising discretionary products.
- d Is it reasonable for the food and beverage industry to self-regulate their advertising techniques, or should the Australian government be regulating this more closely? Justify your response.

HOW CAN I EAT SUSTAINABLY?

Most Australians have access to a wide range of nutritious foods and the means to buy them. While Australia as a whole produces more food than its population needs, growing food puts strain on the environment.

As the world's population continues to grow, producing enough food to feed everyone will become increasingly difficult. There are limits as to how much raw food can be produced using the current resources, particularly nutrient-rich soil and water. There are a number of ways to make **sustainable** food choices; each of these choices makes a small contribution to helping conserve the natural environment.



Figure 2.38 Ultimately, our natural environment is the source of everything we consume.



Figure 2.39 Beef production is a significant contributor to Australia's economy.

FAST FACT

First Nations People have successfully lived off the land for more than 40,000 years. To do so requires a very intimate knowledge of how to sustainably harvest food from a range of plant sources without depleting the natural resources for ongoing use.



Quiz
What is the impact of advertising on my diet?

sustainable in the context of food choices, refers to the ability to maintain or improve nutritional and lifestyle standards without exhausting natural resources or causing severe ecological damage



Weblink
Understanding bush foods

To learn more about Australia's native bush foods, watch the video *Understanding Bush Foods* on the Gardening Australia website.

ORGANIC FOOD

genetic modification
using scientific methods to change the characteristics of an organism's DNA, often to make it resistant to disease or to produce larger crops

Organic food is grown without using human-made chemicals such as fertilisers or pesticides, and it is free of **genetic modification** (GM). Organic foods can be plant based (fruit or vegetables) or animal products, including meat, eggs and honey.

FACE TO FACE

Organic food

Organic foods have grown in popularity in the past decade. Discuss with a classmate why you think this might be the case. Consider the following questions:

- 1 What do people see as the benefits of using organic products, and how do they develop this viewpoint?
- 2 Are there any drawbacks to the increase in popularity of organic products?
- 3 Do members of your household buy organic products? If so, why? Compare your answer to your classmate's and discuss why your family chooses to use more (or less) organic products.

Some people choose organic foods for ethical reasons, because animals raised on organic farms are usually treated more humanely. Often organic farming relies on more traditional and sustainable farming practices, such as conserving water, using renewable resources, rotating crops, and natural recycling of nutrients.

UP AND MOVING

Kitchen inspection!

Have a look through your fridge and pantry at home, and see if you can find an organically produced food item. Take a photo or bring the label into school (check with your parent or caregiver first). How many different items can your class collect in time for your next Health lesson?

MINIMAL TRAVEL, MINIMAL PRODUCTION

There are several other ways to minimise environmental impact when making choices about food and drinks:

- ⇒ Buy food locally, by using farmers' markets and small local stores.
- ⇒ Grow your own food: at home, at school or in a community garden.



Figure 2.40 Farmers' markets are a great way to buy fresh food from your local area.



Shutterstock.com/yevgeniy11

Figure 2.41 Wasted food ends up in landfill.

- ⇒ Choose foods that are less processed. The more effort that goes into manufacturing food, the greater the impact on the environment.
- ⇒ Read the labels and try to buy foods that were manufactured or grown in Australia.
- ⇒ Look for foods with minimal packaging.
- ⇒ Try to minimise overeating and food wastage. Consuming more food than you need is bad for your health and puts extra stress on the environment. Food wastage in Australia is huge. About 3 million tonnes of food per year (worth about \$5 billion dollars) ends up going to landfill.
- ⇒ Compost fresh food scraps (such as fruit and vegetables) at home to look after your own garden better and to reduce landfill. Composting food scraps produces fewer greenhouse gases than when they are added to landfill.
- ⇒ Be mindful of where your seafood is sourced. Some species of fish are at risk of being overfished. There are smartphone apps available to help when your family is shopping for seafood.

It is difficult to buy local and/or organically grown foods when those foods aren't in season. For instance, strawberries don't grow in Victoria during winter. So either you go without strawberries until closer to summer, or you buy strawberries that have been transported from somewhere else in Australia (or even overseas), which means you are no longer buying local. Some crops can be grown locally out of their normal season with the use of chemicals, but that means they are no longer organic.

Tap water versus bottled water

Australia has one of the cleanest and safest drinking water supplies in the world. The water that comes out of the tap is as good as any bottled water. Despite claims about the special 'origins' and 'purity' of bottled water, it's no purer than tap water.



Weblink
Sustainable
seafood guide

Visit the Good Fish website run by the Australian Marine Conservation Society to find a handy online tool to help you choose seafood wisely.



Figure 2.42 Strawberries are a seasonal crop, buying them out of season means that they are not locally produced.

FACE TO FACE **Bottled water in Australia**

Conduct online research into the use of bottled water in Australia, then discuss the following questions with a classmate. You can also watch the video *Bottle Water vs Tap Water* from *Behind the News* on ABC iView.

- 1 Why do some people choose to buy bottled water instead of drinking tap water?
- 2 What are the benefits of drinking tap water instead of bottled water?
- 3 Why is it important for us to reduce the amount of bottled water being purchased?
- 4 Propose some strategies for how we can reduce the amount of bottled water being purchased across the country.



Ecological footprint

An ecological footprint is a measure of the impact people have on the environment. It factors in the impact of food production, but also of timber and material production, and the space required for infrastructure and handling wastes. In 2022 the global ecological footprint was 20.5 billion hectares. However, our planet can only sustain 12 billion hectares, meaning we are using up resources much quicker than we can regrow or replenish them. Australians currently use 5.8 global hectares per person, but the average for every person on the planet would need to be 1.51 global hectares per person for the long-term viability of our ecosystems.

You can measure your ecological footprint on the Footprint Calculator website.



UP AND MOVING

Local projects

The best way to tackle large environmental problems is to start in your own backyard. As a class, see if you can get one of the following local projects up and running in your school.

1 Start a school vegetable garden

Many Australian schools are starting to include vegetable gardens within their school grounds. There are many uses and benefits of vegetable gardens. Does your school have one? How could you go about getting one started? Perhaps try investigating other schools that have one and find out how they started theirs.

2 Canteen audit

How sustainable is your school canteen? Develop a checklist of things you'd like to see taking place in your canteen. Things to focus on include the types of meals and snacks, where the food comes from, how it is grown and processed, how much is wasted and recycled, and where the food scraps go. Offer some strategies for improvement.

3 Plastic-free days

Plastic-free days at school encourage students to bring snacks and lunches that are free of any plastic wrapping. They aim to encourage healthy, nutritious lunches that are environmentally friendly, using only fresh foods and eliminating all unnecessary wrapping and packaging.



Quiz
How can I eat sustainably?

REVIEW

- 1 List three sustainability initiatives mentioned in this chapter, and find three more on the web. Make sure they are related to food. Write a short description of each initiative.
- 2 Does your school currently utilise any food-related sustainability initiatives? Outline how you could introduce one to your school.

REFLECT

- 1 Propose what you believe to be the primary environmental issues facing Australians and the way we use food.
- 2 Hypothesise if these issues would be the same in other parts of the world. How would you answer question 1 if you lived in a developing nation?

EXTEND

- 1 Can you take on the challenge? The 'Love Food Hate Waste' program invites you and your family to save money and help our environment by reducing your food waste. Visit the Track Your Food Footprint website and follow the steps to monitor how much food you and your family throw away at home in one week.



Weblink
Track your food footprint

CHAPTER 2 REVIEW

- 1 List the five main food groups in order from most recommended serves per day to least.
- 2 Explain what discretionary foods are.
- 3 What is Australia's nutritional model?
- 4 What is the difference between energy intake and energy expenditure?
- 5 What are the key principles of a healthy diet? (Hint: they start with V, B and M.)
- 6 State what the three food sources of fuel for the body are.
- 7 A recovery snack after exercise should include which two nutrients?
- 8 What function does fat play in the body?
- 9 What is the difference between a serving size and a portion size?
- 10 What is the difference between 'overweight' and 'obese'?
- 11 What is your ecological footprint?
- 12 List four different types of information that can be found on the nutritional information panel on food labels.
- 13 What percentage of Australian adults are overweight or obese?
- 14 Summarise in what order the ingredients in a food product are listed on its packaging.
- 15 List six influences on eating or food choices.
- 16 List five tips or tricks for choosing healthy food options.
- 17 Describe two advantages of having a compost system in your backyard.
- 18 Define 'sedentary'.
- 19 Why was the Health Star Rating system introduced in Australia?
- 20 List three ways to consider the environment when making decisions around food and drink products and dietary habits.



UNCORRECTED PAGE PROOFS

HEALTH BENEFITS OF PHYSICAL ACTIVITY



Shutterstock.com/Nicetoseeya

IN THIS CHAPTER

You will learn about the importance of participation in regular physical activity throughout your life and learn how to make exercise and physical activity a part of your everyday life.

WHAT IS PHYSICAL
ACTIVITY? 106

WHAT ARE THE BENEFITS OF
BEING PHYSICALLY ACTIVE? 117

WHAT INFLUENCES
PARTICIPATION IN
PHYSICAL ACTIVITY? 129

By the end of this chapter, you should be able to:

- ⇒ define and categorise types of physical activity
- ⇒ identify opportunities for including activity in your daily routine
- ⇒ familiarise yourself with national physical activity, sedentary behaviour and sleep recommendations for various age groups
- ⇒ determine your typical amount of weekly physical activity as well as sedentary behaviour
- ⇒ understand the health benefits of participation in regular physical activity including physical, social, emotional, spiritual and cognitive/mental health
- ⇒ identify factors that influence your participation in physical activity and/or sedentary behaviour.

Quizzes:

- Pre-chapter (p.106)
- What is physical activity? (p.115)
- What are the benefits of being physically active? (p.129)
- What influences participation in physical activity? (p.133)
- How does physical activity participation in Australia compare to other countries? (p.140)

Videos:

- Case study: Everyday exercises (p.106)
- Australians' physical activity, sedentary behaviour and sleep (p.110)

 Nelson MindTap

To access resources above, visit cengage.com.au/nelsonmindtap



HOW DOES PHYSICAL ACTIVITY PARTICIPATION IN AUSTRALIA COMPARE TO OTHER COUNTRIES? 133

WHAT IS PHYSICAL ACTIVITY?



Quiz
Pre-chapter

physical activity
movement of large muscle groups that requires the use of energy



Worksheet
3.1



Video
Case study:
Everyday
exercises

Before you start, take the pre-chapter quiz to find out how much you already know.

Everyone knows that participation in regular **physical activity** results in improved personal and community health. But what does physical activity actually mean? Is it walking the dog or going for a run? Is it hanging out at the skate park or training for netball? How often do you need to be active? Being active on most days – five or more days a week – is considered to be regular physical activity. There are many ways to be active; you don't necessarily need to join a gym or participate in competitive sport.

FACE TO FACE

Physical activity

With a classmate, brainstorm all the things you can think of that you would consider to be physical activity.



Figure 3.1 Are these both examples of physical activity?

TYPES OF PHYSICAL ACTIVITY

All the physical activities you listed in the brainstorm activity can be sorted into two categories:

- 1 incidental physical activity
- 2 structured or planned physical activity.

Incidental physical activity

Incidental physical activity is unplanned activity you do during the day, usually in the process of doing something else. For example, if you catch the bus to school, you may have to walk to the bus stop. This walking is considered incidental physical activity. Incidental physical activity can happen in many different ways: walking from class to class around school or walking around the shops are just two ways to be active without even realising it. Other types of incidental activity are shown in Table 3.1.

Structured physical activity

Structured physical activity is a type of activity that is planned. Exercise, recreational and leisure activities and organised sport are all types of structured physical activity.

Table 3.1 Types of incidental physical activity

Type of incidental physical activity	Description	Examples
Household tasks and gardening	Completing household tasks that use energy	Tidying your room, vacuuming the house or helping prepare meals, mowing the lawn, cleaning the bathroom
Active transport	Travelling to a place using own means and efforts	Riding a bicycle to work, walking to school
Occupational activity	Work-related tasks that result in energy expenditure	Landscape gardening, construction work
Play	Non-structured, informal, fun activities	Skating at a local skate park, climbing on playground equipment

energy expenditure the amount of energy used to complete an activity, measured in kilojoules

There are many examples of structured physical activity: playing sport, going to the gym, doing a spin or dance class, skateboarding and bushwalking are just a few!

DOMAINS OF PHYSICAL ACTIVITY

There are many types of physical activity, and it is not difficult to fit these into your daily routine. Think about all the times you could be active throughout the day. There are many places where this can happen: at home, at school, in the workplace and while getting yourself from one place to another. The places where you are active are called domains. There are four domains in which all activities take place:

- ⇒ leisure-time activity domain
- ⇒ household/gardening domain
- ⇒ occupational domain
- ⇒ active transport domain.



Figure 3.2 Is this activity incidental or structured?

Leisure-time activity

This refers to what you do in your spare time. You choose the activity you would like to do and you do it for your own enjoyment.

Household/gardening activity

This activity refers to the things you do around the house and garden. Vacuuming, sweeping the floor, hanging out the washing, weeding the garden and raking the leaves are all examples of physical activity in the household and gardening domain.

Occupational activity

Occupational activity is done as part of your job or employment. Some jobs are highly **sedentary** and involve sitting at a desk all day, while others involve different amounts of activity. Labourers, cleaners, physical education teachers and tradespeople are examples of people who are likely to be very active as a result of their jobs.

sedentary a type of activity that does not use much energy, such as sitting



Worksheet
3.2

Active transport activity

This is physical activity undertaken to reach a destination. Walking, cycling, scootering (non-electric) and skating are all forms of active transport, where the transport is 'self-propelled/powering'.

Walking to the bus stop is also a type of active transport. What other forms of active transport can you think of? Apart from the physical benefits for the person being active, what benefits are there for the community?

CASE STUDY

PHYSICAL ACTIVITY IMPROVES STUDENTS' ATTAINMENT

Identify

Physical activity also plays a significant role in supporting children's mental health and overall wellbeing. Regular physical activity has been shown to alleviate symptoms of anxiety and depression, improve body image, enhance self-esteem, regulate mood and reduce the risk of developing mental health disorders.

Understand

Associate Professor Natalie Lander (Institute for Physical Activity and Nutrition: IPAN) at Deakin University has said, 'it is concerning that students currently spend approximately 75–80 per cent of the school day sedentary'. Whole-school physical activity interventions have been shown to effectively improve physical and mental health as well as learning outcomes with TransformUs being one such program (Salmon et al., 2023).

TransformUs is a whole-school initiative designed to integrate meaningful movement into daily teaching across all subjects for students from Foundation to Year 12. The program equips teachers with high-quality resources, professional development opportunities and practical strategies to enhance student engagement and academic outcomes. It also supports schools in creating positive and active environments that extend beyond the classroom to include playgrounds and home, promoting a holistic approach to student learning and wellbeing (Salmon et al., 2023). Backed by over 16 years of research, TransformUs is a cost-effective, evidence-based program fully aligned with the Australian Curriculum (Brown et al., 2024).

TransformUs in primary schools

TransformUs has been successfully implemented in over 700 primary schools across Victoria. Key outcomes include:

- 85 per cent of teachers reported improved concentration among students.
- 82 per cent of teachers observed increased time-on-task following active breaks.

Compared to traditional lessons, students in TransformUs schools:

- spent up to 63 minutes less time sedentary and were 5 minutes more active each school day
- demonstrated improvements in physical health, such as lower Body Mass Index (BMI), reduced waist circumference, lower blood pressure and higher vitamin D levels
- reported greater enjoyment and satisfaction with learning.

TransformUs in secondary schools

TransformUs has been adapted for secondary schools through participatory action research and piloted for effectiveness. The secondary school version includes active academic lessons, an active school environment, health lessons, active homework, active breaks and peer support, all aligned with the Australian secondary curriculum (Contardo Ayala et al., 2025). Following the pilot, most students expressed positive engagement with these strategies, and 90 per cent expressed interest in continuing them. Teachers observed significant improvements in classroom behaviour.

Source: Natalie Lander, 'The importance of physical activity for student health, wellbeing, and learning', 12 February 2025

Discuss

- 1 Visit the TransformUs website and outline three strategies suggested there to increase the activity levels of students and decrease their sedentary behaviours during the school day.
- 2 Do you believe the strategies you have discovered could be implemented in your school? Briefly justify your opinion.
- 3 After having discovered more about the programs and initiatives TransformUs has introduced into secondary schools, suggest another way of increasing the amount of time students are physically active while at school.



WebLink
TransformUs

INVESTIGATION**THE LOOK STUDY****Purpose**

The LOOK study is a longitudinal project investigating the effect of physical activity on the health and development of young Australians. Your investigation should increase your understanding and appreciation of how participation in regular physical activity improves the quality of life of Australians across multiple areas.

Method

- 1 Access detailed information about this project on the LOOK study website.
- 2 Use the information presented on the website to understand how the project was structured and is still being undertaken as a longitudinal study. Read the key discussion points outlined below prior to commencing your research/investigation, and take summary notes as you navigate through the website to obtain important key findings.



WebLink
LOOK study

Discussion

- 1 One of the current main findings of the LOOK project is: 'In brief, strong evidence has emerged of a negative impact on the health and well-being of children of the 21st century when they are not afforded opportunities for regular well-designed physical education provided by specialist teachers; when they are insufficiently active; and when they do not participate in any form of organized sport'

'Early research findings' of the LOOK lifestyle study, Research Institute for Sport and Exercise (UCRISE)

Complete the following table to summarise the negative impacts on the following health areas:

Physical health	Social health	Emotional health	Cognitive/mental health

- 2 Are boys more physically active than girls? Briefly discuss the findings, and outline possible reasons for any change in levels of physical activity that boys and girls experience while at school.
- 3 Highly active people can also experience high levels of sedentary behaviour.
 - a How is this possible?
 - b Provide three simple strategies to reduce the amount of sedentary behaviour 12–17 year olds engage in.



WebLink
Physical Activity
in Schools



Video
Australians' physical activity, sedentary behaviour and sleep

How many hours a day do you spend exercising, sitting down and sleeping? What changes could you make to your daily routine to be healthier? Watch the video and join the discussion!

NATIONAL PHYSICAL ACTIVITY, SEDENTARY BEHAVIOUR AND SLEEP RECOMMENDATIONS

To help understand how much activity is necessary for health, and how often it should occur, the Australian Government created Australia's Physical Activity and Sedentary Behaviour Guidelines for adults, and the Australian 24-hour Movement Guidelines for Children and Young People (5–17 years) for children and teenagers. These guidelines outline the minimum levels of physical activity people should do in order to gain health benefits and suggest ways to be more active in everyday life. The guidelines for children and teens are shown in Figure 3.3 below.

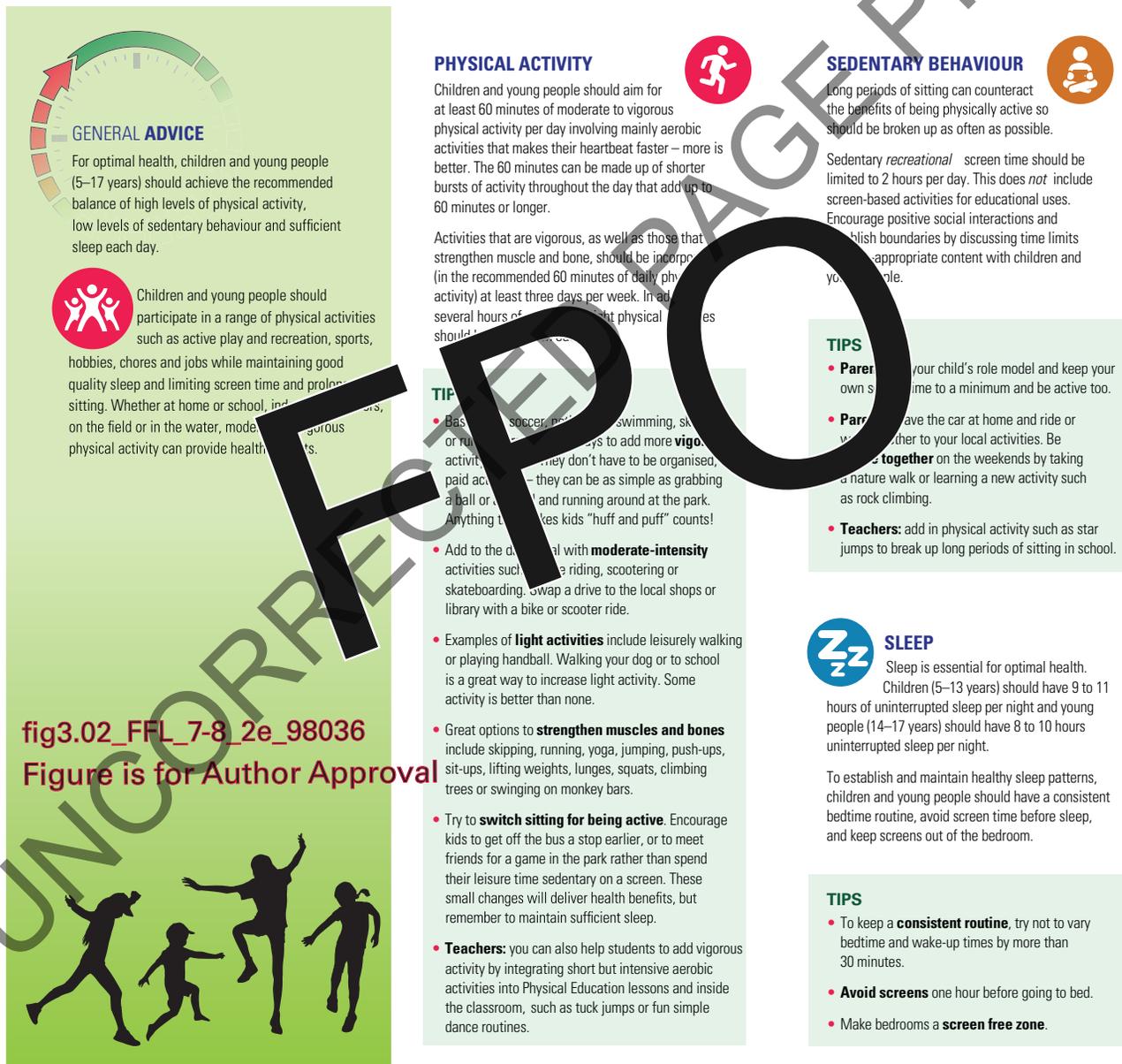


Figure 3.3 Australian 24-hour Movement Guidelines for Children and Young People (5–17 years)

FAST FACTS

- 1 Inactivity is a risk factor for lots of **chronic** conditions. People who do not meet physical recommendation guidelines are at greater risk of cardiovascular disease, type 2 diabetes and **osteoporosis**.
- 2 2.5 per cent of the total **disease burden** is attributed to physical inactivity.
- 3 Inactivity is linked to several major health conditions, including:
 - type 2 diabetes – 20 per cent of the disease burden is attributable to physical inactivity
 - coronary heart disease – 16 per cent of the disease burden is attributable to physical inactivity
 - **dementia** – 12 per cent of the disease burden is attributable to physical inactivity
 - bowel cancer – 12 per cent of the disease burden is attributable to physical inactivity
 - stroke – 9 per cent of the disease burden is attributable to physical inactivity
 - breast cancer – 3 per cent of the disease burden is attributable to physical inactivity.

chronic a condition that lasts a long time or frequently reoccurs

osteoporosis a disease where bones lose their density and become fragile and brittle, leading to a higher risk of broken bones

disease burden the impact of a health problem as measured by financial cost, mortality or morbidity

dementia a disorder that affects the functioning of the brain and interferes with a person's ability to live a normal life

cholesterol a fatty substance produced naturally by the body and found in blood

DIMENSIONS OF PHYSICAL ACTIVITY

The three **dimensions** of physical activity in the national physical activity guidelines are known as the FIT formula:

F = frequency: how often people need to be active (days per week)

I = intensity: how hard the activity needs to be

T = time: how long the activity should be done for.

dimensions the parts or features that make up a situation, problem or thing

Frequency

The frequency of physical activity required for children and youth is very straightforward: you need to be active every day!

Intensity

Intensity is a little more difficult to understand. Intensity is a measure of how hard the activity is, or how much energy is needed to do it (energy expenditure). Intensity can be classified as light, moderate (medium) or vigorous (hard), depending on how much energy is used. Some examples of light, moderate and vigorous activity are shown in Table 3.2.

There are a number of ways to work out the intensity of an activity. Some, such as heart rate monitoring and **VO₂ maximum**, require some equipment and calculations, but others are simple to use. One simple method is the talk test. If you can continue to talk comfortably while being active, then you are working at light or moderate intensity. There are also a number of devices and smartphone apps that can be used to calculate how hard you are working during exercise.

Another method that can be used is **rate of perceived exertion**. Using a scale, you estimate how hard you think you are working, based on how you feel. Table 3.3 shows a modified version of the Borg rating of perceived exertion (RPE) scale.



Worksheet
3.3

VO₂ maximum the maximum amount of oxygen that can be taken up, transported and utilised, and measured in ml/kg/min in a laboratory

rate of perceived exertion a measure of how hard you think your body is working (subjective measure)

Table 3.2 Examples of light, moderate and vigorous activity

Light intensity	Moderate intensity	Vigorous intensity
Will not leave you out of breath. Example: walking from class to class at school.	Will leave you feeling warm and slightly out of breath. Example: bike riding.	Will make you 'huff and puff' and raise your heart rate. Example: being a midfielder in soccer.
		

Table 3.3 Modified rating of perceived exertion (RPE)

	This is easy! No effort at all. RPE = 1		I am slightly breathless, but I can still answer you if you talk to me. RPE = 6
	I can do this all day. RPE = 2		I am puffing quite a bit now and even though I can talk to you, I don't want to. RPE = 7
	I'm breathing a bit faster but still doing it easy. RPE = 3		I can't keep this pace up for long! I can just answer you, but I don't want to. RPE = 8
	Starting to warm up now. I'm sweating a bit, but I can still chat while I exercise. RPE = 4		This is extremely hard and I can't do much more. RPE = 9
	This is getting a little bit harder, but I am comfortable and happy to chat. RPE = 5		I am working as hard I can and can't go on any longer. RPE = 10

UP AND MOVING

Get up and get active!

Use the modified rating of perceived exertion (RPE) in Table 3.3 to determine how hard you are working when performing each of the following activities:

- running up a set of stairs
- doing 10 burpees
- sprinting 100 metres
- climbing up a set of stairs as quickly as you can.

Record your RPE for each activity. Compare your results with those of others in your class, looking for similarities and differences. Discuss reasons why the RPE for the same activity might be different for different individuals.

Time

The amount of time you need to spend is simple: you need to be active for at least an hour a day. This hour can be made up of a number of shorter periods of time, as long as they add up to 60 minutes – for example, 2 × 30-minute or 4 × 15-minute periods.

Type

The type of activity determines the type of benefits that are gained from being active.

Type (T) can be added to the FIT formula to make FITT:

F = frequency

I = intensity

T = time

T = type.

Earlier in this chapter you looked at different types of physical activity and how to classify them. The type of activity you do is usually chosen for a purpose. Household activity is done to complete chores, active transport is done to reach a destination, occupational activity is part of a person's job and leisure-time activity is for enjoyment. The type of activity can also be chosen for a certain purpose. For example, you might

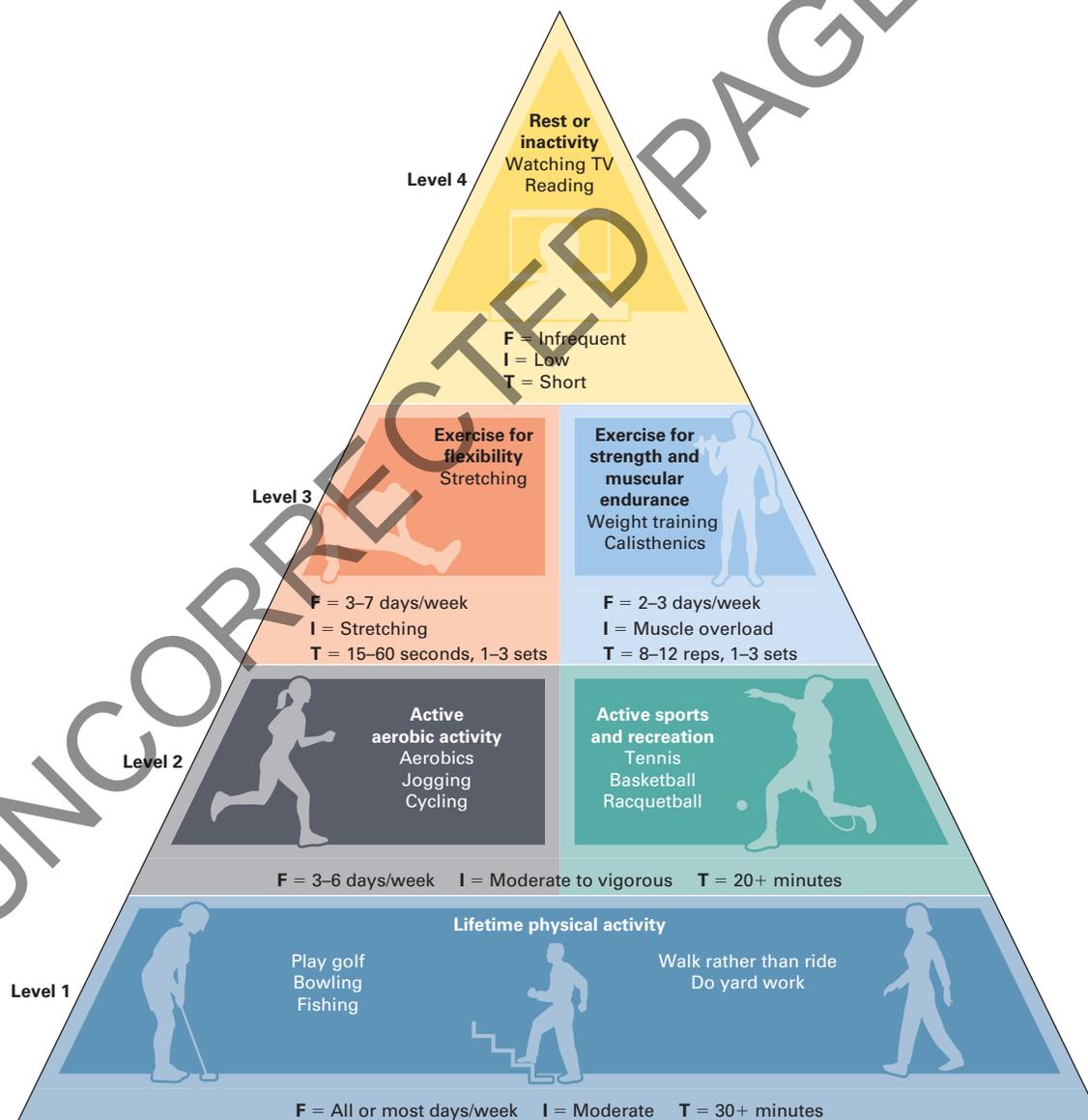


Figure 3.4
Physical activity pyramid

INVESTIGATION

COMPARING PHYSICAL ACTIVITY LEVELS BY AGE

Purpose

To compare and contrast physical activity and sedentary behaviour patterns of older Australians and young people.

Method

- 1 Ask an adult, perhaps a parent or a grandparent, to list all of the physical activity they did for one weekday and one weekend day in the past week. Remind them to consider each of the domains (leisure-time activity, household and gardening, occupational, and active transport).
- 2 Ask them to also write down how much time they spent doing each activity and the intensity (light, moderate or vigorous).
- 3 Record the physical activity you did on one weekday and one weekend day last week.

Discussion

- 1 Make a table to present the data you have collected. Include the frequency, intensity, time and type (FITT) of activity done for your older Australian, as well as your own data.
- 2 Did you and the adult both complete activities in each level of the pyramid? Were there any levels in which you didn't do any activity? If so, suggest reasons why both you and the adult didn't perform any activity in those levels.
- 3 Why do you think the Level 1 activities are at the bottom of the pyramid?
- 4 Did you and the adult you asked meet the guidelines for physical activity and sedentary behaviour? Use the information you collected to justify your answer.
- 5 Research the guidelines for older adults (65+ years) and children 0–5 years. Compare them to the guidelines for adults and your age group. What are the similarities and differences? Present your information in a Venn diagram.

want to improve your fitness, strength or sporting ability. This will determine the activities you choose. The physical activity pyramid categorises physical activity based on the FITT formula of frequency, intensity, time and type. When including physical activity in your daily routine, lifetime physical activities (the bottom layer of the pyramid) should be the physical activity you do most.

SEDENTARY BEHAVIOUR

You will also notice that the Australian 24-hour Movement Guidelines for Children and Young People (5–17 years) makes recommendations for the amount of time spent in sedentary behaviour.

Sedentary behaviour involves sitting or staying in one place for long periods of time, where only small amounts of energy are used. You spend a lot of time sitting throughout the day. Think about all the times you sit: in the car, in front of the television or in class. Even people who meet the physical activity guidelines may not meet the sedentary behaviour guidelines. There are positive health outcomes for children and young people who spend less time sitting – so sit less, move more!

FAST FACT

Over half of all golfers are aged 55+!



Minimising the amount of sedentary behaviour in your day is important for your health and **wellbeing**. There are many different ways to increase the physical activity in your daily routines and to reduce the amount of time you are sedentary. Some small changes you could make include using the stairs rather than the lift or escalator; getting dropped off for school further away so you have to walk further; and putting the remote away so you have to stand up and move to change the channel on the television.

wellbeing an overall feeling of wellness that combines physical, mental, social, emotional, cognitive and spiritual health

SLEEP

Sleep recommendations were added to the guidelines in 2019 after health authorities confirmed the widespread health benefits associated with having consistent sleep and wake-up times, in addition to quality sleep.

In summary, these recommendations require:

- ⇒ an uninterrupted 9–11 hours of sleep per night for those aged 5–13 years, and 8–10 hours per night for those aged 14–17 years
- ⇒ consistent bed and wake-up times.

FACE TO FACE Debate

As a class, debate the statement 'Advances in technology are making people lazy'. Research your point of view and find examples to support or argue against the statement. Include all labour-saving devices (for example, electric bikes and scooters, remote controls and robots) in your interpretation of 'technology' in this task.

hypokinetic disease diseases that are caused by inactivity



Quiz
What is physical activity?

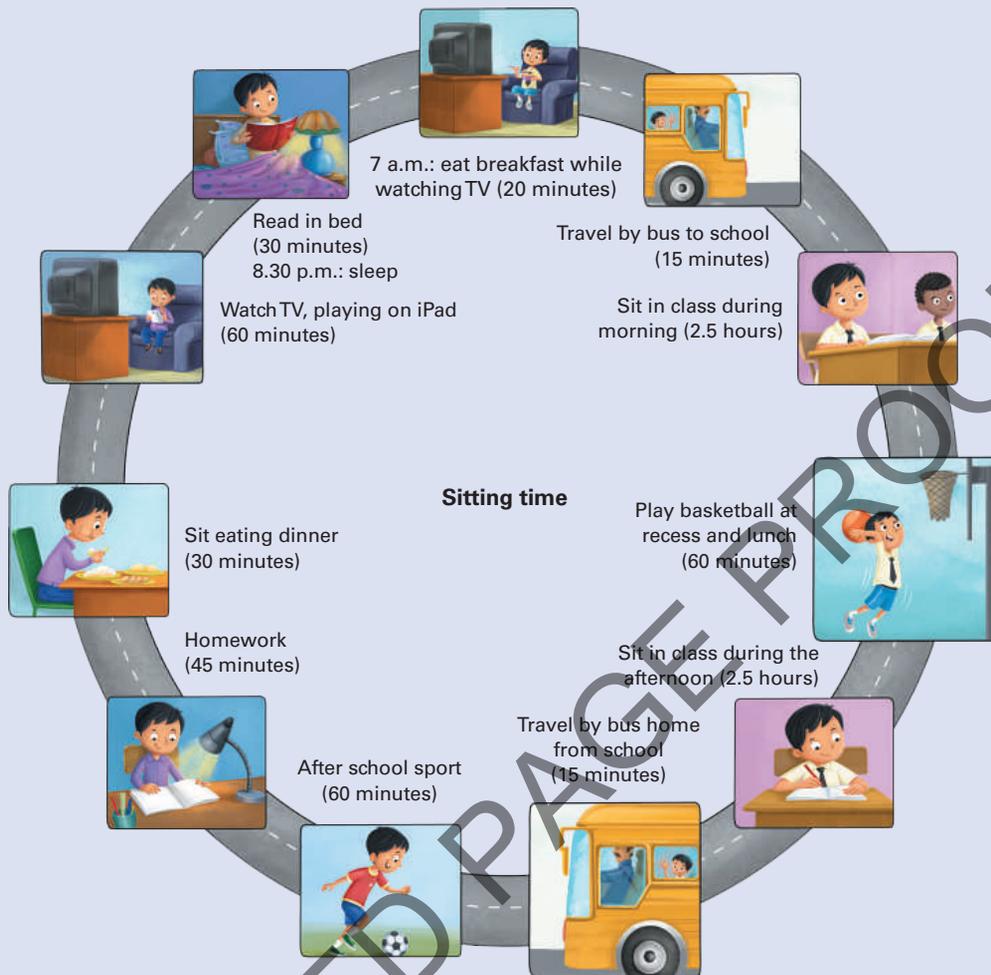
REVIEW

- 1 The physical activity 'guidelines' are recommended to enable people to experience good health. Explain why regular physical activity is recommended over five to seven days, rather than just accumulating the same amount on the weekend.
- 2 Everyone engages in sedentary behaviour, but excessive sedentary behaviour has been linked to **hypokinetic diseases**. Identify an acceptable amount of sedentary behaviour.
- 3 Discuss how you would know if you were participating in an activity at the recommended moderate intensity.

REFLECT

- 1 Using all of the activities you brainstormed (see page 106), create a diagram to show your understanding of how physical activity can be categorised. Your diagram must describe the physical activity as incidental or structured. Each activity type can then be further classified into its domain.
- 2 Construct a 'road map' of your sitting time for a typical school day (Monday–Friday). Include the periods of time when you are active and those when you are sedentary. Add up the total time you spent sitting for the day. You can model your road map on the diagram below, or simply enter your data into a table.

Time	Amount of time sitting
7–7.30 a.m.	30 mins eating breakfast while watching TV
8.40–9.35 a.m.	55 mins sitting in Maths class



3 Recall a time when you did not have a good night's sleep, either because you had a late night and got less than eight hours of sleep, or because you couldn't sleep comfortably due to illness, heat, etc. Briefly discuss how you performed the following day at school, on the sporting field or just generally around the house.

EXTEND

1 Referring to the physical activity pyramid (page 113), read each of the cases below. Create a table using the information given for each person into the dimensions (frequency, intensity, time and type) provided by the Australian 24-hour Movement Guidelines for Children and Young People.

- **Case 1:** Emma, aged 12, walks 10 minutes to and from school each day with her friends. She also does athletics and trains for an hour and a half twice a week. She competes on Saturdays for three hours.
- **Case 2:** Cherry, aged 13, catches the bus to and from school each day. Every lunchtime, she plays basketball with her friends and is often hot and sweaty by the time she has to go back to class. At home, Cherry has to walk the dog for half an hour every day, and they usually end up playing fetch and running around chasing a ball together.
- **Case 3:** Steven, aged 11, is driven to school by his mum, who also picks him up. Steven loves to play on his iPad and spends most afternoons after school playing computer games. He plays football on the weekend in winter; the games go for 90 minutes.

Refer to the guidelines to work out if each person is meeting the recommendations.

WHAT ARE THE BENEFITS OF BEING PHYSICALLY ACTIVE?

Physical activity has many physical, social, emotional and **cognitive** benefits. These benefits affect you as a person and the community in which you live. When considering the benefits of being physically active, words like ‘fit’ and ‘healthy’ are often used interchangeably, but while they are related, they each refer to different aspects of overall wellbeing and more than just physical fitness.

Wellbeing is how a person feels about life and how effectively they can function. A person who is ‘well’ is satisfied at school or work, is spiritually fulfilled (can find peace and purpose in life), enjoys leisure time, is physically fit, is socially involved (has friends) and has a positive emotional outlook (is mostly happy).

Physical, emotional, cognitive, social and **spiritual health** are all parts of wellness. The World Health Organization defines health as ‘a state of complete physical, mental and social wellbeing and not merely the absence of disease’ (Constitution, World Health Organization, © 2020 WHO). Fitness can be defined as ‘the ability to carry out daily tasks with vigour and alertness, without undue fatigue, and ample energy to enjoy leisure time pursuits and meet unforeseen emergencies’ (Clarke, H.H. ‘Basic understanding of physical fitness’. Physical fitness research digests series 1971;1:2.).

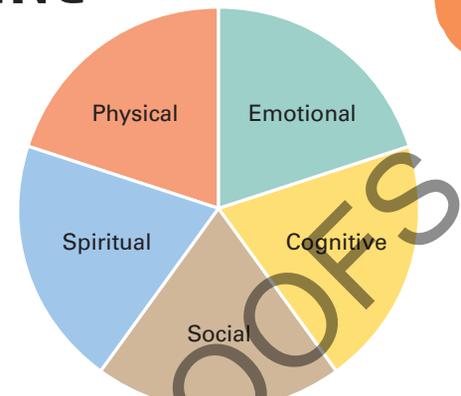


Figure 3.5 Dimensions of health and wellbeing

cognitive relating to your ability to think, learn and remember

spiritual health having a sense of belonging and connectedness



Worksheet
3.4

WELLBEING CHECK IN

EXERCISE CAN MAKE YOUR BRAIN FEEL BETTER

Identify

Exercise isn't just good for physical fitness. It has positive effects all over the body, including the brain.



This activity has been developed in collaboration with Dr David Bakker of MoodMission

Understand

There are many reasons why exercise makes us feel good, and two of these are particularly significant. Firstly, exercise can promote the release of feel-good chemicals in the body, called endorphins. Secondly, it can help us feel like we've achieved something, which can boost our confidence and optimism. You don't have to run a marathon to get these benefits. A really quick exercise can be a step in the right direction. Planking is a way of exercising muscles in your arms, torso and legs, all without moving.

Practise

- 1 Find a flat spot where you can lie down.
- 2 Begin in the plank position, with your forearms and toes on the floor.
- 3 Keep your body rigid, with a straight line from your ears to your toes and no sagging or bending.

- 4 Relax your head and look at the floor.
- 5 Hold this for 10 seconds – count these out in your head while you're planking.
- 6 If you can, try going to 20, 30 or 60 seconds. You may have to work your way up to this with practice.



Reflect

How do you feel after doing this short exercise? Do your stomach and core ache in sort of a good way? Do you think if you did this over and over, maybe every day, you'd get better at it?

PHYSICAL BENEFITS OF REGULAR PHYSICAL ACTIVITY

Fitness is specific to each person. Your daily tasks might not involve using much energy at all, so you might not require the same level of fitness as an athlete who runs 10–15 kilometres every day! The many parts to fitness are called the components of fitness. Health-related fitness components are those that are important to your health

Table 3.4 Health- and skill-related fitness components

Health-related fitness	Skill-related fitness
Aerobic capacity	Balance
Anaerobic capacity	Reaction time
Body composition	Coordination
Muscular strength	Agility
Muscular endurance	Speed
Flexibility	Muscular power

and reduce the risk of disease. Skill-related components are those that are important to your performance in motor skills and sport. The physical benefits of participating in regular physical activity can be health-related and/or skill-related. Table 3.4 lists some of the components of fitness.

The benefit of physical activity depends on the frequency, intensity and type of activity. If you look at the physical activity pyramid again

(page 113), you will see that the frequency, intensity, time and type of activity are specific to the outcome of the activity. For example, the exercise frequency, intensity and time you need in order to achieve flexibility is different from that required to improve your strength. Exercise programs and activities to improve different components of fitness are examined in more detail in Chapter 9 (pages 359–67).

cardiorespiratory system the functioning of the heart and lungs

Benefits for the heart

Regular physical activity has many benefits for the heart and **cardiorespiratory system**. It can increase the size and strength of the heart, meaning it can pump

more blood with each beat and doesn't have to work as hard to deliver the blood around the body. Regular physical activity also helps keep blood vessels healthy and free of blockages, which improves the circulation of blood around the body. Having healthy **cardiovascular** and **circulatory systems** means less chance of heart disease, high blood pressure (**hypertension**), high cholesterol, heart attacks and heart failure.

FAST FACT

Did you know there are two types of cholesterol or fatty substances in your blood? One is good and has protective properties, but the other is bad if there is too much of it in your blood, because it can block your blood vessels so the blood can't flow easily. Regular physical activity helps to reduce the amount of the 'bad' cholesterol, the low-density lipids (or LDLs), and increase the 'good' cholesterol, the high-density lipids (or HDLs).

Benefits for the bones

Strong bones are important because they provide the framework of the body and, much like the frame of a house, they hold you up! Physical activity in childhood can make bones stronger and also helps to stop bones becoming weaker as people get older. **Weight-bearing exercise** has also been shown to increase **bone density**, reduce the risk of osteoporosis and help manage joint-related diseases such as **arthritis**.

Benefits for the muscles

Regular physical activity can increase the strength, endurance and flexibility of muscles, **ligaments** and **tendons**. Increased strength allows muscles to work more efficiently, reduces the risk of muscular and joint injury and, as you get older, allows you to stay more mobile and independent.

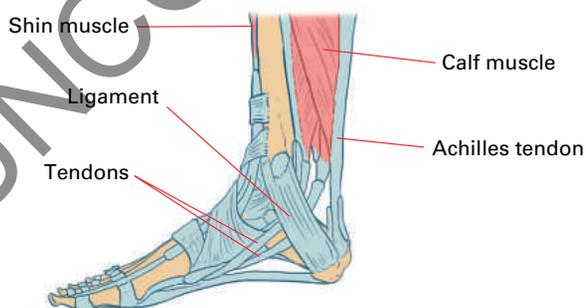


Figure 3.7 Ligaments and tendons of the ankle



Figure 3.6 LDL vs HDL cholesterol

cardiovascular system relating to the heart and circulatory systems

circulatory system the system that circulates blood around the body, including the heart, blood and blood vessels

hypertension abnormally high pressure of blood in the blood vessels



Worksheet
3.5



Weblink
American Heart
Association

View the series of illustrations showing how a build-up of cholesterol can lead to a heart attack on the American Heart Association website.

weight-bearing exercise exercise that requires the bones to support the weight of the body

bone density the amount of calcium and other minerals in bones, which is used to indicate how strong they are

arthritis a disease that causes joints to become stiff, swollen and painful

ligament a strong structure that connects bones to other bones, such as at the knee, ankle and shoulder

tendon a flexible but inelastic cord-like tissue that connects muscles to bones

FAST FACT

Ligaments join bone to bone and tendons join muscle to bone.

There are many other physical benefits of regular physical activity. Some of these are summarised in Table 3.5.

Table 3.5 Physical benefits of regular physical activity



Healthy heart	
	<ul style="list-style-type: none"> Less risk of high blood pressure Less risk of cardiovascular disease (CVD) Lower 'bad' cholesterol
Healthy bones	
	<ul style="list-style-type: none"> Stronger bones Decreased loss of bone density Stronger and healthier joints May help arthritis sufferers
Healthy muscles	
	<ul style="list-style-type: none"> Increased force production – strength and power Greater flexibility Less chance of muscle injury
Healthy body	
	<ul style="list-style-type: none"> Less body fat and risk of obesity Less risk of type 2 diabetes Less risk of bowel and breast cancer and other cancers Longer life Delayed physical effects of ageing Increased energy levels (takes longer to get tired) Improved immune system (don't catch colds often) Improved posture


Weblink
 Benefits of exercise on the brain and body.

INVESTIGATION

HOW CAN I REDUCE MY RISK OF CARDIOVASCULAR DISEASE?

Purpose

To discover some of the statistics about cardiovascular disease (CVD) and become more aware of how to reduce the risk of cardiovascular disease.

Method

- 1 Go to the Heart Foundation website and click on 'Data and statistics'.



Weblink
Heart Foundation

Discussion

Use the statistics to answer the following questions.

- 1 How many people does CVD affect each year?
- 2 What is the leading cause of death in Australia?
- 3 What are 'modifiable' risk factors?
- 4 How does physical activity contribute to the prevention of CVD?
- 5 Investigate the preventative health practices available in your community for CVD.
- 6 Using the information you have found, design a health promotion campaign for these preventative health practices. Present your campaign in one of the following formats:
 - TV commercial
 - radio commercial
 - print media campaign (poster, brochure, newspaper, magazine, etc.)
 - web-based campaign.

Remember, your target audience is people your age.

OTHER BENEFITS

Being physically active is not only good for physical health, it can also have social, emotional, cognitive and spiritual health benefits.

Social health

Social health is your ability to make and keep healthy relationships with the people around you, such as family, friends and teachers.

You are socially healthy when you have a network of friends and family you can rely on for support and to share life experiences. It is important to talk to people every day about what is going on in your life, including both the good and the bad!

nutrition food that is needed for health and growth

Social health is just as important to overall wellbeing as physical health. Poor social health can be as bad for your health as poor **nutrition** or not exercising. Physical activity can improve social health through interactions with others while playing team sports and in recreational settings. Being active with someone else also has the added benefit of making physical activity more enjoyable.

There are many ways to improve your social health through physical activity. Some examples are volunteering at the local sporting club, offering to walk an elderly neighbour's dog or getting involved in a community garden. The benefits are more



Figure 3.8 Why is it important to have a range of people to talk to, including adults as well as friends?

than just being physically active: you get to meet new people, help others and contribute to the community. These benefits help to improve your social health.

Five tips for improving your social health

- 1 Develop healthy relationships with yourself and others.
- 2 Avoid unhealthy and destructive relationships.
- 3 Find out where to get support when you need it.
- 4 Involve yourself in your community.
- 5 Help other people.

It is important to have people in your life who you can trust and who will provide help and support when you need it. There will be people you might talk to every day and share both little and really important things with. These might be your parents, or perhaps a close friend. You will only interact with some other people, such as school counsellors, when you need them.

FAST FACTS

- 1 Activities with the greatest proportion of female participation include Pilates (90 per cent), netball (89 per cent) and dancing (89 per cent).
- 2 Activities with a greater proportion of men participating include cricket (88 per cent), Australian Rules football (84 per cent) and golf (81 per cent).

Emotional health

Emotional health is the ability to recognise, understand and effectively manage your emotions and to use this knowledge when thinking, feeling and acting. Regular physical activity can reduce stress, anxiety positive effect on self-esteem and sleep habits. How you think and feel can play a big part in how you behave.

Life as a teenager may not always be happy, and there will be times when you have to face situations that are difficult to deal with emotionally. These situations might include the breakdown of a friendship, starting at a new school, being bullied by classmates or even the death of a family member. On top of the expectations of just being a teenager, these experiences can be very challenging. The ability to thrive despite these challenges depends on your **resilience**. Being resilient means being able to adapt well to difficulty, trauma or tragedy – anything that causes stress – and manage feelings of anxiety and uncertainty.

resilience the ability to cope with and recover from difficult situations

Adapted from 'The benefits of frequent positive affect: does happiness lead to success?', Lyubomirsky, King, Diener, and The Gallup Organization, Psychological Bulletin of the American Psychological Association, Vol. 131, No. 6, November 2005



Figure 3.9 You can tell someone, or sometimes everyone, how you feel with one little picture.

FAST FACT

Which of the two statements below do you think is true?

- Successful people are more likely to be happy.
- Happy people are more likely to be successful.

Research has found that 'chronically happy people are in general more successful across many life domains than less happy people and their happiness is mostly because of their positive emotions ... When people feel happy, they tend to feel confident, optimistic and energetic and others find them likeable and sociable'.

FAST FACT

Geelong Grammar School in Victoria has been collaborating with Professor Martin Seligman and his team from the University of Pennsylvania. They have developed 'Positive Education' – a whole-school approach to teaching and learning from early learning to Year 12. The Handbury Centre for Wellbeing develops strategies to help students deal successfully with modern living, allowing them to feel confident, resilient and optimistic.

Cognitive health

Cognition is the ability to think, learn and remember. It is the basis for how you reason, judge, concentrate, plan and organise. Good cognitive health, like physical health, is very important.

Regular physical activity improves cognitive health. Many studies have shown that the structures in the brain increase in size and the brain performs better with regular physical activity. This boosts memory and learning, improves decision-making and allows you to think more clearly and learn more effectively. That means that by increasing physical activity levels, you can also do better in your school work!

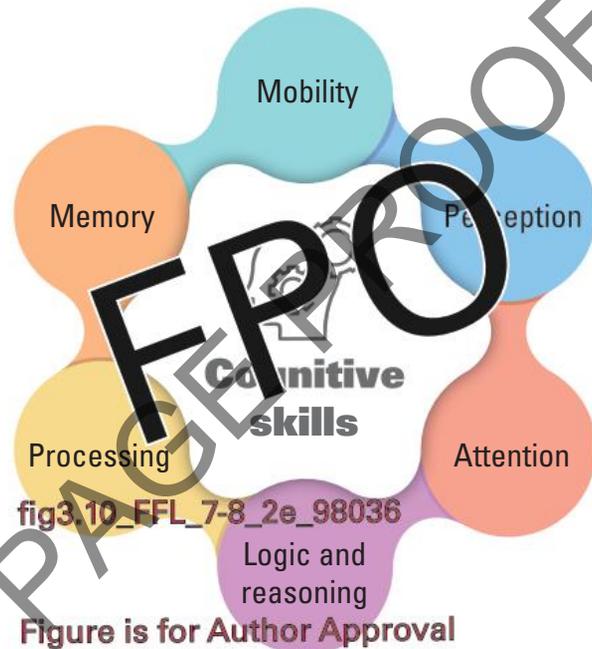


Figure 3.10 Cognitive skills

<credit to come>

UP AND MOVING**Memory game****What to do**

- 1 Play a game of memory. You can use a deck of cards or make your own with 10 pairs of words or pictures.
- 2 Place the cards face down on the table and take turns locating the pairs.
- 3 Record how many turns you took to find all of the pairs.
- 4 Now, go outside and do five 50-metre sprints.
- 5 Repeat steps 1 to 3.

Discussion

- 1 Did the number of turns required to locate all of the pairs stay the same, increase or decrease after your sprinting?
- 2 Based on your results, write a statement that shows the relationship between exercise and short-term memory.
- 3 Define cognitive health.
- 4 What are the benefits of regular physical activity for cognitive health?
- 5 Design another experiment like this one to test the effect of physical activity on cognitive health.

Regular physical activity doesn't just improve cognitive function. It can also help older adults maintain their brain function so they continue to lead healthy, meaningful, independent lives. There are many benefits, to both the individual and the community as a whole, of reducing age-related decline in physical, social, emotional and cognitive health. Older adults who are healthy are likely to have fewer illnesses, be more mobile, have greater independence and have a lower risk of dementia.

FAST FACT

Regular physical exercise, such as a brisk 30-minute walk three times a week, can increase brain power and maintain good brain function in older adults.



Shutterstock.com/Tom Wang

Figure 3.11 Keeping active as you get older not only benefits the body, but also the brain.

WELLBEING CHECK IN

HOW TO RUN WITHOUT RUNNING

Identify

Want to go for a run without going for a run?



This activity has been developed in collaboration with Dr David Bakker of MoodMission

Understand

It doesn't take much to get the body's endorphins flowing and you feeling good. Anything that gets your blood pumping can do the trick, such as running on the spot. Make sure you don't hurt yourself with any of these exercises though, and always keep good form – don't move your body in ways that could cause injury.

Practise

- 1 Run on the spot and lift your knees as high as possible.
- 2 Time yourself for 30–60 seconds.
- 3 Do you feel your heart pumping a bit harder? If not, go for another 30–60 seconds.

Reflect

How do you feel after doing this short exercise? You might feel a bit sore, hot and sweaty, but you also might feel a little more engaged. You will certainly feel different to when you started. This is helpful to notice, as this is another way exercise can help us feel better when we're feeling down or anxious – it can make us change states.



Shutterstock.com/puhitra

Spiritual health

Spiritual health refers to a person's sense of belonging, meaning and purpose in life. Spiritual health is a personal and unique part of you that allows you to make sense of your world. People who are physically active are more likely to make connections with others and with nature and to be more aware of their spirituality. For some people, spirituality may involve their religious beliefs and faith; for others it may be a sense of inner peace. Many cultures believe the mind, body and spirit are all connected. When these elements are all healthy, a person will experience overall wellness.



Figure 3.12 Meditation and mindfulness is a great technique for connecting mind, body and spirit.

WELLBEING CHECK IN

MINDFUL WALKING

Identify

Going for a walk isn't just good for your physical health, it can also be a good opportunity to see the world around you.



This activity has been developed in collaboration with Dr David Bakker of MoodMission

Understand

We know that mindfulness is good for mental health. Mindfulness is often practised through meditation, but it actually just means paying attention to the present moment with openness, curiosity, and without judgement. This means we can do almost anything mindfully, not just meditate. Walking can be a great way of exercising mindfully, as you can pay attention to all the sights, sounds, and sensations that you may not normally notice.



Figure 3.13 Walking can be a great way of exercising mindfully.

Practise

The next time you walk anywhere, practise mindfulness. You don't have to plan a special walk; it could just be the next time you walk from one class to the next, or to your front door. Make sure you don't have any big distractions when you walk. That means going alone and leaving your headphones out.

While walking, try to pay special attention to your surroundings. What colour and patterns are on the ground? If you're outside, look at the trees and count the branches. Notice their shapes. Notice how many colours you can see in each plant, and compare these with neighbouring plants.

If you get distracted by something, first notice that you've become distracted, put the distraction to one side and then refocus on your surroundings. You might have lots of distracting thoughts about yourself, other people, the past, the future, etc. That's okay – in fact, it's totally normal. Refocusing on your surroundings will help you let go of any anxieties or negativity.

Reflect

What did you notice on your walk? Did you discover something that you hadn't noticed before? Were you able to be present and not distracted by your own thoughts? It's OK if you were distracted, but the more you practise mindfulness, the easier it can become to be present and fully enjoy experiences.

CASE STUDY

CLOSING THE GAP REFRESH

Identify

There are a number of health and wellbeing initiatives designed to promote better health outcomes for Aboriginal and Torres Strait Islander peoples. The Australian Indigenous HealthInfoNet website contains a wealth of information about Indigenous (also known as First Nations peoples in this book) health issues.

Understand

In 2019, all levels of Australian government and a Coalition of Aboriginal and Torres Strait Islander Peak Organisations signed a formal agreement to work in genuine partnership to reduce disadvantage among First Nations Australians. This initiative has been called 'Closing the Gap Refresh' and aims to eliminate inequality between Indigenous and non-Indigenous Australians with respect to life expectancy, child mortality, education and employment outcomes, with a special focus on shared decision-making. It comes after more than a decade of mostly unsuccessful attempts by governments to meet specific 'Closing the Gap' targets.

The Annual Data Compilation Report, released on Wednesday 31 July 2024, reports on progress under the National Agreement on Closing the Gap, and shines a light on challenges faced by Aboriginal and Torres Strait Islander peoples. The latest data release shows that only five of 19 Closing the Gap targets are on track to be met.

Below is a summary of the health, wellbeing and education targets.

Health, wellbeing and development

- Life expectancy (Target 1): The life expectancy gap between Aboriginal and Torres Strait Islander people and non-Indigenous Australians remains significant. The average life expectancy is 71.9 years for Aboriginal and Torres Strait Islander men born between 2020 and 2022 and 75.6 years for women, compared to 81.2 years for non-Indigenous men and 85.3 years for women. The target to close this gap by 2031 is not on track.
- Healthy birthweight (Target 2): The proportion of Aboriginal and Torres Strait Islander babies born at a healthy weight is on track to meet the 2031 target, with a rate of 89.6 per cent in 2021.
- Developmental milestones (Target 4): The percentage of Aboriginal and Torres Strait Islander children assessed as developmentally on track has declined, and this target is not on track.
- Suicide rates (Target 14): Suicide remains the leading cause of death for Aboriginal and Torres Strait Islander people aged 15–39, and the target for reducing suicide rates is not on track.

Education and training

- Enrolment rates in early childhood education (Target 3) are on track to meet the 2025 target.
- Year 12 completion and tertiary qualifications (Targets 5 and 6): These targets show improvement but are not on track to be met by 2031.
- Employment engagement (Target 7): The proportion of Aboriginal and Torres Strait Islander young people engaged in employment, education or training is increasing but is not on track to meet the target.

Every year, the Prime Minister releases a Closing the Gap report to Parliament that details the progress on these targets. Those involved in Closing the Gap Refresh believe



Weblink
HealthInfoNet

that, going forward, effective programs and services need to be designed, developed and implemented in partnership with First Nations Australians.

Explore the other health and wellbeing programs on the HealthInfoNet website and then answer the following questions.

Source: Data from Australian Government Productivity Commission, *Closing the Gap: Annual Data Compilation Report*, July 2024

Discuss

- 1 Describe what the Closing the Gap Refresh program aims to do.
- 2 Explain how this initiative is tackling chronic disease risk factors in the Aboriginal and Torres Strait Islander communities.
- 3 Conduct some research to find a program running in your state or community that's aimed at improving the health and wellbeing of Aboriginal and Torres Strait Islander peoples.
- 4 Summarise the main aims of the program.
- 5 Discuss why it is important that people who share similar cultural values are involved in the development of health promotion activities for their own culture.
- 6 Investigate reasons why a sense of connection to country/place is important for sustaining health and wellbeing for Aboriginal and Torres Strait Islander peoples.



Worksheet
3.7

Worksheet
3.8

FAST FACT

Indigenous Australians are more likely to participate in basketball and netball than the overall Australian population.

REVIEW

- 1 Referring to Table 3.5, state the likely physical health benefits of the activities undertaken by these teenagers:
 - Michael, aged 13, loves to run. He goes running with his dad three to four times a week for 30 to 40 minutes and he is usually really puffed at the end of his run.
 - Holly, aged 12, doesn't really like sport but she loves to walk her dog, Jett. Holly walks Jett every day for 30 minutes and enjoys being outside in the fresh air.
 - Zach, aged 14, does gymnastics twice a week. He does lots of strength-based activities where he has to lift or support his own body weight.
- 2 Explain why it is important to have 'healthy bones' and what contribution regular weight-bearing activity plays in achieving this.
- 3 Participation in regular physical activity promotes cognitive development and growth. In your own words, what does having good cognitive health mean?
- 4 Create a diagram like Figure 3.14. Write your name in the innermost circle, then in the next circle write the names of the

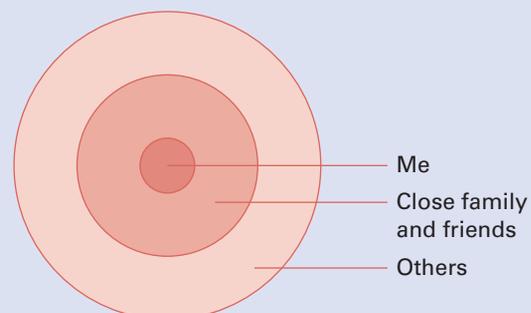


Figure 3.14 Who do you interact with most?

people who are most important to you. In the outer circle, write the names of the people who are in your life, but who you might not interact with as often.

From these people, list who you would turn to in each of the following scenarios:

- Something great has happened and you want to share it.
- You are having trouble at school and need someone to talk to.
- You have had an argument with your parents and you feel like they don't understand you.
- You are excited and nervous about starting at a new dance school.

REFLECT

- 1 When someone feels stressed, why might people suggest that they go for a run, a swim or a gym workout? How do exercise and physical activity decrease stress?
- 2 Recall and briefly describe two occasions when participating in physical activity has improved your social health. This might be when you played sport for the school, walked the dog on the weekend or participated in a fitness class.

EXTEND

- 1 You have researched the modifiable risk factors that contribute to cardiovascular disease. These are different at different life stages.
 - a Prepare a list that highlights the top three risk factors for cardiovascular disease for people who are 20–30 years of age and for those who are 50–60 years of age.
 - b Why do you believe the factors might be different?
- 2 Positive psychology and a growth mindset are interrelated concepts that can be promoted by participation in regular physical activity and can be learnt and built upon by everyone. Conduct online research to identify at least three similarities that exist between these two principles.
- 3 Create a checklist for yourself listing conditions that should be followed each night to ensure good quality and quantity of sleep. You can include the following three prompts in your checklist, but add at least another three suggestions:
 - Do not eat any foods after 8 p.m.
 - Leave mobile phone and tablet on shelf in dining room recharging for next day
 - Ensure room cannot be affected by external 'noise' – close door, ensure blinds block out all light, etc.

WHAT INFLUENCES PARTICIPATION IN PHYSICAL ACTIVITY?

The health benefits of being physically active are very clear. It is important to participate in regular physical activity and to reduce or limit sedentary activities. There are many opportunities to be active, and many choices to make. It is important to understand how and why you choose which physical activities to participate in.



Quiz
What are the benefits of being physically active?



Worksheet
3.9

SOCIAL INFLUENCES

The people who you are active with or who encourage and support you to be active are called social influences. Often physical activity is done with other people – walking with a friend, going for a bike ride or a day at the beach with family, playing team sports with mates. Friends and family are two of the biggest influences on your physical activity behaviours, but a dog can also encourage you to be active. Did you know that dog owners are more likely to be active than non-dog owners?



Figure 3.15 Why do you think dog owners are more active than non-dog owners?

FAST FACT

Female participation in Australian Rules football has increased 790 per cent from 2017 to 2024. This change is attributed to the introduction of the AFLW.

Source: Glazbrook, M.R. et al., (2024). 'Kick like a girl: a qualitative exploration into community perspectives surrounding the Women's Australian Football League'. *Sport in Society*, 27(11), <https://doi.org/10.1080/17430437.2024.2316662>

Parents can be good role models for physical activity. By being active themselves, they are setting a good example and sending positive messages about the importance of lifelong physical activity. They can also support your participation in physical activity in many ways, including driving you to training and games, paying for uniforms and club fees, buying equipment or doing physical activity with you.

CULTURAL INFLUENCES

Australia is a country with many cultures and long-established traditions. First Nations peoples have a rich and wonderful way of life that includes physical activity as part of its tradition. Dance is an important and unique part of the traditional ceremonies and is among the knowledge and stories that are passed down from one generation to the next. Chapters 8 and 10 have more information about some of the traditional games and dance of the First Nations peoples.

All other Australians are migrants or descendants of migrants, meaning that there are many cultural influences on participation in physical activity. More than 25 per cent of all Australians were born overseas, and these people have all brought their own cultural influences with them.

There are many **stereotypes** about Australians. One is that Australians love leisure time and watching or playing sport. Sport has played an important part throughout Australia's history. Have you heard of Phar Lap (a racehorse), Sir Donald Bradman (cricketer) or Dawn Fraser (swimmer)? What about the traditions of the Ashes, the Davis Cup and the Melbourne Cup? These all contribute to the way Australians are regarded today.

stereotype an overly simple generalisation about a group of people or things



Alamy Stock Photo/robertharding

Figure 3.16 Dance is an important part of storytelling in First Nations peoples' cultures.

CASE STUDY

SOCCER STEREOTYPES

Identify

Football is at the heart of many African-Australian communities and increasingly young women are joining the sport. But it has taken hard work, on and off the pitch.

Understand

Every year for the last five years, the African Nations Cup has been a highlight of Adelaide's sporting calendar ... Until now though, there's been a lack of women and girls participating. [Coordinator Arsene Iribuka] says it's partly because of traditional cultural views on women participating in sport. 'A lot of families out there still see that sport is not a place for women, especially football,' he said. 'And for the culture that we come from, that is definitely a challenge in terms of progressing the women's game.'

But as more young women join the sport, that mindset is starting to change. Elizabeth Taban, an 18-year-old



Football South Australia/Adam Butler

Figure 3.17 Women from African-Australian communities are breaking stereotypes to participate in soccer.

from Adelaide's northern suburbs, is among those lobbying for greater participation. She's been playing the sport since 2013.

'I do really like the athletic side of it and the winning side of it,' she said. 'But I [also] really enjoy the culture side of football.' Ms Taban is from South Sudan and says many of her teammates have faced similar barriers, including having to juggle training with responsibilities at home.

'As a woman, because I'm in the house, I'm expected to do cleaning, to do cooking as well. So sometimes I'd have to make sure I quickly do my homework, quickly cook and then go to training,' she said.

Ms Taban is hoping to play in a women's only tournament when the African Nations Cup returns in October. She says it has taken hard work on and off the pitch to be allowed to participate. 'The biggest challenge is probably the support,' she said. 'We don't get enough support from the guys' teams, and we don't get enough support from the community, so it's hard.'

A women's exhibition game was introduced two years ago. That turned into four games last year. 'We are making progress,' said Mr Iribuka. 'One of the reasons is because we recognise that the women's game is something that we've neglected for a long time. He says the potential among young female players is impressive ...

Wendy Carter, general manager of football operations at the Football Federation of South Australia, says ... having women and girls involved could lead to greater participation at more elite levels, like the men before them. 'It actually gives the exposure to the girls ... they are becoming a very strong part of the football community.'

For Ms Taban, the chance to play at competition level is emblematic of a wider battle. 'I'm not so much trying to change the fact that we have the responsibilities, but just to make sure that the community's a little bit more open to girls following their dreams and following their passions.'

Source: 'Adelaide's African-Australian women are fighting barriers stopping them playing football', by Rhiannon Elston, SBS News, 30 August 2019 © SBS.

Discuss

- 1 List at least two stereotypes that appear in the case study.
- 2 Why should local, state and federal agencies support programs such as the one outlined in this case study?
- 3 Briefly discuss what is meant by the term 'gateway to mainstream sport' as stated by Wendy Carter.
- 4 How does participating in team sports such as soccer build a sense of community?

REVIEW

- 1 Use the following table to list the physical activities that you do and why you do them, those that you would like to try and reasons why you may not have the opportunity to give them a go.

What I do	Why I do this activity	What I would like to do	Why I may not be able to do these activities
e.g. Play tennis	My friends are in my team	Go snow skiing	Too far to go, too expensive

- 2 Enablers are factors that positively influence people to do something. List three enablers for physical activity. (Hint: use your table from question 1 to help you!)
- 3 Briefly discuss how parents might be poor role models when it comes to encouraging their children to meet the recommended physical activity guidelines.

REFLECT

- 1 Discuss at least two ways your parents have provided you with the opportunities to participate in physical activity. Would your participation have been the same without their input?
 - a Think of a stereotype that is associated with people participating in physical activity or sport and discuss how this stereotype might have a negative influence on participation.
 - b Discuss instances where gender has provided a barrier to people taking up or participating in sport. How might these barriers be overcome?

EXTEND

- 1 Some overseas cultures place a great emphasis on academic development at the expense of being able to use leisure time for physical activity. Assume you are on a debating team and need to argue that leisure time is more beneficial for teenagers than doing homework and study. Write three paragraphs, one for each key point, to highlight why physical activity is vital to include in everyone's daily/weekly routine – especially up to the minimum recommendations for Australians, as discussed earlier in this chapter.

HOW DOES PHYSICAL ACTIVITY PARTICIPATION IN AUSTRALIA COMPARE TO OTHER COUNTRIES?



Quiz
What influences participation in physical activity?

As discussed earlier in the chapter, the Australian Physical Activity and Sedentary Behaviour Guidelines and the Australian 24-hour Movement Guidelines for Children and Young People (5–17 years) lay out recommendations for physical activity levels of different age groups.

CHILDREN AND ADOLESCENTS

The most recent data comes from a 2022 ABS study on national nutrition and physical activity. This study found that the majority of children and young people were not meeting the guidelines for physical activity.

FAST FACTS

- 1 One in 20 young people aged 15–17 (5.6 per cent) met the physical activity guidelines in 2022.
- 2 Young males aged 15–17 years were more likely to meet the physical activity guidelines than young females (9.9 per cent compared to 3.7 per cent).
- 3 One in five young people aged 15–17 (19.5 per cent) did three or more days of strength or toning activities in the last week.

Young people aged 15–17

- For young people aged 15–17, ‘insufficient physical activity’ is defined as not completing 60 minutes per day of physical activity a week.
- In 2022, based on self-reported data from the ABS 2022 National Health Survey (NHS), an estimated 83 per cent of young people aged 15–17 were insufficiently physically active. A large proportion (80 per cent) also did not do the recommended three days a week of muscle-strengthening activity (AIHW analysis of ABS 2023a).
- Among those who were insufficiently physically active:
 - » 23 per cent did some physical activity on all seven days but did not meet the recommended 60 minutes of physical activity per day
 - » 11 per cent were completely physically inactive – that is, did no days of physical activity in the last week (AIHW analysis of ABS 2023a).

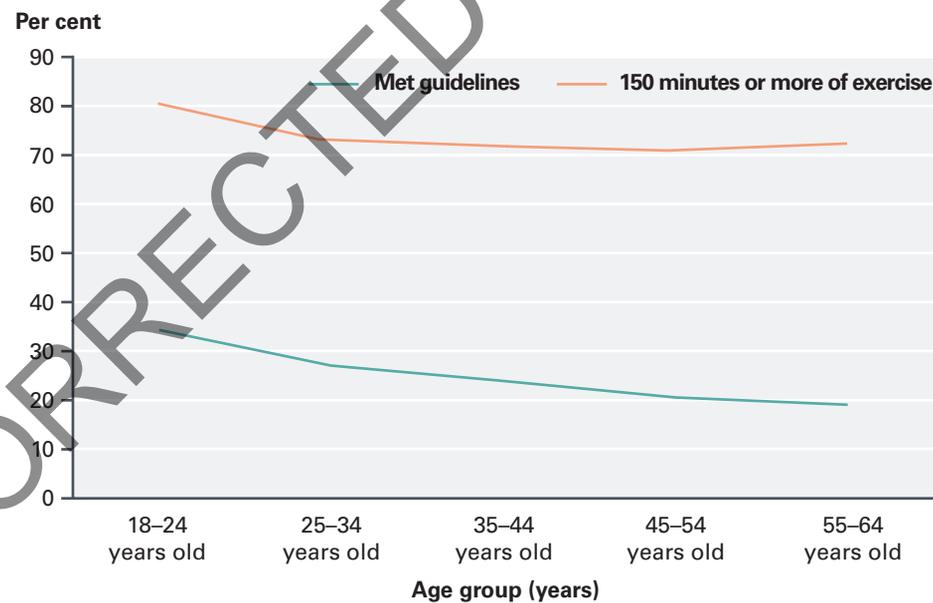
For those who did not meet the muscle-strengthening activity guideline, 9.1 per cent did strength activities on two days in the last week. The majority (82 per cent) did not do any strength activities on any day in the last week (AIHW analysis of ABS 2023a).

Adult participation in physical activity

FAST FACTS

- 1 In 2022, 37 per cent of adults aged 18–64 did not meet the physical activity component of the guidelines.
- 2 73 per cent of adults did not do enough muscle-strengthening activities.

Source: Australian Bureau of Statistics, 17 June 2024.



Australian Bureau of Statistics 2017. Physical activity – 2017–18 financial year. <https://www.abs.gov.au/statistics/health/health-conditions-and-risks/physical-activity/2017-18>, accessed 03 June 2022. Based on Australian Bureau of Statistics data.

Figure 3.18 Persons aged 18–64 years – whether met guidelines or undertook 150 minutes or more of exercise, 2020–21

Table 3.6 Summary of Australia’s recommended physical activity levels

	Ages 5–17	Ages 18–64	Ages 65 and over
Physical activity	Several hours of light activities with at least 60 minutes of moderate to vigorous activity per day	Be active on most, preferably all days with at least 150 minutes of moderate to vigorous activity per week	Be active on most, preferably all days with at least 30 minutes of moderate activity per day
Sedentary or screen-based activity	No more than 120 minutes of screen use Break up long periods of sitting	Minimise and break up prolonged periods of sitting	Be as active as possible
Strength	Vigorous and muscle strengthening activities three times a week	Muscle strengthening activities two times a week	Incorporate muscle strengthening activities

Source: Australian Institute of Health and Welfare 2019. Insufficient physical activity. Web report. Canberra: AIHW. Licensed under Creative Commons 3.0.

CASE STUDY

HOW ACTIVE ARE ADULT AUSTRALIANS?

Identify

AusPlay is a national survey that collects national, state and territory data on how much sport and physical activity Australians participate in. This data is used to:

- inform government policy, programs and funding
- help sports organisations better understand factors influencing participation and trends.

Latest data has again confirmed that walking is Australia’s top physical activity, closely followed by fitness/gym, among those 15 years of age or older.



Shutterstock.com/Syria Productions

Figure 3.19 Walking is the number one activity for Australians.

Understand

Data was collected between July 2023 and June 2024 from 8,800 children aged 14 and under, with the top participation rates being for swimming, soccer, dance, basketball and gymnastics. Among adults (aged 15 and over) activities with the highest participation rates were walking, fitness/gym, bushwalking, running/jogging and swimming. All of these activities are popular with many Australians, but there are some obvious differences between age groups.

Many of these sports are popular across genders – again, with some differences. Activities more popular among women include Pilates, walking and yoga, whereas men participate more in basketball, soccer and golf.

With only 65 per cent of adults and 40 per cent of children being active at least once per week and only 48 per cent of adults and 14 per cent of children active at least three times per week, most Australians are not meeting the national physical activity and exercise guidelines.

Table 3.7 Top 10 sports in Australia by participation and age group

	0–4	5–14	15–24	25–34	35–54	55+
1	Swimming	Swimming	Fitness/Gym	Walking	Walking	Walking
2	Gymnastics	Soccer	Walking	Fitness/Gym	Fitness/Gym	Fitness/Gym
3	Dancing	Basketball	Running	Running	Bush Walking	Bush Walking
4	Walking	Australian football	Bush Walking	Bush Walking	Swimming	Swimming
5	Soccer	Gymnastics	Swimming	Swimming	Running	Cycling
6	Running	Netball	Soccer	Soccer	Cycling	Golf
7	Cycling	Dancing	Basketball	Pilates	Yoga	Running
8	Australian football	Tennis	Tennis	Cycling	Pilates	Yoga
9	Bush Walking	Cricket	Cycling	Basketball	Tennis	Pilates
10	Athletics	Running	Netball	Yoga	Soccer	Tennis

The Sport and Physical Activity Landscape, SportAus AusPlayTM <https://www.clearinghouseforsport.gov.au/research/ausplay/results>

By sport data tables – July 2023 to June 2024

Review

- 1 Younger Australians participate in more team-based activities that require speed and agility, whereas older Australians prefer to participate in less intense aerobic activities
- 2 Physical inactivity contributes to more than 20 000 deaths per annum in Australia, and more and more researchers are linking this to hypokinetic diseases. List three types of hypokinetic diseases and how increased sedentary behaviour might contribute to these.
- 3 Analyse Table 3.7 and propose why walking, running, cycling and fitness/gym have all seen significant increases over the last 10 years.
- 4 Analyse Table 3.7 and explain how stereotypes and other sociocultural factors might influence participation in certain sports/activities.

INVESTIGATION

HOW DOES MY SCHOOL COMPARE WITH THE NATIONAL ACTIVITY PARTICIPATION RATES?

Purpose

To collect data on the most popular activities among students aged 9–18 and compare this with the most popular activities among adults aged 25–64 in our school.

Method

- 1 Design a simple survey to collect information on which activities people associated with your school (classmates, other students and teachers) engage in, both in and out of school. Hint: You might suggest 10 activities and ask respondents to rank them in order from highest participation to lowest participation.
- 2 Include an 'other' option to allow respondents to enter activities that you might not have listed.

Materials

The easiest way to conduct a survey and collect data is to use one of the many digital versions available, such as SurveyMonkey. Most of these are free to use as long as the number of questions is limited and the types of questions and responses are basic.

Discussion

- 1 Summarise your findings and highlight similarities and differences between the two age groups. Make sure you present your results in a visual format, such as a graph.
- 2 Suggest possible reasons why the types of activities people participate in changes as they get older. Make sure you make specific reference to the activities in your discussion.
- 3 It has been found that sedentary behaviour increases as we age. Suggest two ways that sedentary behaviours can be reduced for:
 - a 12–17-year-olds
 - b 18–64-year-olds
 - c 65+ year-olds.

THE ENVIRONMENT AND PHYSICAL ACTIVITY

Research has found that communities that have lots of outdoor spaces, such as parks and playgrounds, walking and bike tracks and recreational programs, have higher rates of physical activity than those with fewer recreational facilities. People who live near a park that has well-lit walking tracks are more likely to use this facility to be active.

The great outdoors

Being outdoors and active in a natural environment is great for health, but the availability of parks and green open spaces in communities can affect the amount of physical activity that people do. Primary school-aged children are more active when the school playground has more 'green' features such as trees and gardens. Being active outdoors has been shown to reduce stress, blood pressure, heart rate and muscle tension and to improve mood. Another benefit of being outdoors is the ability to 'unplug' from electronic devices, although more and more devices are becoming portable, so it's a good idea to leave them at home!

Local community

Local communities provide **infrastructure** and opportunities for residents to participate in physical activity in their local area. These may include:

- ⇒ aquatic facilities
- ⇒ sports grounds



Worksheet
3.10
Worksheet
3.11
Worksheet
3.12

infrastructure
basic facilities and services needed for the functioning of a community or society, such as roads, transportation, power lines and schools



Weblink
Heart Foundation:
healthy, active
communities



iStock.com/monkeybusinessimages

Figure 3.20 Bike paths promote healthy communities by providing an opportunity for accessible physical activity.

- ⇒ walking tracks
- ⇒ bike paths
- ⇒ skate parks.

There are also many opportunities to be involved in physical activity within the community, such as:

- ⇒ walking groups
- ⇒ sport teams
- ⇒ cycling groups.

Active communities

The Heart Foundation's 'Healthy, active communities' is a resource package for local councils to use to create environments that support active and

healthy lifestyles. This includes providing the infrastructure, such as bicycle paths, bike lanes and public transport options, that helps increase community use of sustainable and physically active modes of transport, as well as ensuring that every member of the local community has access to outdoor and indoor physical activity facilities.



Worksheet
3.13

FACE TO FACE

Bike riding

Bike riding has many benefits for your health and the community. In pairs, discuss ways that your community would benefit if more people used cycling as a form of active transport.

INVESTIGATION

HOW CAN MY LOCAL COMMUNITY INFLUENCE HEALTHIER TRAVEL BEHAVIOUR?

Purpose

To research countries that have high uptake of bicycle programs and compare them to local circumstances in our own communities.

Method

There are various reports that focus on user-friendly bicycle programs around the world. Select any of the following sources of information to provide you with more knowledge about the characteristics of effective bike programs:

- Lonely Planet
- Wired
- National Geographic
- MentalFloss.

You could also choose to do your own research.

Discussion

- 1 There are a number of ways people can change their behaviour to reduce car trips in favour of walking, cycling, carpooling and public transport. Select one of the initiatives from the list and explain how it may influence someone to change their travel behaviour.
 - Active School Travel Program
 - Bike Buses
 - Bike Ed program
 - Buy/Rent/Borrow a Bike scheme
 - Community-based cycling proficiency training
 - Cycle events, such as Ride to Work day
 - Bicycle recycling schemes
 - Bikes on buses schemes
 - Walk to School
- 2 What are some of the common factors among cities ranked highly in terms of 'effective bicycle programs'?
- 3 In addition to these factors, what would it take in your local municipality for more people to be encouraged to use bikes?
- 4 Design a proposal to your local council detailing three ways to influence healthier travel behaviour in your local community.

INCREASE PHYSICAL ACTIVITY, DECREASE SEDENTARY TIME

This chapter has shown how important physical activity is for overall health and wellbeing. Initiatives such as Australia's Physical Activity and Sedentary Behaviour Guidelines and the Australian 24-hour Movement Guidelines for Children and Young People (5–17 years) provide information about how much physical activity people of various age groups should be doing each day. Including physical activity in your daily routine is easier than most people think. Ideas include riding or walking to school, or getting off the bus or train one stop earlier; using the stairs at the shopping centre rather than the escalator, or being active at lunchtime. Increasing physical activity results in improvements in health and overall wellbeing.

REVIEW

- 1 Refer to Figure 3.18 and state the general trends observed regarding the proportion of people meeting the physical activity and sedentary guidelines with age.
- 2 Discuss any differences that may exist between different genders when it comes to meeting the physical activity and sedentary behaviour guidelines.

REFLECT

- 1 Muscle strengthening activities are recommended for various age groups in order to experience health benefits. But not everyone can access a gym to work out. Propose four different exercises people your age might engage in to achieve muscle strengthening without necessarily going to a gym.
- 2 Create a list of three activities that contribute to your sedentary behaviour – remember, sleep is not considered sedentary behaviour! How could you modify these three activities to reduce the amount of time they contribute to your sedentary behaviour? Suggest one modification for each activity.

- 3 You have been approached by the local council to design an 'ideal' outdoor space for your community. The design needs to be aimed at increasing physical activity levels among all age groups within the community. You must consider access to the space, safety and aesthetics (the way it looks), as well as the types of facilities you will include.

Present your design as an annotated poster or multimedia presentation.

EXTEND

- 1 Many new housing estates require the developers to include a proportion of land that is dedicated to both passive and active leisure. Research a recent development and provide specific examples of each of these options.
- 2 Devise a policy or an environmental idea for your school that could be implemented to increase the amount of physical activity students are involved in. You could score 'bonus points' by also including a couple of strategies to reduce sedentary behaviours within schools.



Quiz
How does physical activity participation in Australia compare to other countries?

CHAPTER 3 REVIEW

- 1 Physical activity can be classified in two ways: incidental or structured. Describe the difference between the two.
- 2 In our busy lifestyles, how can we ensure that we get a sufficient amount of physical activity in our day, despite only having a few hours after school or work that might be 'free'?
- 3 If people meet Australia's physical activity, sedentary behaviour and sleep guidelines for each age group, list three benefits they are likely to achieve.
- 4 Which acronym can be used to remember the dimensions to determine how often, how hard and how long to perform physical activity? Discuss their purpose.
- 5 What is the purpose of the physical activity pyramid?
- 6 Sedentary behaviour does not include periods of sleep, but what other behaviours does it include? Identify three examples.
- 7 Describe two small changes that can be made to your daily routine to minimise sedentary behaviour.
- 8 How do the heart, bones, muscles and the whole body benefit from regular physical activity?
- 9 There are many health campaigns aimed at increasing the physical activity levels of Australians. List at least three of these you are aware of or have discovered in your research.
- 10 Provide an example of how social health is being promoted in any sport or activity you are involved in or aware of.
- 11 There are many opportunities to be active in your community. The choices you make are influenced by social (friends and family), cultural (who you are) and environmental (spaces and facilities) factors. Briefly discuss how each of these influences promote participation in regular physical activity.
- 12 Most Australians don't participate in enough regular physical activity to meet recommended guidelines. List at least three potential problems this may cause at the individual, social and community levels.

PUBERTY AND RESPECTFUL RELATIONSHIPS



Shutterstock.com/Nicetoseeya

IN THIS CHAPTER

You will learn about puberty and the changes that occur during this time. These include physical, emotional and social changes. These changes often have an impact on your identity as you develop into an independent young adult. You will have an opportunity to explore how your values, beliefs and relationships with others also influence your identity, actions and decisions.

You will learn about respectful relationships and the people and places you can access if you, or someone you know, needs help or has further questions.

By the end of this chapter, you should be able to:

- ⇒ discuss the changes that occur during puberty and how they impact on your identity
- ⇒ evaluate strategies that will help manage changes during puberty
- ⇒ discuss the factors that can influence your emotions
- ⇒ identify how empathy can help in strong relationships
- ⇒ identify all the types of relationships you have in your life
- ⇒ recognise qualities and understand the importance of positive relationships in your life and how relationships impact health and wellbeing
- ⇒ discuss why young people may not seek support, and what can be done to improve this
- ⇒ examine the consequences of an imbalance of power in a relationship
- ⇒ identify good communication strategies
- ⇒ identify support services in your own environment
- ⇒ evaluate strategies for managing conflict
- ⇒ evaluate health information and support services
- ⇒ recognise the role of the media in promoting respectful relationships.

Quizzes:

- Pre-chapter (p.184)
- Puberty (p.197)
- Respectful relationships (p.223)

 Nelson MindTap

To access resources above, visit
cengage.com.au/nelsonmindtap



PUBERTY



Before you start, take the pre-chapter quiz to find out how much you already know.

puberty a short time of rapid physical growth when the body begins its transition from childhood to adulthood

hormones substances produced by the body that have an effect on growth or development

peer group a group of people that you associate with, e.g. class members at school or people who work with you. They may or may not be classified as friends, but they do similar things to you.

hereditary passing of genetic characteristics from parents to children

Puberty is the stage in life where a child's body changes as it develops the ability to reproduce (create a baby). It is not known what causes puberty to begin, but when it does, the brain will signal the body to produce the required **hormones**. Puberty is a time of significant growth for a child and a time when many changes take place. These include physical changes, emotional changes and social changes, among others. Some young people seem to fly through puberty with no worries at all, while others have a more difficult time. Most experience something in between. Everyone has to go through puberty; it is a normal part of growing up.

Puberty usually occurs between the ages of 9–16 for those with ovaries and 12–18 for those with testicles. It takes several years for the changes associated with puberty to be complete. Most people have a lot of questions about puberty, so hopefully this chapter will help answer them! In this section we will talk about the physical and emotional changes that occur during puberty. The next section will address the social changes that occur.

PHYSICAL CHANGES

The factors that have an impact on how people grow and develop over time include the environmental aspects that you don't have much control over, such as where you live, the climate, your community, your **peer group** and the media. Other factors that can't be controlled are **hereditary** features. These are the characteristics that are passed on from parents to their children, such as hair colour, eye colour and height.

Clockwise from top left: Shutterstock.com/Mateusz Kopyt; Shutterstock.com/Tracey Helmbold; Shutterstock.com/Novel; Shutterstock.com/Savanevich Viktor; Shutterstock.com/Djomas; iStock.com/RapidEye; Shutterstock.com/Eric Isselee; Shutterstock.com/Vankad; Shutterstock.com/FeelFree



Figure 5.1 Which inherited traits do you have?

Once they are through the childhood stage, after walking, talking and social skills have been learnt and developed, young people experience puberty.

While the **primary sex characteristics**, which are the parts of the body responsible for reproduction (including the ovaries and testes), have been present since birth, during puberty the **secondary sex characteristics** begin to appear. This occurs because the **pituitary gland** at the base of the brain starts to produce hormones, which cause physical and emotional changes in the body. These hormones send a message to the ovaries and the testes, promoting the development of secondary sex characteristics.

primary sex characteristics
sexual reproductive organs such as the penis, testes, ovaries and vulva

secondary sex characteristics
physical features, other than the reproductive organs, that appear during puberty and distinguish bodies with testes and bodies with ovaries

pituitary gland
a small gland at the base of the brain that produces several hormones

Functions of the reproductive system in bodies with testes

Structure	Function
Testes	Responsible for the production of sperm and testosterone. Located in the scrotum sac.
Sperm	The reproductive cell that fertilises an egg.
Scrotum	Loose pouch of skin that hangs below the penis and contains the testicles. The scrotum keeps the testes at an optimum temperature for sperm development.
Vas deferens	Tube used to transport sperm and semen to the urethra and penis.
Urethra	Carries urine and sperm to the outside of the body.
Seminal vesicles	Small glands that add fluid to the sperm to produce semen.
Epididymis	A sperm storage area that links the testes with the vas deferens.
Prostate gland	Surrounds the urethra under the bladder and secretes a fluid that assists with movement of the sperm.
Penis	The organ used in sexual intercourse to release sperm.

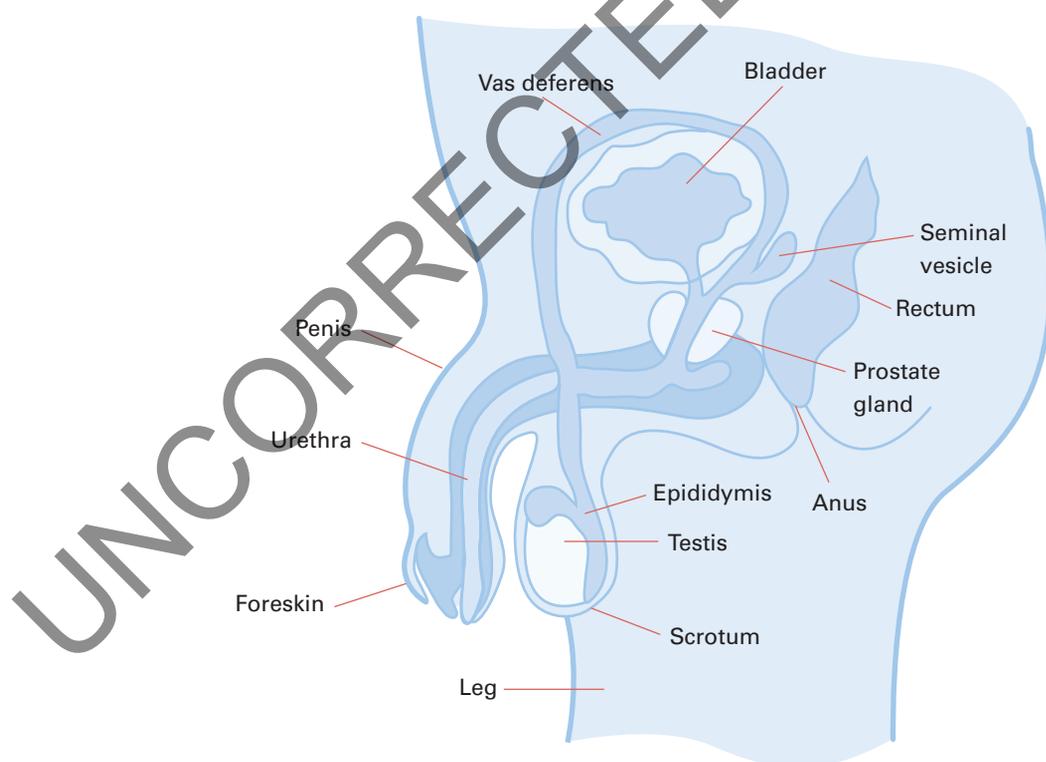


Figure 5.2 The reproductive system of a body with testes

The secondary sex characteristics that may develop in a body with testes during puberty include:

- ⇒ bigger muscles
- ⇒ voice 'breaks'
- ⇒ shoulders widen
- ⇒ hair growth on the body, around the pubic area, under the arms and on the face
- ⇒ the penis, scrotum and prostate enlarge
- ⇒ sperm production will begin.

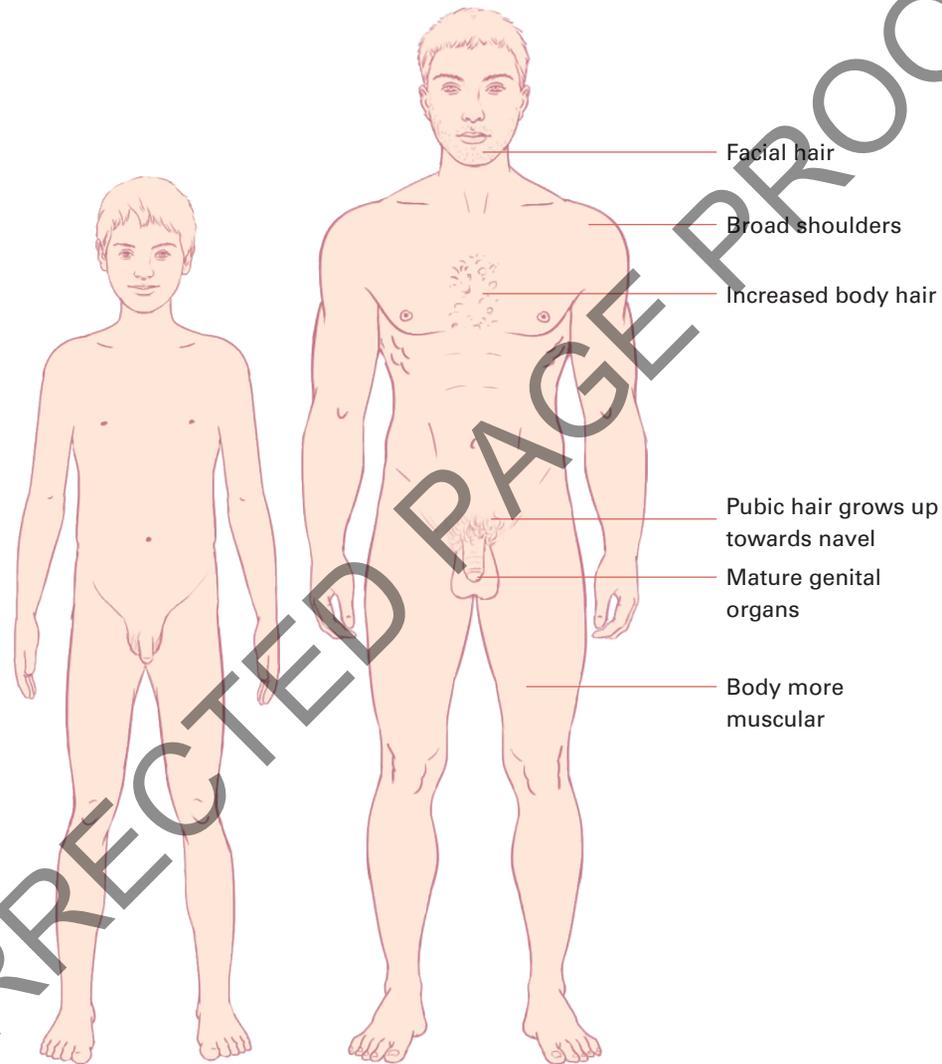


Figure 5.3
Secondary sex characteristics of a body with testes

Functions of the reproductive system in bodies with ovaries

Structure	Function
Ovaries	Glands that produce the sex hormones oestrogen and progesterone. An egg (ovum) is released from the ovaries approximately once a month (ovulation).
Ovum	The sex cell, or egg, fertilised by a sperm at conception .
Fallopian tube	Extends from the ovary to the uterus to carry the egg after ovulation. This is usually where fertilisation takes place.

ovulation when a mature egg is released from the ovary

conception when the sperm fertilises the egg and the embryo is created

Structure	Function
Uterus	A muscular pear-shaped organ where a developing baby will grow for 40 weeks. The lining of the uterus is shed during menstruation when an egg is not fertilised.
Endometrium	This is the lining of the uterus; it builds up every month in preparation for conception. If no conception occurs, the body releases the lining in the form of a period or menstruation.
Cervix	Joins the uterus and the vagina. This is the part that opens when a baby is ready to be born.
Vagina	Joins the uterus to the outside of the body. This is where menstrual blood travels out of the body. This is where the sperm can be released during sexual intercourse.
Urethra	A tube that runs from the bladder to the outside of the body to release urine.
Clitoris	A sensitive organ located just above the vaginal opening that extends under the skin.
Labia	Folds of skin that protect the opening to the vagina.
Vulva	The whole outer area, including the labia.

menstruation the process through which the lining of the uterus is expelled as blood from the body

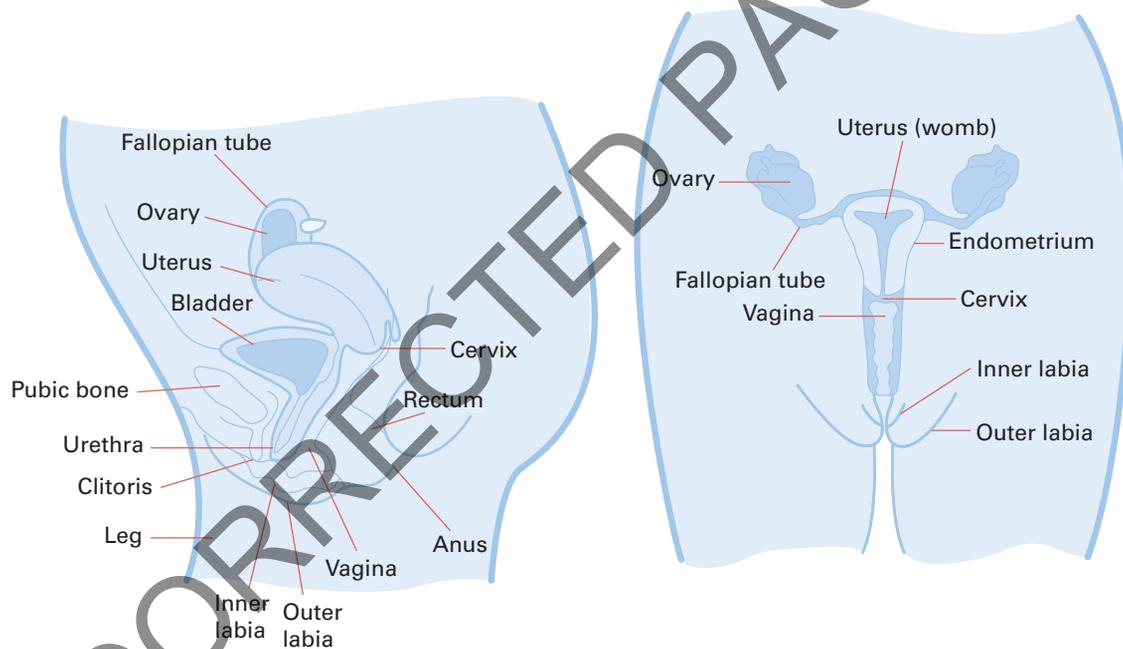


Figure 5.4 The reproductive system of bodies with ovaries

The secondary sex characteristics that may develop during puberty in a body with ovaries include:

- ⇒ breast development
- ⇒ hips become bigger
- ⇒ body hair may appear around the pubic area and under the arms
- ⇒ reproductive organs such as the vagina, fallopian tubes and the ovaries enlarge
- ⇒ ovulation and menstruation will begin.

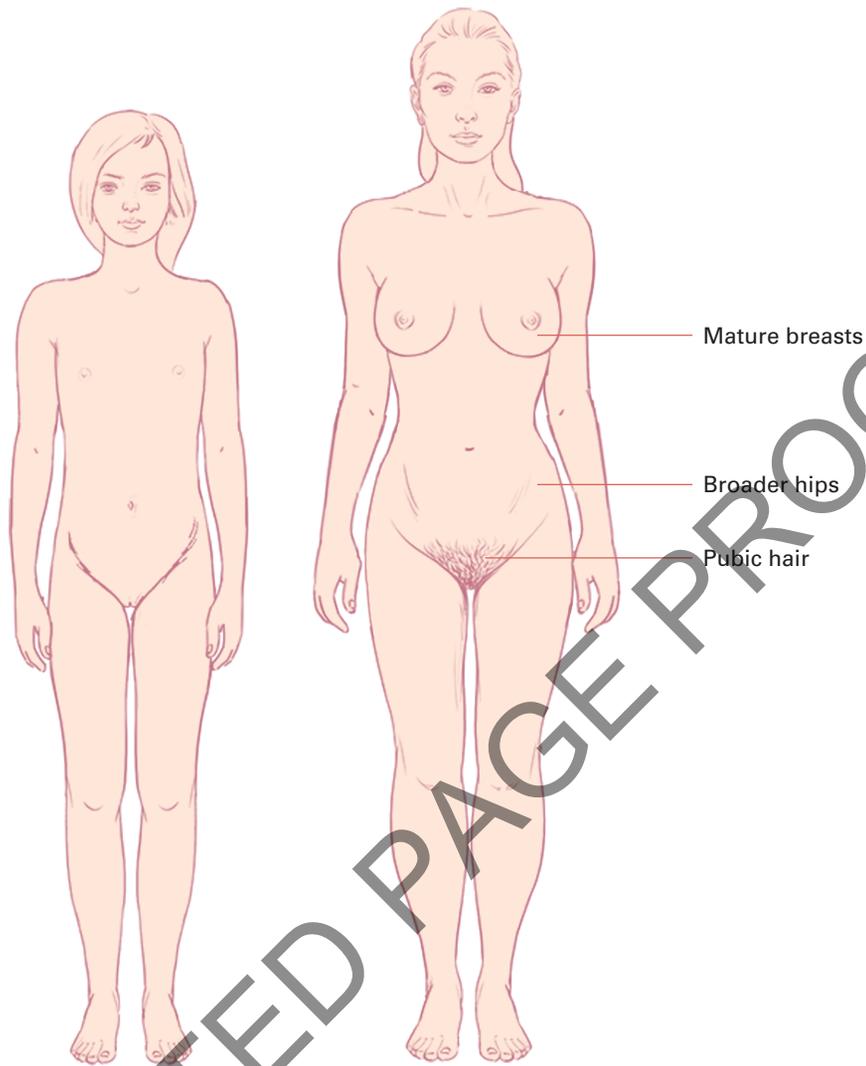


Figure 5.5 The secondary sex characteristics of bodies with ovaries

Changes that occur to all bodies

sex whether a person is biologically male or female

embryo the fertilised egg for the first eight weeks of development

intersex people born with variations of sexual characteristics, e.g. physical sexual characteristics, hormones, chromosomes, etc.

transgender when the physical sexual characteristics of a person don't match the gender identity of that person

stereotype a widely held view or perception of a person or thing based on appearance, gender, race, culture or religion

The **sex** of a baby is determined at conception; however, all **embryos** start with their sex organs inside their body. This is why the sex of the baby can't be determined until around Week 16–20 in pregnancy. The hormones released in the baby will develop the required sexual organs. Oestrogen will keep the organs inside the body, testosterone will allow the penis and the testes to drop outside the body. Sometimes this process doesn't happen, or isn't complete. When this happens, the baby might be born with variations of hormones, genitals or sex characteristics; this is called **intersex**. About 1.7 per cent of the population is born intersex; this is nothing new, and will continue to happen. Often it is not until puberty that they feel connection to one sex or the other.

Puberty can be confusing for children who are born intersex, as their body parts may not develop as expected for their sex. For example, they may develop breasts when they have a penis. There is nothing physically wrong with these children.

People who are **transgender** don't identify with the body they have been born into. As you can imagine, this can cause a lot of stress for them and their loved ones. Imagine looking at your genitals and feeling like you have been given the wrong ones. People who are transgender may choose to express themselves as a different sex or gender. This can include changing their name and the way they dress. Can you think about how harmful gender **stereotypes** might be to people who identify as transgender?



Figure 5.6 Growth from conception to birth

FAST FACT
 All people have nipples, even though not everyone can use them. This is because all babies start off the same way!

For the most part, most physical changes occur both to bodies with ovaries and bodies with testes. These include getting taller and therefore putting on weight, voices deepening, developing body hair, body odour, acne and an interest in **intimate relationships**, etc. There are also other changes that are less well understood, such as **erections** and **nocturnal orgasm**, commonly known as ‘wet dreams’.

People often assume that only bodies with testes experience these, but as all sexual organs start out the same, the clitoris is also very sensitive, just like the penis. Both can harden in an erection as they are both made out of the same erectile tissue. All bodies can also have wet dreams. For bodies with testes this occurs when semen, the fluid containing sperm, is discharged from the penis during an ejaculation while sleeping. The person may find they have more erections during this time.

intimate relationship a deep emotional connection with another person

erection when the penis becomes enlarged and fills with blood, causing it to stand upright; when the clitoris becomes enlarged and fills with blood

nocturnal orgasm a night-time discharge of semen, containing sperm; or vaginal lubrication and discharge

Bodies with ovaries can have vaginal lubrication and orgasms during the night. Erections are thought to happen only when someone is sexually excited, but they may also occur for no particular reason. A person may feel embarrassed or upset about this, but it is perfectly normal and part of growing up. As the production and release of hormones becomes more consistent, the frequency of wet dreams and unexpected erections will decrease.



Worksheet
5.1

UP AND MOVING

Choose the changes

Stand up and move to the centre of the room. Your teacher will identify a change that occurs at puberty. If you think it is a change that happens only to bodies with ovaries, move to the left of the room. If you think it is a change that happens only to bodies with testes, move to the right of the room. If you think it is a change that happens to both, bob down.

Menstruation

The one thing that only bodies with ovaries experience is menstruation, or a period. Menstruation occurs every month once the person reaches puberty. It can take up to a year for menstruation to become regular – this is totally normal. The onset of menstruation is triggered by the production of oestrogen and other hormones in the ovaries. When periods start to occur regularly, this is called the menstrual cycle, and is the monthly preparation of a body for pregnancy. The average cycle is 28 days, but it can range from 21 to 35 days. Everyone is different!

The start of the cycle is confirmed with the release of the period blood. This is a substance rich in nutrients that was built up to house the baby. There is nothing dirty about this substance. A period usually lasts from 3–5 days; again, everyone is different, so whatever is ‘normal’ for you is normal! However, if you do find your period lasting for more than seven days, it would be a good idea to visit a doctor, just to check everything is working okay and that you are retaining enough iron in your body. Ovulation, when the ovary (usually one each month) releases an egg, occurs in the middle of the cycle. If you have a regular cycle, subtract 14 days from the length of your cycle and that will usually be your ovulation day. So, a person who has a 30-day cycle will ovulate on *approximately* day 16 (30 days – 14 days). During this time the lining of the uterus has been growing and thickening with blood and tissue in anticipation of nurturing a developing baby, or embryo.

The egg travels down the fallopian tube, which joins the ovary to the uterus. If a sperm cell fertilises the egg during this journey, it will attach into the thickened lining of the uterus. If the egg is not fertilised, the lining of the uterus is not needed and breaks down, passing out of the body through the vagina.

Sanitary pads, tampons, menstrual cups and various types of period underwear can be used to absorb the menstrual flow. Choosing which is right for you is a personal choice, and your parents, the school nurse or your doctor can help you decide. You should follow instructions on the packaging and change pads and tampons regularly for hygiene purposes.

Signs that the menstrual cycle is about to begin can be both physical and emotional. You may experience cramps, feel tired, have tender or sore breasts, or be more sensitive emotionally. Not everyone will feel the same during menstruation, and not all



Weblink
Days for Girls

FAST FACT

Days for Girls is a charity organisation aiming to help all people access sanitary facilities. There are schools in Australia who are helping disadvantaged communities around the world by making sanitary products for them. The packs have been distributed in more than 125 countries since 2008, including to remote Australian communities. Check them out at the link on Nelson MindTap!

menstrual cycles will be the same. Your periods may vary in the amount of blood lost and the length of time they last for. It is important to maintain a nutritious diet and get plenty of exercise and sleep during your period. Exercise and a heat pack can often decrease the menstrual symptoms and make them more manageable. If you are concerned that your periods have stopped or are not as regular as they should be, you should seek advice from a trusted person or your family doctor.

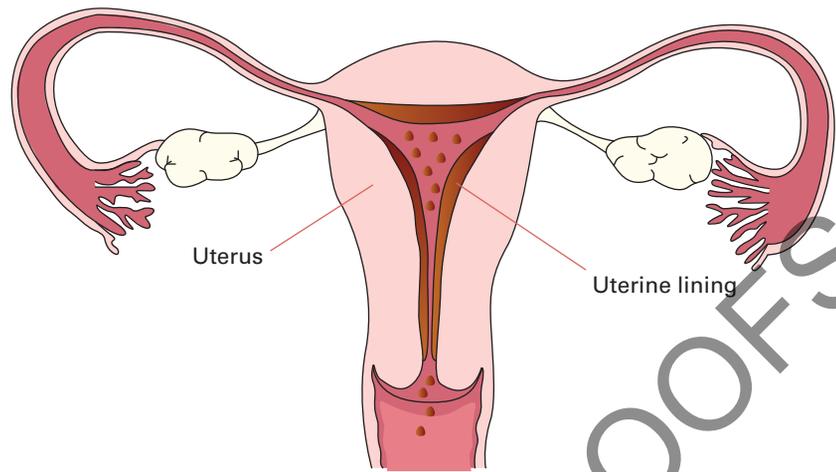


Figure 5.7 The lining of the uterus breaks down to form part of the menstrual flow.

Menstruation continues until you are around 45 to 55 years old. The end of menstruation is called **menopause**.

Periods are a natural and healthy part of life but, unfortunately, some people feel fear, shame or embarrassment about them because of stigma (negative attitudes or beliefs that make periods seem secretive or dirty). This can make you feel uncomfortable talking about periods or asking for help when you need it. Remember: everyone is on this earth because of a period! By talking openly, challenging myths and supporting each other, we can break the stigma and make sure no one feels fearful or embarrassed about something that happens to more than half of the population. Schools, families and friends can all help by creating a positive and respectful environment where people feel comfortable discussing periods without fear, shame or embarrassment.

Conception, pregnancy and birth

Human **development** is a continual process that begins at conception when, after sexual intercourse or **in vitro fertilisation**, an egg unites with a sperm. This is known as conception, and the single cell that results is called an embryo. The embryo grows and develops into a baby in the mother's uterus until it is ready to be born after approximately 40 weeks.

Usually after about 40 weeks, a baby is born. The baby is delivered either by the mother pushing it out of the uterus through the vagina, or via a caesarean (commonly called a c-section) where the lower abdomen is cut open to the uterus and the baby is lifted out. There are specific reasons why both delivery methods might be recommended; the most important thing is that both parent and child are healthy.

Sometimes the baby might come early, or a little later. If the baby is born too early they may need some help to finish maturing their organs. Sometimes a miscarriage can occur; this is a natural death of the embryo or **foetus**. A miscarriage can happen up to 20 weeks **gestation**. After 20 weeks, the death of the foetus is called a still birth, as the mother will need to deliver the baby.

menopause the end of ovulation and menstruation

development how you learn to handle the physical, social, emotional and intellectual changes through life

in vitro fertilisation also referred to as IVF; the process where a sperm and an egg are joined together outside the human body. If the process results in fertilisation, the embryo will be manually planted in the uterus to grow

foetus follows the embryonic stage, from eight weeks post conception

gestation the period in which the baby is developing in a mother's uterus, usually approximately 40 weeks

UP AND MOVING

What can you do now?

To simulate the feeling of being pregnant, get your school bag and put it on your front, instead of your back! Try tying your shoelaces/buckles, walking around the room/ outside without bumping into anyone, jogging on the spot, stretching or dancing. Does the bag get in your way at all? How might it affect your day-to-day activities?

Table 5.1 The stages of human life

Conception to birth	(40 weeks)
Infancy	0–2 years
Childhood	3–12 years
Puberty/adolescence	13–18 years
Adulthood	19–39 years
Middle age	40–65 years
Old age	65 years+

Birth, growth and development continue through numerous stages over the course of your life. These stages include infancy, childhood, puberty, adolescence, adulthood, middle age, old age and finish at death.

Puberty and hygiene

Good hygiene is particularly important during puberty. Your skin and hair can become oilier, and not washing regularly increases the chance of acne or pimples appearing on your face, neck, shoulders and back.

Acne is bumps on the skin in the form of whiteheads, blackheads and red pimples. Your skin is covered in pores that contain sebaceous glands, which produce sebum, an oily substance that moisturises your skin and hair. Sebum is produced in increasing amounts during puberty. Without regular washing and cleansing, acne and pimples are more likely to occur as the pores become blocked. Eating a good diet and using face wash when showering will reduce the likelihood of severe acne.

The sex hormones also trigger an increase in body odour. This can be managed by washing and changing your clothes regularly, particularly after physical activity, and using a deodorant or anti-perspirant.

During menstruation it is important to change pads and tampons as recommended. It is necessary to dispose of these sanitary products in an environmentally friendly way. There are special bins for these in most public toilets. Never flush them down the toilet, as they can cause blockages.

Washing your genitals properly is important to maintain good hygiene, prevent infections and feel fresh and comfortable. Good hygiene also reduces the risk of irritation, infections and unpleasant odours. For people with a penis, cleaning under the foreskin (if uncircumcised) helps prevent bacteria and any build-up (of sweat, skin cells or other fluids). For people with a vulva, washing the external area with water (avoiding harsh and fragranced soaps inside the vagina) helps maintain the natural balance of healthy bacteria and prevents any build-up.

EMOTIONAL CHANGES

Coping with these physical changes can be difficult for everyone. You may feel self-conscious about your changing body, or embarrassed if you look different from your friends. People may start treating you more like an adult because you look like one, but you may not feel comfortable with these additional **responsibilities**. Communicating and associating with people of the same or opposite sex may become more of a priority, and you may take more of an interest in having a partner. The release of hormones during puberty may also cause mood swings and increased tension between you and your family. Not all parents feel comfortable discussing puberty and the physical, emotional and social changes that accompany it. It's important to remember that you are not alone – everyone goes through puberty at some stage. Talk to a parent or caregiver, an older sibling, a friend or your family doctor to help you understand and deal with how you are feeling.

During puberty, the brain is developing, particularly the parts that feel emotions – sometimes quite intensely. Unfortunately, the part of the brain that helps with regulation of emotions and making decisions is one of the last to develop – sometimes not until around 25 years old. This means it can be very difficult for young people to deal with their emotions, and they can often experience mood swings.



Worksheet
5.2



Worksheet
5.3

responsibilities
obligations that ensure
rights are maintained

Mood swings are often caused by increased hormone levels during puberty. Your mood can change in a second, which can be very confusing. Mood swings can be frustrating for both the young person and their family, teachers and friends. Sometimes there are other reasons for mood swings that are not hormone-related. These could include lack of sleep, anxiety, demands from school/home, physical developments and stress, to name a few. As you grow, you get used to your mood swings, and they become easier to manage. If a feeling of sadness or feeling down continues for a couple of weeks or more, it is important to get checked out by a doctor, as this may be a symptom of a mental health issue rather than a mood swing.

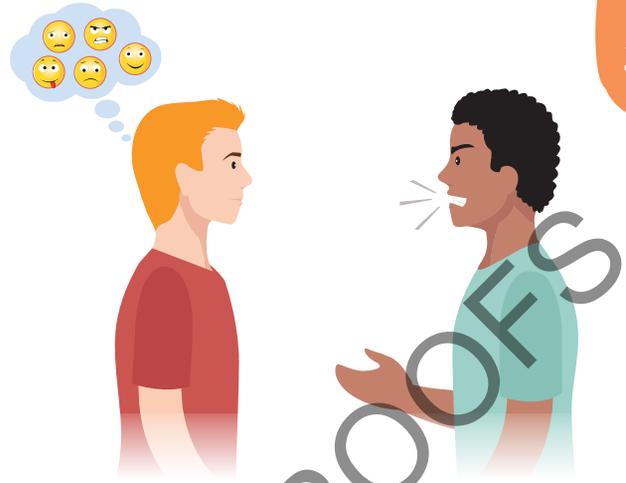


Figure 5.8 How do I really feel?

WELLBEING CHECK IN

WHAT DRAINS MY BATTERY?

Identify

Controlling our emotions can be really tricky, especially when we're experiencing hormonal mood swings. It's good to show some emotions, but others are more useful to try and calm before we do or say something we'll regret.



This activity has been developed in collaboration with Dr David Bakker of MoodMission

Understand

The brain uses a lot of energy when controlling emotional responses. That's why we sometimes lash out when we're hungry, tired, or emotionally exhausted. At these times, you could say that your battery is drained. When your battery is drained, you need to do things to recharge it. But first you need to realise the signs of it being drained so you can proactively take steps to prevent big, uncontrolled emotions.

Practise

Note down some **physical signs** you might notice as warnings that your battery is being drained. Signs might include:

- Feeling tired or hungry
- Feeling tense, hot, shaky, or highly alert.

Note down any events that might drain your battery. These might include:

- Long days at school
- Stressful tests or assignments
- Being around lots of people
- Having to control your feelings.

Note down some **reactions** you might have that show your battery is drained. These might include:

- Snapping at someone
- Wanting to hit/throw something or slamming doors
- Not wanting to do what other people are asking you to do.

Reflection

Now that you know what might drain your battery, what things could you do to recharge it before your brain goes into low-power mode? Recharge strategies might include having a snack, doing something you enjoy, having some alone time, or just sitting down and breathing for a minute.



Figure 5.9
Roller coaster of emotions

Along with the above emotional changes, we also have to consider the impact on our identity as we move from child to young adult. Our values and beliefs have a significant influence over our thoughts and actions and therefore how we feel about ourselves. These will usually drive our behaviour; however when placed in a difficult position, such as peer pressure, it is up to us whether we can hold true to these. For example, if you have a strong belief that smoking is bad for you, and a 'friend' attempts to pressure you into smoking with them, you have to think about whether you stick with your beliefs or do what your 'friend' is asking. Sometimes it depends on how strong your value or belief is as to whether you challenge it. Acting in accordance with your values and beliefs usually makes you feel good inside, however you still have the social world to consider.

FACE TO FACE

My values and beliefs

- 1 In a small group make a list of the values and a list of the beliefs you each hold about growing up. These could include ideas you hold about family, independence, rights and responsibilities and relationships.
- 2 Identify where these values and beliefs come from, e.g. did you learn them from your family, friends, school, etc.?
- 3 Choose one belief and propose three behaviours that would support that belief and three behaviours that you would not do because of that belief.
 - a For example: Young people have to prove they are trustworthy.
 - i Supportive behaviours include: being where they say they will be, coming home at the time they are asked to and calling a parent if something happens that makes their plans change.

- ii Behaviours you would not participate in: sneaking out of the house, lying about where they are and blaming others for their mistakes.

- 4 Reflect on how strong your values are and what would it take to go against them.

Our values are generally learned over time and often we don't question them. Values are like a code that we live by. It is important to understand why we think the way we do so that we can always act in an ethical manner. These will change and develop over time as we are exposed to more challenging experiences. Usually the truer you stay to these values, the easier it is to live with yourself!

FACE TO FACE

How can you support a friend?

Pair up with another student and think about how you might be able to help a friend who is confused or worried about the emotional changes they are experiencing.

- 1 How will you recognise a friend who needs help?
- 2 What could you say to help them feel better right now?
- 3 What could you do or say to help them with a long-term solution?
- 4 Is there anyone you might need help from?

WELLBEING CHECK IN

TALKING ABOUT FEELINGS

Identify

Sometimes it's hard to talk about how we feel, but it can be one of the best things we can do to deal with our emotions.



This activity has been developed in collaboration with Dr David Bakker of MoodMission

Understand

Talking about our feelings helps with several things. Firstly, it gives us a chance to figure out how we're feeling. Sometimes it's hard to know how we feel until we open our mouth and start talking. Secondly, it helps other people empathise with us so they can help us feel better. Empathy is the process of understanding how other people feel, which is a bit different to sympathy. Sympathy is when you actually feel the same feelings and emotions as someone else, e.g. you see someone who is sad and you start feeling sad too. Empathising and understanding someone else's feelings is super helpful for close relationships.

Practise

- 1 Take a look at the emotions on the wheel. Are there any you don't understand? Look up definitions for three words you don't know.
- 2 Think of a name for how you feel. Now use the wheel to pick how you feel right now.
- 3 Think of the reason you might be feeling that way. For example, you might be feeling nervous because you have a test tomorrow.
- 4 Put it into words, e.g. 'I feel nervous because I have a test tomorrow'. You could also add the thoughts going through your head, e.g. 'I keep thinking, what if I forget the answers?'
- 5 Share this with someone close to you. It might be a parent, teacher, family member or friend.

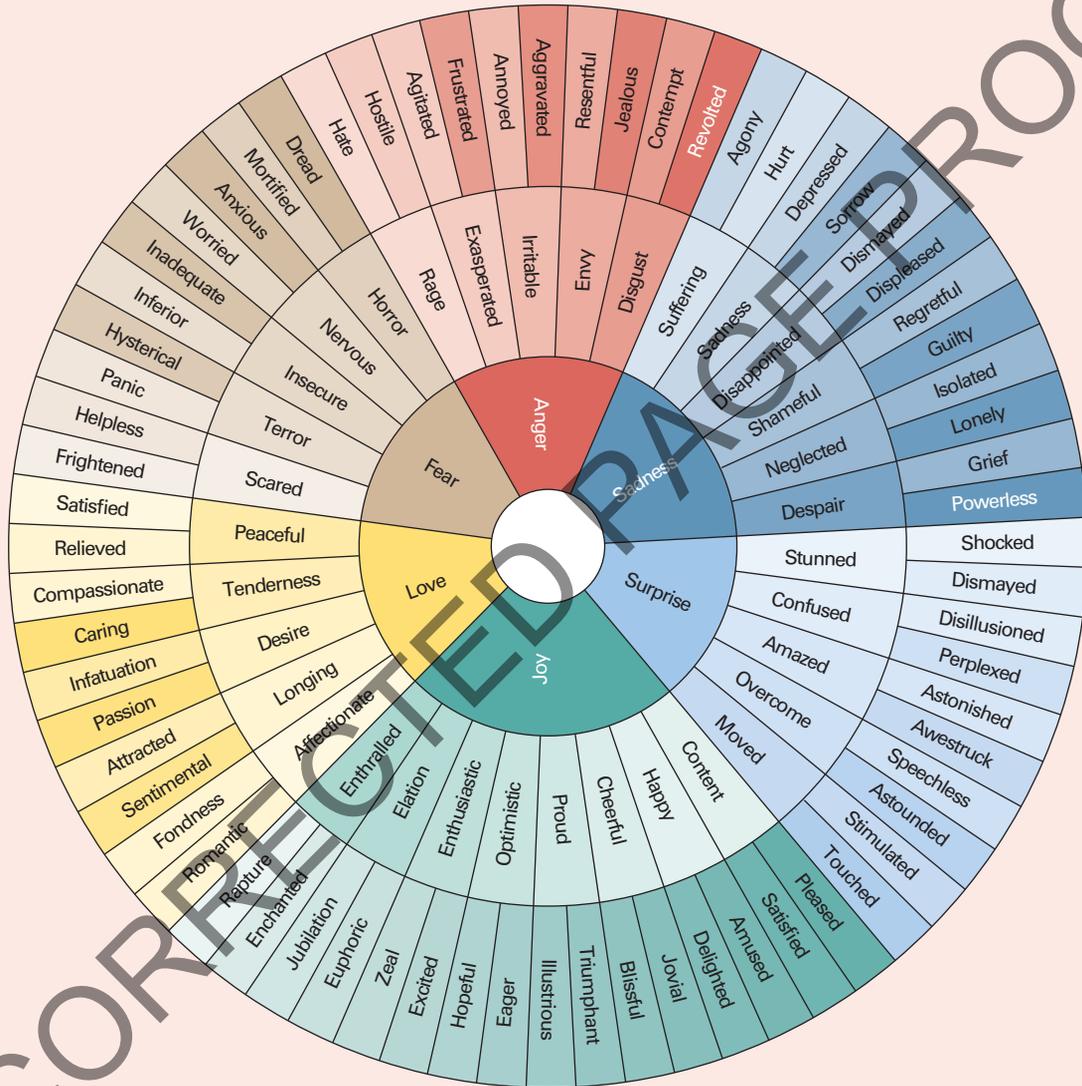


Figure 5.10 Emotion wheel

Reflect

If a friend came to you and told you the same thing, how would you react? And did the person who you actually shared this with react in a similar way? Did you feel like they understood? They might have shown they understood by giving you advice, telling you about a time they felt a similar way, or reassuring you.

Parents/carers are usually good people to talk to about puberty because they've been through it as well. Genetics might have an impact on how your puberty plays out, and your parents might be able to give you some insight into this. Alternatively, teachers, the school nurse, older siblings and friends who have started puberty can all be of help. There are also many books and reliable online sites where you can gather information. Sexuality education at school is set up to answer your questions and get discussions going.

REVIEW

- 1 Identify five physical changes that can happen during puberty.
- 2 Identify five emotional changes that can happen during puberty.
- 3 What is the difference between someone who is born intersex and someone who is born transgender?

REFLECT

- 1 We all go through puberty, so why is it so hard for some people to talk about it?
- 2 Describe three ways that puberty has an impact on your identity.
- 3 Reflect on your values and beliefs and write a few lines explaining why you think you may or may not be doing things that are beneficial (healthy) for your growing process and development.

EXTEND

- 1 Puberty is a long process of growing, learning and changing. What do you think you will learn about yourself that will help you as an adult?
- 2 If you have a friend who is not coping with the changes of puberty, how could you help them initially?
- 3 How could you use the many resources available for puberty (e.g. books, websites, phone lines, etc.) to support yourself or others through all the changes?



Quiz
Puberty

RELATIONSHIPS

Relationships are the social connections we have with others. These can change during puberty as you start to look at the world differently. There is usually a need for greater independence, which means negotiating with parents, friends, team members, etc. (see Chapter 4). Romantic relationships might also be of interest, as might be work and the relationships you develop with colleagues.

From the time you were born, you began to connect and interact with the people around you. There are so many benefits of having relationships in your life. Good relationships provide us with support, care, guidance, understanding, love, honesty. Good relationships should make us feel good, and want to put in effort to maintain and grow them. As we have discussed in Chapter 4, the aspects of health complement each other. If your social health is good, i.e. you have good strong relationships, this can positively impact your mental health by making



Figure 5.11 Social health is just one part of your wellbeing.

holistic health the physical, social, emotional, cognitive and spiritual wellbeing of a person

you feel good about yourself. Therefore the ability to maintain effective relationships will lead to an improved sense of wellbeing and assist your overall **holistic health**. It is important to understand the significance of positive relationships, what makes them work and how to cope when they change throughout your life. Forming, maintaining and developing relationships helps to satisfy the human needs of feeling loved, accepted and a sense of belonging.

Every relationship formed is different. Some will be very close, such as those with your parents and friends, and some will be intimate relationships, such as a sexual partner. Others will be more distant and casual, such as those with your next-door neighbour or family friends. The type of relationship you have with someone may depend on factors such as how long you have known each other, your interests and your age. We are going to look at some of the relationships you might have.

values things that are considered to be good, appropriate and important in people's lives

morals behaviour and attitudes towards what is right or wrong

self-esteem how people feel about themselves; their sense of worth

rights entitlements that everyone should have

RELATIONSHIPS WITH FAMILIES

Relationships with family members are very important and help to satisfy many physical, social, emotional and cultural needs. When people are younger, they are dependent on family for food, clothing and shelter. Families make important decisions and shape **values**, **morals** and social behaviours that are accepted in the community. Families help to develop communication skills, **self-esteem** and a sense of safety and security in the members of their household. They establish the roles, **rights** and responsibilities that help children learn how to relate to people in different ways. They also pass on cultural values and traditions to their children, such as cultural celebrations/holidays, food, dress, rituals, etc.



Figure 5.12 We start off being dependent on our families for many things.



Worksheet
5.4

UP AND MOVING

What makes a family?

On the board, brainstorm a list of things that make up a family. Don't forget all the positives and negatives about being part of a family!

As a class, determine whether each of the following is a family or not, based on your list on the board:

- a single dad with three children
- a couple with six children, and grandparents living with them
- a couple with no children
- a woman and her dog.

Usually things like love, care and shelter are what determine a family, rather than things like being related by blood.

Shutterstock.com/Ery Azmeer; Getty Images/Science Photo Library - IAN HOOTON; iStock.com/CasarsGuru; iStock.com/VMLJones

Types of families

A family is usually a group of people who live together and love, care for and support one another, keeping each other safe. They may or may not be **biologically related**.

The Australian Bureau of Statistics defines a family as people who are related by blood, marriage or through adoption and who usually live in the same household together. In today's society there is no longer a 'typical' type of family. There are many different family types, including:

- ⇒ **nuclear** families, which consist of a couple and their children. These children can be biological or adopted. The couple may or may not be married
- ⇒ **sole-parent** families, where only one parent is raising the children. This may be due to divorce, death or adults choosing not to marry
- ⇒ **extended** families, where adults from different generations of a family live together. These may include parents, children, cousins, grandparents, aunts and uncles
- ⇒ **same-sex** families, which consist of two adults of the same sex in a relationship; they may or may not have children, and may or may not be married
- ⇒ **blended** families occur when two people who already have biological or adopted children from a previous relationship form a family. This family type may also be called a step-family
- ⇒ **couple-only families**, when a couple live together and choose not to have children
- ⇒ **communes**, which consist of a number of adults and children who are not all related but choose to live together. The group share resources and tasks and may live together because of a common purpose, such as their religion.

biologically related genetically related to the parents



Worksheet
5.5



Shutterstock.com/Romrodphoto



Shutterstock.com/ARENA Creative



iStockphoto/Juannomino



Getty Images/Shaw Photography Co.

Figure 5.13 There is so much diversity in what can make a family!

Functions of families

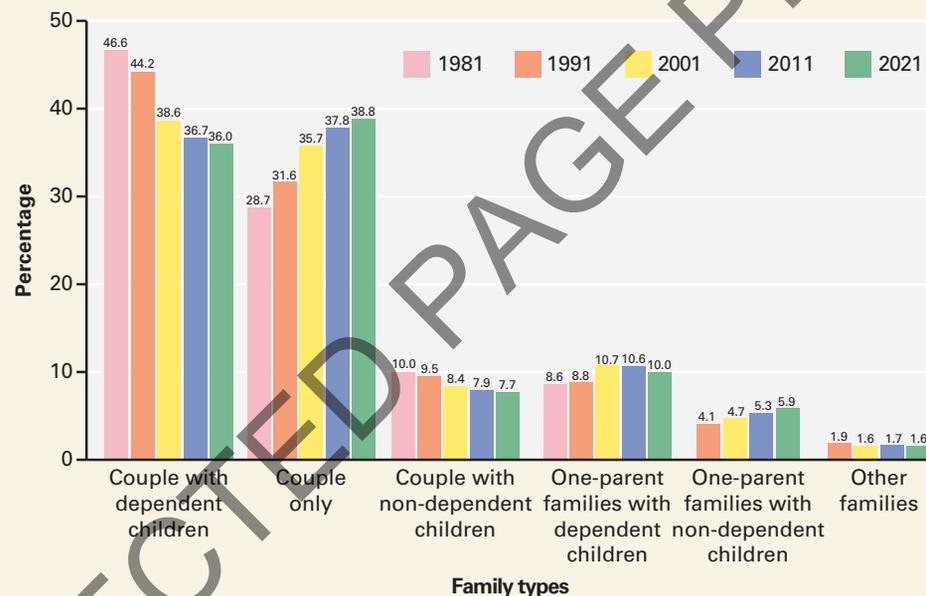
No matter what type of family you come from, all families have a purpose. There are many functions a family provides, including:

- ⇒ physical: care and safety, financial, food and water, hygiene needs, shelter
- ⇒ social: experience of co-existing, teaching of relationship skills
- ⇒ affective: love and care, emotions and control of
- ⇒ cultural, religious and spiritual: handing down of family beliefs, morals and values
- ⇒ authority: rules and regulations, both in society and specific to the family
- ⇒ day to day: how the family functions each day, expectations of roles and responsibilities.

FACE TO FACE

Families with children

Today in Australia, the number of couples with dependent children is declining, while couples with no children are on the rise. Why do you think this is?



Note: Dependent children include children aged under 15 years and full-time students aged 15–24 years.

Figure 5.14 Types of families in Australia, 1981–2021

The Australian Bureau of Statistics has predicted family types through to 2041. At this point in time, mothers make up the majority of parents in sole-parent families. Why do you think that sole-father families are predicted to increase by 2041?

In 2041, there are projected to be between 9.2 million and 9.4 million families in Australia (up from 6.7 million in 2016).

Couples with children are projected to make up 43% of all families in 2041, slightly down from 44% in 2016.

Couples without children are projected to be the second most common family type, up from 38% in 2016 to 39% in 2041.

Single female parent families are projected to make up 13% to 14% in 2041.

Single male parent families are projected to increase the fastest of any family type, increasing by between 44% and 65% by 2041.

Figure 5.15 Projected family types in Australia in 2041

Source: Australian Bureau of Statistics, Census 1981–2021

Based on Australian Bureau of Statistics data. Licensed under Creative Commons 4.0. Link to license: <https://creativecommons.org/licenses/by/4.0/>

INVESTIGATION

FAMILY FUNCTIONS – ARE THEY THE SAME?

Purpose

To find out whether other families have the same functions as yours.

Materials

Come up with a questionnaire, either on paper or on a tablet/computer. You will need access to others to discuss the functions that their families perform.

Method

- 1 Use the functions of families list to write a questionnaire that will help you find out what functions each family performs.
- 2 Make a list of your family's functions.
- 3 Interview at least three of your peers and make a list of their family's functions.

Discussion

- 1 Compare the functions each family has.
- 2 Do any of the following have an impact on the types of functions the families perform? Consider: family size, age of children/parents, whether parents are working or not, type of family, any extended family living with them, volunteering, extra-curricular events, etc.

Influence of families

Individual characteristics and features make people unique, or different from each other. These qualities help to establish each person's personal identity, which is made up of their physical features, individual qualities, skills, values and beliefs. As you grow, you will develop your own feelings, ideas, values and beliefs about different aspects of life, based on your upbringing, friends, religion, culture and the environment around you. These influences then help you establish what is important to you and who you feel you are.

Values are established by your family relationships from a very early age.

They are ideals that provide guidance on what to do and how to behave in certain situations. Children often take on their family's views on particular issues from a young age. As they grow and mature, some of those views will change, according to their life experiences. Values will vary from person to person because of their individual backgrounds.

UP AND MOVING

Family values

This activity will start to look at some of the values that your family sees as important. Can you think of any off the top of your head?

The class will form two circles, one inside the other, with students facing each other in pairs (an odd number can be a group of three). Your teacher will ask a question and you have one minute each to discuss this question in your pair. Your teacher will then ask one circle to move to the left or right a certain number of spaces. You will then have a new partner and a new topic. This can get pretty noisy!

FACE TO FACE

Your family

Discuss the following points with the person next to you:

- 1 Describe why families are important.
- 2 List three values your family taught you.
- 3 Are there any values in your family you don't agree with?
- 4 Explain how your relationship with your family changes as you develop.

Families also have an influence on perceptions of gender roles. Gender roles or stereotyping refers to views on how people should behave, act or dress, based on whether they are assigned male or female at birth. Children learn very quickly what it means to be a male or female through activities they are involved in, opportunities they are given, responses from those around them and parental guidance on appropriate behaviours. As children grow and develop into adolescents, gender stereotypes are often reinforced by other factors in the environment, such as culture, friends and peers, and the way that gender issues are presented in the media.

UNSUPPORTIVE FAMILIES

Sometimes babies are born into families who do not provide enough support for them to grow and develop to their fullest. This could be for a variety of reasons: they do not know how to, they can't afford to (including money, time, etc.), they may have other children/a partner who demands more of them, they might have a mental illness, they may be drug dependent or they simply may not have formed a bond with the child.

We encourage most young people to seek out their families for support, but this might not be the best source of help for some. When seeking help, it is important to turn to someone who you trust and who you can talk to. Just because they are older doesn't mean they have your best interests at heart. If there are members of your family who are not supportive, perhaps a teacher or a friend's parent might be a helpful alternative.

Sometimes it feels as if there is no one to help. Families are usually private and don't want their issues broadcast to the public so it can be hard to take the first step to tell someone about what might be going on. If there isn't anyone to talk to that you know, there are organisations that can help. Please know that if someone you tell believes that you are in danger of being hurt, they might have to tell an authority.

This is called mandatory reporting and is there to keep children and young people safe. This person can be the voice of the child or young person, as often they don't feel like they have a voice. There are help lines that you can ask for advice, Kids Helpline is specifically for children and young people. It is a 24/7 national service and their number is 1800 55 1800. If you don't want to talk in person you can also have a webchat with a counsellor on the Kids Helpline website.

INVESTIGATION

HOW CAN WE HELP OUR PARENTS OR CAREGIVERS HELP US?

Purpose

Often parents or caregivers want to be able to give you all the information you need about growing up and relationships, but feel too nervous, or think you already know. Sometimes they will wait until you approach them, when you are waiting for them to come to you! The purpose of this investigation is to ask both friends and family about how parents or caregivers can do a good job of supporting their teenagers. This research will inform a clip you will make giving parents or caregivers advice on how to have a good relationship with their children. This will help those parents or caregivers who find it difficult to know how to help their children.

Materials

In groups, watch the video about teens and their relationships with their parents or caregivers.

⇒ Paper and pens or computer/tablet to record your questions on



Weblink
Teens talk:
relationships with
parents

Method

- 1 Write a set of questions that will help you present a clip to help parents or caregivers. Consider the following examples from the 'Teens talk' clip:
 - » How do I build trust with my teen?
 - » How do I show my teen I am interested in them and want to help?
 - » How do I start a conversation with my teen?
 - » How to know if I need help?
- 2 Interview your friends and family, including parents, caregivers, teachers, etc., using the questions you have come up with. Plan a clip that will help parents talk to their teens about growing up and relationships. Be as creative as possible.
- 3 Record your clip.
- 4 Present your clip to the class so you can all evaluate each other's.
- 5 If you feel comfortable doing so, take your clip home and show it to your parents/carers. Ask them how effective they think it is and why.

Discussion

- 1 Was it easy to get advice about how to help parents or caregivers?
- 2 Why do you think this is the case?
- 3 How effective do you think your clip would be in helping your own parents/carers? Why do you say this?
- 4 What did you think about the other clips that were presented in your class?
 - a Did you see anything other groups did that might have improved your clip?
 - b How did other groups creatively approach parents or caregivers in their clips?
 - c What did other groups do well in their clips? Why do you say this?
 - d What could the other groups improve in their clips? Give clear examples.
 - e If you felt comfortable showing your clip to your parents/carers, what did they think of it? How effective did they think it would be and why?
- 5 How can your class use these clips to help parents talk to their teens about growing up and relationships?

ethnic people of the same race or nationality who share the same culture

census official count of the population of a country

Intercultural understanding

Australia's population is made up of people from many different cultures and **ethnic** backgrounds. According to data collected by the Australian Bureau of Statistics during the 2016 **census**, about 67 per cent of people living in Australia were born in Australia. Approximately 34 per cent had both parents born overseas.



Figure 5.16 Australia's population is extremely multicultural, the population having grown due to immigration after the British colonisation and genocide from the 1700s to the 1970s.

FAST FACTS

- 1 Generally, more people migrate to than migrate away from Australia. This flow of migrants contributes to the growth of Australia's population as well as increasing the number of Australians born overseas.
- 2 According to the earliest population records that contain country of birth, in 1891 32 per cent of the population was born overseas, reflecting high levels of immigration in the preceding years. The proportion fell to a low of 10 per cent in 1947 due to lower levels of migration during World War I, the Great Depression and World War II. The proportion then rose rapidly as a result of high levels of postwar migration.
- 3 Between 1954 and 2021, there was a steady increase in Australia's overseas-born population.

In 2021, the proportion of Australia's population born overseas declined. This is attributed to the COVID-19 travel restrictions and the resulting impact on overseas

migration, both to and from Australia. These travel restrictions were removed in 2022, and there was a subsequent increase in people born overseas migrating to Australia, as well as an increase in people born in Australia departing to live overseas. The proportion of people born overseas had increased to 30.7 per cent by 30 June 2023, up from 29.5 per cent in 2022. This is the first time the percentage has exceeded 30 per cent since 1893.

Source: Australian Bureau of Statistics (2024), 'Australia's population by country of birth'

First Nations People make up 3.3 per cent of the population of Australia, but tend to have a larger number of children than other Australians. They are more likely to live in multifamily and multigenerational households, and are also more likely to live in regional and remote areas.

Diversity of families make for rich communities. Each family has their own cultural or religious beliefs and activities they participate in. Discussing these differences in class, gives you a wide understanding of why families behave the way they do. These personal stories help create harmony rather than relying on media stereotypes of certain cultures and/or religions. You see each family as a group of people doing the best they can with what they have just like every other family!



Figure 5.17 Many First Nations Australian families live in rural and remote communities.

FACE TO FACE

Some benefits of families

- 1 What qualities help make strong, happy families?
- 2 Identify the qualities you have gained from your family.
- 3 Describe some specific examples of how your family has passed these qualities on to you.
- 4 How do these qualities help to build positive relationships?

RELATIONSHIPS WITH FRIENDS

As you move through adolescence, your friends and peers play a greater role in your life. They can have an influence on what you wear, what music you listen to, what activities you like to participate in and how you feel about yourself. Peer relationships develop through common interests such as school, sport or other leisure activities, and are usually dynamic, meaning that they continually change as you mature, have new experiences and move through life. Friends usually come from your peer group and are the people you feel the most comfortable sharing your thoughts and feelings with.

Belonging to a peer or friendship group can allow you to feel safe and secure, supported and respected. Having friends encourages the development of qualities such as respect, trust, **tolerance**, good communication skills and honesty. The sense of belonging and being connected with friends or peers plays a part in developing self-esteem, **self-confidence** and self-identity, and further develops social and emotional health.



Worksheet
5.6

tolerance willingness to accept attitudes different from your own

self-confidence belief in one's own abilities

FACE TO FACE

Friends

- 1 Complete the sentences:
 - a A friend is ...
 - b Three things I like about my friends are ...
 - c It is good to have friends because ...
- 2 Some people find it difficult to make friends. Why? How could this be overcome?
- 3 Discuss some problems that can arise from belonging to a group.
- 4 Describe some rules that exist in your group of friends.
- 5 Write an acrostic poem using the word FRIEND, with each letter of FRIEND as the starting letter of a new line of the poem.



Figure 5.13 What do you like about your friends?

Peer group

During adolescence, your peer group plays a larger role in establishing what you feel is important. The influence of your peer group during this time can be either positive or negative. A positive influence might be when your friends encourage you to try something different, such as a new sport, or they may help you to make decisions that benefit you in some way, such as setting yourself a challenge. Here are a few more examples of positive peer group influence:

- ⇒ studying for a test together
- ⇒ volunteering at a local community centre to build your skills and confidence
- ⇒ talking to someone you wouldn't normally have felt comfortable approaching.

An example of a negative influence might be if your friends persuade you or push you into making a decision that is harmful to yourself or others, such as trying a cigarette. There are other examples of negative peer group influence:

- ⇒ skipping school
- ⇒ vandalising something
- ⇒ letting someone copy your homework
- ⇒ bullying.

This is called **peer pressure**. Common peer pressure techniques include:

- ⇒ dares or threats: 'if you don't do this, you won't be a part of our group anymore'
- ⇒ guilt: 'if you really wanted to be my friend, you would go along with it'

peer pressure
the strong influence
of a group to act in a
particular way



Worksheet
5.7



Figure 5.19 Peer pressure can happen in many different environments.

- ⇒ generalisations: ‘everyone else is doing it’
- ⇒ poor logic: ‘no one’s going to find out’.

It can often be difficult to stay true to the values and standards you have learnt from your family when your friends feel differently and you want to fit in and be part of a group. Feeling like part of a group satisfies a need to belong, so it is understandable that you may feel pressured to go along with what your peers are doing in order to be accepted. If you are being encouraged to try things that don’t feel right or that make you feel uncomfortable, listen to your body. If you feel sick, sweaty or shaky, for example, your body is probably trying to tell you that these actions are not right for you, or that you are not ready for them yet.

It is important to do what you feel is right and commit to actions that represent what you believe in. If your friends are constantly pressuring you, they may not be the right group of friends for you. It can be difficult to stand up to them, particularly if you are the only one doing so. Here are some simple strategies that could be used to avoid negative peer pressure:

- ⇒ hang out with people who have the same interests as you, as they will probably have similar values and goals
- ⇒ use humour – a funny one-liner may help to take the pressure off
- ⇒ avoid risky situations where peer pressure is more likely to occur
- ⇒ be assertive – this means being able to say no in the nicest possible way!
- ⇒ seek help from your support networks – this might be your parents, your siblings, a teacher, the school counsellor, or more formal organisations such as Kids Helpline.

UP AND MOVING

Friendship cake recipe

If you had to make a recipe for a friendship, what ingredients would you include and in what amounts?

- 1 Work in a group of three or four to design your own recipe.
- 2 Compare your friendship cake with another group.
- 3 Are both recipes the same? Why or why not?

Friends on the web

Having lots of friends online can make you feel special, particularly if they’re a group of people you have a special connection with or who have similar interests to you. However, there are also risks in forming relationships in this way. It is very easy to remain anonymous online. It’s important not to give away your personal details. Never arrange to meet people you do not know. Ask yourself the following questions about your online friends:

- ⇒ Are the people you are corresponding with who they say they are?
- ⇒ Are they really your friend?
- ⇒ Do they value the special qualities that make you unique?

There are nasty people who spend all day trying to lure young people out of the safety of their homes into the community where they aren’t as comfortable. There are also scammers who try to lure people into relationships online, never intending to fall in love, so they can ask that person for money once trust has been established. It feels good when someone pays attention to you, especially if you don’t have many really good connections or people who you feel understand you. These people tell you what you want to hear – they are very good at it. Each person they do it to teaches them new things about what people like and don’t like.



Shutterstock.com/Sarawut-Aiemsin Suk

Figure 5.20 Social media allows online contact to be made 24/7.

These people usually ask for your phone number or email address very quickly, or try to get you to sign up for a communication app like WhatsApp or Kik or one of the hundreds of others around. Make sure you stay on the original site – you don't want to provide them with any more information about you than they already have. Sending pictures of yourself in a school uniform tells them which school you go to; photos of yourself at a shopping centre tells them the area you might live in. Ensure they don't have access to your location on the apps. In particular make sure your photos don't reveal your address, many selfies are taken at home. It is very hard to trust people online; you need to make sure you keep yourself safe and don't provide strangers with any of your personal information.

FACE TO FACE

Family vs friends hot seat

In groups of three, choose one person to be Taj, one to represent Taj's family, and one, Taj's friends. Taj's 'family' and 'friends' will take turns trying to convince Taj to do as they suggest. Taj will listen to their advice and decide who they agree with.

Taj started a new school and has made some great new friends. They are so much more accepting than at the old school. Taj hasn't told anyone at either school, but Taj is transgender. Taj wants nothing more than to transition, but Taj knows that their family will not support that. They are heavily religious and have very strict, gendered ideas about what Taj is and will be. Taj feels restricted in their family life and much freer with friends. Taj's new friends encourage Taj to be themselves and not get caught up with what others think.

After the hot seat, consider the following questions:

- ⇒ What pressures does Taj feel and how do they impact Taj's behaviour?
- ⇒ How would it feel to have two identities – one at school and one at home?
- ⇒ What advice would you give Taj?

It's important to tell someone if things are getting too stressful or if they are causing you problems like anxiety, difficulty sleeping or losing touch with your friends. There are people who can help – you do not have to go through anything alone. Even if you think you might have instigated something, it's important to seek help.



Worksheet
5.8

REVIEW

- 1 What have you learnt about relationships?
- 2 How do families impact your relationships with others?
- 3 Why do people sometimes pressure their friends, and keep doing so even though they have said no?

REFLECT

- 1 Reflect on your own friendships. Would you say they are strong? Why or why not?
- 2 Identify the five most important things you need in a friendship (this might come from your friendship cake), and ask an adult in your life what the five most important qualities were that they wanted in a friendship when they were your age. Then ask them if those things have changed over their life and why.
- 3 Consider if there is anything else you would like to know about building and maintaining strong relationships.

EXTEND

- 1 You have just been given the job of being a peer mentor to next year's new year seven students. You have to come up with a resource, an activity, a story, a play or a movie that you can do or show them during their transition to high school. If it is an activity, you will lead the group in doing it. If it is something that you tell, sing, perform or show, you will need to develop some questions to get the new year sevens involved and thinking.
 - a Reflect back to when you were starting high school. Was there anything that worried you about making new friends? What sorts of things helped you? What would have helped you?
 - b Create a draft of your resource, and questions to ask the students if you are not doing an activity.

RESPECTFUL RELATIONSHIPS

The types of relationships that you have now may change several times as you progress through secondary school. Relationships that are unhealthy can hurt emotionally, socially and sometimes physically. Respectful relationships, on the other hand, promote a sense of safety and caring. People in respectful relationships generally:

- ⇒ feel good about themselves
- ⇒ freely practise their own cultural and religious beliefs
- ⇒ feel safe and secure
- ⇒ feel free to express their opinions and thoughts
- ⇒ feel accepted for who they are
- ⇒ feel they have a right to be heard
- ⇒ feel trusted.

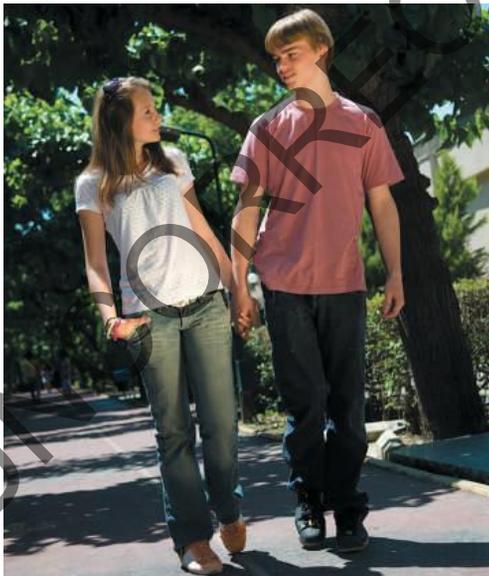


Figure 5.21 Respectful relationships are needed to feel safe.



Worksheet
5.9
Think Pair
Share

Safe relationships exist when young people not only expect to be treated in certain ways, but also carry out their responsibilities regarding the needs of others. They show respect for other people's needs by:

- ⇒ being respectful
- ⇒ listening to what people are saying, not just hearing what they are saying
- ⇒ providing support
- ⇒ accepting different points of view
- ⇒ exercising empathy
- ⇒ protecting others from harm, or alerting them to danger
- ⇒ being considerate of other people's feelings.



Figure 5.22 Listen to what people are saying by paying attention not only to their words, but also to their body language and other cues.

Young people have the right to express themselves and their opinions, but they should also be prepared to put themselves in others' shoes when listening to what they have to say. In positive relationships, both people have an equal say in decision-making and should feel free to be who they are and say what they think without fear, anxiety or risk of punishment. In this type of relationship there is a balance of power, with both people equally respecting each other's feelings, their right to be heard and their right to feel safe.

RIGHTS AND RESPONSIBILITIES

Every positive relationship involves being treated with understanding and respect. In order for this to happen, you need to be aware that you have rights that need to be satisfied and responsibilities to fulfil.

Rights are the things every human being deserves to have, such as the right to clean drinking water. Responsibilities are the things that you are required to do in order to maintain other people's rights and entitlements, such as the responsibility to cross at a pedestrian crossing in order to keep ourselves, other pedestrians and car drivers safe from accidents.

FACE TO FACE

Rights and responsibilities

- 1** Which of the following are rights and which are responsibilities?
 - a** To learn without being disrupted by other students.
 - b** To listen to others when they are voicing their opinion.
 - c** To clean up after yourself.
 - d** To work in a safe environment.
- 2** As a class, develop a Class Charter with a list of 10 rights and responsibilities that you could maintain in your classroom to ensure the best possible learning environment.



Worksheet
5.10

CONSENT

Consent is an agreement to do something. Some people call it a free agreement or giving an enthusiastic 'yes'.

Consent can be difficult to give, it is not as easy as just saying 'no'. This is an oversimplification of a very complicated action. The decision is based on a lot of things, which include, but are not limited to, values, beliefs, self-esteem, communication skills, relationship status, expectations and social pressures. Exploring different situations and experiences and practising negotiating consent is a good way to improve your skills.

FACE TO FACE

Consent in the media

In small groups, make a list of the television shows, series or movies you watch. Whenever someone is kissing or participating in other sexual activities there is not usually any consent involved, so we do not see examples very often. Choose one off your list and discuss the following:

- 1 What messages is the media telling us about giving and getting consent. How do they do this?
- 2 Design a different way the media could portray the realities of giving and gaining consent that young people could relate to.
- 3 If you could influence the writers of a movie, what would you tell them about including examples of consent in their script? Would it be different for a show or series?

Think about all the times you need to consent each day, how many of them do you actually say 'yes' or 'no' to? How many of them involve implied consent? Some examples of this might be eating whatever dinner is on the table, or joining a group in class to complete an activity. When it comes to relationships and sexual activity, there must be a 'YES' to be able to legally participate with someone. Everyone involved must consent. A nod, a shrug, a wink, a shy glance is not considered consent. Neither is what the person is wearing nor what they are doing. If you are the one attempting to gain consent, sometimes it is hard for the other person to say 'yes', even if they want to. There are usually a lot of decisions going on in their mind that might make them unsure as to whether to say 'yes'. If this ever happens, stop and give the person enough time so that they can make the right decision for them. They will appreciate your patience and that you didn't rush them. If you are the one giving or not giving consent, you have every right to say exactly what you want. It is against the law to coerce someone into participating in sexual activity; this includes threatening, tricking and pressuring someone to participate. There is never a time when you should consent if you do not want to.

Consent requires good communication skills, which we will talk about later in this chapter. It also requires you to be level-headed and able to make a decision. Being tired and/or emotional can interfere with being able to give consent. If you are angry, sad, lonely, grieving, excited, etc. you might make a different decision than if you weren't any of these. It is impossible not to be emotional at all, so ensuring you can make decisions when you are put in that situation is key. Alcohol and other drugs can get in the way of making a good decision. Age is another important factor when you are contemplating sexual activity with someone else. States and Territories in Australia all have different



Worksheet
5.11



Weblink
Sex, dating and the law

For more information on consent, visit the Victorian 'Sex and dating' page on the Youth Law Australia website.

laws that you need to abide by. In Victoria the law requires you to be at least 16 to be able to consent.

The use of social media can also interfere with gaining/giving consent. Some people upload material that includes others, send pictures of others and bully others online. This is not OK, regardless of the pressures there are to do these things, or comment on them.

Consent is a component of a respectful relationship, when friends/partners want to know their friend/partner is participating in behaviours they want to. In a respectful relationship friends/partners want each other to tell the truth and be honest about how they feel. Showing respect involves being open, honest and trustworthy; it also includes being empathetic and understanding the thoughts and feelings of the other person.

EMPATHY

empathy being able to put yourself in someone else's shoes and think about how they might be feeling

Empathy is a wonderful skill to have when dealing with people. Empathy helps you think about what someone else might be going through, even if you aren't experiencing it yourself. Being empathetic helps you take a step back, so instead of getting frustrated by someone's behaviour, you can try to understand how they are feeling and help them find a solution. Being empathetic is a skill, and like all skills, it takes practice to develop. When someone comes to you with an issue, the best things to do are to listen without interrupting, avoid making any judgements, tell them you can understand that it must be frustrating/worrying/scary (use the words they use), and ask if there is anything you can do to help.

UP AND MOVING

Empathy toss

Stand in a circle. Your teacher will give one student a ball (or soft object). Everyone must think of a time when they have been empathetic, or seen someone else be empathetic. When you have the ball in your hands, discuss the example you have thought of and how it made the other person feel. Then throw the ball to someone who hasn't had a turn yet.



Figure 5.23 Achieving a balance of power

Shutterstock.com/graphixmania

POWER

During puberty and adolescence, teenagers often feel vulnerable. This is because puberty is a time of exploration and uncertainty about identity and the future. Teenagers are afforded more independence than they had previously, and sometimes have to make choices on their own. It is also a time when teenagers are most influenced by people around them, often because others seem to have more power.

Power has many meanings. In terms of relationships, power can mean the ability or capacity to do something or act in a particular way, or to direct or influence the behaviour of others or the course of events. Power can also play a significant

role in the gaining and/or giving of consent. It is one of the reasons consent can be so complicated.

Everyone has some degree of power. Finding the right balance of power within relationships will help to create positive, healthy interactions that are respectful to everyone involved.

Power is a presence in daily life. There are many ways it can appear:

- ⇒ the power of knowledge, such as a parent teaching a child right from wrong
- ⇒ the power of authority or position, such as a school principal
- ⇒ the power of expertise in a particular area, such as a doctor
- ⇒ the power of an institution, such as the law
- ⇒ the power of being physically or emotionally strong, such as an older brother or sister
- ⇒ the power given by customs and traditions, such as the power held by a First Nations elder.

People are at risk of being emotionally and physically hurt when they have relatively little power in a situation. It is important to maintain a balance of power so that positive, fair relationships can be formed.

Positive use of power involves acting or influencing others in ways that show respect for their rights. Everyone has rights, no matter who they are, what culture they come from, where they live or what they believe in.

Knowing yourself – your attitudes, needs, values, beliefs and interests – will contribute to your sense of identity. This allows you to have power and feel confident in who you are and what you believe in. It is also important to be empathetic towards others who hold different values and beliefs. This develops tolerance and reduces the possibility of **prejudice** and **discrimination** taking place.

prejudice a judgement or opinion formed without knowledge of facts

discrimination treating people differently based on their personal characteristics, race, religion or beliefs

FACE TO FACE Power

Discuss the following with a partner:

- 1 How is power used positively in our legal system? Give some examples.
- 2 How could power be used negatively in the way brothers and sisters treat each other?
- 3 Define the following uses of power as positive or negative. Explain your choice.
 - a Your sports coach asks you to play in a position you don't normally play.
 - b A friend at school asks you to lie to a teacher for them.
 - c The Student Representative Council enforces rules about wearing the school uniform correctly.
 - d A teacher sends a student to the principal for being disrespectful in the classroom.
 - e A group of senior students make jokes about a younger student's hairstyle.
- 4 Explain how the misuse of power can be destructive to relationships.

Privilege, or assumed privilege, can lead to someone feeling powerful or having power over someone. There are groups in society who hold privilege over others. These people are looked at as being the best choice, the right fit, the smartest, etc. just because of the group they belong to, not because of the person they might be. Can you think of any groups that might hold privilege in our society? Think of some examples of the privileges that they receive.

privilege an advantage given to someone because of a particular group they belong to



Worksheet
5.12

Power in relationships

Power exists in relationships when someone tries to control a situation in order to bring about change. Power can be used positively when the outcome is also positive. Examples include helping a friend complete a task in which you are more skilled; helping grandparents complete tasks around their home that you find easy but they tend to struggle with; speaking up when someone is being bullied because you have the confidence to do so; and helping a mate when they have received bad news about a team selection. In all of these examples, the outcome is positive in terms of physical, mental and social health.



Figure 5.24 A balance of power allows all involved to benefit and feel positive.

vilification criticism or abuse directed towards someone or something

In some relationships the balance of power is skewed in favour of one person. This can be harmful because it can lead to an increased possibility of abuse. The types of abuse that can result from abuse of power in relationships are emotional, physical, social, sexual, psychological, financial, spiritual and cultural abuse. Let's talk about the first four, remembering that abuse can sometimes be difficult to talk about, especially if you are experiencing or have experienced it. If you need a break, please ensure you let your teacher know and go somewhere safe.

Emotional abuse

Emotional abuse includes put-downs, non-inclusion, racial or religious **vilification**. It happens when a person attempts to exert control over another person. If your friend or partner displays any of the following behaviours, then your relationship would be considered to be emotionally abusive:

- ⇒ being possessive
- ⇒ being jealous
- ⇒ telling you who you can and can't see
- ⇒ telling you what you can and can't wear.

FAST FACT

Neglect is the failure (usually by a parent or caregiver) to provide for a child's basic needs, including failure to provide adequate food, shelter, clothing, supervision, hygiene or medical attention. Neglectful behaviours could be physical, emotional, educational or environmental. Neglect is also considered a type of abuse.

Physical abuse

Physical abuse includes behaviours such as punching, kicking and hitting, and occurs when someone uses their power to be physically violent towards another, less powerful person. It is also important to remember that it is not always the bigger person (physically) who is the attacker. Typical examples of physical abuse include:

- ⇒ kicking, hitting, striking, etc.
- ⇒ smashing personal belongings
- ⇒ threatening to physically hurt someone.

In Australia, physical abuse is a criminal offence and carries serious consequences and penalties.

Social abuse

Social abuse includes someone telling you who you can and cannot see or talk to. The abuser usually uses their power to ensure that you become reliant on them alone. This usually leads to the victim being isolated from their usual support systems. Common signs of social abuse include:

- ⇒ needing to know where you are and who you are with all the time
- ⇒ telling you they want to spend all their time with you
- ⇒ telling you negative things about your friends/family
- ⇒ changing your plans so you can spend more time with them.

Sexual abuse

Sexual abuse includes unwanted sexual activity, unwanted touching, suggestive behaviours or comments. It occurs when a person uses their power over another person for sexual reasons. Common sexual abuse involves the following actions:

- ⇒ forcing others to have sex
- ⇒ **exposure**
- ⇒ sending unsolicited pictures to someone, or sending naked pictures without permission
- ⇒ suggestive behaviours or comments.

exposure showing your sexual organs to other people in public; also called indecent exposure or flashing

Sexual abuse involving young people always includes elements of emotional abuse, and can have damaging effects that last well into the future. It is important to remember that young people who have been sexually abused are not responsible for the abuse, and should not feel guilty or at fault. Sexual abuse is against the law.

Other types of abuse in relationships

Along with the other types of abuse listed there are other ways that abuse can be seen in relationships. These include:

- ⇒ psychological abuse – deliberate attempts to hurt, frighten, confuse or manipulate someone
- ⇒ financial abuse – using money or resources to control someone
- ⇒ spiritual abuse – controlling someone's ability to practise their spiritual rituals or beliefs
- ⇒ cultural abuse – controlling someone's ability to practise cultural rituals or beliefs.

Abusive relationships are not safe relationships because of the negative effects they can cause, which include:

- | | |
|---------------------------|----------------------------|
| ⇒ distress | ⇒ withdrawal |
| ⇒ anxiety | ⇒ stress |
| ⇒ lack of trust in others | ⇒ lack of confidence |
| ⇒ fear | ⇒ bullying and harassment. |

All forms of abuse are designed to control and are detrimental to the victim. Abusers will often use tactics like isolation to ensure there is no one for the victim to go to for help. They will attempt blame the victim at the same time telling them they love them. It can be very confusing for the victim. Sometimes if family and friends spot the abuse, they might try and help the victim get out of the relationship. Otherwise, the victim is left alone and finds it so difficult to get out.

All types of abuse need to be stopped; this often requires the intervention of a trusted person. Supporting family and friends in abusive relationships sometimes means sticking with them, even if they push you away. Letting them know that you are there, regardless of whether you are in contact often, might be the only



Worksheet
5.13

reassurance/support they have. Just being there for them when they are ready is very important. If you think a family member or friend is in danger, it is important to get some help. School counsellors are often really good resources if you are not sure what to do as along with advice and information, they can refer you to specialist services.

National helplines

1800 RESPECT (1800 737 732) National Sexual Assault and Domestic Violence hotline

1800 176 453 Australian Childhood Foundation

1800 55 1800 Kids Helpline

13 11 14 Lifeline

COMMUNICATION IN RELATIONSHIPS

Interpersonal communication is sending and receiving messages between two or more people. Effective interpersonal communication is essential for forming positive relationships with family or friends because it allows you to express how you are feeling, your needs and your emotions. We spoke a bit about communication in Chapter 4 and looked specifically at internal and external communication skills, listening and negotiation (see pages 164–67).

To communicate effectively, messages about thoughts, feelings and emotions need to be sent in a clear, easy-to-understand way. For the communication cycle to be complete, you also need to listen to find out how your messages are being interpreted by the person you are communicating with.

Communication can be through words, text, facial expressions or even posture. These are known as **verbal** and **non-verbal** forms of communication.

Verbal communication can be face-to-face, over the phone or via video chat, through the radio or TV, or through social media, websites and blogs.

Non-verbal communication includes eye movements, tone of voice, speed and volume of talking and body position. Be aware of your body language when you are speaking to someone; even your hand gestures and the way you are speaking will affect whether your message is received in the way you intended. We often rely on our facial expressions for non-verbal communication. Even seeing a smile can be reassuring and start a conversation off on a positive note.

verbal the use of spoken language, including words, letters or numbers

non-verbal non-spoken, including facial expressions, gestures, posture and emotions

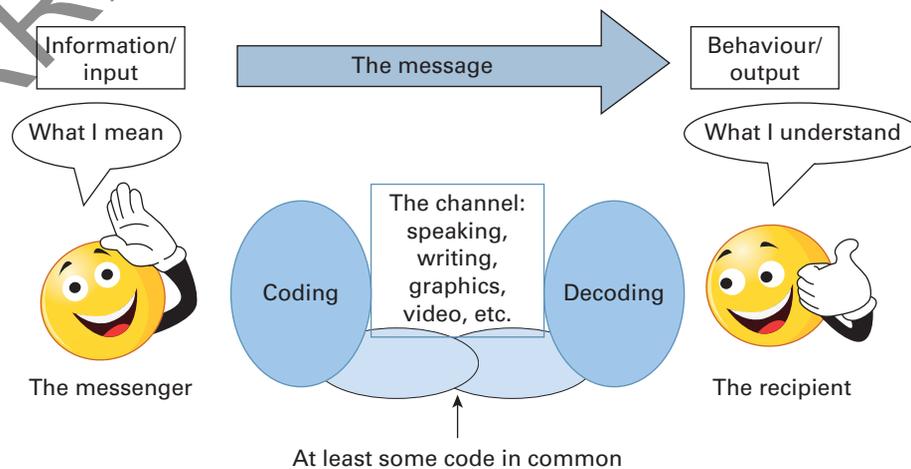


Figure 5.25 The communication cycle

UP AND MOVING

What does this face say?

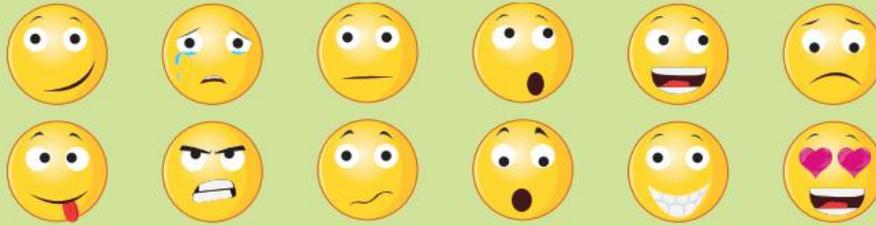


Figure 5.26 Facial expressions

- 1 Find a partner and choose one of the faces shown in Figure 5.26.
- 2 What do you think this face is saying in a non-verbal way?
- 3 Describe how non-verbal messages could contradict verbal ones.
- 4 Find another partner and repeat the steps above.
- 5 Your teacher will tell you when to stop.

Effective messages

Remember that being a good listener is also a vital part of communication. Sometimes there can be barriers to communication. Potential barriers include:

- ⇒ poor listening and speaking skills
- ⇒ background noise
- ⇒ one or both people being upset or angry
- ⇒ confusing messages
- ⇒ not having enough time to explain
- ⇒ individual differences.

To reduce these barriers, you may need to try some of the following strategies:

- ⇒ Reduce or eliminate background noise.
- ⇒ Repeat or rephrase the message you received if you are not sure you heard or understood it correctly.
- ⇒ Select the best method for communication.
- ⇒ Select the words you use carefully.
- ⇒ Avoid difficult communication when you are in a hurry, emotional or tired.
- ⇒ Try to reduce the physical distance between yourself and the other person.
- ⇒ Try to see things through the eyes of the other person – this gives you a different perspective.

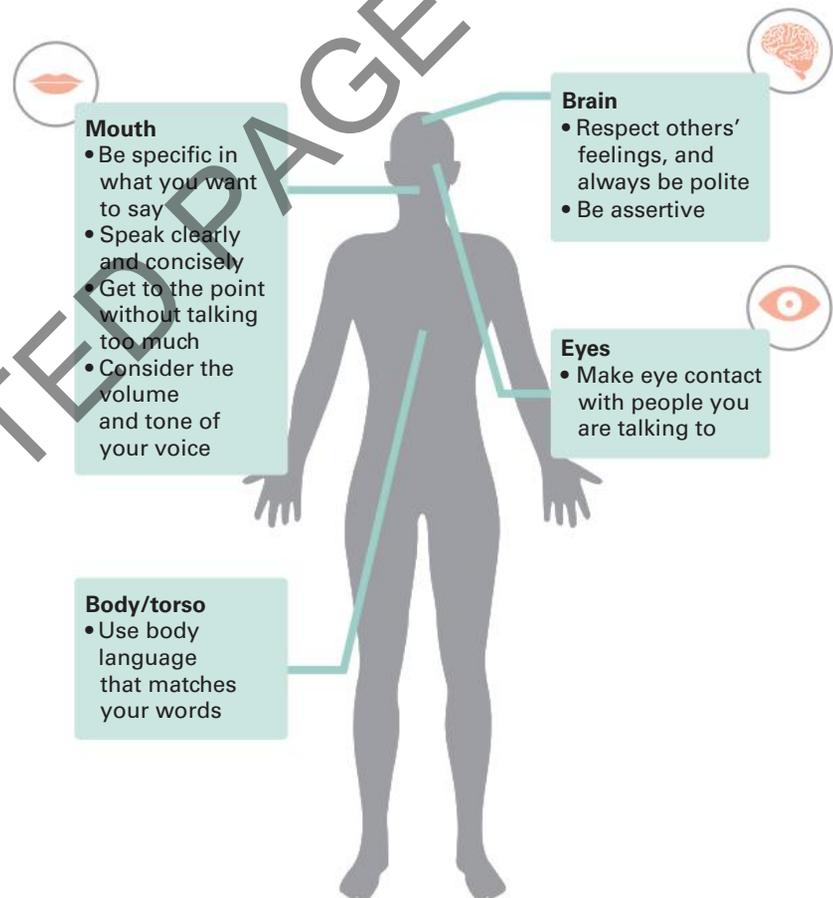


Figure 5.27 Here are some tips to help make sure your messages are sent and received in the way you intended.

UP AND MOVING

Communication games

- 1** Play a game of Grapevine. Stand in two lines. The first person in each line thinks of a message to whisper to the person next to them. Pass the whispered message down the line until it reaches the end. Was the message at the end the same as it was at the beginning? Identify some barriers to communication that may have led to the message being changed.
 - a** Start the game again from the other end of each line and make it a competition. Who can get the message down the line the fastest? Did the competition make it easier or harder? Why? Were there any additional barriers to communication?
 - b** Try doing the grapevine game in the language that you learn at school. What barriers now exist?
- 2** Work with a partner to do the following activity.
 - a** Stand as close to each other as possible and talk about your favourite music.
 - b** One person sits while the other stands. Talk about what you are doing during the next school holidays.
 - c** Touch each other's shoes and describe your family.
 - d** Stand on opposite sides of the room and talk about what you want to do when you leave school.
- 3** How did each situation in question 2 affect the ability to communicate? From these activities, what can you determine to be the most effective way to communicate?
- 4** Research a different form of communication, such as Morse code, sign language, semaphores or the signals used by a referee to control a particular sport. Describe the method of transmission and the skills required to effectively send and receive messages in this form.
- 5** Play charades as a class. Charades is a word-guessing game where one person mimes the title of a movie, TV show or book without speaking. How does communication change without the use of verbal cues?

Communication styles

The way you communicate will have an impact on the way you can relate to people. The style of communication you choose will affect whether the message is sent or received successfully. There are three main styles of communication: passive, aggressive and assertive.

Assertive communication

This is the most effective style of communication. It allows all ideas and feelings to be expressed while respecting other people's rights. Others are treated with dignity, and the communicator believes that each person has something worthwhile to say. Being assertive allows you to say 'no' and feel in control of your choices. Assertive communicators state their needs, wants and feelings clearly, appropriately and respectfully. They listen well without interrupting, and use 'I' statements such as 'I feel hurt when you speak to me in that way' or 'I would like you to ask for my opinion before making a decision'.

Passive communication

Passive communicators often don't stand up for what they believe in. They ignore their own rights and can allow other people's ideas and actions to take over conversations and decisions. They may do this in order to avoid confrontation, but may then become frustrated at not being able to get their message across. They may often feel anxious,

resentful and confused, leading to a lack of self-esteem and self-confidence, saying things like, 'People never consider my feelings' or 'My needs don't matter'.

Aggressive communication

Aggressive communicators express their feelings and opinions and satisfy their needs in a forceful way that doesn't acknowledge the rights of others. They may be verbally or physically abusive. Aggressive communicators may try to blame, humiliate or criticise others. They may interrupt frequently and not listen well to other people's opinions.



Figure 5.28 Aggressive communication is a barrier to getting your message across.

FACE TO FACE

Respectful communication styles

Anh has always been a good friend. Lately, however, he has been avoiding you after he copied your assignment and you both got in trouble for it. Anh comes to you and wants to apologise. Try using the different communication styles (aggressive, passive and assertive) to resolve your friendship issues and see which one brings a better result.

- 1 Did you resolve your friendship issues with any of the styles? Which was more effective?
- 2 Can you be assertive and also angry at someone for something they have done?
- 3 Was there something going on in Anh's life that made him do something out of character, like using you for your assignment?
- 4 Sometimes we have to avoid any judgement and use empathy to find out what is really going on. Has there been a time when you felt judged? Does it make you feel more or less likely to talk to the person who judged you?

Conflict in relationships

When communication messages become jumbled, misunderstandings can occur and conflict may arise. Conflict is when individuals or groups disagree about a topic or decision that needs to be made. It is a natural result of human interaction and occurs because of differences in values, opinions, ideas, goals or beliefs. Conflict can be positive, by improving people's understanding and perspectives around the issue, or negative, if there is no agreement or negotiation and a resolution cannot be reached.



Figure 5.29 Conflict can occur when people have different perspectives.

Conflict can often occur in families as children grow up and want to become more independent, particularly if the parents hold a different point of view. Conflict can also occur in friendship groups where there may be a variety of personalities and beliefs.

Sometimes during conflict, you say things you don't really mean. To avoid this, there are some conflict resolution strategies that you can use in these situations.

Conflict resolution strategies

- ⇒ Try to remain calm. Walk away for a few moments if you have to. Often counting to 10 (in your head) before responding helps.
- ⇒ Think of a compromise. This is when both sides decide to give up some demands and meet in the middle to come to an agreement. Use the negotiation skills you learnt in Chapter 4.

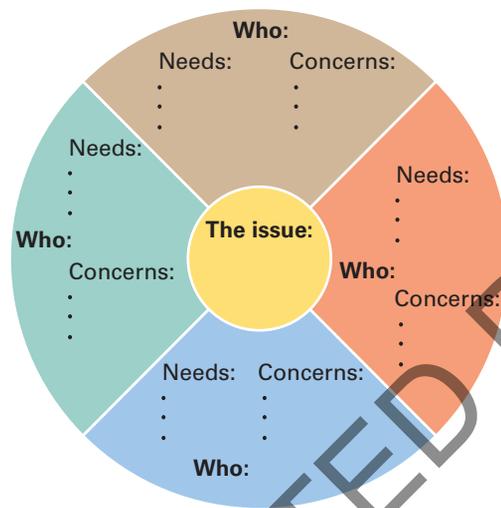


Figure 5.30 Conflict map

- ⇒ Get a different perspective on the conflict. A conflict map might help you understand how the other person sees the same situation. Figure 5.30 shows an example of a conflict map.
- ⇒ Write down the issue, then think about the people involved in the conflict and what their concerns and needs might be. This helps you to gain some insight into how others might be feeling and thinking.
- ⇒ Communicate honestly.
- ⇒ Be respectful in how you speak to the other person and in the type of language you use.
- ⇒ If no solution can be found, you may have to agree to disagree.

CASE STUDY

CONFLICT RESOLUTION – HELP

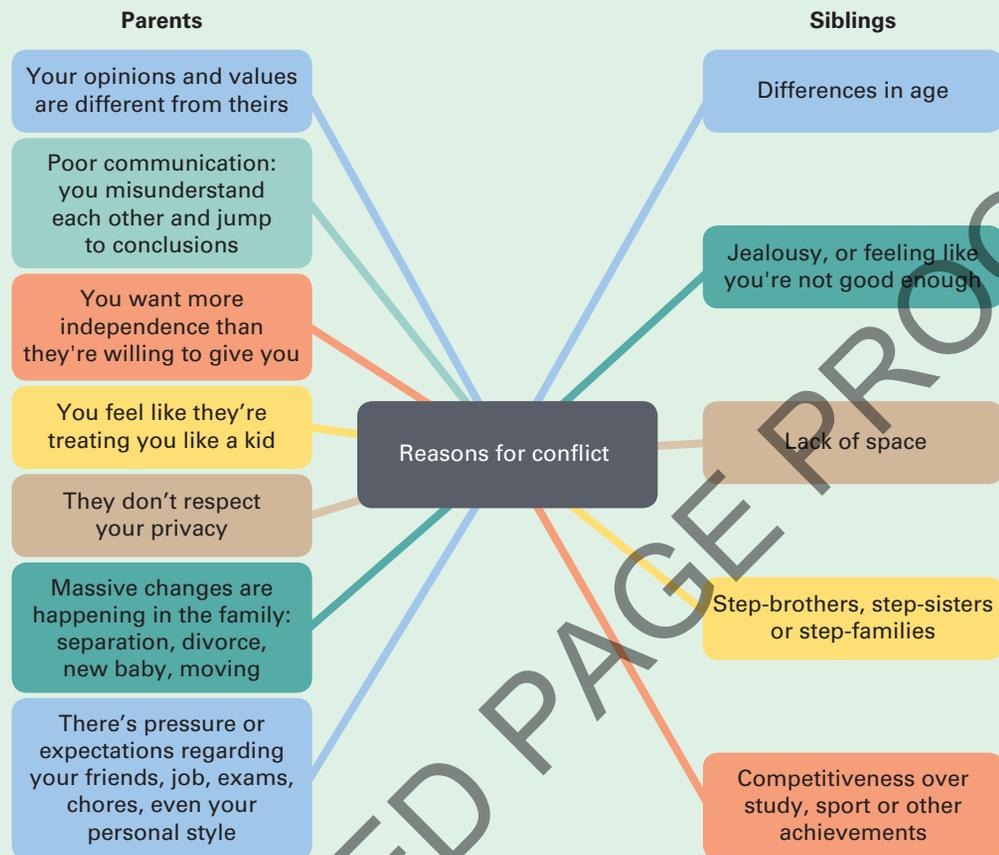
Identify

ReachOut.com is an Australian non-profit organisation with a mission to help young people lead happier lives. It provides fact sheets, stories, forums and videos on mental health issues.

REACHOUT

Figure 5.31 ReachOut.com
by Inspire Foundation

ReachOut.com is an online youth mental health service. It provides information, support and stories on almost any topic for people aged 15 to 24.



Adapted with permission from 'Conflict with family', ReachOut Australia, <https://au.reachout.com/articles/conflict-with-family>

Figure 5.32 ReachOut discusses several common reasons that conflict can occur among family members.

Reachout.com suggests some ways to talk out conflict with those around you. If you're fighting with your parents, you might try having a calm conversation with them about what's going on. They'll probably be impressed to see you take such a mature approach to the problem, especially if you initiate it. Even with annoying siblings, clear and calm communication will almost always be the best way to sort things out and come to an arrangement that works for all of you.

- Pick a time when no one is angry, upset, stressed or tired.
- Choose a place where you can sit and talk without being interrupted.
- Be willing to compromise, and come up with options you're willing to accept.
- Avoid being sarcastic or verbally attacking the other person.
- Be honest. If something really upsets you, let the other person know.
- Listen to what the other person has to say, and accept that their point of view might be just as valid as yours. (This is easier said than done, but it's well worth it!)
- Once you've settled on something you can agree to, stick to it – maybe for a set period of time.
- If talking feels impossible, try writing an email or a letter, explaining how you feel.
- If you can't reach a compromise, you might have to 'agree to disagree'. Remember that you can have your own opinions, based on your personal experience, beliefs and values, and you don't always have to agree with your family.

Adapted with permission from 'Conflict with family', ReachOut Australia, <https://au.reachout.com/articles/conflict-with-family>



Weblink
Check out the rest
of the article on the
ReachOut website

Discuss

- 1 What do ReachOut say are common reasons for conflict with parents/guardians?
- 2 What do they say are common reasons for conflict with siblings?
- 3 What are their tips for talking it out? For each one, discuss whether it is reasonable.
- 4 What do they suggest if things aren't getting better?



Worksheet
5.14

FACE TO FACE Conflict

- 1 In pairs, discuss the most common causes of conflict in a family. What strategies could you use to resolve them?
- 2 In groups of four, design a scenario involving a common conflict that could occur in any family, friendship group or sporting team. Give your scenario to another group and ask them to come up with some specific strategies to resolve the conflict. Role-play the first option through to its eventual consequences, then do the same with each of the other strategies the group came up with. This will demonstrate different options and consequences. The rest of the class will evaluate the strategies and decide which was the best.

proactive to act,
rather than react to
events

Knowing where you can find help when you need it and having this information on hand allows you to have a strong support network. Being **proactive** in getting some help is an important step to resolving any issue that you may be experiencing.

There are many sources you can turn to depending on the type of help you need. Adults should be included in your support network, as they will often know the best way to deal with the issues you may be experiencing. School counsellors or wellbeing teachers may be able to advise you further on other support options. Year level coordinators, teachers you can trust or school nurses will also listen to your needs and assist you where possible. You may feel most comfortable talking to your friends or your family, as they might know you best and understand your perspective. These are known as informal support networks. There are also formal support networks available online or by phone, which specialise in dealing with young people and their health.

WELLBEING CHECK IN

SAYING THANK YOU

Identify

We all have people in our life who we are grateful for in some way. But we don't always thank them ...



This activity has been developed in
collaboration with Dr David Bakker
of MoodMission

Understand

Saying thank you has lots of good effects. It makes both us and the people we say it to feel good, so it's really a win-win situation. It's especially powerful when the person we're thanking isn't expecting it. Maybe they don't get thanked much for what they do, or maybe there isn't an easy opportunity to say thank you. Sometimes we might also think it would be awkward to say thanks. But as soon as you do so, you'll realise it isn't.

Practise

- 1 Think of someone you are grateful for but haven't necessarily shown a lot of thanks to. They might be a family member, friend, teacher, sports coach, bus driver, etc.
- 2 Think of what you'd like to thank them for. It can be just a little thing, like picking you up from school, or a big thing, like always being available to talk to if you have a problem. Note down what you might say.
- 3 Once you've come up with someone and have thought of what you want to say, think of a time you could thank them. It might be a brief moment when it's just you and them. Try to make it as specific as possible, e.g. at 5 p.m. on Thursday at the end of soccer training.

Reflect

How did they respond? What do you think they felt? And how did you feel when they responded? You can refer back to the emotion chart in 'Talking about feelings' on page 198 if you like.

After this experience, do you think you'll try to say thank you more often? Or maybe you'll say thank you in a different, more deliberate way?

REVIEW

- 1 Define what is meant by a respectful relationship.
- 2 Identify three ways someone can exert their power in a relationship.
- 3 Where can you go for help if you feel like you or a friend are in a non-respectful relationship?

REFLECT

- 1 Why do you think people feel the need to exert power over others in relationships?
- 2 Propose strategies to make sure you are being assertive when your emotions are strong, e.g. if you are feeling angry, sad, frightened.
- 3 Reflect on your experiences with conflict. If you are having a disagreement with someone, is it better to ignore it and hope it goes away? What are the pros and cons of this approach?

EXTEND

- 1 Identify and list any examples of respectful relationships in the English novels you read for school. Do they have a role in teaching us how to have respectful relationships?
- 2 Identify any examples of non-respectful relationships in the English novels you read for school. Is anything done to address this behaviour?
- 3 Debate: Power is necessary in a relationship.



Quiz
Respectful Relationships

CHAPTER 5 REVIEW

- 1 Describe the physical, emotional and social changes that occur during puberty.
- 2 Discuss how these changes impact your identity formation.
- 3 Describe three different types of relationships you have and analyse the functions they perform.
- 4 Discuss how your family's values, beliefs, culture and religion influence your identity.
- 5 Why might it be hard to stand up to peer pressure?
- 6 Identify six things you would see someone do in a respectful relationship.
- 7 Identify six things you would see someone do in a non-respectful relationship.
- 8 Discuss the best ways to ask for consent.
- 9 Discuss how you can respectfully respond 'No' to someone asking you to do something you don't want to. How does empathy play a role in this?
- 10 Reflect on how power can be used both positively and negatively. Give specific examples of each.
- 11 Explain how communication helps to maintain effective relationships.
- 12 Summarise your top three tips for conflict resolution, and explain why you chose them.
- 13 Describe where you would go to get help if you needed it. Consider people, places and websites and how accessible they are.

How to purchase

Bookshop

Head down to your local educational bookseller. They're a good local resource for any Nelson product that you may need.

Online

www.nelsonsecondary.com.au

Customer Service

Our dedicated customer service team is ready to assist you from 7am–5pm.

Phone 1300 790 853

Fax 1300 790 852

anz.customerservice@cengage.com

Connect with your Learning Consultant

NEW SOUTH WALES & AUSTRALIAN CAPITAL TERRITORY

Dionne Lombard – State Manager
0411 599 820
dionne.lombard@cengage.com

Sophia Burton
0407 449 260
sophia.burton@cengage.com

Theo Missios
0408 093 625
theo.missios@cengage.com

QUEENSLAND, NORTHERN TERRITORY & TASMANIA

Amanda Cunnington
0419 374 569
amanda.cunnington@cengage.com

David Trueman
0411 599 506
david.trueman@cengage.com

WESTERN & SOUTH AUSTRALIA

Donna Hamlyn
0429 196 708
donna.hamlyn@cengage.com

VICTORIA

Ann Marie Mosley – State Manager
0409 894 188
annmarie.mosley@cengage.com

Jillian Lim
0437 422 385
jillian.lim@cengage.com

Jude Foster
0421 662 395
jude.foster@cengage.com

Scan the QR Code to learn more
about Fit for Life VIC

