



Michelle Bradford
Sue Dickens
Damien Davis

Queensland Health and Physical Education

Years 8–10

Second edition for QCAR





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Physical Education***
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Dedication

Michelle Bradford

Caitlyn & Caleb,

Always remember you are the best kids in the world!

I love you very much,

Mummy

First edition published 1999 (reprinted 8 times)

Second edition published 2007 by

 MACMILLAN SCIENCE AND EDUCATION AUSTRALIA PTY LTD

15-19 Claremont Street, South Yarra 3141

Reprinted 2008 (twice), 2009, 2010, 2011, 2012, 2013, 2016, 2018

Visit our website at www.macmillaneducation.com.au

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National Library of Australia
cataloguing in publication data

Bradford, Michelle-Anne.

Queensland health and physical education: years 8–10.

Includes index.

For secondary school students.

ISBN 978 1 4202 0482 7.

1. Health education (Secondary)—Queensland—Textbooks.
 2. Physical education and training—Queensland—Textbooks.
- I. Dickens, Sue, 1966–. II. Davis, Damien. III. Title.

613.043309943

Publisher: Ben Dawe

Project editor: Naomi Hamilton

Editor: Sally Paxton

Illustrators: Dimitrios Prokopis and Paul Lennon

Cover and text designer: Anne Stanhope

Permissions clearance: Annie Horner

Photo research: Naomi Parker

Typeset in Minion 11/14 pt by Marg Jackson, Emtree Desktop Publishing

Cover image: Stockbyte

Indexer: Mary Russell

MEA7_Jan18_10

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Introduction

Queensland Health and Physical Education second edition is a comprehensive and practical student textbook written specifically for the Queensland Health and Physical Education syllabus. The content covers Levels 4 to 6 of the Health and Physical Education key learning area, making it suitable for students in Years 8 to 10, as well as for middle school students.

The diverse material presented in this book allows teachers to select content that suits the specific needs of their students. The book fully addresses all three strands of the syllabus and allows students to meet the learning outcomes at each level.

Key areas

The **Queensland Curriculum, Assessment and Reporting (QCAR) Framework** has been used as the foundation to structure this new edition of *Queensland Health and Physical Education*. The content and activities directly address the Essential Learnings and can be identified using the checklist at the front of the book.

The incorporation of the priorities set out in the **Student Health and Wellbeing Curriculum Framework** assists teachers to develop programs to meet the needs of individual communities and the students living within them. In addition, students are empowered to take responsibility for their own development and learning.

To further enhance this learner-centered approach, a ‘Where do I go from here?’ feature has been included at the end of each chapter. This section refers students to informative websites. This equips students with the means to further extend their knowledge and provides them with avenues to access information and support.

Making connections is a new section in *Queensland Health and Physical Education* second edition. Included in every chapter, this section contains innovative activities that specifically address the cross-curricular priorities of literacy, numeracy, lifeskills and future perspectives. This section also includes ICT and trans-disciplinary themes. These activities, when used in conjunction with the Essential Learnings Checklist, are a comprehensive and practical resource.

The diverse content covers both the middle and senior phases of learning. Investigative activities allows students within various developmental stages to work within their own parameters to achieve the relevant outcomes.

The authors of this textbook have over 40 years of combined experience in teaching Health and Physical Education. Using this collective knowledge and experience, we have endeavoured to create a student resource that plays a significant role in students' development and that makes the study of Health and Physical Education enjoyable.

Michelle Bradford

Sue Dickens

Damien Davis

Essential Learnings Checklist

The information and activities contained in these chapters, combined with your participation in activity classes, should allow you to demonstrate the following Essential Learnings.

By the end of Year 7 (Level 4)

Essential Learnings	Chapter 1	Chapter 2	Chapter 3	Chapter 4	Chapter 5	Chapter 6	Chapter 7
Knowing and understanding							
Students understand that both individual and group health are influenced by behaviours, and social, cultural and environmental factors. They know and understand that:							
• social and cultural factors (e.g. beliefs, regulations, media) influence an individual's health and participation in physical activity							
• the relationships between food intake, growth, energy and physical activity influence health							
• assessing consequences of potentially unsafe behaviours or situations (e.g. substance use, risks and dares) and applying preventive and protective strategies promote health and safety.							
Students develop physical performance by applying movement concepts and skills, and understand the relationships between health, physical activity and fitness. They know and understand that:							
• movement skills (e.g. batting, freestyle swimming) and sequences (e.g. long jump) are refined using practice, visualisation and feedback							
• tactics, strategies and conventions (e.g. rules, techniques) can be modified and transferred among physical activities of similar purpose							
• regular physical activity involving aerobic endurance, muscle endurance, strength and flexibility enhances health-related fitness.							
Students understand that identity, self-management and relationships are influenced by individual, social and cultural factors. They know and understand that:							
• identity, self-concept and self-esteem are influenced by behaviours, achievements and responsibilities							
• taking on roles, fulfilling responsibilities and developing qualities to lead and work with others support the achievement of group goals							
• significant transitions in their life (e.g. moving to secondary school, puberty) can be managed by problem solving, decision making and use of personal and community resources.							

Essential Learnings	Chapter 1	Chapter 2	Chapter 3	Chapter 4	Chapter 5	Chapter 6	Chapter 7
Ways of working							
Students are able to:							
• gather, analyse and evaluate information to define and identify influences on health issues and physical challenges							
• set goals to manage influences on the health and physical activity of individuals or groups							
• develop and justify an action plan to achieve goals							
• implement, monitor and modify an action plan relating to health or physical activity							
• participate in physical activities applying movement concepts and skills							
• reflect on and evaluate the plan, physical performance and outcomes to propose actions that promote the health and physical activity of individuals or groups							
• reflect on different points of view to identify individual and group values relating to health and physical activity.							

By the end of Year 9 (Level 5)

Essential Learnings	Chapter 1	Chapter 2	Chapter 3	Chapter 4	Chapter 5	Chapter 6	Chapter 7
Knowing and understanding							
Students understand that individual, group and community health are influenced by the interaction of personal, social, cultural and environmental factors. They know and understand that:							
<ul style="list-style-type: none"> health interventions (e.g. drug and safety campaigns) are designed to take action on issues to enhance health outcomes food choices and eating behaviours are influenced by multiple factors (e.g. trends, media, food preparation skills) managing unsafe behaviours and situations, including those related to substance use and sexual health, involve assessing risks and options and applying preventive, protective or treatment strategies. 							
Students develop physical performance by setting goals and applying movement concepts and skills, and understand the relationships between health, physical activity and fitness. They know and understand that:							
<ul style="list-style-type: none"> specialised skills and movement sequences (e.g. lay-up in basketball, rescue sequence in lifesaving) are required and applied or modified to achieve a particular purpose in physical activities tactics, strategies and conventions can be modified in response to individual factors and features of the physical environment to achieve goals personal interest and priorities can be reflected in and achieved through health-related fitness. 							
Students understand that identity, self-management and relationships are enhanced by respect for diversity and responsible behaviours of individuals and groups. They know and understand that:							
<ul style="list-style-type: none"> identity, self-concept and self-esteem are influenced by diverse beliefs and values, including those related to gender and sexuality establishing and maintaining effective relationships involves valuing differences and showing respect conflict resolution strategies are used to manage internal conflicts and interpersonal situations. 							

Essential Learnings	Chapter 1	Chapter 2	Chapter 3	Chapter 4	Chapter 5	Chapter 6	Chapter 7
Ways of working							
Students are able to:							
<ul style="list-style-type: none"> gather, analyse and evaluate information about health issues and physical challenges for individuals, groups or a community to define and identify influences and interactions 							
<ul style="list-style-type: none"> set and justify goals to manage influences on the health and physical activity of individuals, groups or a community 							
<ul style="list-style-type: none"> develop an action plan that takes into account factors influencing health or physical activity 							
<ul style="list-style-type: none"> implement, monitor and modify an action plan relating to health or physical activity, to maximise benefits 							
<ul style="list-style-type: none"> participate in physical activities applying movement concepts and skills 							
<ul style="list-style-type: none"> reflect on and evaluate the plan, physical performance and outcomes to propose actions that promote the health and physical activity of individuals, groups or communities 							
<ul style="list-style-type: none"> evaluate diverse perspectives to identify values that impact on the health and physical activity of individuals, groups or communities. 							

Go to www.macmillan.com.au/secondary for updates to this checklist.

Human movement

Chapter 1

At the completion of this chapter, and after undertaking a range of practical activities, you should have an understanding and appreciation of:

- the movement basics
- types of movement skills
- skill-learning principles
- biomechanical principles
- performance rules and responsibilities
- skill
- safety principles
- performance principles
- composition and performance
- performance appraisal.

Movement basics



Figure 1.1 Skilled human movement

During your practical health and physical education classes you will have the opportunity to learn and refine many skills. To learn these skills quickly and perform them efficiently you need to understand the mental and physical process of skill learning.

This chapter is designed to provide you with the terminology, movement ideas and essential skill-learning principles to allow you to use your whole body and its various parts skilfully and creatively. Your teacher will guide you through these movement experiences and introduce you to a wide range of skill activities during your practical classes.

Every movement you make consists of four basic factors: space, time, force and flow. How you manipulate these factors will determine the sort of movement you produce.

Space

Space is where your body can move, for example:

- ➔ into your **personal space**, which is the area immediately surrounding you, such as a handstand
- ➔ into your **general space**, which is the area immediately surrounding you, for example, you could run to the other end of the court or field
- ➔ **in different directions**, such as forwards, backwards, sideways, across the court, down the field or up the river
- ➔ **at different levels**, such as low (crouch start) or high (jumping for a catch)
- ➔ **following different pathways**, such as around a curved track or zigzagging between witches' hats.

Time

Time controls how your body moves, for example:

- ➔ Movements can be **fast**, such as sprinting, or **slow**, such as throwing a dart.
- ➔ Movements can be **sustained**, such as a three-kilometre run, or **sudden**, such as a quick catch.
- ➔ Movements can be **rhythmical**, such as following a musical beat or pedalling a bicycle.



Figure 1.2 The tennis serve is a fast movement

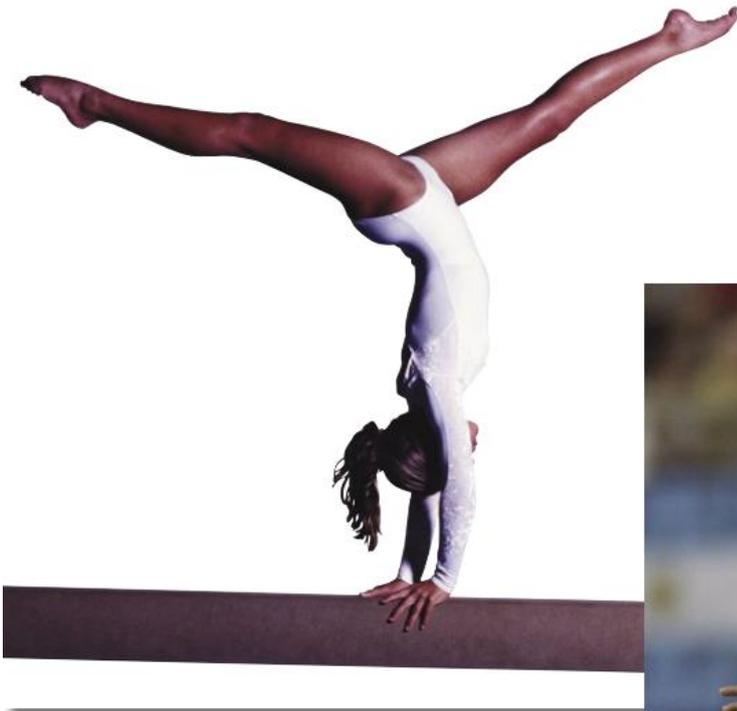


Figure 1.3 A handstand on the beam is a controlled movement

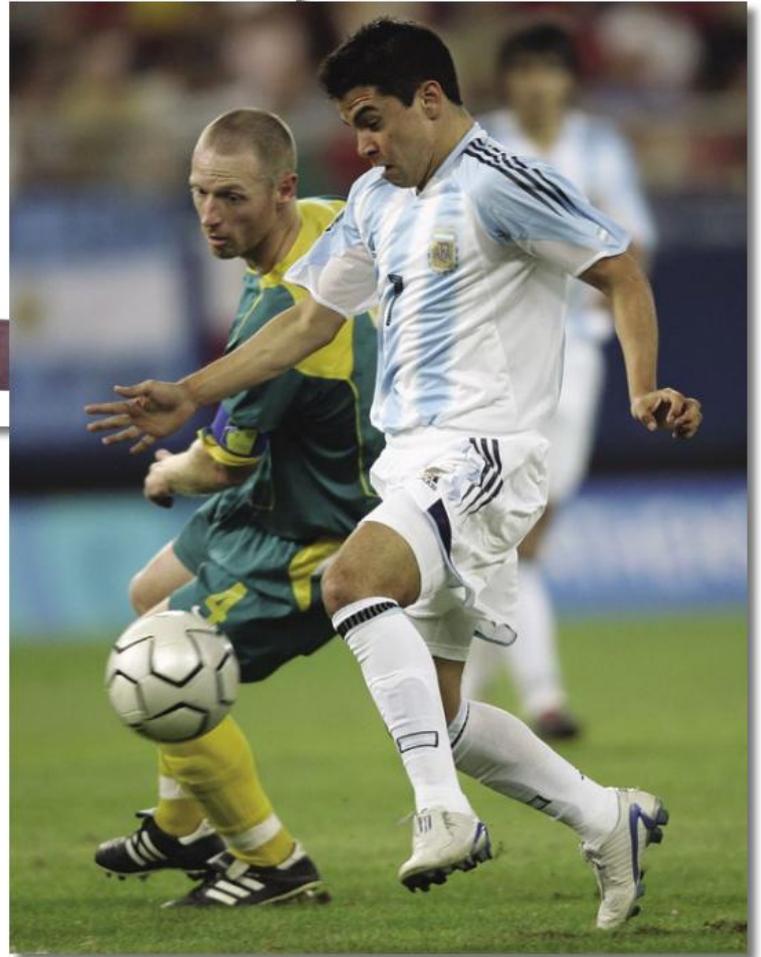


Figure 1.4 In soccer your space is limited by your opponents

Force

Force is the amount of effort involved in your movements. For example, your movement could be **delicate**, such as a drop shot in tennis, or **explosive**, such as throwing the shot put.

Flow

Flow is how you move through space:

- ➔ Your movements could be **free-flowing**, such as jogging around the block, or they could be **controlled**, such as performing a routine on a gymnastics beam.
- ➔ Your movements can be **uninterrupted**, such as continuous swimming, or **interrupted**, such as waiting while the ball goes down the other end of the court.

Activity 1.1



Movement basics

Look at each of the movements below. Describe each in terms of the four basic factors: space, time, force, flow.



Figure 1.5 Movement basics

Skill

The word **skill** is commonly used in two different ways when discussing movement and sport. A skill can be seen as a particular action or movement, for example:

- ➔ The skills of volleyball are the dig, set, spike, block and serve.
- ➔ The skills of tennis are the serve, volley, groundstrokes and smash.

Every activity involves a number of different movement skills, some of which are simple skills and some of which are more complicated.

The second meaning of 'skill' relates to how well someone performs. Television commentators use expressions such as 'Now that takes skill' or 'She is such a skilful performer' or 'Their skill level is way above that of other players'.

So 'skill' can mean how well you perform, or a specific action that you perform. The big question is 'How do I learn skills quickly so that I can become skilful?' (see pages 13–15).

Figure 1.6 A skilled performance



Figure 1.7 Which shooting action is the more skilful? This one?



Figure 1.8 ... or this one?

Types of movement skills

To have complete body control and awareness, you need to practise many different movement skills. Some movements require you to move your whole body while others require only some of your body parts to move.

There are three broad categories of movement skills that you will experience during activity classes and that you can practise at home:

- ➔ locomotor movement skills
- ➔ non-locomotor movement skills
- ➔ manipulative movement skills.

Locomotor movement skills

These skills require you to move from place to place, or move about in a space. They include:

walking	chasing	jumping	feinting
sliding	tumbling	galloping	running
hopping	diving	skipping	wading
leaping	landing	dodging	paddling
swimming	crawling	tagging	
jogging	hurdling	rolling	

Non-locomotor movement skills

These skills require you to move on the spot and include:

stretching	turning	bending	supporting
twisting	swinging	guarding	balancing
swaying	feinting	pushing	rocking
pulling	spinning	lifting	
bouncing	pivoting	transferring weight	

You have probably already mastered many of these locomotor and non-locomotor skills. However, it is essential to practise and refine all of these skills because they are the basics of gymnastics, dance and major games.

Manipulative movement skills

These skills require you to manipulate and control some sort of object (usually a ball) and often a piece of equipment such as a bat. These skills include:

catching	rolling	blocking	spinning
volleying	dribbling	trapping	juggling
lifting	heading	bowling	tackling
tossing	punching	hitting	spiking
pitching	kicking	shooting	serving
throwing	passing	bouncing	

How you perform each of these skills will depend on whether you want speed, power, accuracy or distance. However, the more of these skills you master, the greater your ability to take part in a wide range of sports and recreational activities.

Each movement skill has a correct technique. To learn the right techniques for the sport you want to play, listen to your teacher or coach, read this textbook and other sports books, and above all **practise!**

Three manipulative skills are the foundation of most major games you will experience during your secondary school years: throwing, catching and hitting.

Throwing

Throwing is used in cricket, softball, baseball, athletics, netball, basketball and many other sports. Whatever the sport, the basic technique is the same:

- ➔ Hold the ball with your thumb below and your first two fingers on top (see Figure 1.9).
- ➔ Stand side on to your target with your feet wide apart.
- ➔ As you take the ball back behind you, shift your weight to your back foot.
- ➔ Take the ball back until your throwing arm is nearly straight, with the ball facing behind you and your wrist on top.
- ➔ As you begin to throw, push your weight forward on to your front foot. Keep your elbow high and ahead of your hand as you swing your throwing arm forward.
- ➔ Release the ball as your elbow straightens and wrist snaps.



Figure 1.9 Throwing (1): the throwing sequence



Figure 1.10 Throwing (2): arm back as far as possible, ball pointing away from the target



Figure 1.11 Throwing (3): as you begin to throw, push your weight onto your front foot. Keep your elbow high as you swing your throwing arm forward

The throwing sequence

- 1 Stand side on.
- 2 Take your arm back until straight.
- 3 Transfer weight forward.
- 4 Lead with your elbow and keep it high.
- 5 Straighten your arm.

Hitting

Hitting is used in tennis, squash, badminton, baseball, softball, cricket, volleyball, hockey and golf. Although the exact technique varies slightly for each sport, the following principles apply:

- ➔ Begin with the backswing and your weight on your back foot.
- ➔ Stand or step to side on, and transfer your weight to your front foot as you begin the forward swing (see Figure 1.12).
- ➔ Rotate your trunk then arms as you swing.
- ➔ Keep your head down while you are looking at the ball.
- ➔ Follow through strongly.

The hitting sequence

- 1 Stand side on.
- 2 Step forward.
- 3 Transfer weight.
- 4 Rotate your trunk.
- 5 Rotate your arm.
- 6 Finish with wrist snap.

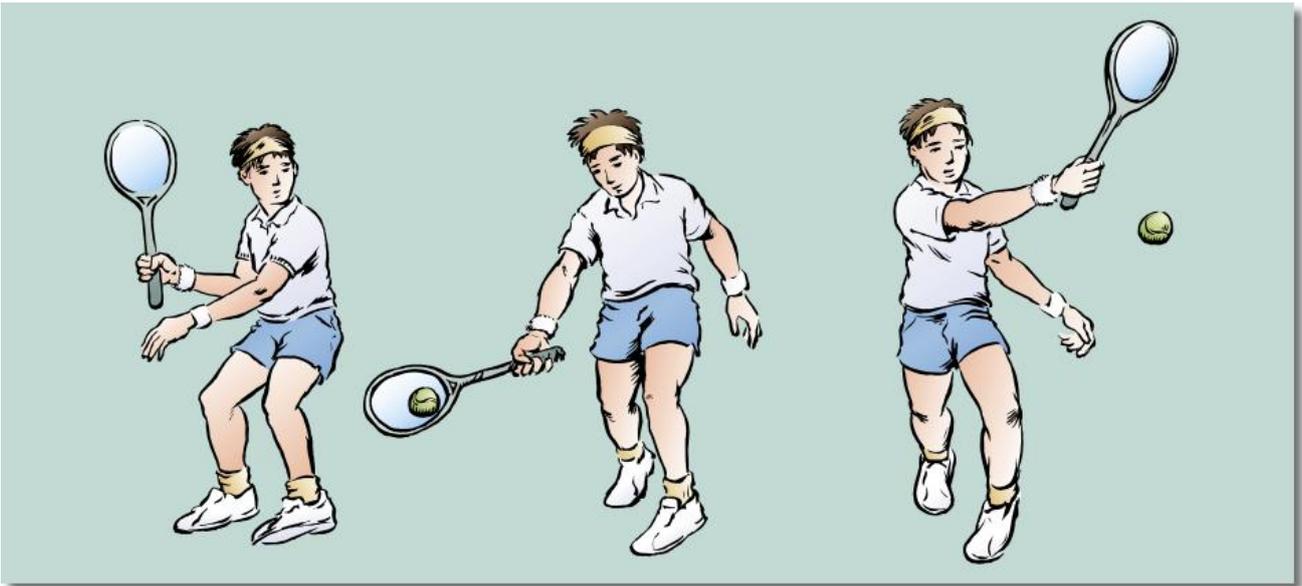


Figure 1.12 Hitting



Figure 1.13 Catching (1): overhead



Figure 1.14 Catching (2): catching above waist height in softball

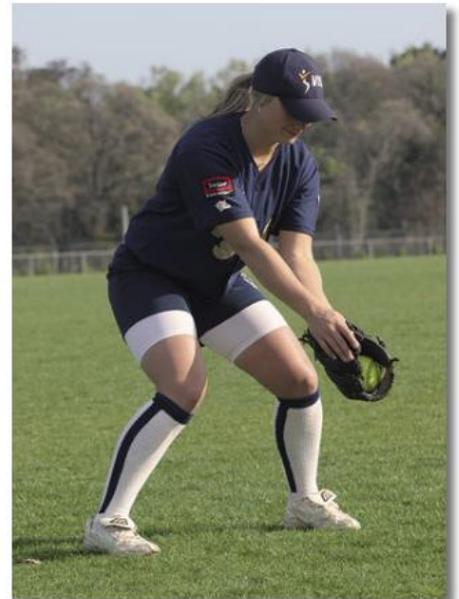


Figure 1.15 Catching (3): low catch

Catching

Catching is common to cricket, softball, baseball, netball and basketball. The same technique guidelines apply to each:

- ➔ Always focus on the approaching ball.
- ➔ Move quickly to either under or behind the ball.
- ➔ Let the ball come to you. Do not grab at it.
- ➔ Cup your hands and ‘give’ slightly as you catch.
- ➔ Take high catches just around eye height.
- ➔ For catches above waist height, your fingers should point up, and for catches below waist height, fingers down (see Figures 1.13–15).

Activity 1.2



How are your movement skills?

- 1** Choose five locomotor, five non-locomotor and five manipulative skills. Combine them into a two-minute movement routine or sequence.
- 2** Make a list of the movement skills in your favourite sport or recreation. Rank them from most to least important.
- 3** Make a list of all the locomotor, non-locomotor and manipulative skills you have:
 - mastered
 - not mastered or never attempted.
 - a** Which list is longer? Why is this so?
 - b** How could you shorten your 'not mastered' list?

Movement sequences

In physical education and sport you are required to combine basic locomotor, non-locomotor and manipulative skills to form movement sequences. For example:

- ➔ Netball—run, jump, catch, land, pivot, pass, run to a new position.
- ➔ Basketball—stretch to catch, pivot, fake a pass, dribble, weave, pass, screen, jump to rebound, guard.
- ➔ Football—tag, tackle, pick up, sprint, baulk, bounce, kick, sprint, receive hand pass, give hand pass, rest.

Practise, learn and combine basic skills

The key to successful performance is to practise and learn the basic skills, then combine them into routines or sequences. Then practise these sequences so that they become automatic. The final step is to combine the sequences of team members to create teamwork, set plays, offensive patterns or defensive patterns. Examples include strategic tactics in tennis and hockey.



Tennis doubles

- ➔ The coach notices that one of the opponents always plays his or her forehand cross-court.
- ➔ Therefore in the next serve to that player, the server serves to his or her forehand, then charges the centre of the net to volley.
- ➔ Meanwhile the server's team-mate fakes remaining still, then at the last minute side steps across the net to intercept the cross-court return and put away the volley.

Figure 1.16 Tennis doubles in action

Hockey: penalty corner

- ➔ Player 1 pushes the ball into the circle, following it to take up a position ready for a deflection from the goalie's pads.
- ➔ Player 2 traps the ball, fakes giving it to Player 3, then passes it behind to Player 4.
- ➔ Player 3 charges into the circle and fakes a shot as Player 2 traps the ball.
- ➔ Player 4 receives the ball and takes a shot.

Make sure you experience and practise as many skills as possible in the next few years so that you can develop complicated sequences that allow you to join in a large range of activities.



Figure 1.17 A penalty corner in hockey

Movement principles

Principles are guides to help you learn skills quickly and safely or perform them accurately, efficiently and safely.

Safety principles

Safety in sports is discussed in detail in Chapter 5. The guiding principles are as follows.

Warm-up

In order to prevent injury and make sure you perform well, always warm up before training, before a match or before active play. A good warm-up always includes:

- ➔ a five-minute jog
- ➔ stretches for every muscle you will use in the training session or game.

Figure 1.18 Top athletes always warm up in warm clothes



Cool-down

To prevent soreness and speed up your recovery, always cool down after training or a match by:

- ➔ walking for five minutes
- ➔ doing the same stretches as you did in the warm-up.

Suitable equipment

It is frustrating, painful and costly being injured in sport, so always wear the protective equipment designed for your sport. This might include the correct helmet, shin pads, gloves or knee pads.

Figure 1.19 Identify the safety gear worn by this softball player



Suitable clothing

Always wear suitable clothing for your sport. For example:

- ➔ Poorly fitting shoes can cause blisters.
- ➔ Slippery shoe soles in basketball or baggy clothes in gymnastics can be dangerous.

Training

Always attend training because this is where you develop the fitness and skills to protect you when you play matches.

Skill-learning principles

Your main objective in learning skills is to improve your performance. The key to doing this is **practise**. Practising allows you to try new techniques, develop your own style, eliminate errors and refine your skills. No one is born skilful.

Everyone has to practise to learn new skills, whether it is in your backyard, at physical education classes or at after-school training sessions.

Some people learn skills more quickly than others, and some skills you will find easier to learn than others. Your goal should be to give every activity a go—to try to master each new skill so that by the time you reach adulthood you have developed a wide range of skills that you can then pursue in your leisure time.

For many years, researchers have studied why some teenagers learn skills very quickly while others take longer. As a result of this study, there are some principles you can follow to make sure you learn skills as fast as possible.

Practice makes perfect

Your goal in practice sessions is to develop your skills to the stage where they become automatic, that is, to the stage where you can perform the skill well, without really thinking about it.

It takes time to reach this level, but you will get there faster if you follow these guidelines.

Sequence your skills

For every sport, skills can be arranged in order from easiest (most basic) to most complicated. You should learn the skills in this order. For example:

- ➔ In volleyball, the skill sequence is dig, set, serve, spike, block and dive (see Figure 1.20).
- ➔ In tennis, the order is forehand groundstroke, backhand groundstroke, serve, volley, smash, lob and spin shots.

Your aim should be to learn the skills of any sport in the correct sequence.

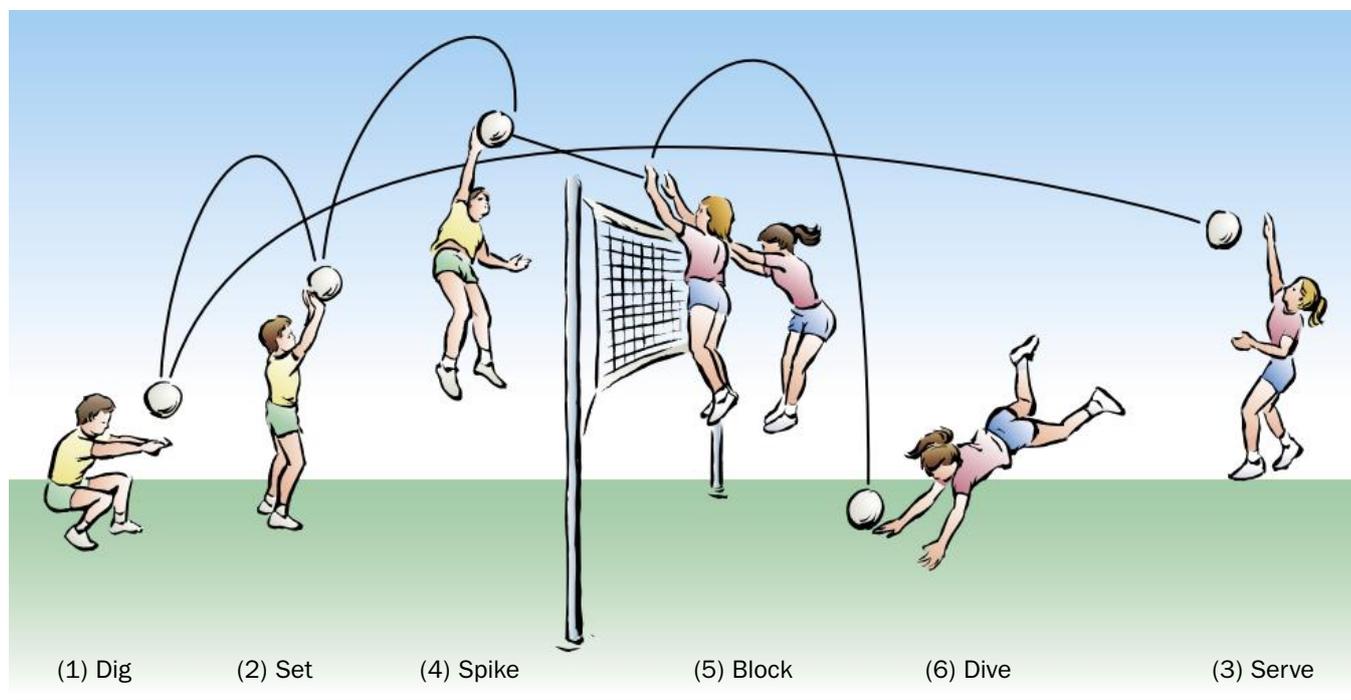


Figure 1.20 The skills used in volleyball

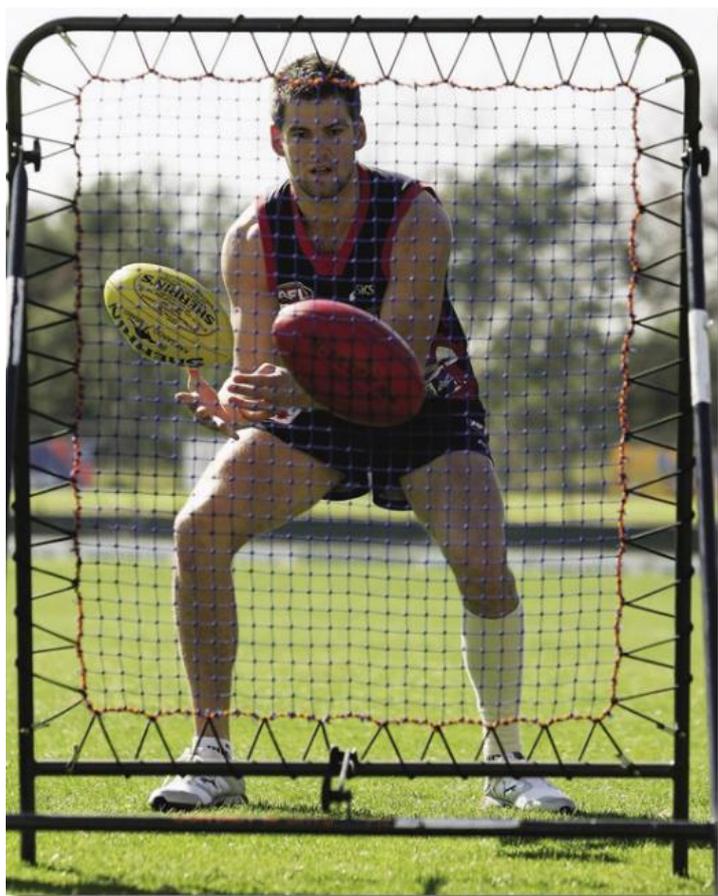


Figure 1.21 Practice made easy

Whole and part skill practice

Simple skills, such as catching, can be practised by performing the whole skill. However, complex skills, such as swimming strokes, the volleyball spike and the tennis serve, are best learned by practising each part and then putting the whole lot together. For example, you can learn a swimming stroke more quickly if you practise the kick movement, then the arm movement, then the breathing technique, and finally put the whole stroke together.

Distributed and massed practise

When you are first learning new skills, it is best to **distribute** (space out) your practice sessions and your practice drills in each session. For example, if you want to master the lay-up in basketball, you should have a practice session every second day, and during practice have a rest or practise your foul shots after every ten lay-ups. This distributed practice stops you overloading your brain by practising too much of the one skill.

Massed practice is used when you have mastered a skill. Now you must get used to performing this skill when you are fatigued. For example, your lay-up becomes automatic, so you take part in a massed practice session where you must complete 25 lay-ups in five minutes, each time dribbling from half court.

Gradually increase pressure

- ➔ First learn and practise each skill.
- ➔ Next increase pressure by using drills with opponents or by racing the clock.
- ➔ Then use your skills in modified games.
- ➔ Finally play the full game.

In physical education classes, there is only enough time to learn the basic skills and play modified games. Full games are usually played at inter-school or club-level sport.

Mental practice

Mental practice (rehearsal) (see Figure 1.22) is when you picture yourself performing a skill in your mind. If you regularly use mental practice, you will learn skills faster and perform better in games provided you:

- ➔ always picture yourself being successful
- ➔ picture the actions taking place at a normal speed not slow-motion
- ➔ picture the entire skill or section of play
- ➔ imagine the feel of the action as you picture it happening.

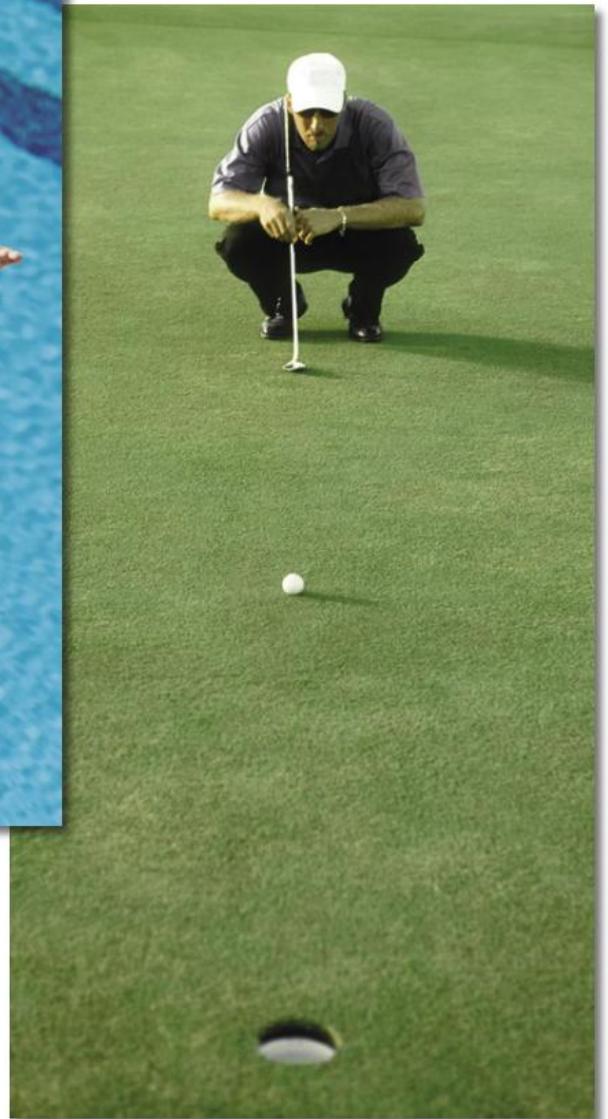


Figure 1.22 Mentally rehearse the skill before you do it

Improving performance

- 1** Think about your performance in the sport that you are currently studying in Health and Physical Education, and list each of your strengths and weaknesses.
- 2** Use the information studied in this section to develop training activities that will improve your weaknesses and maintain your strengths.
- 3** How big a part will mental rehearsal play in your development? Discuss the reasons for your response.



Activity 1.3

Maintain your motivation and arousal

Your **motivation** is your desire to learn, perform or achieve goals. Your motivation can be measured by what is called your **arousal level**—how ready you are to perform as shown by your muscle tension, heart rate, breathing rate, stress reactions and brain electrical activity (see Figure 1.24).

If you are **under-aroused**, you will not perform well because you will be bored, uninterested and too relaxed.

If you are **over-aroused**, you will not perform well because you will be too tense, nervous or aggressive.

The trick is to be at your **optimum arousal level**, which is the level at which you will perform your best or learn fastest. It takes practise to control your arousal level.

- ➔ If you feel flat and not fired up, you can increase your arousal level by a long warm-up, motivational music or encouragement from spectators, your team-mates or the coach.
- ➔ If you feel tense, frightened or stressed, you can reduce your arousal level by keeping away from people, lying down quietly, listening to slow music or having a long warm-up.

Figure 1.23 A good coach knows when to fire up players and when to calm them down



Always use feedback

Feedback is all the information you received about the performance you have just made. This information can come from:

- ➔ your muscles (how it felt)
- ➔ your eyes (whether the ball went where you wanted)
- ➔ your ears (your team-mates' encouragement)
- ➔ your coach (advice).



Figure 1.24 The three levels of arousal: (a) under-arousal, (b) over-arousal, and (c) optimal arousal

If you do not use the feedback you receive to modify your performance, you will never learn and never improve. For example, imagine you are practising your netball shooting. Every time you release the ball you turn around and block your ears so that you get no feedback because you cannot see or hear where the ball went. If you did this, you would never improve. However, if you watched where the ball went, concentrated on how your muscles felt and listened to your coach's advice, all this feedback would enable you to become a top goal-shooter.

The more you can learn to use feedback to analyse what you are doing, the faster you will learn.

Figure 1.25 Sources of feedback



Figure 1.26 A good coach or teacher is your best source of feedback



Constructive feedback

When you give or receive feedback it should be constructive—it should help your next performance or the performance of the person you are giving it to.

Examples of constructive feedback:

- ➔ You kick the ball off the side of your boot. The coach says, ‘Next time guide the ball down onto your boot with your right hand.’
- ➔ You cannot get enough power into your throw. Your friend says, ‘Make sure you take a big step onto your opposite foot as you throw.’

Destructive feedback

Destructive feedback does not improve performance. It can reduce your confidence and does not tell you how to improve. Examples of destructive feedback:

- ➔ The coach says, ‘You idiot, you missed the shot.’ All this does is damage your self-esteem.
- ➔ Your team-mate says, ‘Your high jump technique is really poor.’ This statement may well be accurate, but the comment does not help the high jumper to improve. All it does is make him or her feel useless.

Making the best use of feedback

- ➔ After each attempt at a skill, try to analyse why it was successful or unsuccessful by remembering how it felt as you did it.
- ➔ When your performance is not successful, work out which part of the movement you need to modify in order to improve.
- ➔ Ask for detailed feedback from your coach, classmates or teacher. Then put into practice the advice they give you.

Remember: feedback is not personal criticism; it is constructive advice.



Figure 1.27 What feedback could you give the hurdler in blue to help her improve her time?

Maximise the transfer of learning

One of the great benefits of learning skills is that you can transfer the skills you learn in one sport to many others. For example:

- ➔ Once you have learned to side-step or dodge, you can use this skill in football, basketball, soccer, netball, touch football or European handball.
- ➔ If you learn to serve in tennis, you can use the same action to serve in squash, smash in badminton or spike in volleyball.
- ➔ If you learn to swing a softball bat, with only slight variations you can use the same technique for cricket shots, golf shots or hockey shots.
- ➔ If you learn a range of gymnastics skills, you can use the same skills in rock climbing.
- ➔ If you learn to skateboard or in-line skate, you can easily learn to water ski, ice-skate, surf and snow ski.

The more skills you attempt and learn, the easier you will find it to apply your talent to new activities.

Thrills and skills

- 1** For each of the activities listed below, write down the skills required to play each activity in the order you think the skills should be learned. Justify the order you choose for each activity. Discuss your answers in class.

a netball	b badminton
c hockey	d soccer
e football.	
- 2** If you mastered each of the following skills, into what sports could you transfer each skill?
 - a** forehand hit
 - b** overarm throw
 - c** kick.



Activity 1.4

continued ...

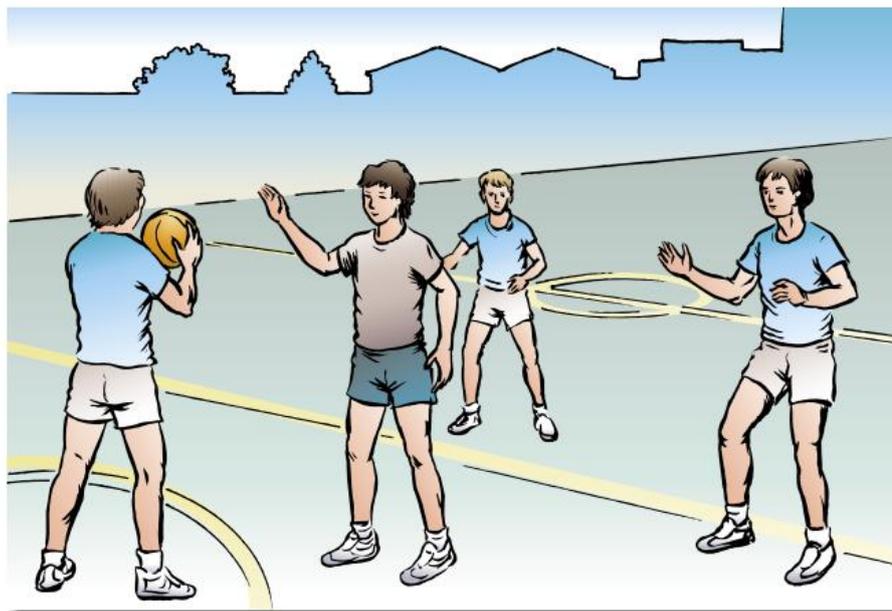
- 3
 - a You have been selected to play your first game in the A grade team. You feel excited but very tense, and your stomach is churning. What could you do to control your over-arousal?
 - b You are not looking forward to Saturday's game. The weather is bad, the opposition are easy beats, and you feel like a week off. What could you do to improve your arousal level?
- 4 It is the first volleyball practical class. The class has been shown how to dig. You are all now practising. The teacher comes over to one student who is having difficulty and says, 'That's not a bad attempt. Now try with your elbows straight.' The student replies, 'I can't do it.'
 - a Is this a constructive reply by the student?
 - b Do you think this student is prepared to use feedback?
 - c Can you suggest a better response by either the teacher or the student?

Performance principles

Every game or activity has unique rules, skills and tactics. However, there are a number of performance principles that you can apply to a range of activities in order to improve your performance:

- If you or your team are in possession of the ball you are in **attack**, irrespective of your position.
- If you or your team do not have possession of the ball you are in **defence**, regardless of your position.
- When in attack, **draw the defender to you** before you pass. This opens up the play for your team-mates (see Figure 1.28).
- When in attack, **pass the ball in front of your team-mates** so they can run to it.
- When in attack, **lead, cut or break into open space** so you have time to control the ball when you receive it (see Figure 1.29).

Figure 1.28 The player with the ball has drawn the defender so his team-mates are free



- ➔ When in attack, **spread the defence** by spreading players across the field or court. Do not let team-mates bustle close together where they can all be covered by one defender (see Figures 1.30 and 1.31).

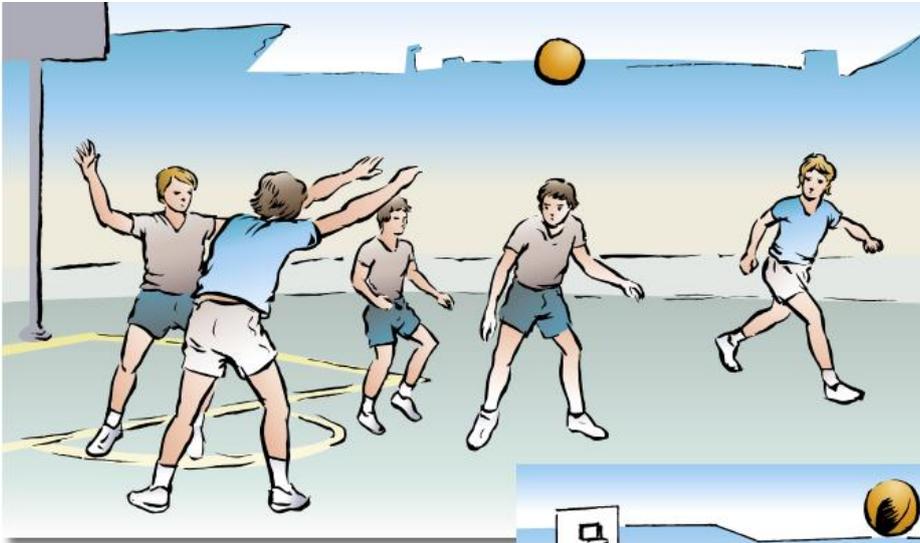


Figure 1.29 The pass in from the side is to a team-mate who is leading into open space

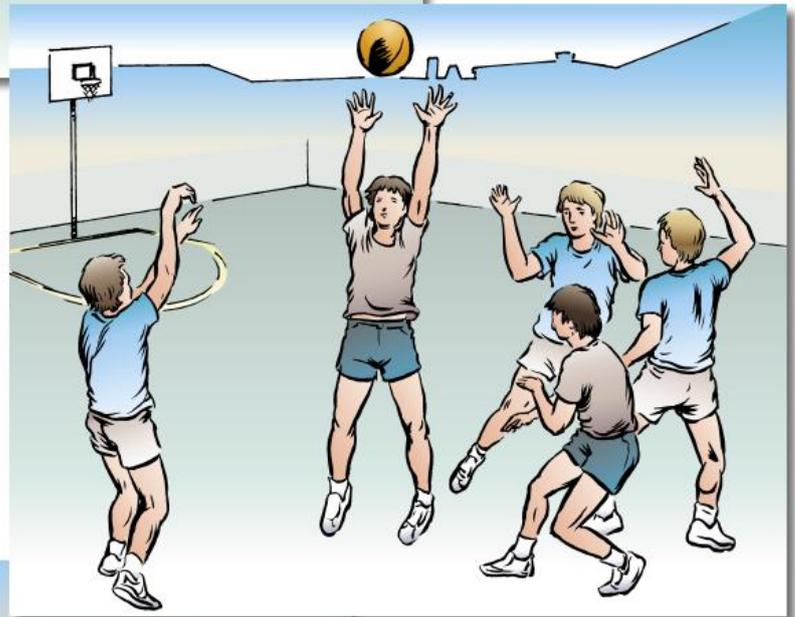


Figure 1.30 Poor use of space: attackers and defenders bunched together



Figure 1.31 Effective use of space: defenders are spread apart so that attackers have space to lead into

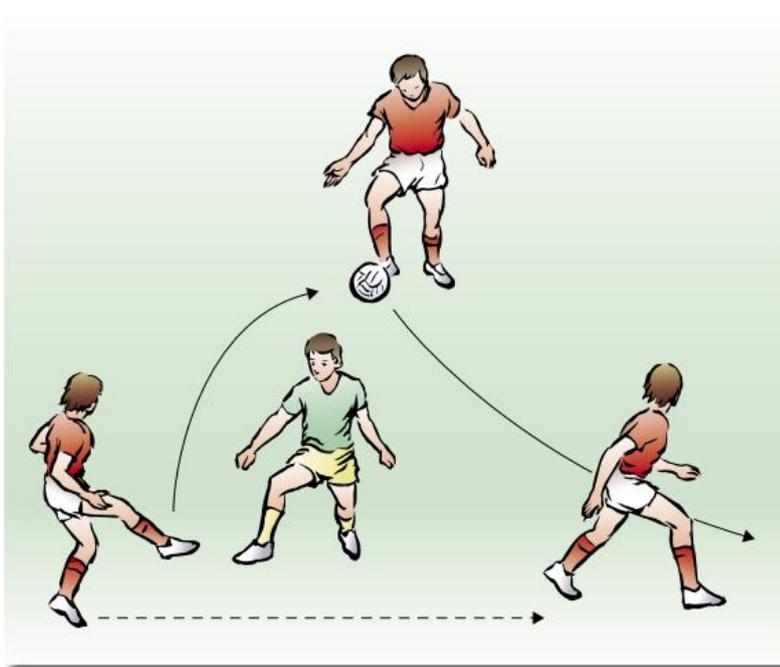


Figure 1.32 The wall pass

- ➔ When in attack, **keep your opponents guessing** by varying the type of skills you use and the pace at which you perform them.
- ➔ When in attack, **support your team member who has the ball** by providing her or him with an open target to pass to.
- ➔ When in attack, the **wall pass** or 1–2 is a very effective method of getting past defenders while still keeping possession. With a wall pass the player with the ball passes to a team-mate, then runs around the defender to receive a return pass from the team-mate (see Figure 1.32).
- ➔ Communicate with your team members by **voice** and **signals**.

- ➔ When in defence, **cover your specific opponent** or the nearest opposition player.
- ➔ When in defence, the job of the nearest defender (called the **first defender**) to the attacker with the ball is **to slow them down** and **narrow the passing or shooting options** by moving towards them (see Figure 1.33).

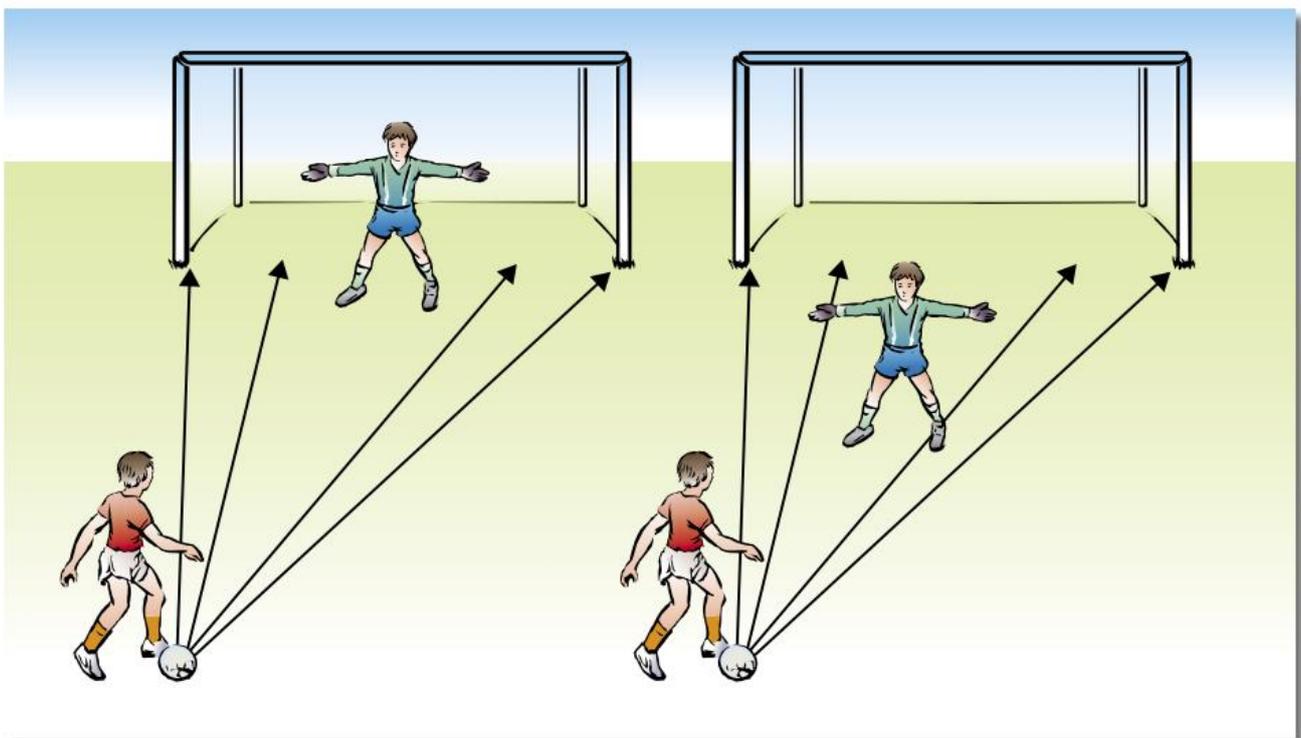


Figure 1.33 Narrowing the angle. Both goalies and defenders must come forward to meet an attacker. This narrows the attacker's shooting or passing angle

- ➔ When in defence, you either defend an opposition player (**one-on-one defence**) (see Figure 1.34) or defend a section of the field or court (**zone defence**) (see Figure 1.35).
- ➔ When in defence, if you are passed by an opponent with the ball you must **give chase** because if that opponent is held up by your team-mates you can then **tackle or steal or defend from behind**, which is the attacker's blind side.

Figure 1.34 Netball is a game requiring classic one-on-one defence

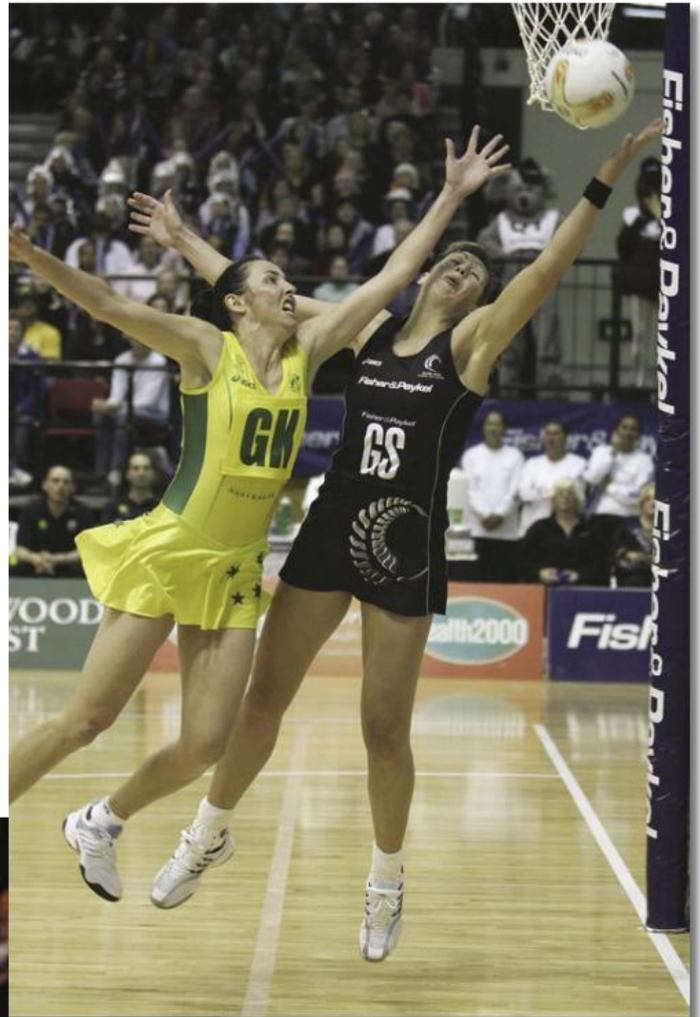


Figure 1.35 In European handball, a five-person zone defence protects the goalie and goal circle

Activity 1.5



Performance principles in practice

- 1 Name five sports in which wall passes are commonly used by the team in possession of the ball.
- 2 If the whole team does not follow the principle that 'when you do not have possession you are in defence', what is likely to happen during a match? Give an example.
- 3 The principle of drawing a defender is common to many sports. Name three sports that use this principle, and give an example from each to explain why it is an effective tactic.
- 4 From a sport of your choice explain a set play that requires leading into open space.
- 5 The change of pace tactic is common to a number of sports. Give an example of this tactic being used in a competitive sport.
- 6 In many sports it is crucial that all players understand and can play the role of first defender. In which sports is this so? Explain why this is important.
- 7 Quick, loud calls are essential in all team sports if the team is to function well. Give ten examples of common calls or types of communication that are used in sport.

Biomechanical principles

Biomechanics teaches you about the techniques that will allow you to produce your best performance. The following principles should help you in a number of activities.

To maximise power you must combine your forces

When your muscles contract they produce force, which allows you to turn, jump, go or stop and hit, kick, and throw or catch objects such as balls. In physical education or sport when you need power to serve a tennis ball, throw a shot put, clear a high jump bar, sprint down the track, hit a home run or drill the ball past the goalie, you must use the biomechanical principle of force combination.

- Use as many body parts as possible, for example, legs, hips, trunk, shoulder, arm and wrist.
- Develop force first with the strongest and heaviest body parts. For example, when you throw, first transfer your weight using your legs, then turn your trunk and finally use your lighter and weaker arm and wrist.
- Bring a new body part into action when the previous body part has reached maximum speed. This involves timing and is very difficult to achieve consistently and therefore requires a lot of practise. For example, in the process of throwing, when your hips are turning at maximum speed you begin your shoulder rotation and when your shoulder reaches maximum speed you begin to straighten your arm.
- Develop your forces on a firm base of support by firmly planting your feet during the action. For example, a tennis player, cricketer, softball pitcher and hockey player all plant the leading foot as a solid base for the other actions to build on.

The throw for distance is a classic example of force combination:

- ➔ Take the ball back as far as possible to give you more time to develop force.
- ➔ Begin the throw by using your legs to step forward and shift your weight forward onto your front foot.
- ➔ Next rotate your hips and trunk, followed by your shoulders.
- ➔ As your shoulders rotate, straighten your arm and finally complete the force sequence with your wrist snap.



Figure 1.36 Throwing a shot put requires power

Putting it together

The combination of various forces is vital in the following activities:

- a volleyball spike
- a high jump
- shot put
- a sprint start
- a tennis serve
- a hockey drive
- a three-point basketball shot.

Choose two of these skills and describe how the principle of force combination applies to each.



Activity 1.6

A force is required to change the motion of an object

Newton's first law, called the 'law of inertia', basically states that any object (the human body, a ball, a moving skier, a cyclist) will require a force to act on it to move it, stop it, speed it up or slow it down. For example, when you pick up a netball it moves because you have applied a muscular force. When you throw it, it moves through the air because of the muscular force you applied when it was in your hand. When you catch it, it stops because of the force your hands have applied to it. This law also states that the more weight this object has, the more inertia it has and therefore requires more force to move, stop, speed up or change direction. For example, a 120-kilogram rugby forward sprinting downfield takes a lot more force to stop than a tennis ball coming towards you at the same speed.

The effect of any force depends on the size of the force and the weight of the object it acts on

This is Newton's second law. If you apply a lot of force to a small object, for example, hitting a golf ball with a driver, you expect it to accelerate quickly. However, if you apply the same force to an object with more weight, for example, hitting a shot put with your driver, it does not move far at all.

In sport, this law explains why a waterlogged football, soccer ball or tennis ball does not travel the usual distance or why racehorses have to carry weight in the saddle as a handicap.

Activity 1.7



Force and inertia

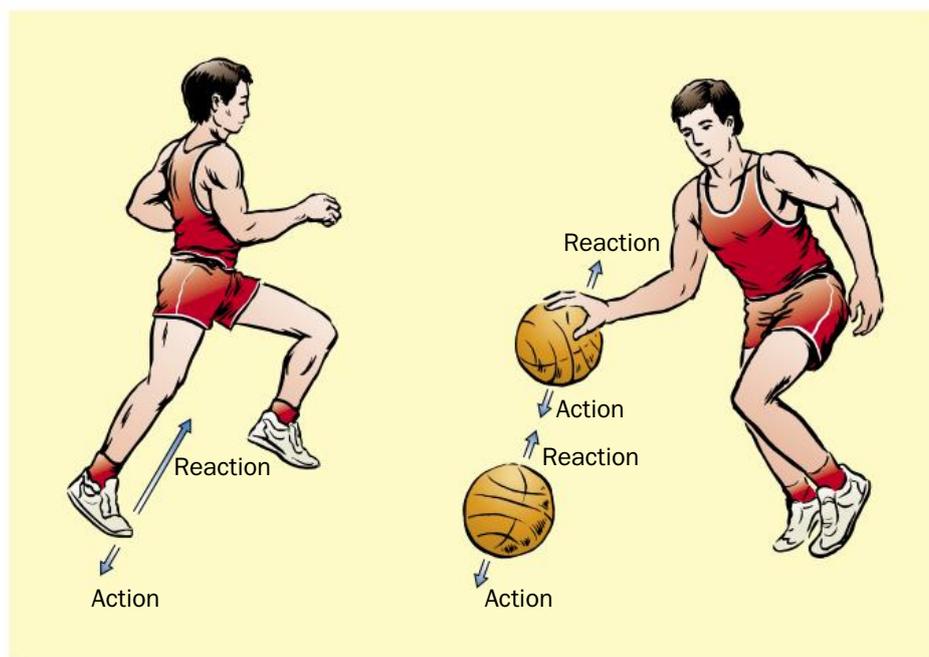
- 1** List ten examples of objects in sport that have a large inertia.
- 2** List ten sporting examples of stationary objects that have a force applied to them to move them.
- 3** List ten sporting examples of moving objects that have a force applied change their direction.
- 4** List ten sporting examples of objects that have a force applied to stop them.

Share your answers in a classroom discussion on force and inertia in sport.

In sport applied forces are accompanied by reactive forces

This is Newton's third law, called 'action and reaction', which states that when you apply a force there is an equal and opposite reactive force. For example, when you jump you apply a force downwards onto the floor and the floor

Figure 1.37 Examples of action and reaction in sport



applies a reactive force on you so you move upwards. In a sprint start you push backwards onto the blocks and the reactive force from the blocks propels you forward down the track. However, if there is insufficient friction then the reactive force is not maximised.

Levers magnify your muscular force

Natural and artificial levers are involved in many aspects of sporting activities. All lever systems involve a rigid bar called a **lever**, a fulcrum or pivot point around which the lever rotates, a point where force is applied and a resistance which you are trying to move (see Figure 1.38).

There are three classes of levers. In the human body, third-class levers are most important for physical activities since they allow the development of speed. Third-class levers have the force point (muscle insertion) between the fulcrum (joint) and resistance point (usually the ball), such as in kicking, throwing or pitching actions.

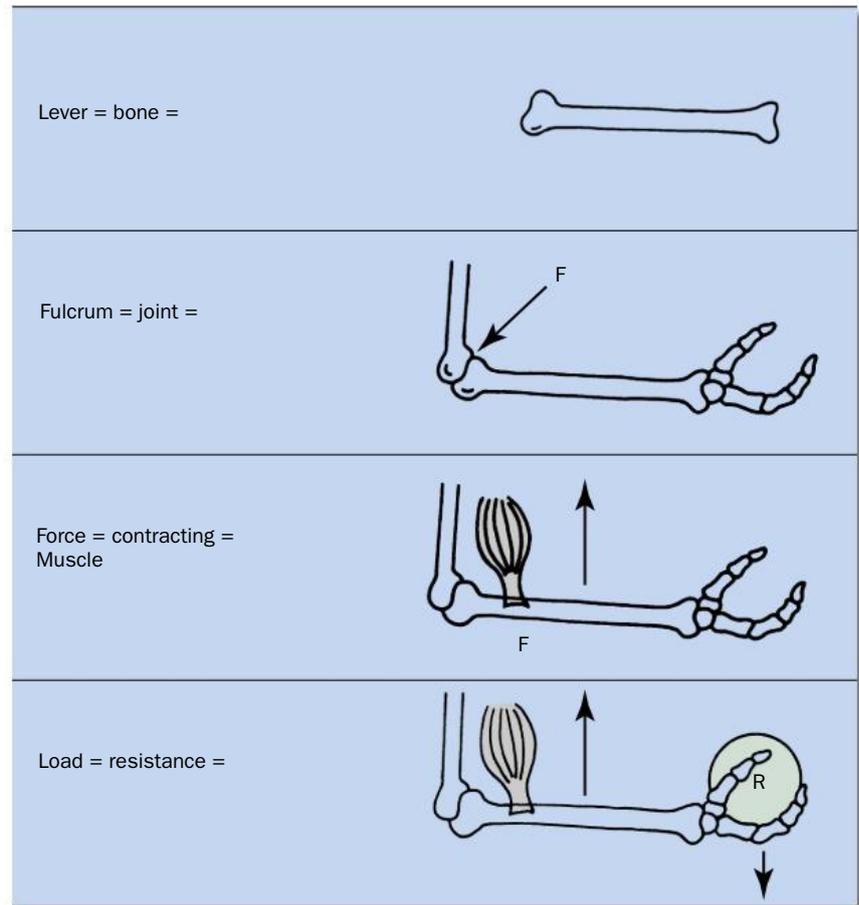
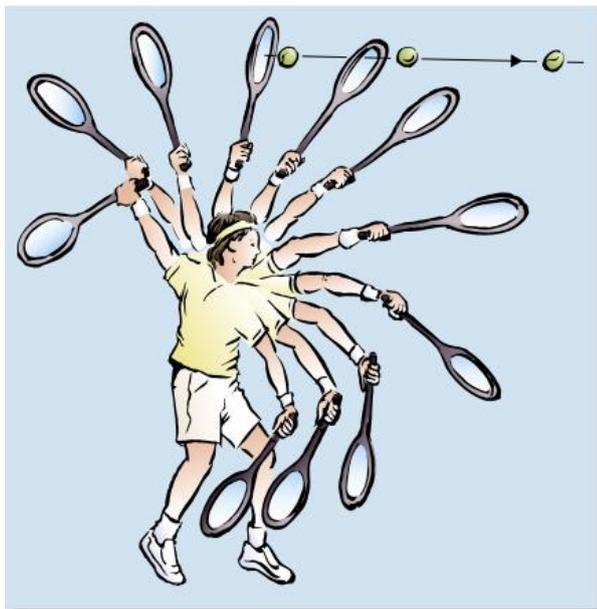


Figure 1.38 The lever system in the human body



Figure 1.39 The baseball bat is one example of a lever used in sport



Your body parts, such as your arm rotating around your shoulder in a softball pitch, are natural levers. Racquets, bats, sticks and clubs are artificial levers. The advantages of artificial levers are:

- ➔ they are harder than human levers
- ➔ the end of an artificial lever travels faster than the end of a human lever. Look at Figure 1.40. The end of the artificial lever (the tennis racquet) covers twice the distance of the end of the human lever (hands) in the same time, so it must be going faster. Therefore the racquet can hit a ball further than the hand can.

Figure 1.40 A tennis serve. The tennis racquet is an artificial lever, and the arm is a natural lever

Activity 1.8



Sporting levers

- 1** Give five examples of natural levers used in sport. For each lever identify the fulcrum, force and resistance.
- 2** Give five examples of artificial levers used in sport. For each lever explain how it improves performance.

Share your ideas in a class discussion on levers in sport.

Small changes in body position significantly alter your stability

Your **stability** is how well balanced your body is at any particular time. Stability depends on two key factors: centre of gravity and base of support.

Figure 1.41 Placing your feet apart and bending your knees widens your support base and lowers your centre of gravity



- ➔ **Centre of gravity** is an invisible point in your body which is the centre or average of your weight. In a ball the centre of gravity is in the middle since it is round, but in a human it varies depending on your body shape. It is generally around your hip region, however, if you have large legs it will be a bit lower and if you have a large chest it will be a bit higher.
- ➔ **The base of support** is the parts of an object in contact with the ground and the area between these supporting parts (see Figure 1.41).

You are in a stable position as long as your **centre of gravity** is directly over your base of support. In many sports it is tactically a good idea to increase your stability by:

- ➔ **lowering your centre of gravity** by bending your knees or bending over
- ➔ **widening your base of support** by keeping your feet wide apart or putting two feet and one hand on the ground
- ➔ **increasing the friction between your base of support and the ground or surface**, for example, wax on a surfboard, grip tape on a skateboard deck, chalk in gymnastics and studded or spiked footwear.



Figure 1.42 Wax on a surfboard increases the friction between your feet and the board

Stability in sport

- 1 What position do surfers adopt when they take off on a wave? Why do they adopt this position?
- 2 If a gymnast is losing balance on the beam, what movement do they make to regain their balance?
- 3 When footballers or rugby players are about to be tackled, they bend their knees, spread their legs and drop their shoulders. Explain why they make these movements.
- 4 In basketball and netball the defensive or guarding stance is a very stable position. Explain why.
- 5 Three tips to increase your stability are given above. For each of these, give an example of when the opposite is done in sport to decrease your stability.



Activity 1.9

Projectile motion is generally predictable

A **projectile** is something that moves through the air. In sport it could be an object such as a ball, discus, javelin or shot put that is thrown, hit or kicked into the air, or it could be your body propelled off a diving board or landing in a long jump pit.

All projectiles have a parabolic flight path (see Figure 1.43) and all projectiles are affected by several key factors:

- The forward motion of a projectile is slowed down by air resistance. This is less of a factor for heavy objects, such as a shot put, or aerodynamic objects, such as a javelin, but it is a major influence on a light object such as a badminton shuttle.
- All projectiles are pulled down to the ground by gravity.
- For any angle of trajectory the greater the propelling force the further the object will go (see Figure 1.43). However, the optimum angle of trajectory varies from activity to activity. For high jump, pole vault and a high badminton serve it is 60–90°. For the shot put it is 45° while for long jump it is 30°. Generally in sports where maximum distance of a projectile is required, 45° is the optimum angle.

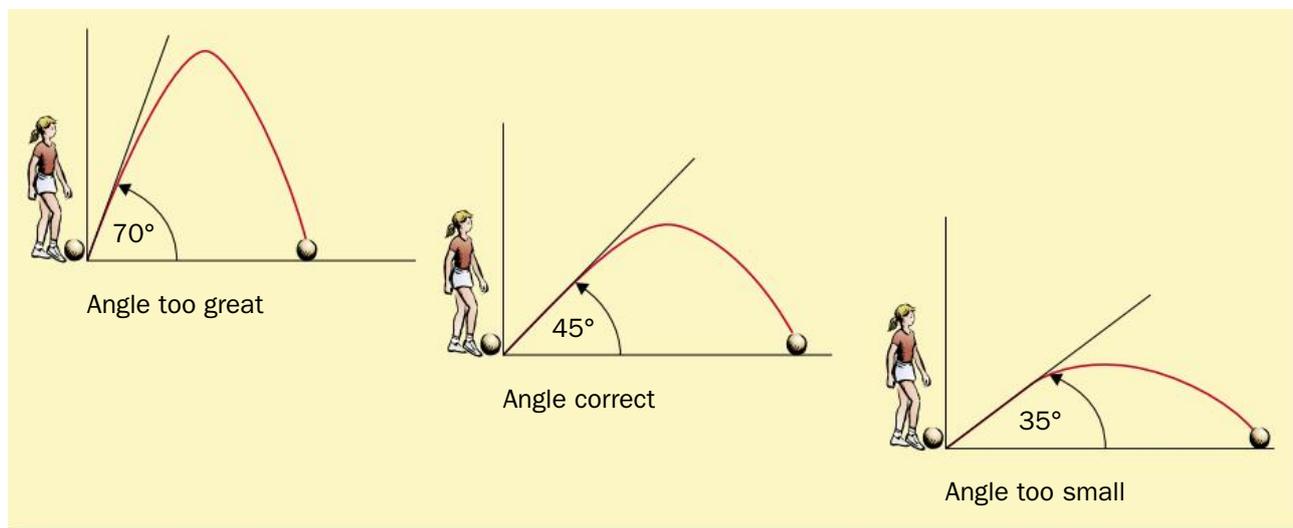


Figure 1.43 The ideal angle for distance

Spin alters the normal flight path and rebound of a projectile

To get a projectile to travel with no spin is very difficult since you need to apply a force directly through the centre (centre of gravity) of the projectile. Instead the force is usually applied off centre either deliberately or accidentally. There are four types or spin.

Topspin

Topspin is applied by hitting or rolling your fingers over the top of the ball (see Figure 1.44). Topspin causes the ball to drop quickly at the end of its flight path (see Figure 1.45) so, for example, in tennis you can hit the ball harder over the net but it will still land inside the baseline.



Figure 1.44 Topspin is created by hitting over the ball

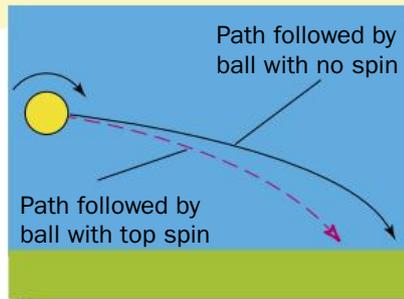


Figure 1.45 The altered flight path of a ball with topspin

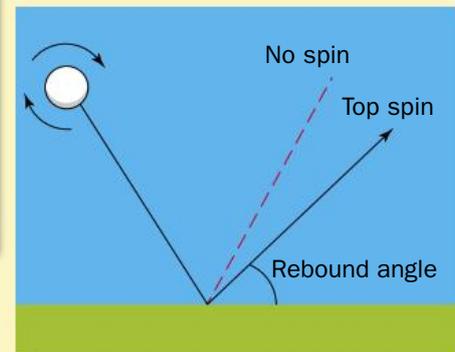


Figure 1.46 The lower rebound of a ball with topspin

When a ball hit with topspin rebounds off a surface, it does so with greater speed and at a lower angle than a ball hit with no spin (see Figure 1.46). This is why topspin shots tend to ‘jump’ at an opponent and make them rush their return.

Backspin

Backspin is applied by hitting or rolling your fingers underneath the ball (see Figure 1.47). Backspin causes the ball to rise in the air or ‘float’, which extends its flight path (see Figure 1.48). However, when the ball hits the ground, its rebound angle is higher and it comes off slower (see Figure 1.49). In golf, backspin is a large advantage because the ball flies further in the air over soft ground, bunkers or hazards, and when it bounces it stops quickly and therefore stays on the green.

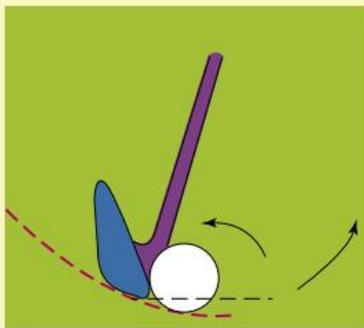


Figure 1.47 Backspin is created by hitting under the ball

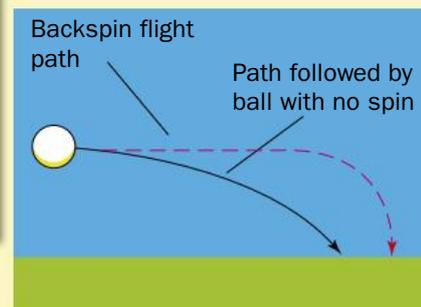


Figure 1.48 The altered flight path of a ball with backspin

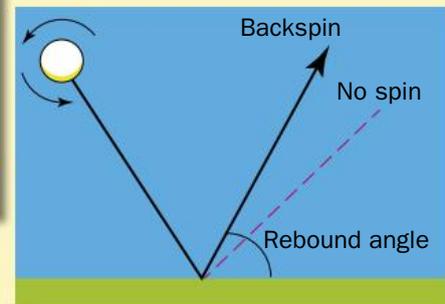


Figure 1.49 The higher rebound angle of a ball with backspin

Rightspin

Rightspin is applied by hitting or rolling your fingers across the right side of the ball. Rightspin causes the ball to curve to the left which, if controlled, can be a major advantage in some sports (see Figure 1.50). When a ball with rightspin bounces it rebounds to the right, for example, an offbreak in cricket or a slice serve in tennis that curves left in the air but rebounds right to cramp the opponent.

Leftspin

Leftspin is applied by hitting or rolling your fingers across the left side of the ball. Leftspin causes the ball to curve to the right which, if controlled, can be a major advantage in some sports (see Figure 1.51). When a ball with leftspin bounces, it rebounds to the left, for example, a leg break in cricket or a left hander's slice serve in tennis which curves right in the air but rebounds left when it bounces.

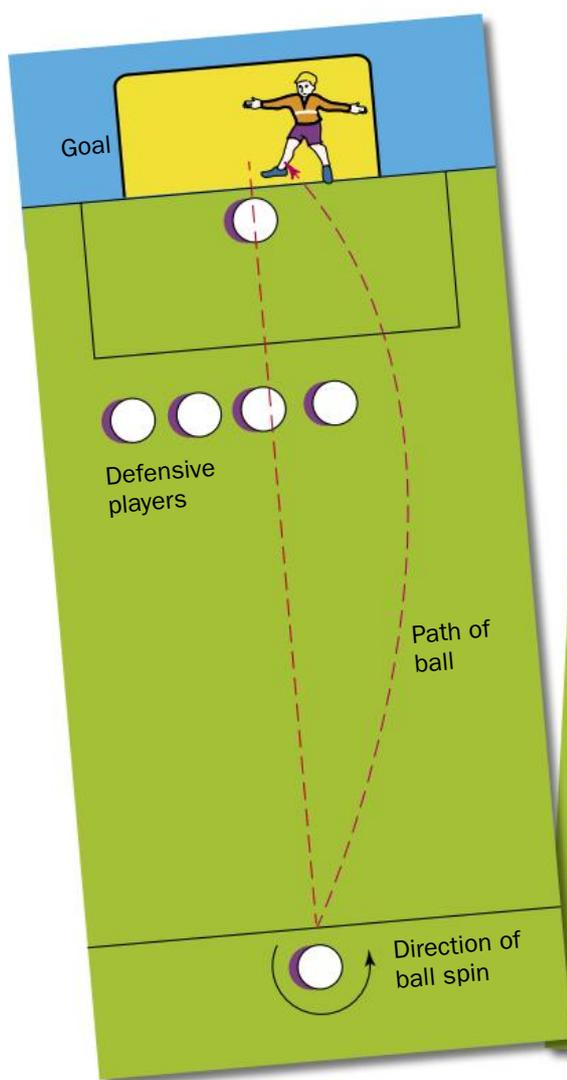


Figure 1.50 In soccer, rightspin can be used to curve the ball around the wall of defensive players

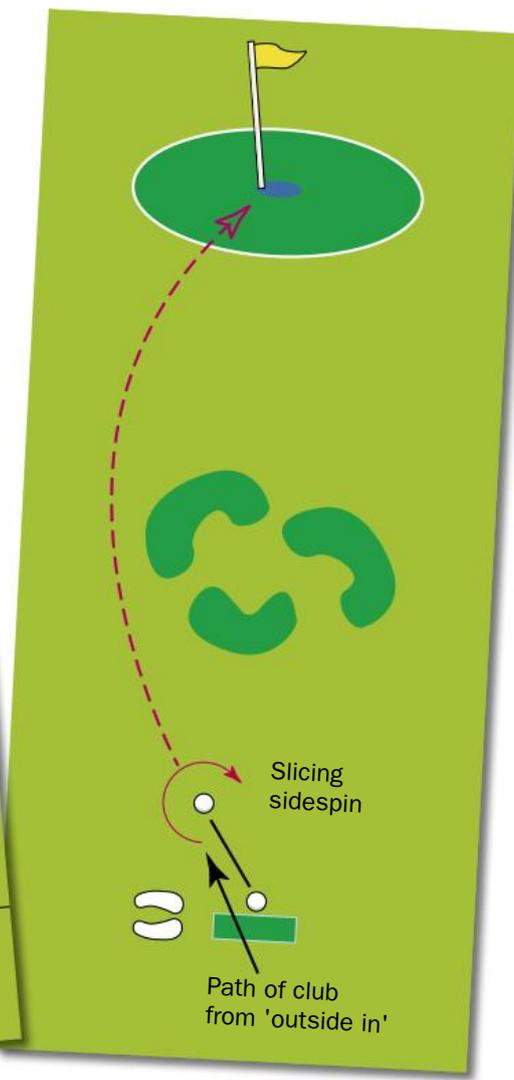


Figure 1.51 In golf, leftspin can be used to curve the ball around bunkers or trees

Flight and bounce

- 1** Name three sports where a projectile is thrown or kicked for maximum distance. For each of these activities:
 - a** What is the best angle of release to get maximum distance?
 - b** Does the projectile have spin? If so what type and how does it affect the flight path?
- 2** The use of spin is essential in a number of sports.
 - a** Name four sports where spin is used for its flight effect and name the effect in each case.
 - b** Name four sports where spin is used for its rebound effect and name the effect in each case.
- 3** Name the spin most commonly used in each of these situations and why it is used:
 - a** a lob in tennis
 - b** a knuckle ball in baseball
 - c** a drop shot in tennis
 - d** a hook in golf
 - e** suck back in pool or snooker.



Activity 1.10

Personal factors and movement skills

There are many personal factors that determine how quickly you learn skills, how well you perform skills, and the skills that you choose to specialise in.

Genetics

Your body shape, muscle type (speed or endurance) and level of coordination are largely inherited from your parents. Therefore your activity potential is controlled by genetics. Of course through training and practise, you can greatly improve all your skills and fitness but if you are short, making elite basketball is not likely; if you are very thin, making the elite rugby league is not likely; or if you have inherited endurance muscle fibres then you will probably never make an elite sprinter.

Growth and development

How quickly you grow and how large you are at any stage of development often determines how successful you are in under-age sport. Late developers are often discouraged as their friends grow taller, stronger and faster, while early developers can become over-confident since they can dominate their small opponents.

Motivation and persistence

If you are self-motivated, and if at first you do not succeed but keep trying, you will develop skills more quickly than others who do not put in the effort. This is particularly true for late developers who persist against more mature opponents and develop a huge range of skills that allows them to dominate when they do grow. However, many early developers who can dominate without much effort, struggle when everyone catches up to them.

Willingness to experiment

No one ever knows everything or can do everything when they begin a new activity. The key to learning skills is ‘having a go’—not being afraid to try new skills and make mistakes. When you are learning, mistakes do not matter. They are a sign that you are trying something new. Experiment, make mistakes, listen to feedback, and eventually you will master the skill.

Disability

Physical problems such as longsightedness, shortsightedness, cerebral palsy, deformity or paralysis might limit how quickly you can learn the skill or skills you choose to develop. However, every person is capable of learning and mastering many physical skills, and it is a matter of capitalising on strengths and gradually eliminating weaknesses.

Activity 1.11



Movement principles

- 1 Choose ten movement principles discussed in this chapter. You could choose safety principles, skill-learning principles, performance principles or biomechanical principles. Fill in Column 1 of the table below with the name of each principle and in Column 2 write a sporting example that applies that principle.

Principle	Sporting example
Warm-up	Track athletic

- 2 Draw up a table with two columns.
 - a In Column 1 list all the personal factors that limit your learning and performance of movement skills.
 - b In Column 2 list all the personal factors that assist your learning and performance of movement skills.
 - c For each factor in Column 1 explain how you could eliminate or work around this limitation to improve your learning and performance.

Recipe for successful performance

People who are successful at learning skills and performing tend to have the following characteristics, which you can develop and build into your lifestyle:

- **Set goals**—they set themselves realistic training, personal and competition goals.
- **Training**—they arrive early, leave late and always try to learn and perform drills well.
- **Mental preparation**—they use mental rehearsal daily to picture either training performances or competition situations.

- ➔ **Lifestyle**—they listen to their bodies. They push themselves when they feel great; they hold back if they feel poor. They rest well and they eat well.
- ➔ **Evaluation**—they honestly analyse and evaluate their performances. They learn from mistakes and work out strategies to improve. They see defeats and disappointments as hiccups rather than as an excuse to throw a tantrum.
- ➔ **Respect for others**—they assist other team-mates by encouraging them and praising their achievements.
- ➔ **Self-discipline**—they build self-discipline and control so that they try when they are tired, never argue with opponents or officials, and focus on producing their best performance for that day.
- ➔ **Enjoyment**—they enjoy reaching goals and helping others to achieve theirs.

Figure 1.52 The ingredients of success



Composition and performance

Composition is when you combine the movement skills you have learned into personally unique patterns. The more creative or imaginative you are, the more interesting and unique will be your movement composition. For example, your gymnastics composition might include a sequence of tumblers, balances, steps and jumps, all in time to a piece of music.

Performance is when you actually do a movement skill, a routine or a composition. For example, for a gymnastics routine you plan which movement skills you will perform and in what order, then you perform them. You get a buzz from the feeling of doing something active that you have planned.

Figure 1.53 Gymnastics is a sport that allows you to perform creative compositions





Figure 1.54 Movements are linked together to form routines

Planning your own composition

Before you can plan your own composition, you need to know several terms and principles. All compositions should have these features:

- ➔ A series of **movement skills** should be linked together to form **sequences** or **routines**.
- ➔ All sequences should be important to the **overall purpose** of the composition.
- ➔ Sequences should include **variety**, such as changes in body part or speed (tempo) or direction or group size, to maintain interest and spectacle.
- ➔ Sequences should include **contrasts** that show the extremes of movement, for example, skip then pause, or fast then slow, or leap then crouch, or hard then soft.
- ➔ Sequences should be linked by **smooth transitions** so there is a continuous flow from sequence to sequence.

Developing a composition: four steps

The four steps to follow in developing your composition are:

- 1 Plan and master the **basic movement skills** (which should include the elements of space, time, force and flow).
- 2 **Sequence** these movement skills together into flowing patterns, routines or set plays.
- 3 **Perform** the complete composition.
- 4 **Evaluate** your performance by any of the following methods:
 - ➔ how it felt
 - ➔ how it looked to either yourself, as viewed on video, or to another member of the class
 - ➔ by asking yourself: ‘Was the technique correct?’

Composition in games and sports

All games and sports follow the principles and elements of composition. They require you to:

- ➔ combine your skills to form **sequences**, for example, defensive shuffle, steal, weave, dribble and lay-up in basketball
- ➔ move within a specific **space**, such as a field or court, and use certain **skills**, depending on where you are on the field. For example, positional play demands specific skills such as tight marking in defence and quick leading by forwards
- ➔ vary the amount of force you use for your skills, the **direction** you move, the **part of your body** you use or whoever is near you, for example, quick passes when defenders are near
- ➔ have a **purpose** and perform your skills with that purpose in mind
- ➔ plan your **movements** or your team's movements so that you develop teamwork, offensive patterns and defensive patterns.

Composition creativity

Using research information, your own experiences and your teacher's guidance, compose each of the following:

- 1 a one-minute gymnastics routine
- 2 a unique dance
- 3 an offensive strategy for your favourite sport
- 4 a defensive strategy for your favourite sport.



Activity 1.12

Types of performance

During your life, you have chosen or been forced to perform many different activities, ranging from ballet to badminton, cricket to canoeing, gymnastics to golf, swimming to soccer, or tennis to touch football. Some people love every activity, some people are good at every activity, some people try every activity, and some people avoid every activity.

Because so many people of your age enjoy performing activities, there must be some good reasons for choosing to perform. The following quotes are from a sample of teenagers.

- ➔ 'My dad played soccer in Greece so I play soccer in Australia.'
- ➔ 'Mum and my sisters play netball so I can't help but play.'
- ➔ 'I met my boyfriend at the basketball club so we have something to share.'
- ➔ 'I like ice-skating because it looks and feels so graceful.'
- ➔ 'I like going down to the club because you're with mates and your skills get better.'
- ➔ 'I like to compete and I love to win.'
- ➔ 'I like to get away from parents, homework, TV and everything and go for a ride.'
- ➔ 'If you surf you are "cool", so I surf.'
- ➔ 'Rock climbing is thrill seeking but best of all, it's a challenge.'

- ➔ 'I train hard and I play hard because I don't want to turn around at 20 and be a "coodabeen champion". I want to find out how good I can be.'
There are several possible types of performance:
- ➔ a **competitive** or **non-competitive** performance
- ➔ an **individual** or **team** performance.

Figure 1.55 Liesel Jones specialises in producing elite competitive performances



For you to develop fully as an active person, you need to regularly experience all types of performance because each allows you to develop qualities that are useful for the rest of your life.

Competitive performance

Competitive performance allows you to experience the thrill of success and prepares you for the losses that occur in life. People who lack experience in competitive activities may find it hard to handle competition in their careers.



Figure 1.56 A competitive performance

Non-competitive performance

A non-competitive performance allows you to experience the fun of performing skills because it is enjoyable. People who lack experience in non-competitive activities often find it difficult to enjoy 'social' sport or active leisure pursuits because in these activities winning and losing does not matter.

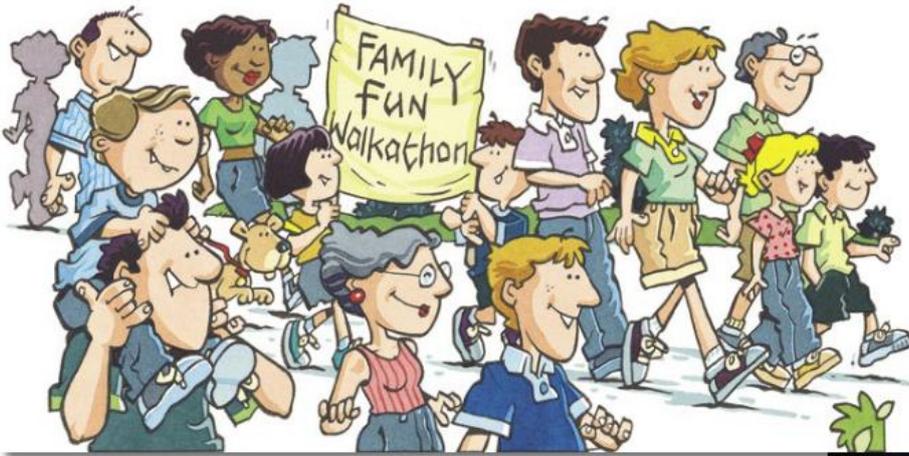


Figure 1.57 A non-competitive performance

Individual performance

An individual performance allows you to experience self-reliance and independent decision-making. People who lack experience in individual activities can lack self-confidence and rely on others to make decisions for them.

Team performance

Team performance allows you to experience working with a group to achieve a common goal. People who lack experience in team activities can be selfish and self-oriented, which can be a handicap when it comes to cooperating with others at work or home.

Try all types

To get the most out of activity you need to try all types of performance. For example, you might play summer competition tennis (individual, competitive), winter basketball (team, competitive), and regularly go roller-blading with friends (non-competitive). Or you might surf all year round (individual, non-competitive), swim for a club in summer (individual, competitive) and play hockey in winter (team, competitive).

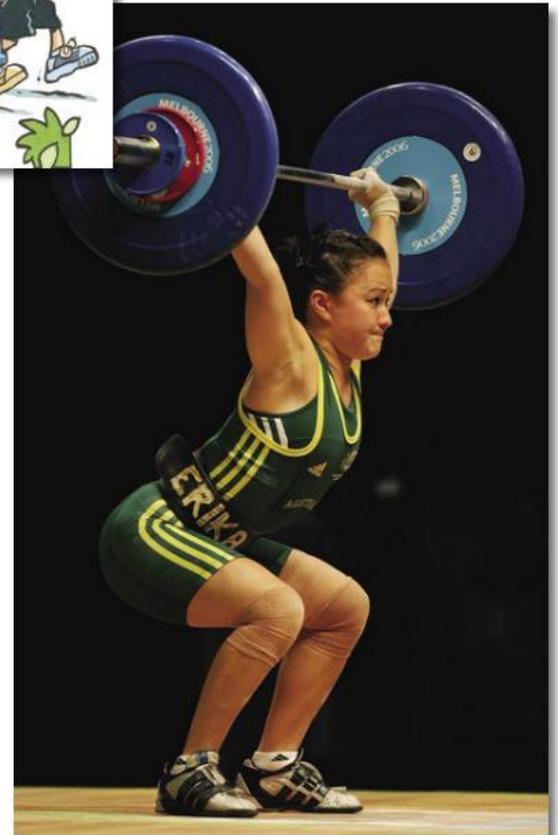


Figure 1.58 An individual performance



Figure 1.59 A team performance

Activity 1.13



What a performance!

- 1** Look at the reasons the teenagers gave on pages 37–8 for performing some sort of activity. Classify each reason as:
 - a** social
 - b** cultural
 - c** achieving personal potential
 - d** relaxation
 - e** challenge
 - f** aesthetic (looks good).
- 2** Now write down each activity you participate in and the reason or reasons you perform your activities. Then make a list of the most popular reasons given by your classmates for choosing the activities they perform.
- 3** To get the most out of activity, it is recommended that you perform in individual, team, competitive and non-competitive activities during your adolescent years. Which activities would you choose in order to carry out this recommendation, and how could you build these into your lifestyle?

Performance roles and responsibilities

Over the next few years you may be asked to perform as a coach, captain, team member, umpire, spectator or scorer. Each of these jobs involves a specific performance role, and each job carries with it a number of responsibilities. If you are to perform the job well, you must understand what it involves.



The captain

If you are selected as a captain or leader, consider it an honour but remember that such a position carries with it responsibilities. To be an effective leader you must:

- ➔ be the players' spokesperson to the coach if the players have concerns or suggestions
- ➔ be the players' spokesperson to the umpire or referee if the players have queries or concerns
- ➔ lead by example—always give your best at training and in games, encourage your team-mates, give everyone a fair go and always act in a fair manner
- ➔ assist the coach at training by helping to set up equipment or organise players for training drills.

Figure 1.60 The captain directs his team-mates

The team member

The following tips will help you get the most out of your performance as a team member.

- ➔ Work together—teamwork is what playing sport is all about.
- ➔ Give 100 per cent—you owe it to yourself and your team members to be dedicated to performing your best.
- ➔ Accept the way things are—acknowledge the weaknesses and strengths of team members, including yourself, and seek out ways to work around them.
- ➔ Be committed—be willing to go the extra mile. It is the little things that drive success.
- ➔ Show self-control—things may not always run smoothly on the field or at training. You may receive a call that you feel is unjustified or criticism that you find hard to accept. How you deal with difficulties will determine how effective you are as a team member.

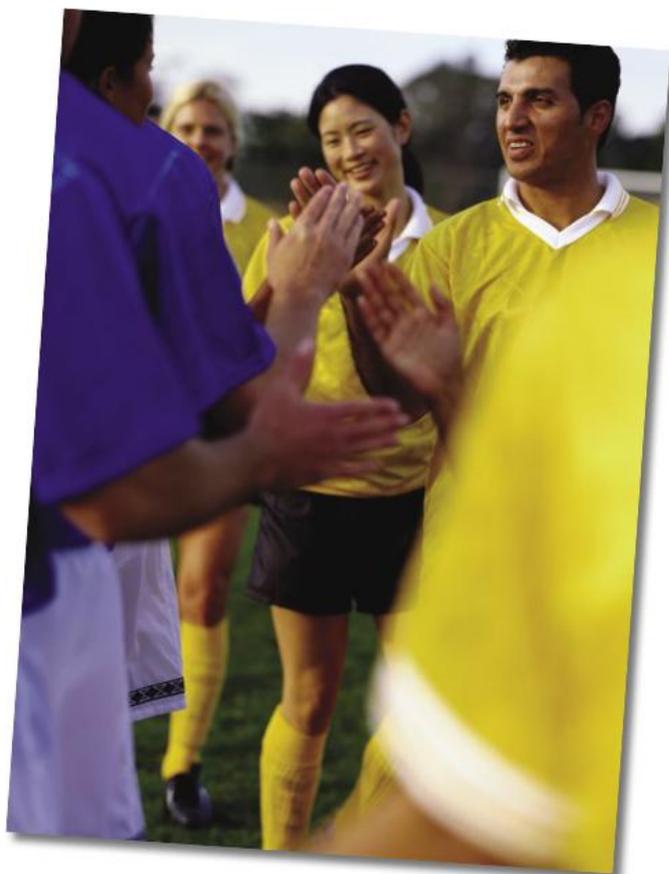


Figure 1.61 Members from opposing teams congratulate each other after the game

You as a team member and your coach

At your age, you have probably experienced several coaches—a teacher/coach in a school team, a local parent/coach in your club team, or a tennis coach for tennis lessons. How you relate to your coach will in many ways determine how quickly you learn physical skills and how much you enjoy the sport or activity.

Coaching is a very difficult job. A good coach must:

- ➔ get to know the personality of each player
- ➔ teach them a number of complicated skills or team plays
- ➔ help the group form a motivated and cooperative unit
- ➔ reward learning and praise good efforts
- ➔ above all, make playing and training fun.

This takes a lot of time and effort. As you know, most coaches do not get paid. They coach because they like the sport or activity.

Given the difficulty and importance of the coaching job, you and your coach need to have a good relationship. Here are some guidelines to help you get on well with your coach.

Assist your coach

Assist your coach in setting up or packing away equipment. ‘Many hands make light work.’ Your help can save your coach valuable time.

Follow directions

Follow your coach’s directions quickly and quietly. If you do, training runs smoothly and efficiently and you get the maximum benefit.

Figure 1.62 Listen to your coach



Listen to your coach

When your coach is speaking to you or your group in a huddle, focus on them, not on other distractions.

Follow advice

Listen to your coach's advice and try to put it into practice. Remember that it is your coach's job to tell you:

- ➔ how your skills are developing
- ➔ whether or not your technique is right
- ➔ how you should position yourself on the field.

This sort of information is called **feedback** (see pages 16–18). Without it you cannot learn properly. When your coach tells you to 'Take your racquet back earlier' or 'Keep your head down' or 'Tuck your elbows in', they are giving you feedback to help you learn; they are not picking on you.

Communicate with your coach

Do not just listen. If you do not understand or you are not happy with some aspect of the game, talk to your coach about it. This gives your coach feedback so that they can learn more about you, the team and their coaching.

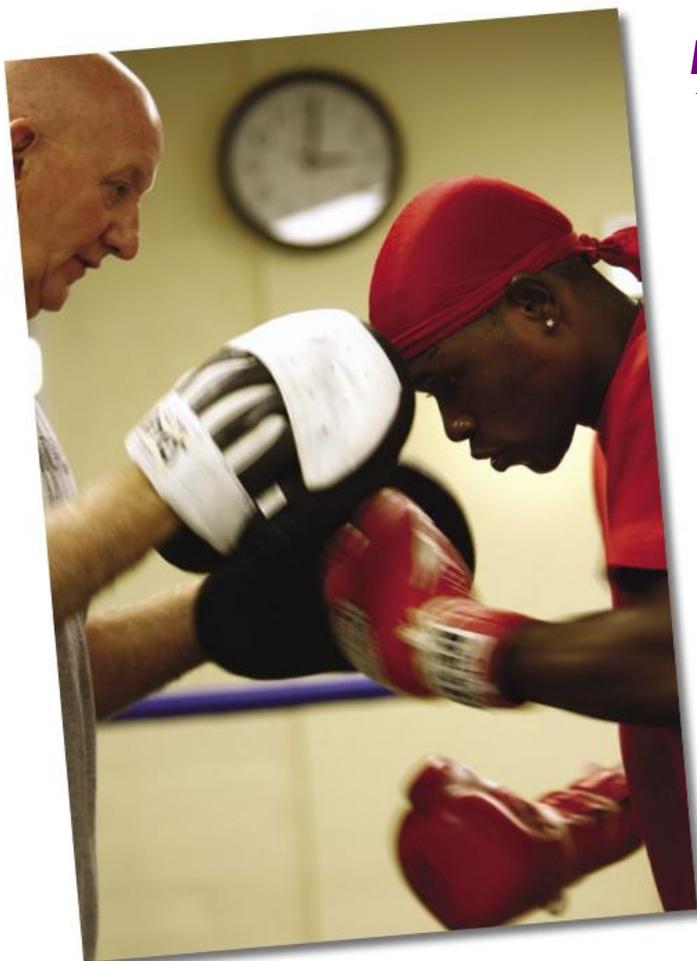


Figure 1.63 Boxer Gairy St Clair, right, with his coach Johnny Lewis

Be tolerant

Be tolerant if your coach makes the odd mistake or sometimes seems tired and irritated. It is a difficult job done in their spare time. Coaches, like players, are only human.

You as a team member and the umpire, referee or official

At this stage of your sporting or physical activity career, you have probably had little chance to umpire games. You probably would not want to anyway.

Most people prefer to play or watch rather than umpire because it is a difficult job. Umpires must:

- ➔ make very rapid decisions for long periods of time
- ➔ know the rules backwards
- ➔ keep up with play even when tired.

It is not surprising that most competitions find it difficult to get umpires. Usually people take on an umpire's job in their spare time and are unpaid. In most sports they are made to feel unpopular even before they walk out onto the field or court.

Umpires are very important in sport because you need them in order to have a game. Could you imagine two rugby, basketball, netball or cricket teams trying to umpire themselves?

Since umpires are essential, you can increase your enjoyment of your sport if you get on well with the umpire. Here are some guidelines to follow.

Tolerate mistakes

Like players, even umpires make mistakes. It is a difficult job, so be patient and tolerant.

Do not argue

Do not argue with or advise the umpire. An umpire will not change a decision. Arguing only distracts you and aggravates the umpire.

Own up if you get caught

When the umpire pulls you up for 'stepping' or 'offside' or 'out of bounds', do not act as if it did not happen. Cop it sweet and get on with play!

Encourage the umpire

Encourage the umpire with comments such as 'Good decision' or 'Fair enough' so that they feel positive towards you. Thank the umpire at the end of the game.



Figure 1.64 Good umpires and referees stay close to the action

Activity 1.14



Coaches, umpires and you

1 For Case studies 1, 2 and 3, suggest ways of improving the situation.

Case study 1 Jill is called for obstruction soon after the netball match begins. She glares at the umpire and mutters under her breath. Soon after this it happens again, and Jill becomes even more aggro towards the umpire. The rest of the game follows the same pattern.

Case study 2 Luke is annoyed by an opponent who does sneaky things when the umpire cannot see. Eventually Luke retaliates and is penalised by the umpire. Luke abuses the umpire for being blind.

Case study 3 The coach tells Peter to stay very close to his player. Peter is trying to do this, but when the ball comes Peter is distracted and forgets about his player. The coach becomes annoyed and tells Peter again. Peter gets cross and says he is sick of being picked on.

2 For Case studies 4 and 5, write down:
a how you would feel in each situation
b what you would do in each situation.

Case study 4 You are coaching the local hockey team. You have had a hard day at work. When you arrive at training, you have to set up the equipment while your players fool about. When you start the training session, two players do not listen and mess up the training drill.

Case study 5 You have given up your Saturday morning to umpire an under-14 basketball match. You call a player for travelling. She stops and says to you, 'I did not. You umpires can never get it right.'

The spectator

You often find yourself in the role of a sports spectator, whether watching television, an F-grade match at the local park or a top-level match at the nearest stadium. Unfortunately some spectators often lose sight of why they are watching. Therefore they spoil the fun for the players, officials and other spectators.

To be a responsible spectator, try following these guidelines:

- Remember that children and most adults play sport for fun, not to entertain spectators.
- Applaud good performances by both teams. Do not just have eyes for one side only.

- ➔ Respect the officials' decisions. Screaming, shouting and whingeing makes no difference to the result. They just make you red-faced and aggro.
- ➔ Never ridicule a player, particularly a child or adolescent, for making a mistake during a competition. They know if they have made a mistake; they do not need you to tell them. Remember, it always looks easy when you are a spectator.
- ➔ Condemn the use of violence by players or other spectators.
- ➔ Show respect for your team's opponents. Without them there would be no game.
- ➔ Encourage players to follow the rules and accept the officials' decisions.
- ➔ Do not make a spectacle of yourself by using foul language, abusing officials and harassing players or coaches. It does nothing for them, and it certainly does you no good.



Figure 1.65 Responsible spectators

The referee/umpire

Being an official in charge of a performance is not a popular job. It is very difficult to be a good umpire, referee or judge because you have to make rapid decisions for long periods of time, often without any assistance from players or spectators.

However, there would be very little competition in sport if umpires did not exist. If you are put in the situation where you have to referee, here are some useful tips:

- ➔ Make sure you know the rules clearly.
- ➔ Make decisions quickly and use the whistle loudly to stop play.
- ➔ Explain your decision quickly, then allow play to continue.
- ➔ Keep close to the action so you can see clearly and intervene quickly.
- ➔ Be consistent in your decisions and interpretation of the rules.
- ➔ Be very strict with unsporting behaviour right from the start.
- ➔ Compliment players from both sides on good play.
- ➔ If necessary, modify the rules to match the skill level of the team members.

Many sporting associations run umpire/referee courses. Many people your age make good casual money by refereeing or umpiring junior netball, basketball, softball, soccer, hockey, football and other sports. If you are keen to umpire, contact the appropriate state sporting association for more information.



Figure 1.66 In cricket the umpire is right among the action

The scorer/timekeeper

While official jobs such as scorer or timekeeper do not require as much skill or concentration as umpiring, playing or coaching, they are still vital to any performance. Poor scoring or timekeeping can result in an unpleasant scene or even an invalid result.

Figure 1.67 Scorers adjust the total in a junior cricket match



If you are given the role of scorer or timekeeper, these tips should help you fulfil your duties:

- Concentrate on the game and the umpire's signals. If you are unsure whether a score counted, signal to the umpire for clarification.
- If spectators or substitutes block your vision or distract you, explain what you are doing and ask them to move away.
- Before the performance begins, check that you know how to fill in the score sheet and how long each quarter or half lasts. If you are not sure, ask the umpire. Do not let the match begin until you are sure.
- It is safest to share the scoring/timing with an official from the opposition team so that there are no arguments or accusations at the end.

Activity 1.15



What's your decision?

The following case studies are taken from real situations that have occurred during sports matches. For each case study discuss how the situation could have been prevented.

Case study 1

It was an under-16 rugby match. The game was close, but it had been a spiteful and unsporting game, fuelled by spectators who constantly abused the referee and the opposition. Five minutes into the second half, a large brawl erupted. The referee stopped the fight, called the two captains over, and said, 'This is not sport, and I don't do this job to be abused by people who think cheating is fair enough. The game is cancelled.' With that he walked off and drove home.

Case study 2

It was an under-14 netball match. It was a fair and very close match. When the hooter sounded, one team's scorer had it as a draw while the opposition scorer on the other side of the court had her team winning by one.

Case study 3

It was an under-15 school basketball match and the home team supplied all the officials. In a tense finish, the home team was up by two points, but the opposition had possession and was dribbling down the court. Suddenly the hooter sounded. An argument erupted, with the opposition accusing the timer of sounding the hooter early. The timer claimed that the opposition was wrong and that she had not cheated.

Case study 4

It was an under-14 hockey match. Players had been back-chatting and arguing with the referee throughout the game, making it unpleasant for everyone. By the second half, the referee was sick of it. When one player whinged about a decision, the umpire sent her off. The spectators became angry because her action was only minor compared to some of the earlier incidents.

The coach

To be an effective coach you must make sure that you abide by the following code of behaviour:

- ➔ Understand all the rules of the game or activity.
- ➔ Have a detailed knowledge of the movement skills, practice drills and tactics of the activity.
- ➔ Have a season-long coaching plan that states what will be covered in each training session.
- ➔ Arrive at training early to set up the equipment and activity stations so that training can begin as soon as the players arrive.
- ➔ Observe all players at training and provide useful feedback to each player.
- ➔ Make your players feel comfortable and happy with the training sessions and games.
- ➔ Always encourage your players and encourage them to encourage each other.
- ➔ Adapt your coaching style to suit your different players. For example, you must be firm with those who lack self-discipline, friendly with those who always 'put in', and listen to those who want to make suggestions.
- ➔ Be reasonable in your demands on your players' time, energy and enthusiasm.
- ➔ Teach your players that rules of the sport are mutual agreements that no one should evade or break.
- ➔ Whenever possible, group players to give a reasonable chance of success.
- ➔ Avoid over-playing the talented players. The 'average' players need and deserve equal time.
- ➔ Remember that the members of the team participate for fun and enjoyment, and that winning is only part of their motivation. Never ridicule or yell at players for making mistakes or losing a competition.

- ➔ Ensure that equipment and facilities meet safety standards and are appropriate to the age and ability of the players.
- ➔ Take into consideration the maturity level of the children when scheduling and determining the length of practice times and competition.
- ➔ Develop team respect for the ability of opponents, as well as for the judgment of officials and opposing coaches.
- ➔ Follow the advice of a doctor when determining when an injured player is ready to recommence training or competition.
- ➔ Make a personal commitment to keeping yourself informed of sound coaching principles and the principles of growth and development of children and adolescents.
- ➔ Never use put-downs based on gender or race.

Figure 1.68 The coach instructs his players



Figure 1.69 The coach provides feedback during training



Accreditation

Being a good coach is a very important job because you have responsibility for a team that is relying on you for their skill development and enjoyment. To do the job well you really need to be qualified. This is where the National Coaching Council can help. The National Coaching Council has developed a National Coaching Accreditation Scheme (NCAS) designed to increase coaching confidence and ability.

NCAS training programs include the following components:

- coaching general principles—generic principles of coaching and athletic performance that apply to all sports
- sport-specific—skills, techniques, strategies and scientific approaches to the particular sport
- coaching practice—practical coaching and application of coaching principles.

The Australian Sports Commission (ASC) currently has two levels of coaching general principles available to be delivered by approved Coaching & Officiating (C&O) agencies. These are:

- Beginning Coaching General Principles (previously called Level 1 Coaching Principles)
- Level 2 Coaching Principles

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Completing the above courses is just the first step to gaining coaching accreditation. In order to become fully accredited you must participate in sport-specific courses and practical sessions approved by the Australian Sports Commission. These courses are conducted by various national, state and regional sporting associations.

If you want to become a qualified coach, contact the state sporting association for the sport you are interested in. Find out where and when courses are being conducted. Sport cannot function without good coaches.

You will find that attending a coaching course not only makes you a better coach but it also tends to make you a better player.

In addition to being accredited, it is now law that any person over the age of 18, who works with children either for their job or in a voluntary capacity, must apply for a Positive Notice 'Blue Card' from the Commission for Children and Young People and Child Guardian.

Give it a go!

- 1 Make a list of the various roles you have taken on within various sports and activities.
- 2 How would the skills that you developed in these roles benefit you if you were to become a coach?
- 3 Choose a sport that you are interested in and contact the appropriate state sporting association to find out what their courses involve, including information covered, costs and age requirements.



Activity 1.16

The key to a successful team

Strategy and tactics are of little benefit if your team doesn't come together as one. Here are some features of a successful team.

Goal setting

Goal setting is important in any team to ensure that everyone has a common direction. It also allows players to develop individual goals, which will help the team achieve its goals. If a major goal for a netball team is to move the ball down the court quickly, individual players need to take responsibility for refining their ball skills to make sure the goal can be achieved.

Communication

Communication is essential to performance both on and off the field. Players need to feel that they can express themselves by making suggestions and decisions. In turn you need to be prepared to listen and take direction. Many teams find it valuable to take time after a game to debrief and share information.

Respect

Respect for your sport, team members, coaches, opposition and officials ensures that the spirit of the game is upheld at all times. By supporting your team members you foster a fun and safe environment in which to play.

Enjoyment

Enjoyment is the most important aspect of any game. If you are finding yourself unmotivated and not wanting to participate in your sport it is most likely that your team-mates feel the same. What is it that made you take up sport in the first place? This may be the key to reigniting the fun!

Activity 1.17



The key to success

- 1 In the following situations identify what is hindering the following teams from achieving success. What can be done to put the team back onto a winning path?
 - a You are coaching the under-12 touch football team for your local club. Recently, you have noticed that a few of the players have made a habit of turning up late to practice.
 - b While playing school netball, your opponent is constantly swearing under her breath and making rude comments about the umpire.
 - c You are on your way to training and as you walk past the skate park you find yourself considering skipping practice to hang out with your friends.
 - d Lately, you have noticed a fellow team-mate has not been taking training seriously. He is often unprepared and rude to your coach.
- 2 Each player brings essential skills to a game. Choose a sport and list what expertise is required for each position.

Fair play

There may be situations throughout your sporting career when people or circumstances make your enjoyment or experiences with your sport less enjoyable. As a sports person you deserve certain rights and in turn must take responsibility for your own actions.

The Equal Opportunity Commission (EOC) is a government organisation set up, within each state and territory, to ensure that people are aware of their rights and responsibilities. 'Play by the Rules' is an initiative developed by the Australian Sports Commission, all national sport and recreational agencies and anti-discrimination agencies. This project is aimed at educating sports people about their rights and responsibilities on and off the field.

Your rights include:

- to be safe and protected from any harm or abuse
- to participate equally with everyone else
- to be respected, cared for and listened to
- to be supported by others involved in your sport or recreation
- to be safe from put downs, harassment, ridicule and bad language.

Your responsibilities include:

- to act within the rules and spirit of the game
- to give positive comments to others involved
- to respect coaches' and officials' decisions
- to respect other players and participants
- to keep your emotions in check
- to not use put downs, harassment, ridicule or bad language.

from Play by the Rules,
Equal Opportunity Commission

Figure 1.70 Playing by the rules is all about keeping sport fun

www.playbytherules.net.au

Play by the Rules

Fair and safe behaviour in sport and recreation

Everyone needs to feel safe and to act fairly and respectfully towards each other.

Be a good sport

- Treat all participants in your sport as you like to be treated yourself.
- Co-operate with your team-mates, coach and opponents.
- Control your temper. Verbal abuse and sledging are not acceptable behaviours.
- Respect the rights, dignity and worth of all participants regardless of their ability, gender or cultural background.

You must feel safe

- playing, at training and practice
- travelling to and from games and training
- with other players, your coach or team personnel

No-one should

- make you feel unsafe
- ask you to do things that you are not comfortable with
- verbally abuse you or anyone else
- make racist or sexist jokes or comments
- allow offensive pictures or graffiti to be visible
- look at or touch anyone in ways that make them feel uncomfortable
- make uninvited sexual comments that offend, intimidate or humiliate
- discriminate against or harass anyone else

Bad sporting behaviour is unacceptable and it can be unlawful.

www.playbytherules.net.au
Provides information and online training on equal opportunity and child protection laws to address inappropriate behaviour in sport. It complements the Australian Sports Commission's Harassment-free Sport Strategy.

If a person is not following your sport's guidelines and is behaving inappropriately or if you think that you have been abused, discriminated against or harassed, then tell someone about it:

- a friend, colleague or parent
- a club official or contact officer
- your state or national association
- your department of sport and recreation
- your equal opportunity or anti-discrimination body
- the Australian Sports Commission
- your child welfare agency or the police

Queensland Government
Department of Local Government, Planning,
Sport and Recreation
Level 5, 160 Mary Street,
Brisbane, QLD 4000
PO Box 15187, City East, QLD 4002
Telephone: 1300 656 191
Fax: 07 3235 4723
Web: www.sportrec.qld.gov.au

adca ANTI-DISCRIMINATION
COMMISSION QUEENSLAND
Telephone: 1300 130 670
TTY: 1300 130 680

Australian Government
Australian Sports Commission
www.ussport.gov.au

Supported by the Australian, State and Territory Governments

When is sport not a game?

If you find yourself in a situation where you believe you or someone you know is being treated unfairly, it is your responsibility to take control of the situation and do something about it. The problem will only get more intense the longer you leave it.

It is easy to be told not to put up with unfair or unethical behavior but what can you do about it? The following is a guide to the steps you can take in order to resolve any problems you may be experiencing both on and off the field.

The 3 Ts to conflict resolution

- **Think** about the situation. What is it that is concerning you? What do you want to change? At this stage you may find it helpful to write down what you are feeling. This will help you sort through your thoughts and put things into perspective.
- **Talk** to someone you trust. Sometimes getting something off your chest may be all that you need to resolve your problem. It will also allow you to work through your options.
- **Take action.** This may be going to the source of the problem and airing your issues, seeking professional advice or making a formal complaint. The most important thing is that you do not stop until you are happy with the resolution.

Sportsmanship

As a sportsperson you are constantly making decisions. Who will I throw to? Will I go to training? Do I choose to react to the referee's call on me? How you react to these situations shapes you as both an athlete and a person.

Think of a sporting identity who you consider to be a role model. Is your opinion based entirely on their physical ability or is it also influenced by how they behave both on and off the field? Sportsmanship is your ability to maintain integrity and respect while abiding by the rules of your sport, and being a good sport will significantly influence the choices that you make.

Activity 1.18



Being a good sport

- 1 Brainstorm the qualities that you believe are part of being a good sport.
- 2 Share your thoughts with your class and as a group design a 'Sportsmanship checklist'.
- 3 Using this checklist design an A3 poster highlighting the attributes of sportsmanship and display it in your classroom. You may choose to use the computer or draw your own design.
- 4 Using the checklist rate yourself in relation to sportsmanship. What things can you do to practise good sportsmanship?

Ethical issues in sport

Australians are proud of being a sporting nation. However, now more than ever we seem to be facing new and diverse ethical issues and concerns. Ethics refers to the 'unwritten rules' by which a person should live and is distinguished by how well we treat others and ourselves.

Here are some ethical issues that you may encounter as a sportsperson:

- ➔ sportsmanship, or lack of it
- ➔ sport rage, including harassment and bullying or inappropriate behavior by parents and spectators
- ➔ cheating or bias
- ➔ drug abuse
- ➔ biased media coverage, such as inaccurate reporting of your performance or attitude.

What ethical issues have you experienced that are not listed here?

The good, the bad and the ugly

- 1 Write down an incident you have experienced or heard about where a coach behaved in an unprofessional manner. Explain what you would have done if you were the coach in the situation.
- 2 Write down an example you have experienced where a coach's behaviour had a positive influence on your performance or enjoyment. What qualities did this coach have that you could adopt in your coaching style?
- 3 Read the 'Parents' code of behaviour'.
 - a Write down an incident you have experienced or heard about where a parent broke this code.
 - b Plan how as coach you could subtly make the parent aware of this problem so that it does not happen again. Share your answers in a class discussion.

Parents' code of behaviour

- If children are interested, encourage them to participate. However, if a child is not willing, do not force him or her.
- Focus on the child's efforts and performance rather than the overall outcome of the event. This assists the child in setting realistic goals related to her or his ability by reducing the emphasis on winning.
- Teach children that an honest effort is as important as victory, so that the result of each game is accepted without undue disappointment.
- Encourage children to always participate according to the rules.
- Never ridicule or yell at a child for making a mistake or losing a game.
- Remember that children are involved in organised sport for their enjoyment, not yours.
- Remember that children learn best by example. Applaud good play by all teams.



Activity 1.19

continued ...

- If you disagree with an official, raise the issue through the appropriate channels rather than question the official's judgment and honesty in public. Remember that most officials give their time and effort for your child's enjoyment.
- Support all efforts to remove verbal and physical abuse from sporting activities.
- Recognise the value and importance of volunteer coaches. They give their time and resources to provide recreational activities for the children, and they deserve your support.

Performance appraisal

There are many reasons for appraising performance, and many ways of doing it. Think about the people in your class. Who do you think are good performers? Now think about why you classify these people as good performers. Did you use any of the following methods of appraising performance?

Skill level

Performance can be judged according to skill level. For example, a performer who demonstrates every skill possible in a particular activity might be appraised as a good performer. However, a performer who demonstrates some skill, but never makes a mistake, could also be classified as a good performer.

Objective measurement of skills performance

Skills performance can be measured. For example, your performance level could be measured by a skills test or by taking game statistics (see Figure 1.71).

Those who score better skill test results or higher game statistics are thought of as more skilful performers. These sorts of measures of skill are **objective measures**, designed to eliminate personal bias. Statistics (such as test results, distances and times), not opinions, are used to make a judgment.

Figure 1.71 Basketball skills analysis sheet

Player	Possession skills				Disposal skills															
	Passes received	Dribble steals	Pass interceptions	Re-bounds	Chest pass		Overhead pass		Bounce pass		Overarm pass		Set shot		Lay-up		Jump shot		Dribble	
Davis																				
Wilms																				
Bourke																				
Alger																				

E = Effective, i.e. to a team member or scored. IE = Ineffective, i.e. to opposition.

Subjective evaluation

Subjective evaluation of skill performance relies on personal feelings or opinions. For example, you may judge a performance as very skilful because it looks difficult, it looks graceful, not many people can do it, or it feels great to do.

Subjective appraisal of performance is commonly used in non-competitive situations, whereas objective appraisal is generally used in competitive performances.

Win or lose

Perhaps the most commonly used, yet most narrow-minded method, of performance appraisal is winning or losing. A win-or-lose result says nothing about the level of skill, the enjoyment experienced by players or the level of entertainment for spectators. Remember, there is a lot more to performance than winning or losing.

Rule adherence

Another method of judging performance is assessing how regularly a player adheres to the rules. For example, game statistics could be compiled on how often each player has been penalised for a breach of the rules (see Figure 1.72). The player who is frequently penalised might need specific coaching to iron out difficulties because each time they are penalised the whole team suffers by losing possession.

Name	Rule violations					
	Contact	Obstruction	Over $\frac{1}{3}$	Offside	Play own ball	Ball out of play
Gerry						
Emma						
Tanya						
Kim	++++	++++ +++				
Yumi	++++	++++				
Stephanie		++++				

Figure 1.72 Rule adherence statistics in netball

Application of performance principles

The final useful method of appraising performance is by analysing how well each player puts into practice the performance principles discussed on pages 20–3. Game statistics can be kept for each player, showing how often he or she draws the defender, leads into space, runs in support, wall passes or first defends, and so on. Players who do not perform well can be given extra assistance at training.

Activity 1.20



High, low or in between

- 1** Practice some skills appraisals.
 - a** After a practical class on tennis, subjectively grade the members of your class from 1 = 'Most skilful tennis player' down to 10 = 'Tenth most skilful player'.
 - b** Now test yourself on the Dyer tennis test (below). Your teacher will set this up for you.
 - c** Compare your subjective rankings with the ranking of your classmates according to the Dyer test results. Give reasons for any differences, then discuss your ideas in class.
- 2** Here are the reactions of two Year 10 students to skills appraisal:

'It's a waste of time. It doesn't tell me anything I don't already know.'

'I like skills tests because I find out how I am going.'

 - a** How do you feel about skills appraisal?
 - b** What are the advantages of skills appraisal to a player and to a coach?
- 3** Different sports or activities use different methods for appraising performance. Find out the method used in each of the following:
 - a** gymnastics
 - b** ice-skating
 - c** diving
 - d** athletics
 - e** swimming.

The Dyer tennis test

Aim

To measure tennis ability.

Procedure

- 1** Stand behind a restraining line 2 metres from a rebound wall, which is about 3 metres high and 5 metres wide.
- 2** Mark a line on the wall one metre above the floor to indicate the net.
- 3** Bounce a tennis ball and begin rebounding it against the wall for 30 seconds.

Score

- 1** Your score is the maximum number of shots you can play against the wall above the net in 30 seconds.
- 2** The ball may bounce several times between hits or you may volley it, provided you are behind the restraining line.

Equipment

- a tennis racquet
- several tennis balls.



Figure 1.73 The Dyer tennis test is used to measure skill level in tennis

Games analysis

- 1** Choose a sport that you would like to analyse.
- 2** Decide which method you will use to analyse performance:
 - a** skills analysis (see Figure 1.71)
 - b** rule adherence (see Figure 1.72)
 - c** application of performance principles.
- 3** Draw up a grid for recording the analysis statistics.
- 4** Attend a match in your chosen sport and conduct an analysis of five players for a full half of the game.
- 5** Using your results, discuss each of the following:
 - a** Do my statistics allow me to evaluate who performed well?
 - b** For those players who had poor statistics, what can I suggest that they do to improve them?
 - c** How should a sensitive coach use statistics and analysis to assist players?



Activity 1.21

Literacy

You have been employed as a reporter for a major Australian sporting magazine. Your first assignment is to write a report entitled, 'Sportsmanship—is it alive or dead in today's society?' Your research should include interviews with relevant people and a collection of recent data and statistics.

Numeracy

As a class you will develop a statistics sheet that can be used for recording performance in the sport that you are currently studying.

Each student will have the opportunity to complete a statistical analysis of the performance of two players. Results will be collated and graphed.

Using the results write a comparison of the players' performances, including feedback on how to improve individual performance.

Lifeskills

In pairs, complete a video analysis on an athlete of your choice between the ages of 5 and 18.

Analyse the athlete's performance, including identification of their strengths and weaknesses, in order to develop a series of activities that could be used to improve the athlete's performance.

The degree of difficulty and enjoyment factor must relate directly to the athlete in order to effectively meet their needs and encourage improved performance.

Future perspectives

In pairs, choreograph a two-minute movement piece to music. Your routine may be based on dance or gymnastic movements and must include an exploration of space, time, force and flow.

Your teacher will give you the opportunity to share your sequence with other class members to gain feedback on your performance.

Where do I go from here?

www.ausport.gov.au

www.achperqld.org.au

www.srq.qld.gov.au/school_community/school_community.cfm

Physical activity and your community

Chapter 2



After the completion of this chapter, and after experiencing a range of practical activities, you should have an understanding and appreciation of:

- what you do with your time
- factors influencing participation
- fitness testing
- motivation for fitness training
- sports, recreation and fitness activities
- women in sport
- the commercialisation of sport
- sport for the disabled
- the benefits of an active lifestyle
- the meaning of fitness
- fitness training methods
- training principles and programs
- your community activity facilities
- technology in sport
- recreation and sport as a career.

What do you do with your time?



Figure 2.1 Parasailing is a popular adrenalin rush



Figure 2.2 Active leisure

Your time can be divided up in the following ways:

- ➔ **Work**—for people of your age, work includes school, homework, household jobs and paid jobs such as part-time employment.
- ➔ **Survival**—survival time is spent doing things your body needs to stay alive, such as sleeping, washing and eating.
- ➔ **Leisure**—leisure is that part of your time not occupied by survival or work. You can spend your leisure time relaxing, reading, listening to music, playing sport, enjoying a hobby or burning up energy in active recreation.

The way you look, feel and behave depends on:

- ➔ how you balance your work, survival and leisure time
- ➔ how you balance all the activities within your leisure time.

Your leisure time can be either passive or active:

- ➔ **Passive leisure time**—is used for rest, recreation or hobbies that require no physical exertion. They include watching television, listening to music, reading and playing computer games.
- ➔ **Active leisure time**—is used for sport or recreational activities that require physical exercise.



Figure 2.3 Passive leisure

They are heavy, they're our youngsters

By Jeff Sommerfeld, Health reporter

Younger Australians are less likely to eat fruit and vegetables and more likely to be overweight or obese, according to new research by the Australian Bureau of Statistics.

Researchers and medical experts have warned that poor nutrition and exercise habits of Australians are likely to cause a fall in life expectancies of future generations.

According to the National Health Survey, released by the ABS yesterday, 9 per cent more people aged under 24 are living sedentary lifestyles compared with 10 years ago.

However, people aged between 25 and 74 are on average leading more active lives.

Compared with 10 years ago, 42 per cent more people aged between 18 and 24 are obese. The research shows people aged under 24 are less likely to walk for exercise than any other age group, other than people aged 75 years or older.

People aged under 24 are also less likely to eat the recommended daily amounts of fruit and vegetables compared with other age groups.

Australian Medical Association Queensland president Steve Hambleton said parents had a vital role to play in teaching children good nutrition and exercise habits which would last them a lifetime.

Dr Hambleton said the current generation of Australians ran the risk of having shorter lifespans than their parents because of lifestyle issues.

The need to encourage children to lead more active lifestyles has seen a number of health clubs open in recent years catering for parents and their children. Most fitness clubs require members to be aged 18 years.

However, centres such as Active Generation at Brisbane's Paddington caters for parents, babies and children of all ages, according to manager Natalie Black.

Ms Black said the centre was ideal for children who had less sporting prowess, as it had activities that did not require them to be competitive as many sports did.

'Healthy attitudes to exercise are important to be developed from an early age,' she said.

'We have more of an emphasis on keeping fit.'

The Courier-Mail 28 February 2006

Time strips

- 1 Cut out two paper strips.
- 2 Divide each paper strip into 24 equal sections.
- 3 On the first strip (A), record all your activities over 24 hours of a typical week day.
- 4 On the second strip (B), record all your activities over 24 hours of a typical weekend day.
- 5 Now draw up a table (see Figure 2.5 on next page) showing the total time spent on 'survival', 'work', 'active leisure' and 'passive leisure' for a week day and weekend day.
- 6 Compare your results with those of your classmates and discuss any major differences. For example, some people of your age will only need eight hours of sleep while others need 11 or 12 hours of sleep; and some will have zero active leisure and others several hours of active leisure.
- 7 Make a class list of all the activities classified as 'leisure'. Next to each, write 'active' or 'passive'.
 - a What are the advantages of active leisure activities?
 - b What are the advantages of passive leisure activities?
- 8 Do you think you have a good balance between your active and passive leisure pursuits? Explain your answer.

continued ...



Activity 2.1

- b** Could you increase the amount of physical activity in this time slot? If so, what category of activity would you take time from?
- c** Identify the types of physical activities that you would like to do in this timeslot.
- d** What equipment would you need to be able to participate?
- e** What do you consider to be barriers for involvement in physical activity at this time?
- f** If you could participate in physical activity at school during this time, what would it be?
- g** If you could participate in physical activity in a local park during this time, what would it be?
- 3** Suggest ways of incorporating physical activity into the After School Program at your school.
- 4** How do you know if you are getting enough active leisure? The bare minimum is the FITT formula (see pages 99–101).

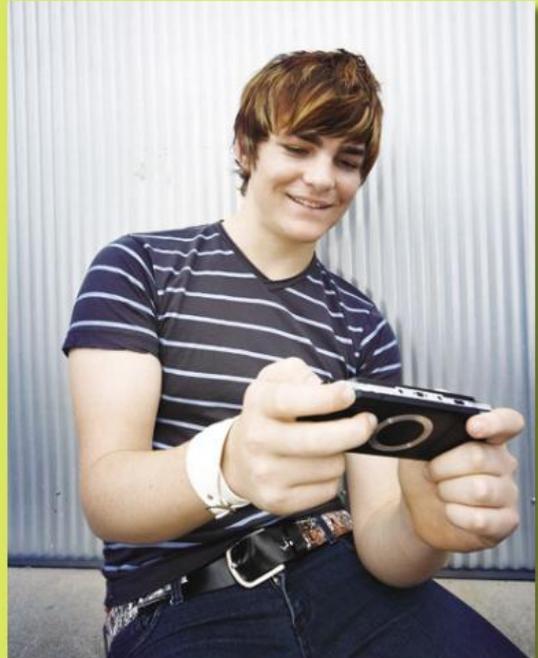


Figure 2.6 Sedentary recreation dominates the lives of many Australian children

Teen recreation: television wins, sports loses

- 1** Using the activities listed in your time strips (see Activity 2.1 on pages 61–2), find out the main leisure activities of members of your class.
- 2** What was the main leisure activity among the girls in your class?
- 3** What was the main leisure activity among the boys in your class?
- 4** Are they different? Why?
- 5** Compare the results from your class with the results given in the article ‘Everyone must help fight this weighty issue’ on page 64.
- 6** If a similar survey is carried out in the year 2020, do you think the results among people your age will be different? If so, how and why?
- 7** Make a survey of members of your class to find out which students have sharply decreased their sporting and other physical activities during the last year or so. For each student who has decreased activity, write down their reasons for being less active. Make a list of these reasons and classify each as negative (too lazy, stress at home or school, felt depressed, just gave up) or positive (made a decision to switch to a less demanding activity, decided they were doing too much).
- 8** If the reasons were negative, in a class discussion talk about ways of fixing the underlying problems instead of reducing physical activity.
- 9** Write down five ways in which sporting and physical activity might help solve day-to-day personal problems.



Activity 2.3

Everyone must help fight this weighty issue

Late last year, in a balanced, thoughtful article on young people, the media and health, the *Medical Journal of Australia* quoted research showing that Australian infants are spending nearly 90 minutes a day watching television. This figure rises to more than two hours a day for 4–5 year olds, and close to four hours a day for 10–13 year olds.

Such fondness for the small screen, then, suggests that many young people will at least see a new series of advertisements, promoted by Health Minister Tony Abbott, encouraging them to spend less time watching television, get off the couch and exercise by finding enjoyment in sports and games, swimming, bushwalking and being more active generally. The advertising campaign is part of a \$116 million program announced by Prime Minister John Howard 18 months ago, which includes \$90 million to get kids active after school and \$15 million to encourage school canteens to serve more nutritious food. In Queensland, State Government initiatives have already brought significant improvements in the quality of school tuck shop food.

The federal campaign is aimed at turning around the growing problem of obesity and obesity-related illnesses among Australian children. According to Government figures, one in 10 children younger than 16 is obese, and one in five is overweight. There is a real risk, as Prime Minister John Howard points out, that today's young people could be the first generation in modern history with lower life expectancy than their parents. The consequences for Australia's already overstretched

health systems could be dire. The success or otherwise of the campaign will depend on much more than the effectiveness of television ads or the banning—which some critics of the Government want—of all junk food advertisements during peak children's viewing times. While the advertising industry is right to be looking to tighten up its regulatory code in relation to fast food ads, the issues that need addressing are more complex and wide ranging.

Family awareness, for instance, of the need to buy and cook healthy foods on a permanent basis and not just for a few weeks is important, as is parental example in getting off the couch and taking part in the kinds of activities that children will be keen to join in. As Opposition health spokesman Julia Gillard says, it is often the overweight or obese children with low self-esteem who are most reluctant to participate in activity, and the provision of opportunities for safe outdoor play—with both competitive and non-competitive sporting activities for children of all levels of athletic ability—is important. Limiting television viewing and time spent on the internet and playing computer games, too, is important, too given the fact that between television, the internet, iPods, and mobile phones, many older children and teenagers are spending as much as six hours a day in largely sedentary pursuits. The start of the Federal Government campaign is an opportunity for parents, children themselves, schools and the community in general to take positive steps towards healthier lifestyles.

The Courier-Mail 6 February 2006

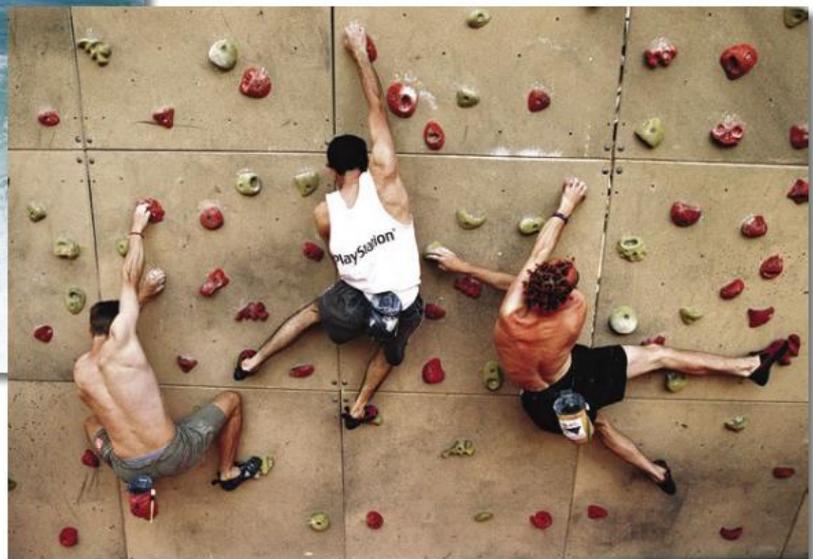


Figure 2.7 Active lifestyles

Building an active lifestyle

Why should you bother building an active lifestyle and maintaining it throughout your life?

Exercising can be hard work and difficult to fit into a hectic schedule of school, family life, part-time work and social life. There are some convincing arguments for regular exercise that you should consider, then make your decision on whether you will build an active or a passive lifestyle.

Here are four good reasons for building an active lifestyle:

- ➔ because it is the most enjoyable way to live
- ➔ because you live in a sedentary society
- ➔ to avoid diseases, illnesses and injuries that are caused by lack of activity
- ➔ because you can.

The statistics

The statistics on lifestyle-related health for teenagers are very depressing.

For example:

- ➔ up to 80 per cent of 15-year-old girls and 20 per cent of boys are aerobically unfit
- ➔ up to 50 per cent of 12 to 15 year olds have unacceptably high blood cholesterol levels
- ➔ one in every three teenagers is overweight or obese
- ➔ about 50 per cent of Australian teenagers do not take part in regular exercise
- ➔ more than 50 per cent of teenage boys and 25 per cent of girls cannot touch their toes
- ➔ on average, 15 year olds tend to be less fit than 14 year olds.

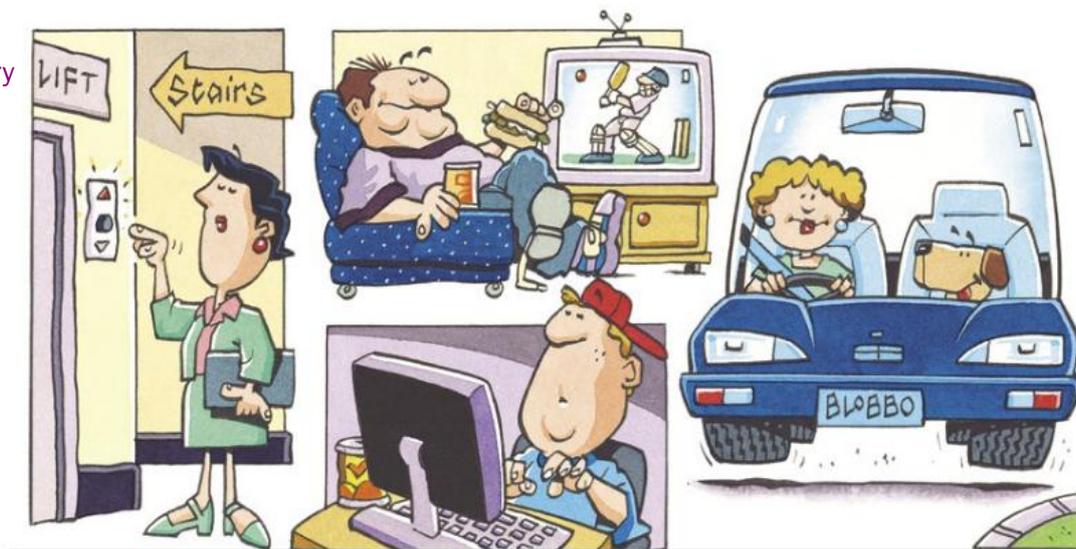
Most Australian teenagers like to think that they fit Australia's international image of fit sun-bronzed Aussies. The statistics say otherwise. Children are spending more time in sedentary activities such as watching television and playing computer games and less time enjoying physical activity. For example, 20 to 25 per cent of Australian children do not participate in sufficient physical activity to gain a health benefit.

For many of you reading this chapter, you have been the fittest you will ever be in your life unless you set yourself some fitness goals. In other words, as an average Australian teenager 14 to 16 years old, unless you work at it, your fitness is deteriorating and will continue to deteriorate throughout your life. Is it any wonder Australian adults suffer from so many illnesses related to poor fitness? It would be good if you could prove the statistics wrong.

Living in a sedentary society

You live in an industrialised and automated society. When you get a job in industry, whether blue-collar (requires manual labour) or white-collar (office work), machines now do most of the work. This is the age of computers and pushbutton labour-saving devices. At home there are dishwashers, automatic

Figure 2.8 We live in a sedentary society



washing machines, dryers, electric toothbrushes, and even lawnmowers that you can ride. There are escalators and lifts to save you walking upstairs. Many of you are driven to school rather than walking or riding. The only regular activity many of you get is watching sport on television rather than actually playing.

Automation can be great. It is much better for everyone if machines do the work and we can relax. However, not only is society automated and industrialised, but it has become sedentary—in other words, you spend most of your time sitting down.

Physical activity has disappeared from many jobs, and taken with it the physical fitness of many people. For example, 54 per cent of men and 55 per cent of women work in occupations that demand little physical effort, and only 11 per cent of men and 7 per cent of women work in jobs requiring heavy physical effort.

Therefore, for most Australians their job gives them zero fitness. When you consider that only 16 per cent of men and 9 per cent of women use their leisure to develop real fitness, you can see that most Australians could benefit from more physical activity.

Avoiding hypokinetic conditions

The old adage ‘a healthy mind in a healthy body’ has been around since ancient times. In our modern high-technology, automated society, most people spend more time looking after their car or house than looking after their bodies.

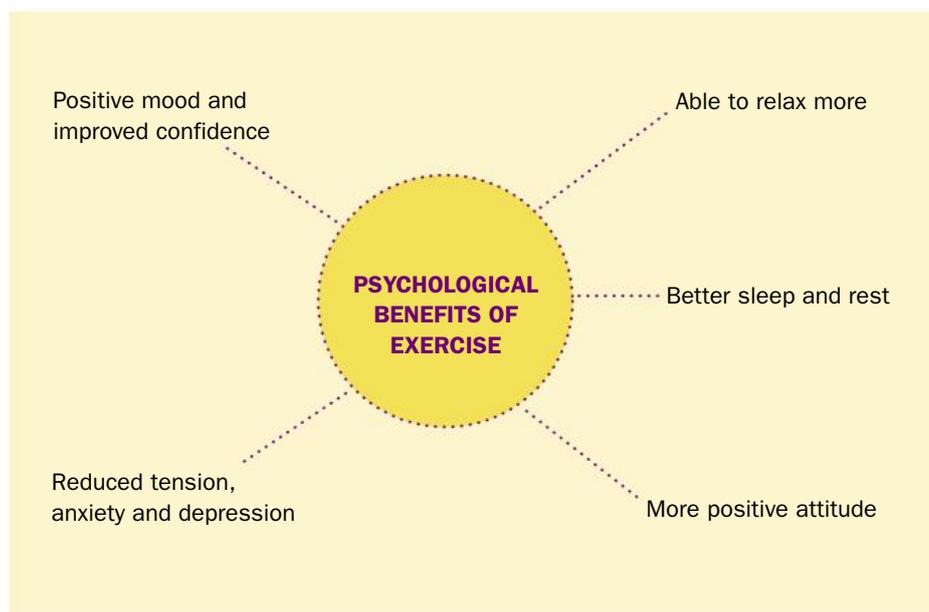
As a result, diseases and conditions caused by a lack of physical activity are in epidemic proportions in our society. These **hypokinetic** (lack of movement) diseases and conditions range from heart disease, high blood pressure, obesity and lower back pain to emotional stress, depression, loss of self-esteem and insomnia.

Look back at the statistics on teenagers on page 65. Lack of aerobic fitness is a major risk factor in developing heart disease, as are high blood cholesterol levels and weight gain. Tight hamstrings and lower back muscles cause postural problems such as lower back pain.

Major health benefit	Associated factors
Improved health and wellbeing	<ul style="list-style-type: none"> ▪ Feeling of wellbeing ▪ More energy available to perform daily tasks, improved work capacity and tolerance ▪ Increased ability to meet emergencies, for example, save yourself or someone else from drowning ▪ Increased general vitality
Reduced mental and emotional stress	<ul style="list-style-type: none"> ▪ Reduced tension, anxiety and depression ▪ Able to relax more ▪ More adequate sleep and rest ▪ More positive work attitude ▪ Positive mood alteration as a result of an increased oxygen supply to the brain, and improved feelings of control and confidence
Improved personal appearance	<ul style="list-style-type: none"> ▪ Reduced body weight ▪ Decreased body fat ▪ Enhanced self-concept and body image ▪ Delay of ageing process ▪ Decreased amount of food eaten and desired ▪ More selective in type of food ▪ Improved posture and appearance
Decreased incidence of degenerative disease and common health complaints	<ul style="list-style-type: none"> ▪ Less chance of heart attack ▪ Greater chance of surviving a heart attack ▪ Improved fat metabolism ▪ Decreased levels of cholesterol and triglycerides ▪ Decreased blood pressure ▪ Decreased menstrual discomfort and premenstrual tension symptoms, such as breast tenderness, anger, depression and fluid retention ▪ Less discomfort during pregnancy and birth, and faster postnatal recovery ▪ Decreased likelihood of age-onset diabetes and insulin requirements ▪ Improved immune system because of stress relief ▪ Decreased incidence of arthritis as a result of improved blood supply
Improved cardio-respiratory endurance	<ul style="list-style-type: none"> ▪ Increased musculature of the heart so it can contract more forcibly ▪ Decreased resting heart rate ▪ Increased stroke volume ▪ Ability to perform more work before becoming fatigued ▪ Ability to recover faster following a strenuous task ▪ Less stress placed on heart during the performance of a submaximal task ▪ Increased lung capacity ▪ Relief from respiratory diseases, such as asthma, as the efficiency of the lungs improves
Improved strength and muscular endurance	<ul style="list-style-type: none"> ▪ Less chance of muscle or joint injury because the strength of the bone, ligament, muscle and tendon has been increased ▪ Reduction of lower-back pain problems ▪ Increased muscle tone and size
Increase in flexibility to society	<ul style="list-style-type: none"> ▪ Decreased incidence of low-back pain ▪ Reduced absenteeism, WorkCover claims ▪ Reduced frequency of industrial accidents ▪ Reduced health services expenditure.

Figure 2.9 General health benefits associated with regular physical activity

Figure 2.10 Psychological benefits of exercise



Hypokinetic conditions begin in your teenage years. If you do not do anything to avoid them, they will continue through your adult years.

For many years now researchers around the world have been studying how regular exercise affects the human body. The results of this research are summarised in Figure 2.9 on page 67, which shows conclusively that regular activity plays a key role in preventing a huge range of physical, social and emotional problems.

Regular moderate-to-intense aerobic exercise following the FITT formula (see pages 99–101) should be combined with postural flexibility exercises (see page 109) and strengthening exercises (see figure 2.45 on page 104 and figure 2.50 on page 108). The benefits to you far outweigh the initial inconvenience and discomfort of regular exercise.

You do have time

Look at your results for Activity 2.1. What was your total leisure time? You probably found that you have about 3–6 hours of leisure time each day.

To build an active lifestyle, you need to spend about 30–45 minutes exercising, every second day. Every two days you have a total of 6–12 hours leisure time, but you need to spend less than one hour of that being active. Do you really think you can use the old excuse ‘I don’t have enough time’?

Full-time working life

Even when you become an adult working full-time, you will be able to fit activity into your lifestyle. A working week was once 60 hours. During the early part of this century it decreased to 45 hours. After World War II it dropped to 40 hours, and now it is around 38 hours. This means you will have more leisure time than work time, but within that leisure time you will need to only devote three or four hours a week to building an active lifestyle.

Your teenage grandparents

Interview your grandparents (or an older friend or relative) to find out what their teenage lifestyle was like. If they can give you enough detail, draw up a typical week day and weekend day time strip for your grandparents when they were your age (see Activity 2.1 on pages 61–2).

- 1 What inventions have influenced the changes in the amount of leisure time for a teenager between then and now?
- 2 What social factors have influenced changes in the amount of physical work required of a teenager between then and now?
- 3 What did your grandparents do:
 - a after school?
 - b on weekends?



Activity 2.4

Twins

Read the two case studies below about two sets of twins at Choices State High School.

- 1 Which set of twins, the Slackers or the Energetics, most resembles your current lifestyle? Are you happy with this?
- 2 If your current lifestyle is more like the Slackers', how could you make it more like that of Elaine and Eric Energetic without creating too much trouble for yourself?
- 3 How true to life do you think these hypothetical twins are? Give your reasons, then share your ideas in a class discussion.



Activity 2.5

Case study 1 Sam and Sally Slacker are fairly typical Year 10 students. They gave up regular exercise in Year 8, and so they are now overweight. They are both very conscious of their weight and really would like to be slimmer, especially when they put on their sports clothes or their swimsuits. They find that their concentration wanders in class, and their test results have not been as good as they used to be. By the end of school each day, they are both tired, so it's home to television and eating. When Eric or Elaine Energetic ask them out, they usually feel too tired to party.

Case study 2 Eric and Elaine Energetic lead their lives very differently. They both follow the aerobic exercise formula, mixing up cycling, jogging and aerobic classes three or four times a week for at least 20 minutes each session. Sometimes they exercise in the morning, sometimes at lunchtime, and sometimes after school. They both keep their weight stable, and do not carry much fat. Eric and Elaine also go to the gym twice a week, and they look as if they do. They don't mind school, and find that their aerobic stamina helps them to concentrate all day. Their parents are pleased with their results and their self-motivated approach to schoolwork. They rarely feel tired, so they are ready to party at any time.

Factors influencing participation

Young people become involved in physical activity due to a complex mix of genetic, social and personal factors that influence their behaviour. Each of these factors can have both a positive or negative influence on participation. The growing decline in the number of physically active children has long-term health consequences for the community.

Your attitude to exercise has been, and will be, shaped by the following influences.

Your family

Your family structure has a significant impact on your attitude towards physical activity. Research has found that boys from two-parent families participate more in physical activity than boys from single-parent families. Children who have one or more siblings have been found to have higher levels of physical activity than an only child. The level of parental involvement in physical activity also plays a role. If your parents and brothers or sisters are physically active or take an interest in sport it is more likely that you too will follow their lead. Conversely, the influence from parents and siblings can also have a negative impact. If they discourage you from physical activity and show little interest in your performance, than this can shape your attitude towards physical activity.

Your peers

There is not a lot of research about peer influence on participation rates in physical activity. Despite this, ask yourself the following questions and see if peers have influenced your decision-making process.

Which sports are enjoyed by your peers? Are you more likely to participate in these sports because you enjoy the social interaction with friends? Are some sports seen as more 'important' than others? Do you feel pressured into participating in one particular sport over another?

Figure 2.11 Your peers can influence your involvement in physical activity



Culture

Your cultural group are the people you have spent your life growing up with and from whom you have picked up your values, beliefs, behaviours and attitudes. Cultural groups can be based on location or region, financial status, race, ethnicity or religion. Different cultural groups often have different sporting traditions and games specific to their community or culture.

Australia is a multicultural nation, and people from all cultures have contributed to the range of sports and physical activities available in Australia. The 2003 Bureau of Statistics identified that the rate of participation in sport of Australians born outside Australia was lower than that for people born in Australia. Non-English speaking people may be more reluctant to become involved in physical activity because language may be a barrier for participation.

Activity and your culture

- 1 Explain who your cultural group is and what your cultural group's attitude to sport/activity is.
- 2 Does your cultural group place any restrictions on you developing an active lifestyle?
- 3 How could you eliminate the restrictions/limitations imposed on your activity by your cultural group?
- 4 List all the positive influences your cultural group has on your active leisure involvement.



Activity 2.6



Figure 2.12 Different cultural groups often have different sporting traditions specific to their community

Gender

There is overwhelming evidence that boys are more physically active than girls at any age. On average, boys spend 68 minutes per day playing sport compared to 36 minutes per day for girls. Boys prefer Australian Rules football, cricket and soccer. Sports dominated by girls include netball and dance.

Age

Research has found that children who have not reached puberty have a natural drive to exercise. This natural affinity for physical activity drops off suddenly at puberty in both boys and girls. Prepubescent children tend to prefer to play in friendship groups, whereas post-pubescent children prefer organised sport. A number of studies have identified the age bracket of 13 to 18 years as the period of greatest decline in physical activity.

Sedentary lifestyle

The average amount of time children spent watching television was 20 hours per school fortnight in 2006. More than 50 per cent of children watch over 20 hours of television or DVDs per week, and the majority of children watch in the two hours following school. With the rise in the ownership of home computers and the significant impact of the internet on our lifestyle, it is easy to see why children are becoming increasingly inactive.

Your body image

Your body image is the mental picture you have of your own body. Your body image is part of your self-image, which is the total mental picture you have of yourself, including brains and personality. You have a positive body image if you feel happy with the way you are. You have a negative body image if you are dissatisfied with your body or parts of it, and this makes you feel inferior and/or depressed.

Unfortunately the media are responsible for many adolescents having poor body image because they bombard us with stereotypes of 'the perfect body' which 99.9 per cent of us could never look like, particularly during adolescence when your body is in a state of constant change. (Body image and media stereotypes are discussed in more detail in Chapter 4.) Whether you have a positive or negative body image tends to influence your attitude to exercise.

A positive body image means that you:

- ➔ are happy to be active and wear sports clothes
- ➔ use exercise/activity as a way to boost your body image.

A negative body image means that you:

- ➔ dislike displaying your body in sports clothes and therefore avoid activity
- ➔ find activity/sport threatening and therefore dislike physical education/sport.

The perfect body and your body image

- 1 Purchase or borrow a popular teenage magazine. Flick through the pages and count the number of pictures of so-called 'perfect bodies' compared to 'normal/average' bodies. Compare your statistics with class members who have analysed different magazines.
- 2 Is there a body bias in these magazines? Is this bias good for the body image of the people who read them?
- 3 In a class discussion suggest ways to build or maintain a positive body image.
- 4 Through research find out if the western idea of the perfect body is the same in other countries/cultures.



Activity 2.7

To sweat or not?

- 1 Fill in the table below by describing each factor influencing your attitude to physical activity as either positive or negative, and give an example of why this is so. For example, school could be a positive influence because your physical education teacher is very encouraging.

Influencing factor	Type of influence	Example
School		
Family		
Peers		
Media		
Cultural background		
Gender		
Climate		

- 2 Which are the strongest positive influences acting on you? Why?
- 3 Which are the strongest negative influences acting on you? Why?
- 4 Which influences are stronger: the positive or the negative?
- 5 For each negative influence, work out a plan to control or eliminate each.
- 6 Are the influences the same for both boys and girls? Explain.
- 7 How could you become a positive influence in someone else's life?
- 8 How can you maximise the number of positive influences in your active lifestyle?



Activity 2.8

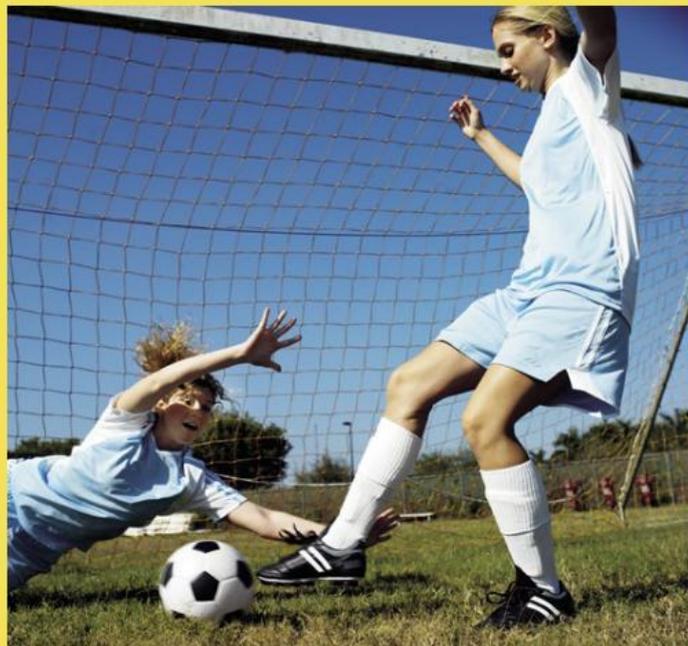
Activity 2.9



Why do I exercise? Why did I drop out?

- 1** Describe your current attitude to exercise.
- 2** Do you exercise three times each week? Why? Why not?
- 3** Make a list of
 - a** all the positive influences
 - b** all the negative influencesthat have shaped your attitude to activity so far in your life. Put an asterisk next to the three biggest influences.
- 4** If you think being active is important, how can you eliminate your negative influences and find more positive influences?
- 5** At lunchtime on a nice day, walk around your school checking each of the activity areas (basketball or tennis courts, ovals, shelter shed, hall or gymnasium and asphalt area).
 - a** Count how many girls and how many boys are playing in each area. Check your final totals.
 - b** Is there a difference between the totals for boys and girls? Why do you think this is so?
- 6** Interview five boys and five girls in Years 10, 11 or 12 who exercise regularly (at least three times each week).
 - a** Ask them why they exercise regularly.
 - b** When you have finished your ten interviews, compile a list of the top five reasons why senior students like to exercise.
- 7** During Years 9 and 10, many girls drop out of activity, yet at the same time they become figure-conscious. They therefore throw away their most effective way of keeping a trim figure. Why do you think this happens?
- 8** You can probably give plenty of reasons for not exercising. But do any of these reasons stand up to scrutiny?

Figure 2.13 Not all girls drop out of activity



Class debate

The topic for debate is 'Health and physical education should be compulsory at school'. Your teacher will choose four debating teams, two mixed teams and two single-sex teams.

In debate Number 1, the two mixed teams will debate the topic while other class members note down their arguments for or against. The two single-sex teams should not be in the room during this debate.

In debate Number 2, the all-boys team should debate against the all-girl team while the rest of the class note down their arguments.

- 1 Which teams provided the more convincing arguments?
- 2 Was there a difference in line of argument between the mixed teams and the single-sex teams?
- 3 Write down your attitude to this topic.

Note: If you attend a single-sex school, simply have four teams debate the topic.



Activity 2.10

Time to decide

You now have all the information you need to make a decision on whether or not you will pursue active leisure from now on. Consider the information and your options carefully and arrive at your final decision on your future activity level.



Activity 2.11

Fitness: what does it mean?

You hear the words 'fit' and 'fitness' used almost every day in conversation, on television, on the radio, in newspapers or in magazines, yet probably you are not quite sure of:

- ➔ the actual meanings of these words
- ➔ how to get fit
- ➔ whether you should bother to get fit.

This section will help you understand more about fitness.



Figure 2.14 Fitness means being able to exercise vigorously and regularly without feeling ill

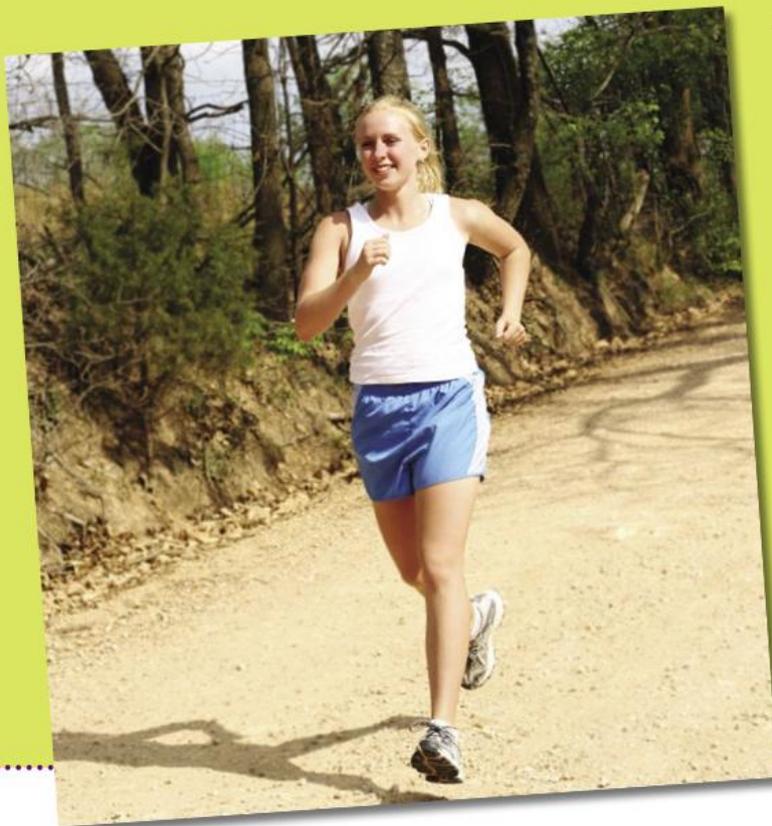
Activity 2.12



The community idea of fitness

1 Conduct a survey of some people in your community. Find out what each person thinks the meaning of 'fitness' is. Fill in the table below.

Person interviewed	What is fitness?	Are you fit?	Do you think it is important to be fit?	What regular exercise do you do (3 times per week)?
Myself				
Mother				
Father				
Teacher				
Neighbour				
Friend				
Shopkeeper				
Doctor				
Nurse				
Coach				



2 From your survey, answer these questions:

- a** Try to define 'fitness'.
- b** Do people in general believe that fitness is important?
- c** Do most people try to exercise regularly so they can be fit?

Figure 2.15 She looks fit

Benefits of fitness

Why bother about fitness anyway? For years, experts around the world have been studying the benefits of fitness. Researchers have compared fit groups of people with unfit groups, studied the changes in people who have become fit, and looked at the deterioration in people who have lost their fitness. Research has found that the health benefits you gain by being fit are:

- ➔ stronger muscles and bones
- ➔ bigger heart and lungs
- ➔ improved posture and appearance
- ➔ greater resistance to illness and disease
- ➔ improved sleep
- ➔ improved self-image
- ➔ reduced stress and tension
- ➔ less boredom
- ➔ less fatigue
- ➔ more opportunities to meet and make friends
- ➔ enjoyment from being part of a team.

In other words, your body works better and you feel better if you are fit. That's why it is worth using some of your leisure time to improve your fitness.

Figure 2.16 Passive leisure pursuits provide few health benefits



Activity 2.13



'Fitness': a big word

- 1 Read the following examples that use the words 'fit' or 'fitness'. Write down what you think the word means in each case.

Example	Meaning
a Frank must be fit because he is a top runner.	
b Tania is the best swimmer in the school, so she must be fit .	
c Brooke goes to aerobics, which must keep her fit .	
d Leigh's fitness is excellent, because he lifts weights at the gym.	
e Celia goes to the gym three times a week to improve her fitness .	
f Darren plays A-grade football, which is why he is so fit .	
g Megan plays tennis regularly to keep fit .	

- 2 Now share your answers in a class discussion: 'What does "fit" mean?', then answer these questions:
- Does 'fit' or 'fitness' mean just one thing? Explain.
 - Are there key words to describe different types of fitness? Give some examples.
 - What sort of fitness do you think is most important?

Types of fitness

The word 'fitness' is very vague because it has a range of different meanings. The fitness you develop from lifting weights is very different to the fitness a long-distance runner develops. Both are different from the fitness you get playing tennis regularly. So you need to stop using the word 'fitness' and instead talk about **fitness components** (types).

Fitness is divided into parts called fitness components. There are 10 fitness components:

- ➔ strength
- ➔ flexibility
- ➔ stamina or aerobic capacity
- ➔ speed or anaerobic capacity
- ➔ balance
- ➔ power
- ➔ muscular endurance
- ➔ agility
- ➔ body composition
- ➔ coordination.

These 10 fitness components can be grouped in two main categories: health-related and sport-related fitness.

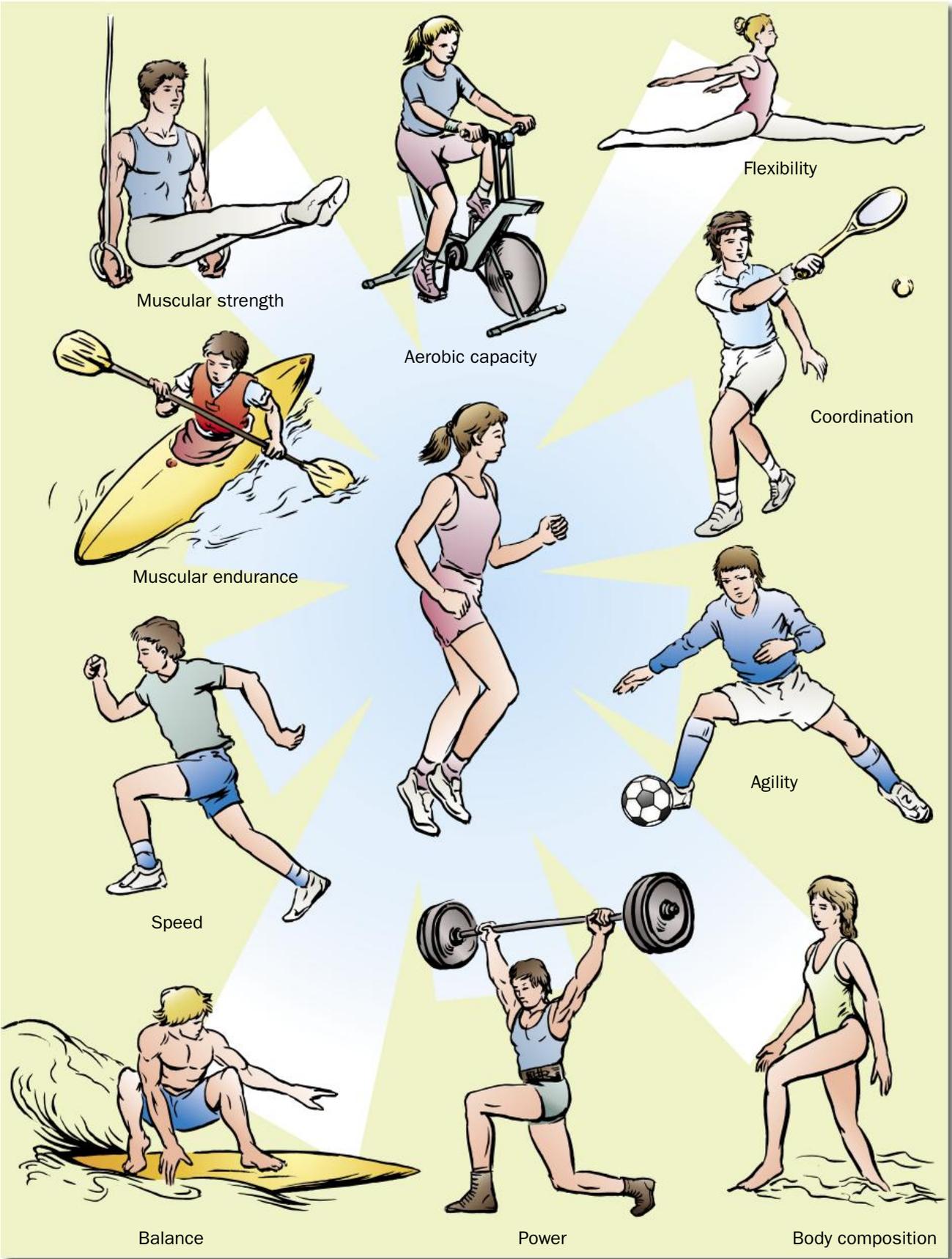


Figure 2.17 The components of fitness

Health-related fitness

If you want to develop enough general fitness to enjoy a healthy lifestyle, you are interested in health-related fitness. The health-related fitness components are:

- aerobic capacity
- muscular strength/endurance
- flexibility
- body composition.

Sport-related fitness

If you want to develop a high level of fitness to play competitive sport, you are interested in sport-related fitness. For successful sports performance, you need to develop a good level of fitness in all components, but especially in those fitness components your particular sport needs most, for example, power, agility, speed, balance and coordination.

Energy production inside your muscles

Before exploring each fitness component in detail, you need to understand how your muscles produce energy.

Your muscles need energy to contract (shorten) and therefore produce movements. There are two ways your muscles can make this energy:

- anaerobic energy production (without oxygen)
- aerobic energy production (using oxygen).

Anaerobic energy

When your muscles need quick, explosive energy for sprints, jumps or throws, they use energy from the breakdown of the carbohydrates in the food you have eaten. That energy is stored in your muscles. Unfortunately, explosive energy production often leaves you feeling sore because anaerobic energy production can leave a waste product called lactic acid in your muscles. Oxygen is not required to produce this energy, so it is called anaerobic.

Aerobic energy

When your muscles need energy for steady-paced, long activities, such as jogging or cycling, they create aerobic energy. The muscles use their stores of energy from the breakdown of the carbohydrates and fats in the food you have eaten and combine them with the oxygen you breathe in to make the energy.

Fitness components

Muscular strength

This is the ability of your muscles to exert a force. In practice, strength is performing an action that requires large amounts of force and can only be completed a maximum of 10 times, for example, weight training.

You need strong muscles to protect your joints from injury during body contact in sport.



Figure 2.18 Weight training is a strength activity

A good test of forearm strength is the grip strength test (see page 93). A number of other tests include the involvement of strength such as sit-ups and push-ups, but the grip test is purely a test of strength.

Muscular power

This is the ability to use strength quickly to produce an explosive effort, for example, when jumping or putting the shot. A good test of leg power is the standing long jump (see page 88).

Flexibility

Flexibility is the ability of your muscles, ligaments and tendons to stretch so that your joints allow large movements, for example, when bridging in gymnastics, following through when kicking, or touching your toes (if you can).

Flexibility is very important if you are to avoid injuries during active leisure pursuits. A good test of your flexibility is the sit-and-reach test (see pages 86–7).

Figure 2.21 Flexibility is the range of motion around joints

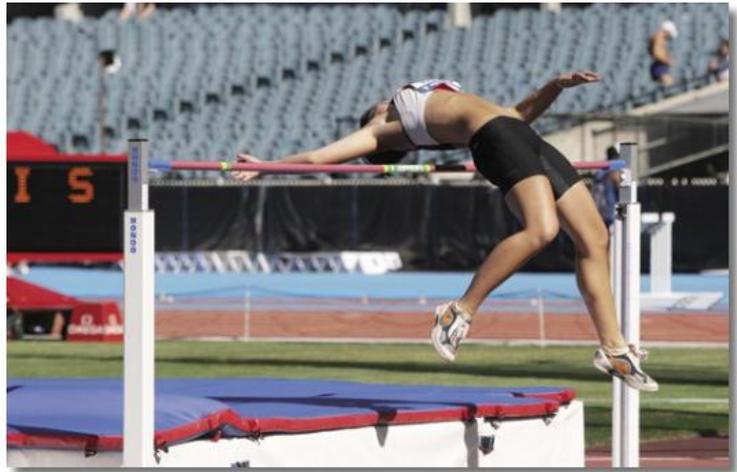


Figure 2.19 High jump requires both strength and power



Figure 2.20 Hurdling requires flexibility of the leg and hip region



Muscular endurance

This is the ability of your muscles to produce small efforts that are repeated over and over again. Some examples are paddling a canoe, strumming a guitar or going for a jog. Each stroke, strum or step does not take much effort, but stringing hundreds together requires muscular endurance.

Figure 2.22 Long canoe trips require arm and shoulder endurance



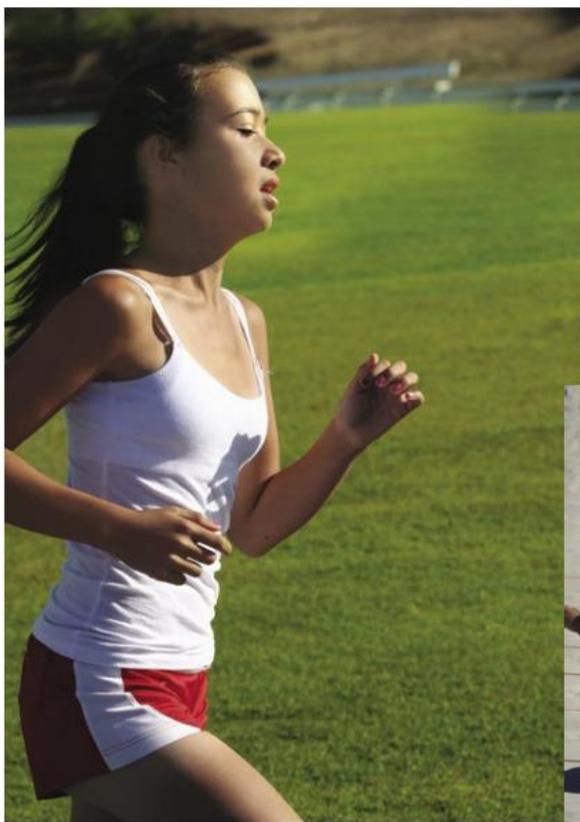
The 30-second push-up test and the one-minute sit-up test are good tests of combined muscular strength and endurance (see pages 88–9 and 85–6).

Aerobic capacity (stamina)

This is the ability of your heart and lungs to deliver oxygen through your blood to your muscles, to produce aerobic energy. All whole-body, continuous activities develop your aerobic capacity. Running, cycling, swimming, in-line skating and aerobic floor classes at the gym are all aerobic activities. This fitness component is the most important for living a long and enjoyable life.

A good test of your aerobic capacity is the 1.6-kilometre run, or the Kasch–Boyer step test (see pages 89–90).

Figure 2.23 Cross-country running is a great way to develop your aerobic capacity



Anaerobic capacity (speed)

This is your ability to get your body moving quickly. Speed activities are short events requiring rapid movements, such as 100-metre and 200-metre track events or the 50-metre swim. Most team sports require speed so that you can be first to the ball or get away from the opposition. A good test of your speed is the 40-metre sprint (see page 87).

Figure 2.24 Sprinting is a speed activity



Figure 2.25 Touch football requires agility

Agility

This is your ability to accelerate quickly, dodge, weave and turn. Agility is essential to most team sports where you must avoid the opposition by carrying out such actions as falling over and recovering quickly. To be agile, you also need muscular power, speed and flexibility. A good test of your agility is the shuttle run test (see pages 91–2).

Balance

Balance is your ability to stay upright or in control of your body position when you are moving or stationary. All sporting activities require balance. However, for activities such as skiing, skateboarding, gymnastics, surfing or cycling, balance is crucial. A good test of balance is the stork stand (see page 91).

**Figure 2.26** Balance is essential on the balance beam

Coordination

Coordination is your ability to time your movements so that you perform skills smoothly and accurately. All activities require some sort of coordination. For example, sports such as soccer require foot–eye coordination, while sports such as netball, basketball and tennis require hand–eye coordination. A good test of coordination is the alternate hand wall toss test (see page 92).

Body composition (BMI)

Your body consists of many different types of tissue, such as muscle tissue, bone tissue and fat tissue. Although each type of tissue is essential for your body to work properly, too much fat tissue can cause a vast range of health problems.

One easy way to work out whether or not you are overweight (too fat) is to calculate your body mass index (see page 93).

Activity 2.14



This activity, that component

- 1** Look at the list of physical activities in the table below. Next to each activity write:
 - a** the component or components of fitness this activity develops
 - b** the reasons why you think this is so.
- 2** Share your answers with your classmates in a discussion. Alter your answers if you find out more information.
- 3** What activities develop several fitness components?
- 4** In which activities do you regularly participate?
- 5** Which of these activities could you easily include in your lifestyle to improve the fitness components in which you tested poorly?
- 6** Why do people say that to be totally fit you need to exercise in several different ways?

Activity	Fitness component(s)	Reasons why developed
Aerobics		
Aussie rules		
Ballet		
Baseball		
Basketball		
Canoeing		
Cross-country running		
Cycling (touring)		
Gymnastics		
Hockey		
Horse-riding		
In-line skating		
Netball		
Push-ups		
Rugby		
Soccer		
Sprinting (athletics)		
Surfing		
Swimming		
Tennis		
Toe touch		

Fitness components

- Which fitness component is most important for carrying out each of the following sports or activities?

a marathon running	b rock climbing
c dancing	d bodybuilding
e tennis	f basketball
g soccer	h surfing
i netball	j softball.
- If possible, list three of your daily or weekly activities that require:

a flexibility	b strength
c aerobic capacity	d muscular endurance.



Activity 2.15

Fitness testing

This section outlines how to test each fitness component. Keep in mind the following points:

- ➔ Fitness tests are a guide to your fitness at this stage of your life.
- ➔ Fitness test results tell you the components that you need improvement in, and those you need to maintain at their current level.
- ➔ You must try your best on each test or the result will tell you nothing.
- ➔ For analysis of your result see pages 95–7.

Test 1 Speed sit-ups

Purpose

This test will give you an indication of the strength and endurance of your abdominal muscles.

Equipment

- ➔ a stopwatch
- ➔ a gym mat
- ➔ a partner.

Description

- ➔ Lie on the mat with your knees bent at 90°, your hands beside your ears, and your partner holding your ankles.
- ➔ When your partner says 'Go', sit up to the vertical position: your elbows should pass your knees. Then return to the mat until your shoulder blades touch the mat.
- ➔ Repeat the movement as many times as you can in 60 seconds.

*NOTE: This is **not** the normal way to do sit-ups in a fitness program.

However, as a one-off test, this is not dangerous and you are able to use your results to rate your abdominal fitness.

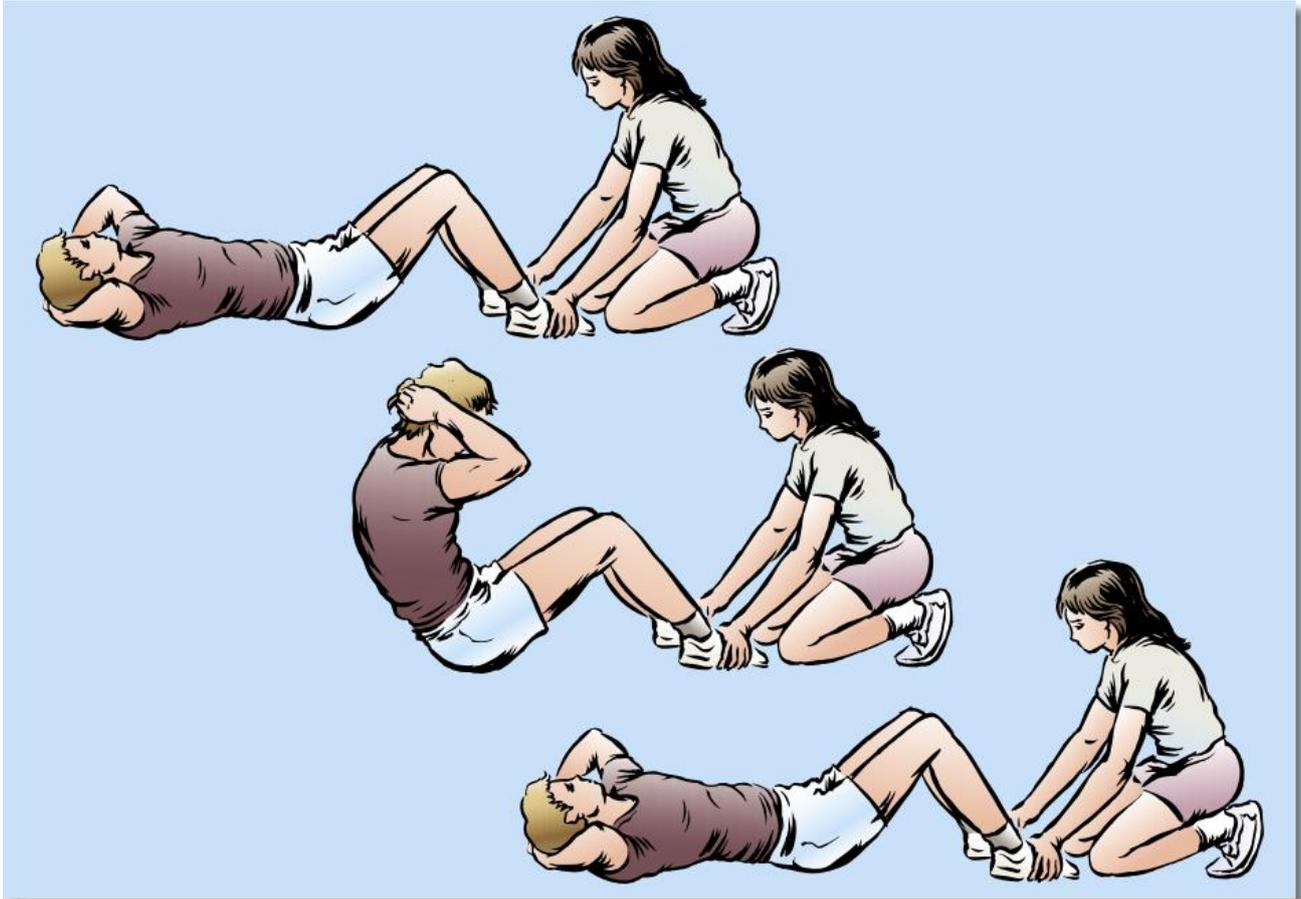
Rules

- Your partner counts.
- Your fingers *must* stay *beside* your ears.
- Your shoulder blades must touch the mat at the end of each sit-up.
- You may rest between sit-ups.

Score

Maximum number completed in 60 seconds.

Figure 2.27 Sit-ups



Test 2 Sit-and-reach

Purpose

This test will give you an indication of the flexibility of your lower back and hamstrings.

Equipment

- a 30-centimetre ruler
- a gym bench
- adhesive tape.

Description

- Place the ruler parallel to the floor, with the 15-centimetre mark level with the front edge of the bench. Attach the ruler to the bench with the tape.

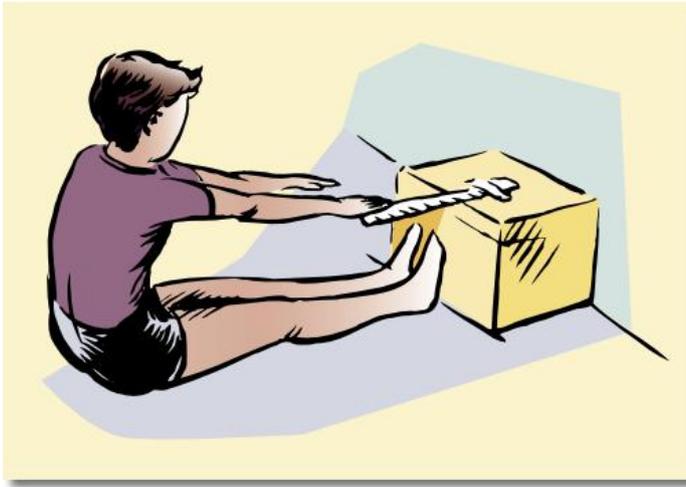


Figure 2.28 Sit-and-reach

- ➔ Sit on the floor with your knees straight, soles against the bench, and feet either side of the rule.
- ➔ Place one hand on top of the other, with your fingertips level, and slowly slide your hands down the rule as far as possible.
- ➔ Hold your maximum distance for three seconds.
- ➔ Take three readings and record the best measure.

Rules

- ➔ You must not bend your knees.
- ➔ You must hold for three seconds.

Score

A reading of less than 15 centimetres means you are unable to touch your toes.

Test 3 40-metre sprint

Purpose

This test will give you an indication of your speed.

Equipment

- ➔ a flat 40-metre track with start and finish lines
- ➔ a stopwatch.

Description

- ➔ The starter gives the command 'On your mark', 'Set', 'Go'.
- ➔ Begin in a standing position with your toe behind the line, and sprint as fast as possible across the finish line.
- ➔ Do not slow down until you are well past the finish line.
- ➔ Find out your time from the chief timer.

Rule

- ➔ Wait for the starter's commands.

Score

The time taken from 'Go' until you cross the finish line.



Figure 2.29 Standing long jump

Test 4 Standing long jump

Purpose

This test will give you an indication of the strength and power of your hip and leg muscles.

Equipment

- ➔ a take-off line
- ➔ a tape measure
- ➔ a partner.

Description

- ➔ With your toes behind the take-off line and feet still, swing your arms and jump forward as far as you can.
- ➔ Land on both feet, and keep moving forward.
- ➔ Your partner will mark where your heels landed.

Rule

- ➔ There is no run-up allowed.

Score

Your maximum distance from take-off line to heels.

Test 5 Push-ups

Purpose

This test will give you an indication of the muscular strength and endurance of your arm and chest muscles.

Equipment

- ➔ a standard 46-centimetre chair or bench
- ➔ a stopwatch
- ➔ chalk.

Description

- ➔ To mark the position for the feet, lie face up, with the soles of both feet in line with the front of the chair seat or bench. Mark a line on the floor at the level of the elbows.
- ➔ Stand behind this line. Reach forward to place both hands, shoulder-width apart, on the front edge of the chair or bench.
- ➔ Make sure your body and legs are in a straight line, with your arms extended and at an angle of about 90° to the body.
- ➔ On the command of 'Start', do as many push-ups as possible in a period of 30 seconds. For a push-up to be counted, you must lower yourself until your chest touches the front edge of the chair or bench, then raise yourself until your arms are straight. It is important to keep your body in a straight line throughout. Count aloud the number of completed push-ups.
- ➔ If a push-up is not completed satisfactorily, repeat the previous instruction until you have performed a correct action.

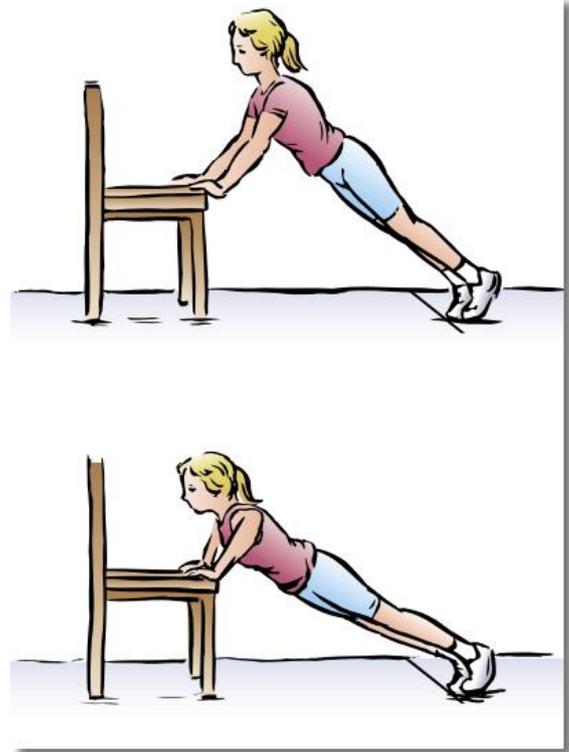


Figure 2.30 Push-ups test

Rule

- ➔ Make certain that your chest touches the chair or bench, and that your arms are returned to the fully extended position for each push-up.

Test 6 1.6-kilometre run or Kasch–Boyer step test

1.6-kilometre run

Purpose

This test will give you a good indication of your aerobic capacity or stamina.

Equipment

- ➔ an accurately measured and flat 400-metre track
- ➔ a stopwatch.

Description

The task is to run four laps of the track as fast as possible.

- ➔ Start at a comfortable, steady pace that you can maintain for the whole distance.
- ➔ As you come to the last lap, speed up if you feel okay.

- ➔ Listen for your time as you cross the finish line but keep on walking until you recover. Do not lie down.
- ➔ Stretch before you shower.

Rule

- ➔ You must complete four laps (1600 metres).

Score

Your time to complete four laps.

The Kasch-Boyer step test

Purpose

To measure your aerobic capacity.

Equipment

- ➔ a 30-centimetre high bench or box
- ➔ a metronome or timing tape
- ➔ a stopwatch.

Description

- ➔ Begin this test standing in front of the bench or box.
- ➔ On the starting signal, begin stepping up and down onto the bench or box at a rate of 30 cycles per minute.
- ➔ Each cycle of steps includes up (one leg), up (the other leg), down (one leg) and down (the other leg) (see Figure 2.31).
- ➔ After three minutes of stepping, sit down quickly.
- ➔ Five seconds after the stepping stops, take your pulse for one full minute.

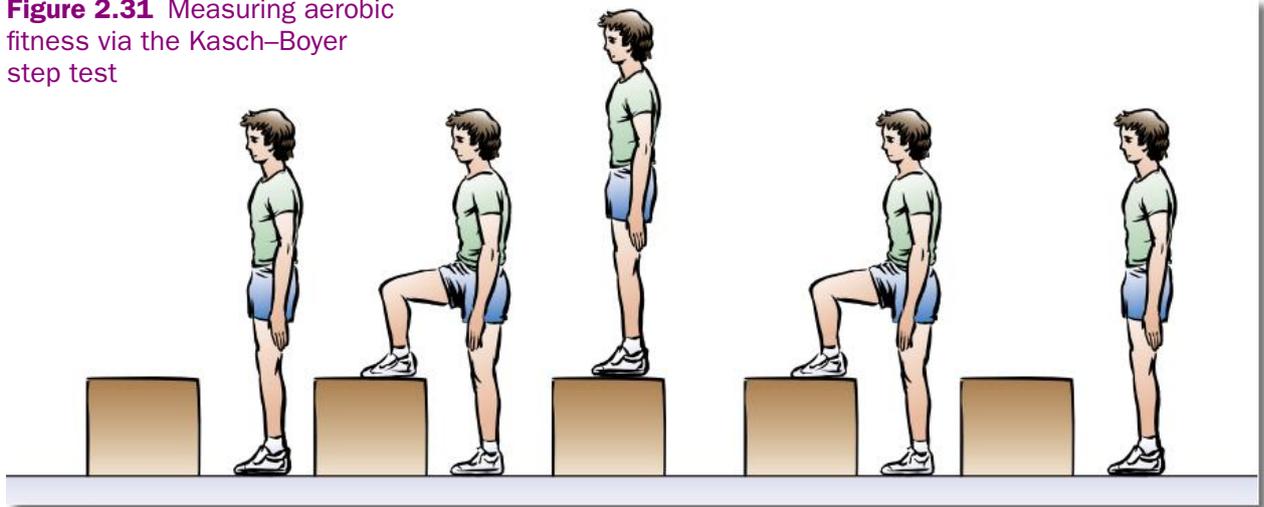
Rule

- ➔ You must step both feet up, then both feet down, and you must complete 30 cycles per minute.

Score

Your one-minute pulse count is your score.

Figure 2.31 Measuring aerobic fitness via the Kasch-Boyer step test



Test 7 Stork stand

Purpose

This test measures your ability to balance.

Equipment

- ➔ a stopwatch.

Description

- ➔ Stand comfortably on both feet and place your hands on your hips.
- ➔ On the signal to start, lift one leg and place your toes against the inside of your other knee.
- ➔ At the same time, raise your heel and stand on your toes.

Rule

- ➔ During the balance, your heel must not touch the floor or your other foot move away from your knee.

Score

Your score is the length of time you can hold your balance.



Figure 2.32 The stork stand

Test 8 Shuttle run

Purpose

This test will give you an indication of your agility.

Equipment

- ➔ a stopwatch
- ➔ two lines 10 metres apart.

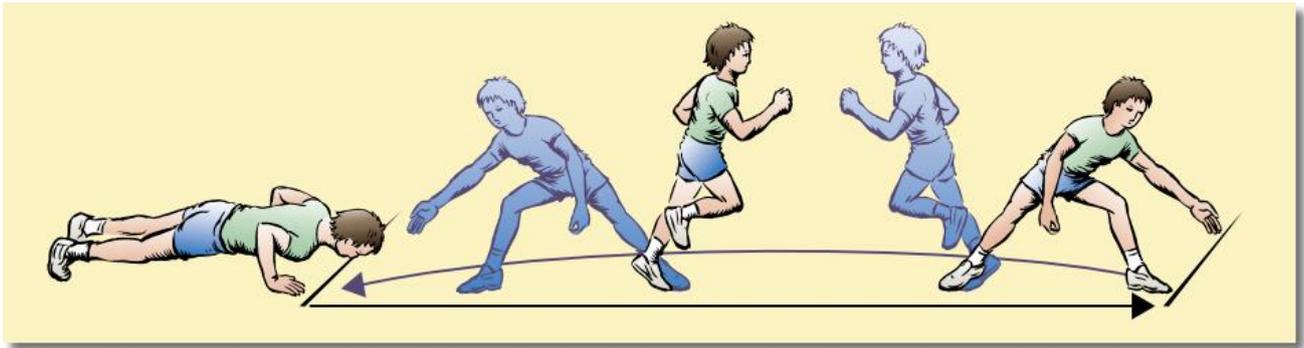


Figure 2.33 Shuttle run

Description

- Start this test lying in a push-up position with your forehead on the start line.
- On the signal 'Ready ... go', jump to your feet and sprint to the opposite line.
- Touch the opposite line with your fingers and sprint back to touch the start line.
- Sprint back to touch the opposite line, then finish by sprinting across the starting line.

Rule

- Each line must be touched with your fingers, except when you finish.

Score

Time to the nearest 0.1 of a second.

Test 9 The alternate hand wall toss

Purpose

The test is an indication of your level of coordination.

Equipment

- rebound wall
- a tennis ball
- a stopwatch.

Description

- Stand two metres away from and facing the rebound wall.
- On the starting signal, throw the ball with your right hand against the wall and catch the rebound with your left hand.
- Throw with your left hand and catch the rebound with your right hand.
- Do this as quickly as possible for 30 seconds.

Rule

- You must alternate hands and stay behind the two-metre line.

Score

The number of successful alternate hand catches.

Test 10 Grip strength

Purpose

This test will give you an indication of the strength of your fingers, hands and forearms.

Equipment

- ➔ a handgrip dynamometer.

Description

- ➔ Adjust the dynamometer so that it fits your hand comfortably.
- ➔ Holding the dynamometer with your arm straight by your side, squeeze the handgrip as hard as possible.

Rule

- ➔ Use only one hand.

Score

The reading on the dial of the dynamometer.



Figure 2.34 Grip strength

Test 11 Body mass index (BMI)

Purpose

This test will give you a good indication of whether you are overweight (too fat).

Equipment

- ➔ height measurer
- ➔ bathroom scales
- ➔ a calculator.

Description

Measure your height in metres and your weight in kilograms. Now put these two figures into the BMI formula.

$$\text{BMI} = \frac{\text{Weight}}{\text{Height}^2}$$

For example:

$$\begin{aligned} \text{BMI} &= \frac{75}{1.78^2} \\ &= 23.6 \end{aligned}$$

Rule

- ➔ Take your shoes off before you measure your height and weight.

Score

The final calculation of your BMI.

Activity 2.16



How fit are you?

- 1** Now that you understand what the fitness components are, and how to test each component, it is time to test yourself. From the results, you can draw up a personal fitness profile (see Figure 2.35).
 - a** Fill in the month at the top of the first Result and Rating columns.
 - b** After you complete each test, fill in your score in the result column.
 - c** After you have completed all tests, use the information in Figures 2.36 to 2.37 to work out your ratings. Fill these in on your personal profile.
 - d** Before beginning the tests, warm up thoroughly with a five-minute jog and complete set of stretches.
 - e** After completing your personal fitness profile, have a good look at your strengths and weaknesses. Read up on how to improve your fitness components (see pages 97–111).
 - f** Remember to test yourself at least twice per year so that you can record your progress and see where you need to improve. Use Figures 2.36, 2.37 and 2.38 to score your tests.
- 2** List the components of your fitness that are advanced or excellent.
- 3** Which of your current regular activities will develop these components of your fitness?
- 4** Which fitness components do you need to improve?
- 5** Why is fitness testing important, especially while you are young?

The best way to complete the whole battery of tests is to do them on two days:

Day one

- 40-metre sprint
- sit-and-reach
- shuttle run
- sit-ups
- alternate hand wall toss
- BMI

Day two

- standing long jump
- grip strength
- stork stand
- push-ups
- 1.6-kilometre run or Kasch–Boyer step test.

Fitness ratings

E = Excellent result—Just maintain your current exercise for this fitness component.

A = Advanced—However, there is room for improvement by increasing either the amount or type of exercise in your lifestyle.

P = Problem area—You must increase your exercise levels to improve this fitness component because your body is heading downhill.

R = Risky—If you do not increase your exercise level to improve this fitness component, you are very likely to suffer an injury.

My fitness profile

Fitness test	Fitness component	MONTH		MONTH		MONTH	
		Result	Rating	Result	Rating	Result	Rating
Sit-ups	Strength/muscular endurance						
Sit-and-reach	Flexibility						
40-metre sprint	Speed						
Standing long jump	Strength/power						
Push-ups	Strength/muscular endurance						
1.6-km run or Kasch-Boyer step test	Aerobic capacity						
Stork stand	Balance						
Shuttle run	Agility						
Alternate hand wall toss	Coordination						
Grip strength	Strength						
Body mass index (BMI)	Body composition						

Figure 2.35 Personal fitness profile chart. Study your fitness profile chart. If you scored a ‘problem area’ in any of the fitness tests, try to incorporate into your lifestyle the recommended exercise to improve that fitness component

Fitness test	12-year-old females				13-year-old females			
	R	P	A	E	R	P	A	E
Sit-ups	19 or less	20 to 25	26 to 30	31 or more	20 or less	21 to 26	27 to 30	31 or more
Sit and reach (cm)	5 or less	6 to 10	11 to 15	16 or more	5 or less	6 to 10	11 to 15	16 or more
40-metre sprint (seconds)	8.2 or more	8.1 to 7.6	7.5 to 7.2	7.1 or less	8.2 or more	8.1 to 7.6	7.5 to 7.1	7.0 or less
Standing long jump (cm)	142 or less	143 to 150	151 to 160	161 or more	146 or less	147 to 155	156 to 165	166 or more
Push-ups	5 or less	6 to 9	10 to 12	13 or more	5 or less	6 to 9	10 to 12	13 or more
1.6-kilometre run (minutes)	10.02 or more	10.01 to 9.00	8.59 to 8.30	8.29 or less	9.55 or more	9.54 to 9.15	9.14 to 8.30	8.29 or less

Figure 2.36 12–13-year-old female fitness ratings:
R = risky, P = problem area, A = advanced, E = excellent

Fitness test	12-year-old males				13-year-old males			
	R	P	A	E	R	P	A	E
Sit-ups	25 or less	26 to 30	31 to 34	35 or more	26 or less	27 to 30	31 to 35	36 or more
Sit and reach (cm)	5 or less	6 to 10	11 to 15	16 or more	5 or less	6 to 10	11 to 15	16 or more
40-metre sprint (seconds)	8.1 or more	8.0 to 7.5	7.4 to 7.0	6.9 or less	8.0 or more	7.9 to 7.4	7.3 to 6.5	6.4 or less
Standing long jump (cm)	148 or less	149 to 159	160 to 169	170 or more	150 or less	151 to 165	166 to 184	185 or more
Push-ups	13 or less	14 to 16	17 to 20	21 or more	14 or less	15 to 17	18 to 20	21 or more
1.6-kilometre run (minutes)	8.20 or more	8.19 to 7.43	7.42 to 7.10	7.09 or less	8.05 or more	8.04 to 7.25	7.24 to 6.57	6.56 or less

Figure 2.37 12–13-year-old male fitness ratings:

R = risky, P = problem area, A = advanced, E = excellent

Fitness test	14-year-old females				15-year-old females				16-year-old females			
	R	P	A	E	R	P	A	E	R	P	A	E
Sit-ups	23 or less	24 to 25	26 to 29	30 or more	20 or less	21 to 26	27 to 31	32 or more	20 or less	21 to 26	27 to 31	32 or more
Sit and reach (cm)	5 or less	6 to 10	11 to 15	16 or more	5 or less	6 to 10	11 to 15	16 or more	5 or less	6 to 10	11 to 15	16 or more
40-metre sprint (seconds)	8.0 or more	7.9 to 7.4	7.3 to 6.4	6.3 or less	7.7 or more	7.6 to 7.2	7.1 to 6.1	6.0 or less	7.7 or more	7.6 to 7.2	7.1 to 6.1	6.0 or less
Standing long jump (cm)	148 or less	149 to 159	160 to 170	171 or more	144 or less	145 to 159	160 to 174	175 or more	144 or less	145 to 159	160 to 174	175 or more
Push ups	5 or less	6 to 9	10 to 12	13 or more	5 or less	6 to 9	10 to 12	13 or more	5 or less	6 to 9	10 to 14	15 or more
1.6-kilometre run (minutes)	9.48 or more	9.47 to 9.07	9.06 to 8.21	8.20 or less	10.28 or more	10.27 to 9.25	9.24 to 8.21	8.20 or less	10.28 or more	10.27 to 9.25	9.24 to 8.21	8.20 or less
Kasch-Boyer step test (heart rate)	141 or more	140 to 121	120 to 101	100 or less	131 or more	130 to 116	115 to 96	95 or less	131 or more	130 to 116	115 to 96	95 or less
Stork stand (seconds)	19 or less	20 to 29	30 to 59	60 or more	19 or less	20 to 29	30 to 59	60 or more	19 or less	20 to 29	30 to 59	60 or more
Shuttle run (seconds)	13 or more	12.9 to 12.3	12.2 to 11.6	11.5 or less	13.2 or more	13.1 to 12.6	12.5 to 11.8	11.7 or less	13.2 or more	13.1 to 12.6	12.5 to 11.8	11.7 or less
Alternate hand wall toss (score)	13 or less	14 to 17	18 to 23	24 or more	13 or less	14 to 17	18 to 23	24 or more	13 or less	14 to 17	18 to 23	24 or more
Grip strength (score)	25 or less	26 to 30	31 to 34	35 or more	25 or less	26 to 30	31 to 36	37 or more	25 or less	26 to 30	31 to 36	37 or more

Figure 2.38 14–16-year-old female fitness ratings:

R = risky, P = problem area, A = advanced, E = excellent

Fitness test	14-year-old males				15-year-old males				16-year-old males			
	R	P	A	E	R	P	A	E	R	P	A	E
Sit-ups	32 or less	33 to 35	36 to 39	40 or more	32 or less	33 to 35	36 to 41	42 or more	33 or less	34 to 36	37 to 41	42 or more
Sit and reach (cm)	5 or less	6 to 10	11 to 15	16 or more	5 or less	6 to 10	11 to 15	16 or more	5 or less	6 to 10	11 to 15	16 or more
40-metre sprint (seconds)	7.1 or more	7.0 to 6.7	6.6 to 5.9	5.8 or less	7.0 or more	6.9 to 6.5	6.4 to 5.8	5.7 or less	7.0 or more	6.9 to 6.1	6.2 to 5.8	5.7 or less
Standing long jump (cm)	172 or less	173 to 183	184 to 194	195 or more	179 or less	180 to 194	195 to 210	211 or more	181 or less	182 to 196	197 to 212	213 or more
Push-ups	15 or less	16 to 18	19 to 20	21 or more	15 or less	16 to 18	19 to 21	22 or more	15 or less	16 to 18	19 to 22	23 or more
1.6-kilometre run (minutes)	7.39 or more	7.38 to 7.12	7.11 to 6.44	6.43 or less	7.36 or more	7.35 to 7.00	6.59 to 6.30	6.29 or less	7.30 or more	7.29 to 6.55	6.54 to 6.26	6.25 or less
Kasch-Boyer step test (heart rate)	126 or more	106 to 125	91 to 105	90 or less	121 or more	106 to 120	86 to 105	85 or less	121 or more	106 to 120	106 to 120	85 or less
Stork stand (seconds)	19 or less	20 to 29	30 to 59	60 or more	19 or less	20 to 29	30 to 59	60 or more	19 or less	20 to 29	30 to 59	60 or more
Shuttle run (seconds)	12.3 or more	12.2 to 11.8	11.7 to 11.1	11.0 or less	12.0 or more	11.9 to 11.6	11.5 to 10.9	10.8 or less	11.8 or more	11.7 to 11.4	11.3 to 10.7	10.6 or less
Alternate hand wall toss (score)	20 or less	21 to 24	25 to 29	30 or more	22 or less	23 to 26	27 to 32	33 or more	22 or less	23 to 26	27 to 32	33 or more
Grip strength (score)	Less than 30	31 to 40	41 to 50	51 or more	Less than 39	40 to 45	46 to 55	56 or more	Less than 39	40 to 45	46 to 55	56 or more

Figure 2.39 14–16-year-old male fitness ratings:
R = risky, P = problem area, A = advanced, E = excellent

Fitness training methods and programs

To improve your fitness components, you need to use what are called training methods. Each training method requires you to follow a special formula or rule to improve one or more of your fitness components. The training methods are:

- ➔ continuous training
- ➔ interval training
- ➔ circuit training
- ➔ resistance (weight) training
- ➔ flexibility calisthenics.

Continuous training

This method of training is designed to improve your aerobic (heart and lung) capacity and your muscular endurance.

Continuous training is the most important training method for both health and sport-related fitness. For health-related fitness, improving your aerobic capacity helps you reduce heart disease risk factors such as weight gain, high blood pressure and high stress levels and helps build up positive self-esteem.

For sport-related fitness, aerobic capacity (stamina) is the building block for all team sports and most individual sports and recreation.

Before you can use continuous training to improve your aerobic fitness you need to understand a little more about your body. Try Activity 2.17.

Activity 2.17



Your one-minute pulse count is called your **heart rate**, which is the number of times your heart beats in one minute.

Puffing and pounding

- 1 Find your carotid pulse by pressing lightly on your carotid artery with your index and middle fingers. Feel next to your Adam's apple on your throat (see Figure 2.40).
- 2 Now count the number of pulses in one minute. Record your score.
- 3 **a** Now count the number of pulses in 15 seconds.
b Record this score, then multiply it by four to calculate a one-minute count.
- 4 **a** Find your radial pulse by pressing lightly on the radial artery in your wrist, at the base of your thumb (see Figure 2.41).
b Take a 15-second count. Multiply it by four to calculate the one-minute count. Record the score.
- 5 Locate your partner's radial and carotid pulse, and calculate their heart rate.



Figure 2.40 The carotid pulse

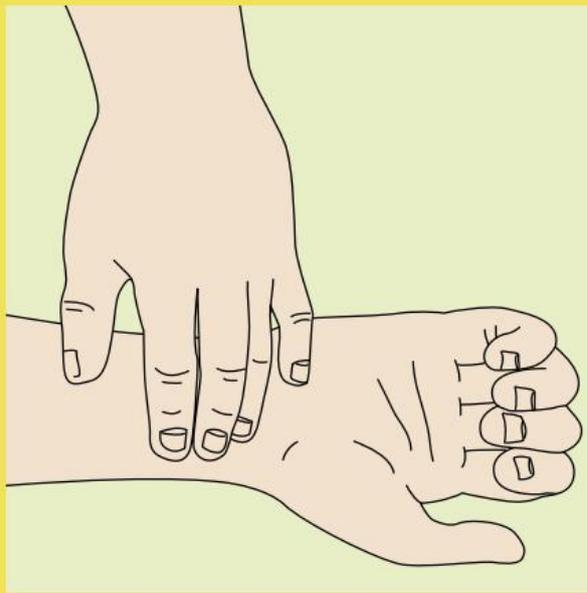


Figure 2.41 The radial pulse

- 6 With your partner timing, step up and down on a bench for two minutes at a pace of about 24 steps per minute.
- 7 After two minutes of stepping, sit down quietly and let your partner take a 15-second pulse count. Multiply it by four and calculate your heart rate. Record the result.
- 8 Three minutes later, let your partner take another pulse count. Calculate your heart rate and record the result.
- 9 Repeat points 6, 7 and 8, with your partner doing the stepping and you taking the pulse counts. Record the results.

Before exercise:

- My carotid 1-minute pulse count _____
- My carotid 15-second pulse count _____ $\times 4 =$ _____
- My radial 15-second pulse count _____ $\times 4 =$ _____
- My partner's heart rate _____

Immediately after exercise:

- My heart rate _____
- My partner's heart rate _____

Three minutes after exercise:

- My recovery heart rate _____
- My partner's recovery heart rate _____

Questions

- 1 What happened to your heart rate when you did your step-ups?
- 2 Why do you think your heart rate changed during exercise?
- 3 What happened to your heart rate after exercise?
- 4 Apart from exercise, what else can make your heart rate change?
- 5 Compare your results with those for other class members. What was the lowest before-exercise heart rate? Is this person a good aerobic athlete?
- 6 Compare the results for five boys and five girls. Which group has the higher heart rates—males or females?
- 7 Look at the difference between your heart rate immediately after exercise and your heart rate three minutes after exercise. Find a classmate who had a larger difference, and someone who has a smaller difference. Who do you think is more aerobically fit? Why?
- 8 What did you notice about your pattern of breathing and that of your partner's during the step-ups and immediately after?
- 9 Why does exercise change your breathing rate?

The FITT formula

To improve your aerobic fitness, you need to perform activities that make your heart and lungs work, as well as your muscles. These activities are whole-body activities such as running and swimming, and you must follow the **aerobic** or **FITT formula**. This is the most important formula to remember for an active lifestyle.

The FITT formula:

- ➔ **F** for frequency—three or four exercise sessions each week.
- ➔ **I** for intensity—to improve your heart and lung (aerobic) efficiency, your pulse must reach 140–160 beats per minute during the whole of your exercise session.
- ➔ **T** for time—to get any real benefit, you must exercise for at least 20 minutes and continuously (no rests).
- ➔ **T** for type—the best types of aerobic activity are running, cycling, swimming, aerobics classes, surfing, in-line skating and power walking.

Frequency

For you to improve your aerobic fitness, you must perform three continuous sessions per week—for example on Monday, Wednesday and Saturday—or every second day.

Intensity

Target heart rate

The rate at which your heart should be working during a continuous training session is known as your **target heart rate**. Because this rate varies with age, you need to work out your own target heart rate.

To do this, first determine your **maximum heart rate**. This is done by subtracting your age from 220. Your target heart rate is now worked out by calculating 75 per cent of your maximum heart rate.

For example: Determine the target heart rate of a 14-year-old girl:

Maximum heart rate = 220 – age (beats per minute)

Maximum heart rate = 220 – 14 = 206 beats per minute

Target heart rate = Maximum heart rate × 75% (beats per minute)

Target heart rate = 206 × 75% = 155 bpm (beats per minute).

Target training zone

Your **target zone** is the range in which your body should be working. This zone generally ranges from 70 to 85 per cent of your maximum heart rate. Therefore a 15 year old should have a heart rate roughly between 140 and 170 beats per minute.

To check this:

- ➔ Pause during a training session and take either your radial pulse or your carotid pulse for 30 seconds.
- ➔ Double this count to give your one-minute heart rate.
- ➔ If your heart rate is below 140, speed up your activity.
- ➔ If your heart rate is above 170, you need to slow down.

Look at Figure 2.42. If you work within the fitness training target zone, you will gain the desired benefits from continuous training.

Level of intensity

Continuous training sessions are classified according to the level of intensity. There are three types:

- ➔ **Low intensity aerobic:** This type of continuous training produces a gradual but steady aerobic improvement. It is commonly used in pre-season training to improve general aerobic fitness. It is sub-maximal training at

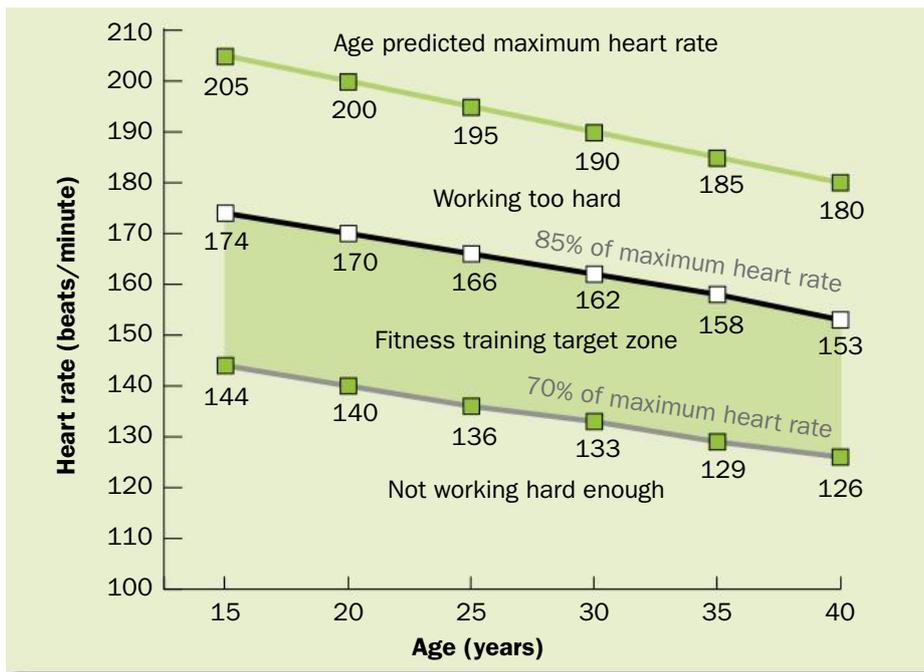


Figure 2.42 To gain benefits from continuous training, you should be working within your target zone

about 70 per cent of maximum heart rate and the emphasis is on distance not speed.

- ➔ **Anaerobic threshold training:** This type of continuous training is at about 85 per cent of the maximum heart rate. The high intensity of training results in lactic acid building up in the muscles and is therefore very fatiguing. This is commonly used for events such as 800 m runs, 400 m swims and for team sports played on large fields.
- ➔ **Fartlek:** *Fartlek* is a Swedish word meaning ‘speed play’. It is cross-country-style continuous training that incorporates regular changes in pace. These changes usually come about as a result of the natural terrain such as hills or obstacles or because of deliberate short bursts of speed.

Time

Each training session must last for 20 minutes continuously. For many of you, 20 minutes of continuous (no breaks) activity will be too much. You might need to begin with five or ten minutes of continuous activity, and increase by five minutes every second week until you reach 20 minutes.

Type

To develop aerobic fitness using continuous training, the best types of activity are:

- ➔ running
- ➔ swimming
- ➔ cycling
- ➔ aerobic floor classes.

Sports such as tennis, squash, badminton and racquetball do little for your aerobic capacity because you stop and start too often while taking part in them—in other words, they are not continuous.

Team games such as soccer, hockey, football, basketball and netball are better alternatives, provided that the teams are even and you are involved in the play most of the time.

Individual sports, such as surfing, orienteering, canoeing, in-line skating and skiing, are excellent for improving your aerobic fitness, provided you stick to the FITT formula.

Interval training

The interval training method is designed to improve strength and power, agility and speed (anaerobic capacity). It is the best training method for improving your ability to play team sports such as netball, rugby, soccer, basketball, football and field hockey. These sports all involve periods of activity or work, such as chasing the ball, followed by periods of rest or recovery, for example, when the ball is at the other end of the field.

Interval training is a form of training during which work intervals are followed by rest intervals.

Sample training session

A sample training session for interval training might include:

- **Warm-up:** five-minute jog and stretching exercises.
- Run 400 metres; walk 400 metres; repeat three times.
- Run 200 metres; walk 200 metres; repeat three times.
- Run 100 metres; walk 100 metres; repeat three times.
- **Cool-down:** five-minute walk and stretching exercises.

The length of the work interval can be varied to suit your sport. Football is played on a large field, so training for it requires long sprints. Netball is played on a small court, so it requires short sprints.

Regardless of how long the work interval, the rest period should take twice as long as the work interval.

Two interval sessions a week, plus other training, is ideal.

Circuit training

This is an excellent training method because it can improve your body strength, power, muscular endurance, agility and aerobic capacity all at the same time.

Method

Circuit training usually consists of a series of 10 exercises arranged around your house, backyard, sports hall or oval. You perform the exercises (see Figure 2.43), in order as fast as you can:

- Choose your 10 exercises (see Figure 2.44).
- Test yourself to see how many repetitions you can do of each exercise in one minute. Record the number for each exercise. This is called your one-minute maximums.
- Divide your one-minute maximums in half. These numbers are called your initial load.
- Next session, do two laps of the circuit, without stopping between exercises or laps, performing the initial load numbers for each exercise. Your aim is to be able to complete three laps.

- ➔ When you can complete three laps of your circuit, record your time each session, and try to improve.
- ➔ Every four weeks, change the exercises in your circuit.

Circuit training is probably the best all-round training method. Three circuit training sessions a week will definitely improve your aerobic capacity, strength and muscular endurance.

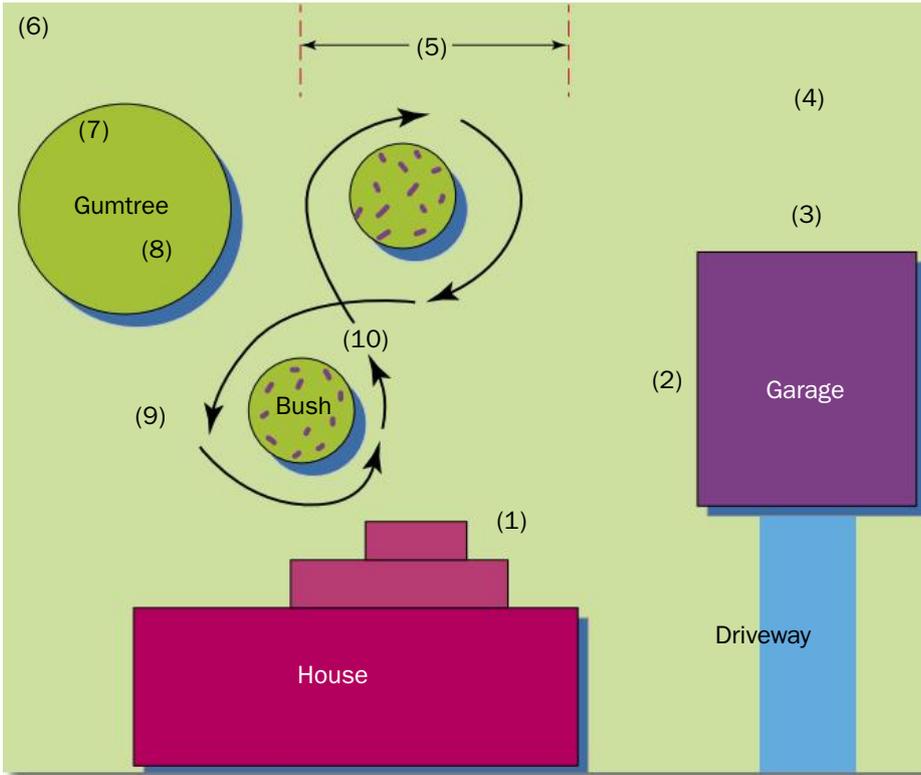


Figure 2.43 Backyard circuit: each exercise is performed in order around the circuit

Exercise	One-minute maximum	Initial load	Date	Three-lap time
1 Step-ups				
2 Push-ups				
3 Vertical jumps				
4 Sit-ups				
5 Hops				
6 Upstarts				
7 Shuttle run 10 m				
8 Chin-ups				
9 Reverse dips				
10 Skips				

Figure 2.44 Record card

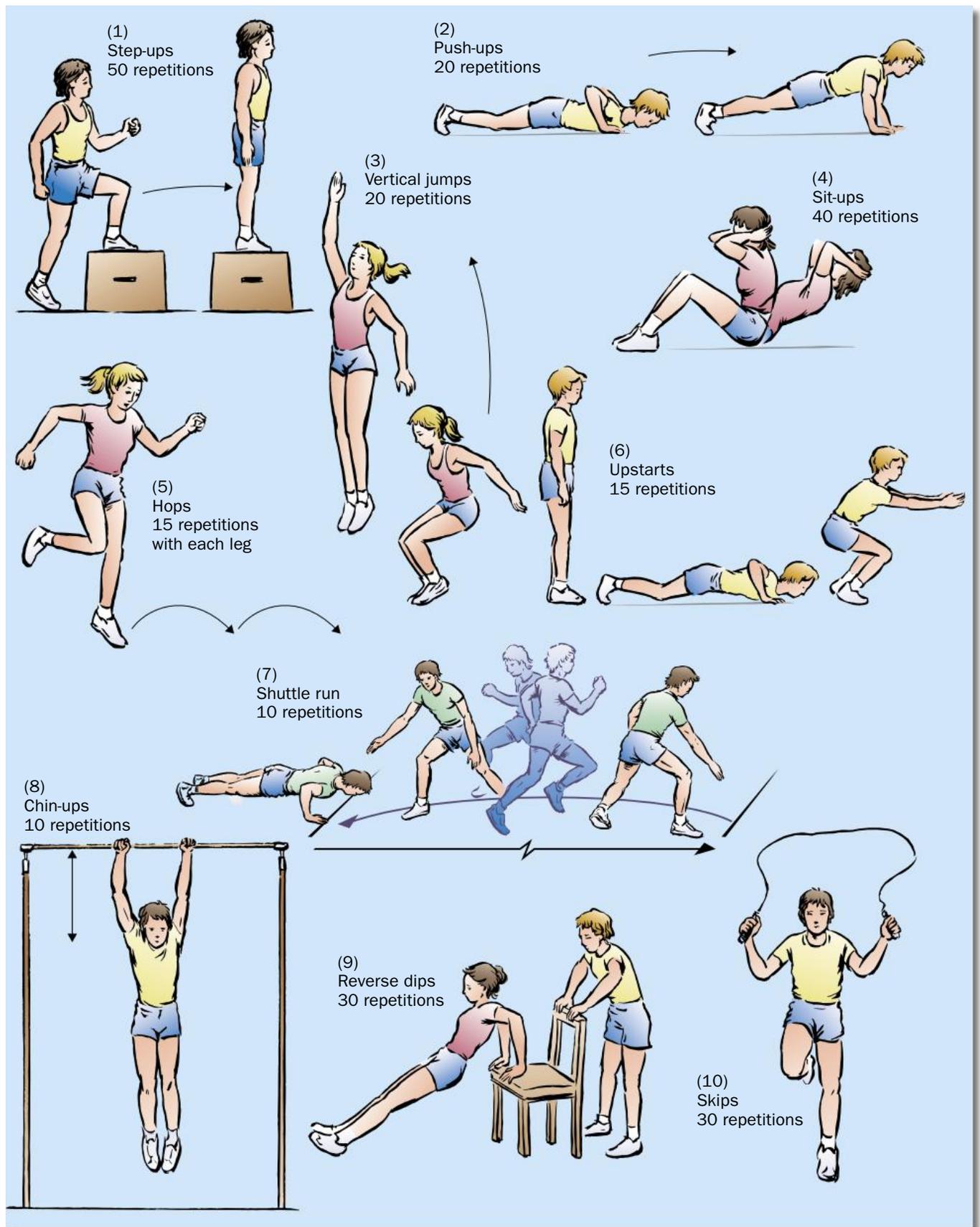


Figure 2.45 A resistance circuit. This circuit can be performed in a gym, in your backyard, your garage or your house. You can replace exercises with easier or harder alternatives, you can use your initial load repetitions for each exercise or you can perform a set number of repetitions for each lap as shown above.

Circuit workout

Look at the circuit exercises in Figure 2.45. Draw up a three-column table and write in the following information.

- 1 List the 10 exercises in Column 1.
- 2 In Column 2 write what component of fitness you think each exercise would develop.
- 3 In Column 3 write what body part and muscles are being given a workout.
- 4 Have a go at designing your own backyard circuit.



Activity 2.18

Resistance training

This training method is used to improve your strength and power or muscular endurance. Resistance training involves using either weights in a gymnasium or your own body weight to make your muscles work.

Definitions

The basic terms used when discussing resistance training are:

- ➔ A **rep** = a **repetition** = one performance of an exercise, for example, one sit-up.
- ➔ A **repetition maximum (RM)** is the maximum weight you can lift a certain number of times, for example, a one RM weight is the maximum weight you can lift once. A 10 RM weight is the maximum weight you can lift ten times.
- ➔ A **set** is a number of repetitions performed without a break, for example, 8 bicep curls = 1 set of 8 reps, or 1×8 .



Figure 2.46 Controlled weight training using 10 RM weights (never maximums) can begin during early adolescence

Formula for body development

To build your body and develop strength and power, follow this formula for resistance training:

- ➔ By trial and error, find a 10 RM weight (you can lift it only ten times) for each exercise.
- ➔ For the first two sessions try to complete two sets of each exercise.
- ➔ From the third session try to pump out three sets, using a 10 RM weight, for each exercise. Rest for two minutes between sets.
- ➔ Three sessions a week is ideal.
- ➔ When you can perform three sets of ten comfortably, increase your weights by 2 to 5 kilograms.

Formula for muscular endurance

To develop muscle tone and improve your muscular endurance, follow a slightly different formula:

- ➔ Choose a 30 RM weight for each exercise.
- ➔ Perform three sets of 30 repetitions for each exercise.
- ➔ Rest for three minutes between sets.
- ➔ Again, three sessions per week is ideal, for example, Monday, Wednesday and Friday.

Safety precautions

If you choose to lift weights for resistance training, follow these safety precautions:

- ➔ Always stand close to the bar.
- ➔ Bend your knees to pick up the weight.
- ➔ Keep your back straight and your head up. (Never hollow or round your back.)
- ➔ Use your legs to lift (see Figure 2.48).
- ➔ You must breathe during a set. Breathe in during the lowering (relax) phase of each repetition, and breathe out during the press (effort) phase of each repetition.
- ➔ In your first few weeks of weight training use machine weight exercises when possible and gradually progress to free weight (barbell or dumbbell) exercises.



Figure 2.47 Incorrect lifting technique



Figure 2.48 Correct lifting technique

Sample weight training program

Figure 2.49 shows a sample weight training program suitable for a beginner, male or female. The program in Figure 2.50 follows the pattern:

- ➔ chest
- ➔ back
- ➔ shoulders
- ➔ legs
- ➔ arms

- ➔ chest
- ➔ back
- ➔ shoulders
- ➔ lower back
- ➔ abdomen.

		Date	28/5											
No.	Movement	Formula	Wt (kg)	Rep	Wt (kg)	Rep	Wt (kg)	Rep	Wt (kg)	Rep	Wt (kg)	Rep	Wt (kg)	Rep
1	Bench press	3 × 10 RM	20	10 8 7										
2	Lateral pulls	3 × 10 RM	20	10 10 8										
3	Lateral flys	3 × 10 RM	5 ea	10 8 8										
4	Leg press	3 × 10 RM	10	10 10 5										
5	Curls	3 × 10 RM	10	10 9 8										
6	Flat flys	3 × 10 RM	5 ea	10 7 5										
7	Bent dumbbell rowing	3 × 10 RM	5 ea	10 10 8										
8	Seated press	3 × 10 RM	15	10 7 5										
9	Back extensions	2 × 20	–	20 15										
10	Crunches	2 × 20	–	20 15										

Figure 2.49 Weight program, with the first day laid out on this sample gym card

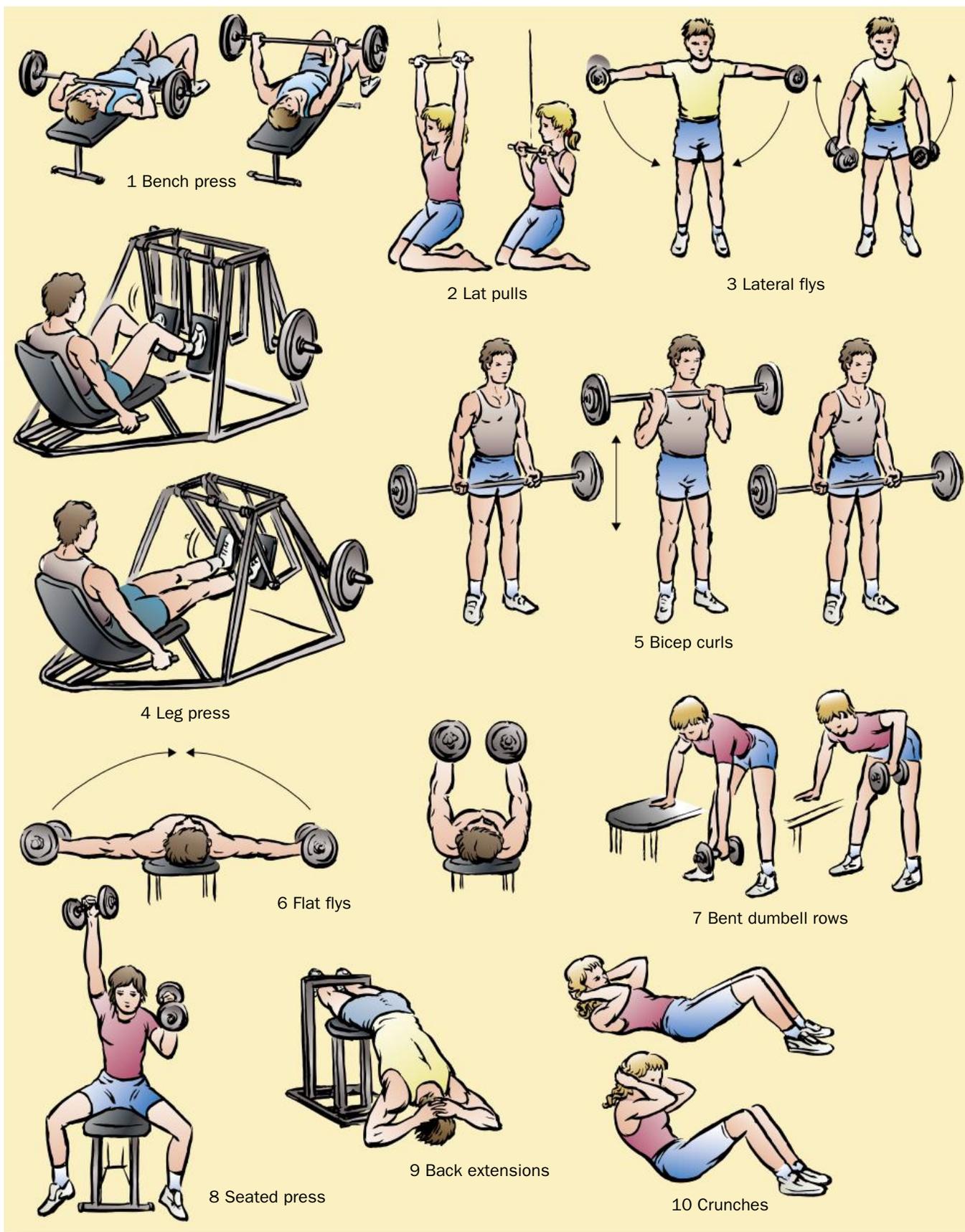


Figure 2.50 Weight training exercises

Pump it up

- 1 Study the weight program on page 108. For each exercise write down which muscle group is being worked.
- 2 If you wanted to begin a weight program, what local facilities would be available for you to use? Find out any costs involved, age limits, hours of operation, etc.
- 3 Through research find out the differences between weight training and weight lifting. Write down the differences and discuss which activity has more of a safety risk.



Activity 2.19

Flexibility exercises

This training method is used to improve your joint and muscle flexibility. Any exercise that puts a muscle in a stretched position develops your flexibility.

There are two safe methods of improving flexibility:

- ➔ PNF (proprioceptive neuromuscular facilitation)
- ➔ static (passive) stretching.

Proprioceptive neuromuscular facilitation (PNF)

This method uses the following procedure:

- ➔ Take a muscle close to its full range and then contract the muscle against an immovable resistance, usually provided by a partner (isometric contraction). Hold for a count of 3 seconds.
- ➔ Passively increase the range of movement yourself.
- ➔ Perform a further isometric contraction for three seconds and then increase the range of movement if possible.
- ➔ Repeat a third time until you reach your limit.

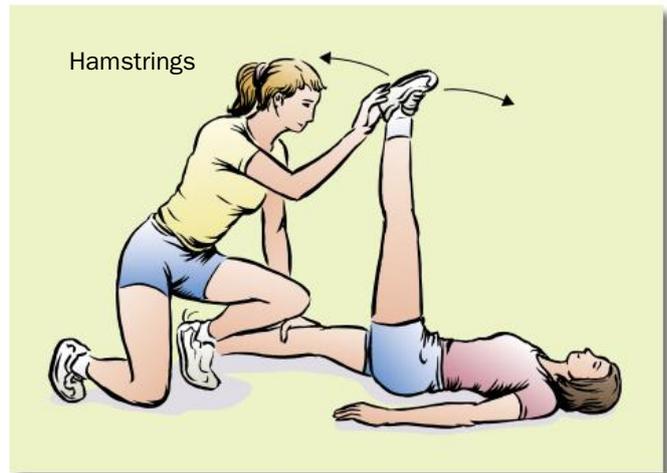


Figure 2.51 PNF stretching of the hamstrings

Static stretching

Static or passive stretching involves taking the muscle to its greatest range and holding this position for 30 seconds.

The formula you follow for improving your flexibility is:

- ➔ Slowly stretch the muscle or joint to the greatest range possible.
- ➔ Hold this position while you count 30 seconds.
- ➔ Relax, then repeat the exercise.
- ➔ Never bounce or jerk in a stretched position.
- ➔ Never move quickly to a stretched position.

Perform the static stretches shown in Figure 2.52 on page 110 as part of your warm-up before exercising or training, and at least three times a week after a hot shower or bath. They will help you avoid unnecessary injury and postural problems.

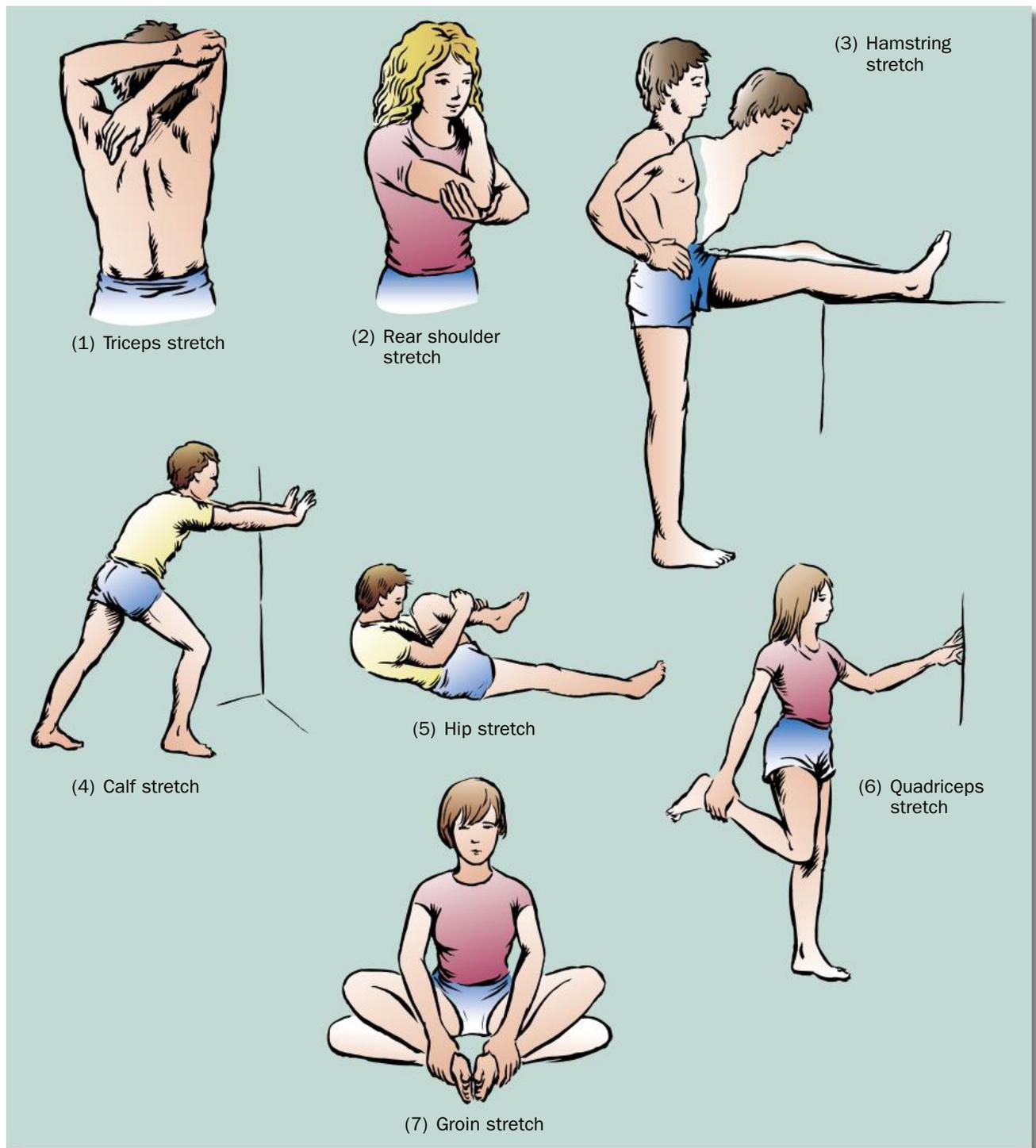


Figure 2.52 Static stretches

Body composition BMI

The best way to improve your body composition is to increase the amount of muscle in your body and reduce the amount of fat.

Resistance circuits combined with aerobic exercise are the best ways to increase muscle strength. Both types of exercise burn up fat for energy.

Apart from exercise, the other key ingredient in improving your body composition is controlling how many kilojoules you eat. If you eat too many kilojoules, those you do not use for energy become fat tissue. If you burn up as many kilojoules as you eat, your body fat stays the same. If you burn up more kilojoules than you eat you use up some of your fat for the extra energy required.

Your aim is to control your kilojoule intake so that your body fat is kept at desirable levels. This is discussed in more detail in Chapter 7.

Fitness training

- 1 Which muscles would you use when you are:
 - a sprinting
 - b jumping
 - c swinging a racquet
 - d throwing?
- 2 How would you stretch each of these muscles?
- 3 How do you think your muscles get energy for a five-kilometre bike ride?
- 4 If you see another student in the gym picking up a barbell with his or her legs straight, what should you tell that person?
- 5 If someone asked you how to improve his or her aerobic fitness, what would you tell that person?
 - a What sort of exercise?
 - b For how long?
 - c How fast?
 - d How often?



Activity 2.20

'If it feels good ...'

Now that you know all the different training methods for improving your fitness components, it is up to you to choose the exercise that is right for you.

The basic rule is:

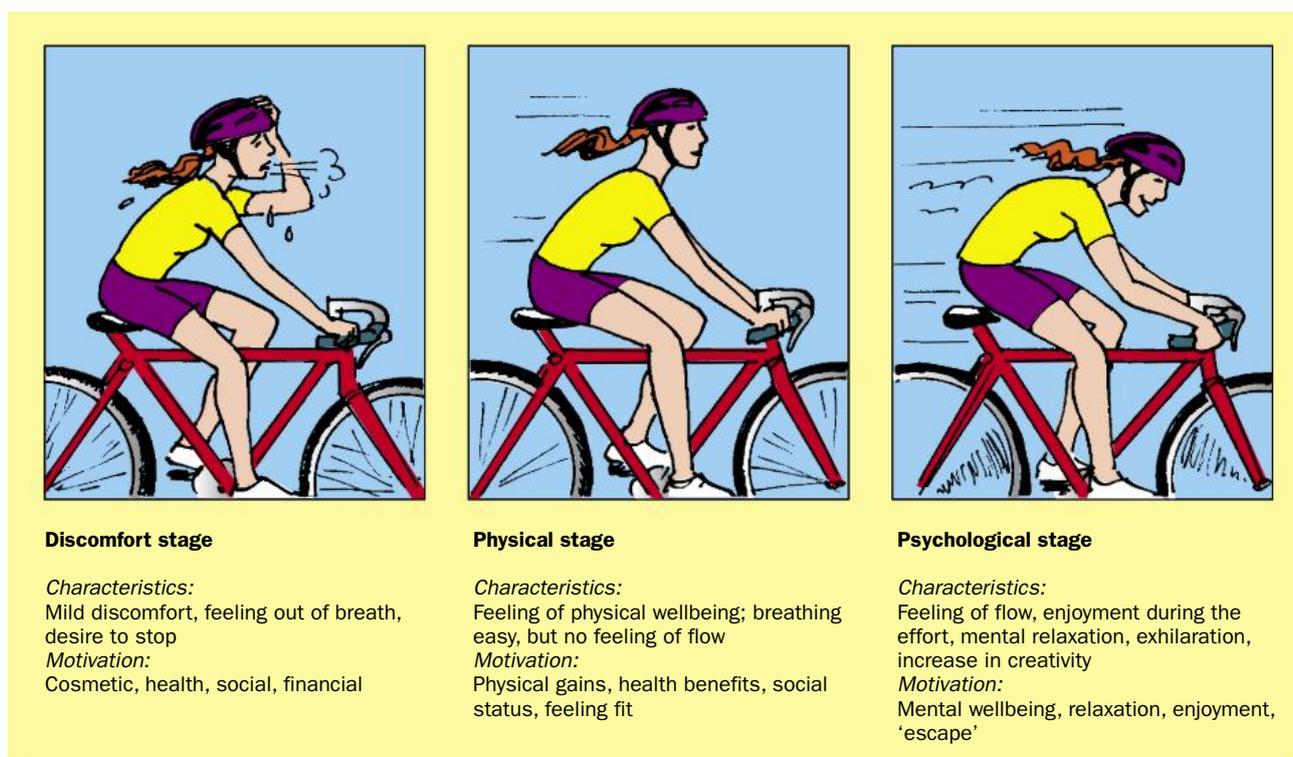
If it feels good and makes you fitter, do it.

However, before you begin to write your own fitness program, you need to know a little more about:

- ➔ planning your training sessions
- ➔ following training principles
- ➔ keeping up your motivation.

Motivation for fitness training

Unfortunately, reports show that nearly two-thirds of the people who start an exercise program give it up within three months. So that you do not become one of the dropouts, here is some information to help you.



Discomfort stage

Characteristics:
Mild discomfort, feeling out of breath, desire to stop
Motivation:
Cosmetic, health, social, financial

Physical stage

Characteristics:
Feeling of physical wellbeing; breathing easy, but no feeling of flow
Motivation:
Physical gains, health benefits, social status, feeling fit

Psychological stage

Characteristics:
Feeling of flow, enjoyment during the effort, mental relaxation, exhilaration, increase in creativity
Motivation:
Mental wellbeing, relaxation, enjoyment, 'escape'

Figure 2.53 Discomfort stage

Figure 2.54 Physical stage

Figure 2.55 Psychological stage

Three stages of fitness

Anyone who begins an exercise program needs to realise that there are three stages of fitness (Figures 2.53, 2.54 and 2.55):

- ➔ the discomfort stage
- ➔ the physical stage
- ➔ the psychological stage.

The discomfort stage

This stage has a different time and duration for each person, according to the amount of time since you last exercised regularly. It can last from two to ten weeks, so you must keep pushing yourself to see it through. At this stage, you will probably find the training a pain. If so, these suggestions should help:

- ➔ Train with someone so that you can take your mind off what you are doing.
- ➔ Take the training gradually. Do not punish your body.
- ➔ Always keep a record of your training sessions.
- ➔ Set yourself both long-term and short-term goals. For example:
 - short-term goal: to be able to jog for ten minutes non-stop
 - long-term goal: to be able to complete the local five-kilometre fun run.
- ➔ Give yourself a pat on the back after every session.
- ➔ Plan your training in advance so that you are committed and cannot get out of it.
- ➔ Choose a type of exercise that 'feels good and makes you fitter'.

Okay, so you have survived the discomfort stage and have made it to the physical stage.

The physical stage

At this stage, the exercise stops hurting and even begins to feel good, especially after each session. You start to notice beneficial changes in your body, you feel good and you look better, so you come back for more. It is still difficult, but now you know it's worth it.

The psychological stage

Few people make it to this stage. This is the addiction stage, where the person gets a mental 'high' out of exercise. It takes years to reach this stage, and you do not need to make it in order to keep training.

Training principles

If you follow each of these training principles (guidelines) you can be sure your program will work.

Progressive overload

Once you have chosen your goal, plan small increases in effort in order to reach it. In other words, progressively overload your body so you gradually improve and reach your goal. For example:

Goal: Jog for 20 minutes continuously.

- ➔ Weeks 1–3: Jog for ten minutes.
- ➔ Weeks 4–6: Jog for 15 minutes.
- ➔ Weeks 7–8: Jog for 18 minutes.
- ➔ Weeks 9–10: Jog for 20 minutes.

Specificity

Your fitness tests have shown you which fitness components need improvement. Now you must choose the specific training methods you need to improve these fitness components. For example, if your 1.6-kilometre run result was 'P' or 'R', choose either continuous training or circuit training as your exercise to improve your aerobic capacity.

Frequency

To improve your fitness components:

- ➔ train at least three times per week
- ➔ keep that going, as a habit, for the rest of your life.

Unfortunately, if you stop during an exercise program, the fitness you have developed in the preceding weeks will gradually disappear. You will have noticed this when you have been sick in bed for several days. When you get up, your legs are weak because your leg muscles have lost strength while you were not exercising them.

Variety

To keep up your interest and motivation, you must vary your training to change:

- ➔ how you train, for example, two weeks of jogging, two weeks of aerobic classes, two weeks of circuit training, two weeks of jogging, etc.

- ➔ where you train, for example, beach runs, hill runs, park runs, road runs
- ➔ how hard you train, for example, two easy days, one hard day, two easy days, and so on
- ➔ with whom you train, for example, schoolmates, friends, family.

Retest

At first, retest yourself every six weeks to see how your program is working. If you are improving, stick with your program. If there is no change, make your program harder so you will improve.

Training session format

Every time you go out to train, your training session must include a warm-up, a work out and a cool-down.



Figure 2.56 Warming-up should involve stretches after light continuous activity

Warm-up

This will prevent injuries and make the main part of your training more enjoyable. All warm-ups should include five minutes of slow continuous activity—for example, jogging or cycling—followed by the series of flexibility exercises shown on page 110.

Work out

This is the major part of the session where you perform the exercise you have planned, for example, a continuous 15-minute jog, continuous 20-minute swim, circuit training, weights program or interval session.

Cool-down

You must always finish your training sessions with a slow walk or jog, and again do the stretching exercises used in the warm-up. A cool-down prevents the severe muscle soreness you sometimes get after training and reduces muscle stiffness.

Planning your program

In this chapter, you have:

- ➔ seen what fitness means
- ➔ found out what the fitness components are
- ➔ tested yourself and found out where you need to improve
- ➔ looked at the training methods you can choose to improve your fitness components
- ➔ found out how to keep up your motivation
- ➔ found out how to set up each session and what principles to follow throughout your program.

Now it is time to plan your program so that when you retest in six weeks to three months, you will find that you have made extensive improvements.

Here are several sample programs:

- ➔ **Programs 1 and 2** (Figures 2.57 and 2.58) are general programs aimed at improving aerobic capacity, muscular strength and endurance, and flexibility.
- ➔ **Program 3** (Figure 2.59 on page 116) is designed to improve strength and power, aerobic capacity, agility, speed, and flexibility for team sports.

Day	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Monday	Jog 10 mins	Jog 10 mins	Jog 15 mins	Jog 15 mins	Jog 20 mins	Jog 20 mins
Tuesday						
Wednesday	Swim 10 mins	Swim 10 mins	Swim 15 mins	Swim 15 mins	Swim 15 mins	Swim 20 mins
Thursday				Cycle 20 mins		
Friday	Circuit training	Circuit training	Circuit training	Circuit training	Circuit training	Circuit training
Saturday			Cycle 20 mins			
Sunday	Cycle 15 mins	Cycle 15 mins		Cycle 25 mins	Cycle 25 mins	

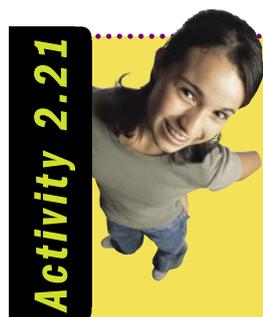
Figure 2.57 Program 1: General fitness. Note that every session begins with a warm-up and finishes with a cool-down, and every session builds towards or follows the FITT formula

Day	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Monday	Jog 10 mins	In-line skating 30 mins	Jog 15 mins	Jog 15 mins	Backyard resistance circuit 20 mins	Jog 20 mins
Tuesday						
Wednesday	Backyard resistance circuit 20 mins	Swim 10 mins	Swim 15 mins	Swim 15 mins	Basketball 1 on 1 25 mins	Swim 20 mins
Thursday				Cycle (bike path) 20 mins		
Friday		School cross- country run 20 mins	Basketball 1 on 1 30 mins			Aerobics
Saturday	In-line skating 40 mins				Surfing 60 mins	
Sunday	Cycle street 15 mins	BMX track 15 mins	In-line skating 30 mins	Tennis 60 mins	BMX track 25 mins	In-line skating 30 mins

Figure 2.58 Program 2: General fitness. This program includes many of the activities you normally are involved in. You begin every session with a warm-up and finish with a cool-down, and every session builds towards or follows the FITT formula

Day	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Monday	Weights Jog 20 mins	Weights Jog 20 mins	Weights	Weights	Weights	Weights
Wednesday	Intervals: 2 x 400 m 4 x 200 m 6 x 60 m	Intervals: 2 x 400 m 4 x 200 m 6 x 60 m	Intervals: 2 x 400 m 6 x 200 m 10 x 50 m	Intervals: 4 x 200 m 6 x 100 m 8 x 50 m	Intervals: 8 x 200 m 8 x 50 m 8 x agility runs	Intervals: 8 x 200 m 8 x 50 m 8 x agility runs
Thursday	Weights Jog 20 mins	Weights Aerobics	Weights Aerobics	Weights Cycle 25 mins	Weights Cycle 25 mins	Weights Aerobics
Saturday	Game	Game	Game	Game	Game	Game

Figure 2.59 Program 3: Team games fitness program. Note that every session begins with a warm-up and ends with a cool-down. The distances, efforts and exercises are all chosen to improve the fitness components for your team sport



Activity 2.21

My fitness program

- 1** Look back to see the fitness components that you need to improve. Write them down.
- 2** Next choose the activities you would like to do to improve each component. Write them down.
- 3** Now plan how long or how much you think you should perform for each activity. Remember: build up slowly.
- 4** Now write in the table below an activity that suits your lifestyle for each day. For instance, maybe you can use the local pool only on Monday or Wednesday, or maybe you can do aerobics only on weekends.
- 5** Write in how long you will exercise each activity day, or how much you are going to do each activity day. Shade in your rest days.
- 6 a** When you have finished, decide if you will try out your program. You may find you need to modify it along the way because it has been too hard or too easy, or because your plans have changed. That's fine. Just write in the changes.
- b** After six weeks, retest your fitness components to see if your program worked.

Day	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Monday						
Tuesday						
Wednesday						
Thursday						
Friday						
Saturday						
Sunday						

Sport, play or physical activity?

If you decide to build an active lifestyle, you need to decide the types of activity you will include in your leisure time. You can choose sport, play or physical activity. Each of these has advantages and disadvantages.

Sport

Sports are very organised, standardised activities with detailed rules, a high level of competition, complex skills and usually a high level of fitness that you develop through training.

Figure 2.60 Canoeing is an Olympic sport



Figure 2.61 Athletics is a very competitive sport

The advantages of sports

- You have fun.
- You can play with your friends or make new friends.
- You learn to share and think of others.
- You get to compete against others.
- You can learn team spirit and sportsmanship.
- You are coached in skills and fitness.
- You develop fitness while you are focusing on team play, skill or your teammates.

The disadvantages of sports

- You may dislike having to compete against other people in a win-or-lose situation.
- You have to commit yourself to set training and competition times.
- If you just want to improve your fitness, sports are inefficient, because you spend a lot of time learning skills and tactics.
- You may have to do things in a sport that you do not really like doing, for example, you may like dribbling and shooting in basketball but dislike guarding and screening.

Play

Play may involve the same skills or fitness as sports. However, play is not as organised, competitive or controlled as sports, and you have a choice of when you will do your chosen activity and for how long.

For example, you can choose whether or not you want to go to the local school with your friend and play one-on-one basketball. But if you join the local basketball team, you take on set training and game times—you will be committed to attend because sport requires commitment.

Figure 2.62 Recreational swimming



Advantages of play activities

- ➔ You can choose when to play, for how long, and with whom.
- ➔ You do not have the pressure of competition unless you want it.
- ➔ You can develop fitness while focusing on skills or fun.
- ➔ You can develop new friends and skills.

Disadvantages of play activities

- ➔ You miss out on learning team spirit, sportsmanship and the social side of sport.
- ➔ You may not develop much fitness if you spend all your time trying to master new skills.
- ➔ You usually cannot get coaching unless you pay for it.



Figure 2.63 Recreational canoeing

Figure 2.64 Many popular recreational activities in Queensland are water based



Physical activities

Physical activities are really recreational activities with the main purpose of developing your fitness.

Advantages of physical activities

- This is the most time-efficient way of improving your fitness. It can be over and done with quickly, and you reap all the benefits of such activities.
- You do not need to spend a lot of money on equipment and coaching.
- You do not need to travel to facilities unless you want to. Most activities can be done from home.

Disadvantages of physical activities

- There is less to distract you while you are active, so motivation and boredom are key factors.
- Many physical activities are individual activities, so you may miss out on the social-interaction side of activity.

As you probably realise, the best use of your leisure time is to include some sports, play and recreational activities. This way you enjoy the benefits of all.



Figure 2.65 Aerobics and weight circuits are fitness-based activities offered at fitness centres



Figure 2.66 Cycling is a popular fitness activity

Is it sport, play or physical activity?

- 1 Look at the list of activities in the table below.
- 2 Next to each activity, write whether it is a sport, play or physical activity.
- 3 In the next column write the component or components of fitness you would develop if you performed each activity regularly.



Activity 2.22

Activity	Sport, play or physical activity	Component(s) of fitness
Rugby (club)		
Cricket (club)		
Darts		
Frisbee games		
Windsurfing		
Mountain climbing		
Tennis (club)		
Golf		
Cricket (beach)		
Hockey		
Surfing		
Basketball		
Soccer (street)		
Tenpin bowling		
Netball (club)		
Aerobics		
Athletics (1500 m)		
Jogging		
Skateboarding		
Soccer (club)		
Sprinting (athletics)		
In-line skating		
Swimming		

- 4 Answer these questions:
 - a Do you think sport or play is more likely to develop fitness? Why?
 - b What is the key difference between sport and play?
 - c Can play become sport? Can sport become play? Can physical activities become sports?
 - d As you get older, which do you think will be more important: sport or play?
 - e List all the sports, physical activities and play activities you have regularly been involved in during the last year. Are your lists long enough? Why or why not?

Activity 2.23



The great activity debate

- 1** Define the following three types of activity using examples to support your definitions:
 - sport
 - play
 - physical activity.
- 2** Which of these types of activities provides you with maximum benefit? Write down your answer.
- 3** Your teacher will chair a class forum on the definitions of these types of activity, and on which is most beneficial to teenagers. Use your answers to question 1 and 2 as a basis for your opinion.
- 4** Based on the discussion in the class forum, modify your answers to questions 1 and 2 if you have changed your mind.

Community facilities

From the information you have gained throughout this chapter, you may want to set yourself a goal to improve your overall fitness or certain components of it. To do this, you will need to find out about the available services in your community:

- ➔ You might wish to swim three times a week. Does your community have a pool open to the public? Is it open all year round? What are its opening hours?
- ➔ You might like to take up bike riding to help strengthen your legs. Where are the local bike tracks? Are they well maintained and convenient to use?
- ➔ You might like to join a tennis club or play netball. Are such clubs available nearby? What are their fees and opening hours?

Activity 2.24



Community sporting facilities

- 1** Using a street directory, your community information centre, your classmates, your parents and your own knowledge, make a list of all the community sporting, recreational and fitness facilities within five kilometres (comfortable riding distance) of your home.
- 2** Record your list on the table shown on page 123.
- 3** Now complete the table:
 - a** Fill in 'yes' for each facility if you do or could use it or 'no' if you cannot.
 - b** Fill in the types of activities each facility offers or caters for.
 - c** Fill in the costs of using the facility.
 - d** Rate each facility as excellent, good, average, poor or very poor.

Facility	Do you or could you use it?	Activity offered	Cost	Rating

4 What other sporting or recreational facilities do you think your community needs?

Good facilities open up sporting and recreational opportunities for all members of the community.

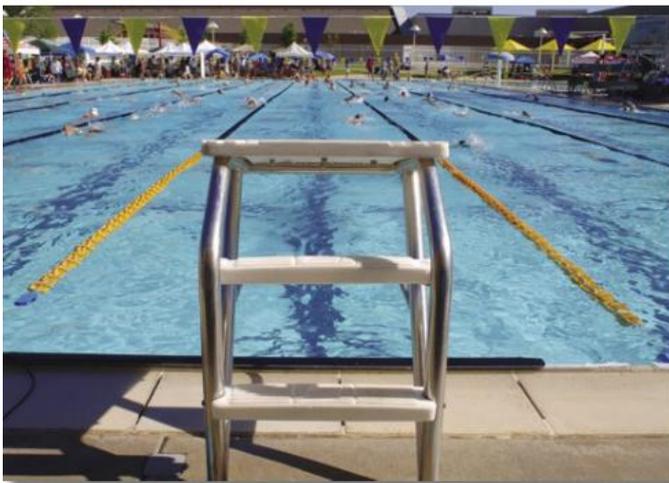


Figure 2.67 Aquatic facilities



Figure 2.68 Indoor courts



Figure 2.69 Country sports facilities include horse-riding schools



Figure 2.70 Rebound ace courts



Figure 2.71
Gymnastics facilities with safety pits



Figure 2.72 Lighting for a sports stadium

Activity 2.25



Facilities for sport, play and physical activities

- 1** In pairs, survey staff at several sporting facilities in your area. These might include:
 - tennis facilities
 - football facilities
 - netball facilities
 - softball clubs
 - nature reserves
 - fishing clubs
 - gymnasiums
 - surf clubs.
- 2** Ask the staff about the needs that the particular facility or activity is trying to meet. To help you do this, use the table below.

Name of facility	Purpose (sport/ play/ physical activity)	Location	Cost	Equipment required	Skill level required	Hours of operation

- 3** Which facility is the most expensive for people to attend?
- 4** Is it a facility for sport, play or physical activity?
- 5** For the facilities you researched, does the participant need to provide his or her own equipment or is it provided? Give details.
- 6** Which facility or activity requires the greatest time commitment from those who take part in that activity?
- 7** Do any of the facilities require a certain level of skill before allowing a person to participate? If so, which ones?
- 8** Which types of people are unlikely to be allowed to join these facilities?
- 9** Which facility appeals most to you? Why?
- 10** What do you think are the key factors that determine whether a community facility is well used? Make a list and discuss your answer with classmates in a class discussion.

Vital community activity issues

Women in sport and physical activity

When the Olympic Games started more than 2000 years ago, women were not allowed to watch or take part in any events. Offenders could be severely punished or put to death.

The Olympic Games were restarted in the late nineteenth century. Their modern founder, Pierre de Coubertin, said: 'In public competitions women's participation must be absolutely prohibited. It is indecent that spectators should be exposed to the risks of seeing the body of a woman being smashed before their eyes ... her organism is not cut out to sustain certain shocks.'

The opportunities for women to participate in national and international competitions remain much fewer than for males. For example, in the 2004 Summer Olympic Games there were 166 men's events and 118 women's or mixed events.

This is an increase of 21 events for women due to the introduction of events such as women's water polo, weight lifting, modern pentathlon and pole vault.

Women are also under-represented in all area of leadership, management and decision-making in sporting associations. Coaching has historically been a male domain. Very few females coached prior to the 1950s, and while numbers of female coaches have increased men still dominate this profession. Only 20 per cent of high performance coaches and 29.5 per cent of Level 1 coaches are female.

Figure 2.74 Today women enjoy competing in a variety of sports



Figure 2.73 Ian Thorpe with his coach Tracey Menzies, prior to his retirement



Figure 2.75 Tamsyn Lewis is an elite female track athlete

Media coverage of women in sport

The Australian Sports Commission produces a report every four years on media coverage of sport in Australia. The results of this research have confirmed for many years the considerable inequity that exists in media coverage of women's and men's sport. Part of this research involved a two-week analysis of newspapers, magazines, television and radio media coverage of sport. The results showed that television coverage of women's sport was just

Figure 2.76 An Australian women's swimming team—ambassadors for women's sport



2 per cent of total sports' coverage; magazines assigned 6.8 per cent of their coverage to women's sports and radio a meagre 1.4 per cent of all sports broadcasts.

The most popular sport played by females in Australia is netball, with close to 376 000 participants. This figure is almost double the number of AFL players and four times the number of participants in Rugby League. Why is it then that coverage of netball does not reflect of these figures? Despite the large numbers of players, netball still struggles for media coverage. Read the following article and assess the reasons given for this situation.

Give us a sporting chance, netballers tell sponsors

By Liz Gooch

When Nathan Brown pulls up at Telstra Dome in his BMW tonight for the opening match of the Wizard Cup, there will be no shortage of professional help.

The Richmond rooms will be bursting with a support crew for the Tigers star to call on. He is one of 20 players in the competition who earns more than \$500 000 a year, according to figures released yesterday.

There will be four full-time coaches, three part-time coaches, a doctor, a psychologist, four masseurs, two physiotherapists, three strength and conditioning coaches, a player welfare manager, a team manager and co-ordinator, football director, a chaplain, two

runners, eight trainers, six people preparing boots and uniforms and six statisticians.

And just to make sure over-zealous fans are kept away, two doormen and a security guard will also be on duty.

It is the type of preparation elite netballers like Sharelle McMahon can only dream about.

She is one of the nation's top 120 netballers who this week joined the Australian Workers Union to help fight for more pay.

As the captain of Melbourne Phoenix, McMahon is paid between \$8000 and \$10 000. She juggles a part-time administration job with eight training sessions a week.

McMahon works part-time so that she can travel interstate for Friday night games. 'With the pay

that we get, it's certainly not enough to live off,' she said. 'Everyone has to work. They have to do something else so they can eat.'

The Australian netball team might be ranked No. 2 in the world and train up to 30 hours a week, but the players still take leave without pay or annual leave to play.

The average netballer in the national competition receives between \$4000 and \$6000 a year, plus benefits in kind. The top players receive about \$20 000, small change for the average AFL player who takes home \$165 000.

Australian coach Norma Plummer knows only too well the limitations of a sport which doesn't enjoy corporate support or the government funding given to Olympic sports. She has just 22

training days this year to prepare the team for the Commonwealth Games. 'I don't think Kevin Sheedy would be too pleased to ... have his players for 22 days,' she said.

The netballers' plight is common in women's sport. Only two sportswomen—rising tennis star Alicia Molik and golfer Karrie Webb—scraped into *Business Review Weekly* magazine's list of the top 50 Australian sports earners last year.

There can be little argument that women are any less dedicated to their sport than men, but the enduring question remains—should female athletes receive more pay if their sport fails to generate revenue?

Men's sports rake in the money from television rights, massive crowds and sponsorship, but netball still relies on the membership fees paid by its 1.2 million players to help fund its elite teams.

Netball Australia's chief executive Lindsay Cane said that before the players could earn a living, the sport needed to advance internationally, and community and corporate attitudes needed to change.

She said netball was a perfect match for companies trying to pitch to women, who were often the decision-makers in the home.

'Netball is one of the best products that you can offer in terms of representing to the female market,' she said.

'That's where I see our potential is—to convey to the public what wonderful role models (netballers) are for healthy living, being well balanced and trying to inspire the young kids too.'

She said part of the challenge was helping change the public mindset that netball was all about attractive girls in short skirts. 'Forget the old pleated skirts and girls. Think about astonishingly fast, speedy athletes. Then watching a game is like watching a men's game.'

Martin Hiron, the director of sports marketing research company Sweeney Sports, said the key to boosting revenue lay in attracting more men and being broadcast on commercial television.

'Unless you're on mainstream TV, you're never going to have significant amounts of revenue,' he said.

But this seems extremely unlikely, considering popular events like the Ashes have already gone to pay television.

Australian captain and veteran Liz Ellis is one of the lucky few who can earn extra income through coaching clinics and sponsorship. She has no doubt about the sport's potential.

'We know that the sport can sell itself as a spectacle and the Players Association is keen to work with Netball Australia to make sure that continues to happen,' she said.

Ellis knows her playing days will be over by the time netballers can make a decent living from the sport. But she said it was important to ensure future players were well placed to share in the spoils of the game's success if it did take off.

Despite the gaping disparity between pay for netballers and footballers, Ellis said there were no hard feelings.

'We certainly look at them with a little bit of envy but a lot of admiration,' she said, 'And it's my dream that in 20 years' time netballers will be in the same position as them.'

The Age 18 February 2005

A tale of two sports

NETBALL

Average pay: \$4000–\$6000

Top players: \$20 000

World record crowd: 14 339 at test between Australia and New Zealand at the Sydney SuperDome, November, 2004

Television: Delayed broadcast on ABC

AFL FOOTBALL

Average pay: \$165 000

Top players: Four players earn more than \$800 000

World record crowd: 121 696 at 1970 grand final between Carlton and Collingwood at the MCG

Television: \$780 million deal over five years with Channel Seven and Channel Ten; Foxtel will pay Channels Seven and Ten \$315.5 million over five years to broadcast four games live on the weekends.

The Age



Figure 2.77 Activities that are seen as women's-only activities get very little or no media attention

Activity 2.26



Media survey

Conduct a survey of men’s and women’s sport in a daily newspaper over at least one complete week.

- 1** Divide the class into three groups.
- 2** One-third of the class should cut out all the articles on women in sport.
- 3** Another third of the class should cut out all the articles on men in sport.
- 4** The other third of the class should cut out all the articles on mixed-gender sport.
- 5** At the end of the week, bring all the articles into class.
- 6** In your groups, tally the number of articles you collected over the week.
- 7** Using the table below, record the number of different articles for each of women’s sport, men’s sport and mixed-gender sport for each day of your coverage, and a total for each. Calculate a percentage for the coverage of each category.
- 8** Which group had the greatest coverage? Was this surprising? Why? Why not?
- 9** Which sport had the most coverage for males?
- 10** Which sport had the most coverage for females?
- 11** Can you see these results changing in the near future? Explain your answer.

	Men’s sport	Women’s sport	Mixed sport
Day 1			
Day 2			
Day 3			
Day 4			
Day 5			
Day 6			
Day 7			
Total			

Activity 2.27



Women’s sport has a way to go

Read the article ‘Women’s sport: a way to go yet, baby’. The author, Tracee Hutchison, has identified inequalities in the media coverage of women’s sport.

- 1** How many of the names of the sportswomen in this article did you recognise?

2 Complete the table below through research.

	List the men who are:	List the women who are:
Surfing	Current World Champion	Current World Champion
Tennis	Current World No.1	Current World No.1
Cricket	Australian Captain	Australian Captain
Basketball	Australian Captain	Australian Captain
Soccer	Australian Captain	Australian Captain
Hockey	Australian Team Name Australian Captain	Australian Team Name Australian Captain

- Were there any differences in the time taken to find the names for the men and the names for the women? Which category was 'general knowledge' for you?
- List the ways in which you have seen women's sport promoted in the media? How does this contrast with the way in which men's sport is promoted?
- The assumption that advertisers and sponsors make is that women's sport is less popular than men's sport. What media strategy would you employ to increase media coverage of women's sport?

Women's sport: a way to go yet, baby

By Tracee Hutchison

In the fight for equality in sport, tennis is still the odd girl in.

With the exception of Cathy Freeman's gold medal run at the Sydney Olympics, I can't think of any other time that women's sport is broadcast in prime time on commercial television other than during the Australian Open. I also can't think of any other women's sport where its top-ranked players are known by their first names. Venus, Serena, Jelena, Lindsay, Maria, Amelie, Elena, Justine, Martina, the Czech-born Swiss-Miss, not the veteran Czech-American, and, of course, the woman formerly known as Our Kim.

But when Martina Hingis stormed back into contention with a two-set run in the park on Tuesday night, she did it in trademark style and in the after-dinner sweet spot of prime-time commercial TV

viewing. It was the kind of exposure that other women's sports could only dream about.

The time-weary debate about gender inequity in sport is at its most level playing field in tennis. When the great Billie Jean King championed the first women-only event in 1970, it was celebrated with the slogan 'You've come a long way, baby' and a \$US7500 purse. It was a huge step not only for defining the women's game, but completely redefined how much women expected to be paid to play it. At the end of next week, one of the present crop of first-name-basis women will walk away \$1.2 million richer—the same prize as the winner of the men's event. Show me another sport that equally divides its sponsor's money? There isn't one.

Right from those halcyon days of Billie Jean, Margaret, Yvonne and Czech-Martina, women's tennis has been the one real pioneering game in terms of male-female

equity on the sports field. So why the interest in tennis and not, for example, netball—the sport of greatest participation for women in Australia?

Australian netball captain Liz Ellis is probably better known as a media performer than as one of the game's most capped and most ferocious goalkeepers. After Elouise Southby—who also dabbles with a media career and, as we're frequently reminded in this state, has a famous footballing father—most sports-loving Australians would struggle to name any other of our netball champions. Perhaps the legendary Joyce Brown would rank a mention, for her inspiring career as a player, coach and mentor rather than as the mother of a famous Carlton footballer.

Lauren Jackson has done a huge amount for keeping basketball in the mix, but after retired greats Michelle Timms and Robyn Maher, who else would be on the list?

continued ...

Let's roll through some more just for fun, shall we? Cricket? Belinda Clark ring a bell? Clark, a Victorian and a veteran of 118 one-day internationals and 15 Tests, retired as captain of the Southern Stars last year—surely an outstanding career in anyone's estimate. I confess to having seen nothing of her in action outside a quick bit of vision at the end of the nightly news.

And what of the roller-coaster some women have travelled just to be able to play Australian rules? Earlier this month two commercial TV stations paid an obscene amount for the broadcast rights to AFL football. The rights-holders believe that sponsor dollars will help meet the operation dollar black holes they

must both be desperately trying to fill. It probably doesn't leave much room for so-called niche sports to find a spot, or a sponsor, to show us what they have to offer.

So what's tennis got that other sports haven't? It can't just be about sexy outfits and bling. Surfing's pretty sexy, with all those wetsuits and gravity-defying manoeuvres—Chelsea Georgeson sound familiar? She's the newly crowned 22-year-old world champion. Lives on the Gold Coast. But just last year former world champ Layne Beachley had to enlist the services of a personal sponsor to bankroll the annual women's event at Bells Beach.

In 1970, women's tennis had Billie Jean King and a sponsor

willing to take a risk. More than ever, the big name women of the game are drawing more in sponsor dollars and audience enthusiasm than their male equivalents. But it had to start with what was once a bold move called Virginia Slims. That tournament and those women showed us their game had just as much to offer as the men's.

I'm all for seeing the Australian netball team take on the Silver Ferns in prime time. I would have liked to have discovered that the Southern Stars also play an Ashes series other than in the process of researching this article. And I'd be pretty keen on seeing what Chelsea Georgeson has to offer while surfing my TV menu.

The Age 21 January 2006

Obesity crisis looms for women: a study shows disturbing trends

By Julie Robotham and Justin Norrie

Australian women in their 20s have put on an average five kilograms in only seven years, according to a national survey that suggests an imminent health crisis.

More than half of middle-aged women are also revealed as being overweight in the study, which highlights greater female participation in the workforce, longer hours spent behind desks and increasing difficulty balancing work and family commitments as reasons for the unhealthy trends.

'It's astounding,' said Christina Lee, co-ordinator of the Commonwealth-funded study, which will follow the same 40 000 women for at least another decade.

'The younger women have already caught up with the older generation. We are going to have higher rates of heart disease and diabetes,' said Professor Lee, professor of health psychology at the University of Queensland.

Tim Gill, executive officer of the Australasian Society for the Study of Obesity, said: 'It's a pretty frightening scenario ... It suggests rates of obesity are going to escalate quicker than we believed.'

The Australian Longitudinal Study on Women's Health, launched by federal Health Minister Tony Abbott yesterday, found that women in their mid to late 20s weighed an average 67.4 kilograms in 2003, compared with 62.6 kilograms when the same women were weighed in 1996. The weight of women in their early 50s had risen an average 2.4 kilograms to 71 kilograms over a five-year interval.

The young women's weight would inevitably climb, as only one in three had already had children and pregnancy and new motherhood were typically times of major weight gain, warned Professor Lee.

Women gained weight 'after getting married, moving from study into work, making those transitions into adulthood ... perhaps they give

up playing netball with their friends on a Friday night'.

Society needed to look at the particular pressures on young women, who did not have time to eat healthily or exercise adequately, she said.

'It's the whole struggle of juggling increasingly demanding sedentary work with finding time to cook and exercise,' Professor Lee said.

'Women want education, they want a professional, meaningful job, and they want a husband and children.

'It's up to policymakers to find a way for women to do those things without their health collapsing,' Professor Lee said.

Her research also examined rates of drinking and mental health problems among women.

Dr Gill said concern about overweight children had overshadowed the problem among young women, in whom excessive dieting and eating disorders had been incorrectly perceived as the greater issue.

The Age 15 September 2005

Women's health

- 1 Read the article 'Obesity crisis looms for women', which highlights the issue of women's declining health as a result of a multitude of factors. List these factors.
- 2 Refer back to the Time diary on page 62. Compare the weekly activities for boys and girls in the class. Were boys or girls more physically active?
- 3 What reasons do girls give for being inactive?
- 4 Does society expect girls to behave in certain ways? Explain your answer.
- 5 What are the long-term implications for you as a teenager?
- 6 What action/s can you take to ensure that you find a balance between work, study, family and friends and a healthy lifestyle as you move into adulthood?
- 7 Look at the photographs in Figures 2.78 and 2.79. Which is typical lunchtime behaviour? Why?
- 8 Write a paragraph for or against the following topic: 'Teenage girls do not enjoy physical activity.'



Activity 2.28



Figure 2.78 Is this typical behaviour for girls at lunchtime?



Figure 2.79 ... Or is this typical behaviour for girls at lunchtime?

The inactivity syndrome

Factors such as females historically being discouraged from exercise, poor media coverage of women's sporting achievements, and lack of positive role models to encourage girls and women to be active in sport or recreation have contributed to the growing number of inactive and overweight children, particularly girls.

Solutions to the inactivity syndrome

Equality for women in sport is gradually becoming more of a possibility. The following campaigns, promotions and strategies assist in keeping women active:

- Provide specialist primary-school physical education classes focusing on improving girl's basic skills.
- Educate the community so that both males and females understand that competitive urge, drive, aggression and endurance are characteristics that are shared by males and females, and that females do not have to be quiet, demure and retiring.
- Promote successful female sportspeople and demand they be given equal media attention to males.
- Demand that schools provide equal sports choices for boys and girls.
- Teachers, especially health and physical education teachers, need to be positive role models and encourage/praise active pursuits not just sporting success.
- Girls need to be educated on the value of activity in building a positive self-image.
- Girls need to be given their own time on activity facilities.



Figure 2.80 Athletics is an excellent sport for fitness and self-esteem



Figure 2.81 Sport is a great way to develop friendships

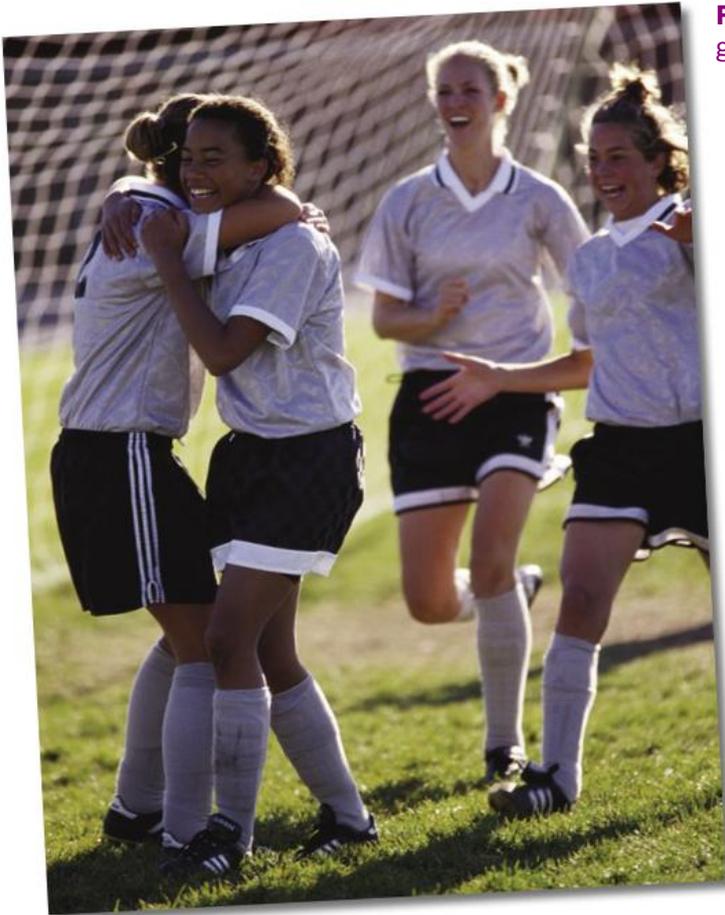


Figure 2.82 Sport allows girls to be part of a team

A fair go for girls

- 1** Are there barriers for girls participating in physical activities at your school?
- 2** Does your school:
 - offer equal sports choices for girls and boys?
 - have good active female teacher role models for girls?
- 3** Do you feel that boys dominate sport in your school? Justify your answer.
- 4** Do you have single-sex or mixed classes in physical education?
- 5** What are the advantages and the disadvantages of single-sex classes in physical education?
- 6** What are the advantages and the disadvantages of mixed classes in physical education?
- 7** How do the media see girls in sport?
- 8** How can the self-esteem of girls be improved through activity?
- 9** 'Females will never be as good as males at sport, and they should stop trying to be.' Write a paragraph in your workbooks on your feelings about this statement.
- 10** Draft a letter to a high-profile female Queensland sports star and ask her to come and talk at a school assembly about women in sport or girls and activity.



Activity 2.29

The commercialisation of sport

Media organisations say that we get the sports entertainment that we (as viewers, listeners and readers) ask for. But do we?

Are athletes worth the money that the media (such as television, radio, newspapers and magazines) pay for them? Media organisations would say 'Yes'. They say that we are willing to watch and read about highly paid athletes. On the other hand, the athletes and sports that are publicised in the media are the only ones to become popular enough to be paid vast amounts! Is there anyone in this world whose talent and service to humankind is worth \$8 million a year for swinging a golf club or tennis racquet? Should a sports star be able to demand \$23 million a year to match the number on his singlet? You as a consumer must decide how you feel about this.



Figure 2.83 A quick look at the grandstand shows how important advertising is in sport

Television rules sport

Television is now so powerful that the television company can demand changes in a sport if it is to give that sport coverage.

Changes within sport to fit the requirements of television include:

- ➔ Tie-breakers and 90-second game change-overs in tennis to accommodate commercial breaks.
- ➔ World Cup soccer matches played in the heat of the day to suit sponsors.
- ➔ The change in cricket to more one-day competitions and six-ball overs, giving an increase in advertising time.
- ➔ Four quarters, not halves, in rugby league because more breaks mean more commercials.
- ➔ Bowls tournaments played indoors, not outdoors, so that bad weather will not interrupt coverage.

- ➔ Boxing bouts fought after midnight in the host country ‘to allow a multitude of Americans to finish their afternoon shopping, snap open a beer, put their feet up and watch it on television at tea time’.
- ➔ Previous world championships and Olympics, which scheduled dawn sprints, noon marathons and mid-morning fights to coincide with American prime viewing even though the event was being held in another country.
- ➔ The direction of sailing races on Sydney Harbour has been changed to downwind to make better television, although this eliminates basic sailing skills from the race itself.
- ➔ Many sports have introduced coloured uniforms and coloured balls to improve their visual impact on television.
- ➔ In the National Basketball League, the requirements of television forced the alteration of the format from two halves, each 20 minutes long, to a format of four quarters, each ten minutes long and the reduction of the number of teams in the league.
- ➔ In rugby, cricket and AFL football, almost every item associated with the game now carries the sponsor’s logos (see Figure 2.84).
- ➔ In top netball, the traditional skirt and top has been replaced by lycra outfits that help sell the game on television.



Figure 2.84 Commercialism now extends to sponsor’s trademarks on Rugby League jerseys

Technology in sport

Technological change has had a major impact on almost every sport, making these sports safer, faster, cheaper or more interesting. For example:

- ➔ During the last 20 years, competition has become computer organised. Competitors are now computer ranked, and spectators have their bookings, security and access managed by computers.
- ➔ During recent years, many different sports have made enormous changes in the quality of the equipment and playing surfaces.

Tennis

Tennis is a sport that has been subject to the influence of technology:

- The tennis ball has changed to a lighter ball, kept in pressurised cans and cooled in fridges for tournaments.
- The old division in tennis between grass courts and clay courts has changed. Now many courts have a synthetic surface that gives extra speed, more grip, and an even bounce, and eliminates a home court advantage.
- Old wooden racquets have been replaced by graphite, wide-bodied racquets that enable harder, more accurate hitting.
- Shoes have changed dramatically during recent years. They are now much lighter (as light as 140 grams each) and contain new materials that give 'bounce' and protection to players' feet.
- Racquet strings are made of synthetic materials for greater rebound velocity, while vibration dampeners make it easier to grip the racquet.
- The racquet head has been enlarged to give a larger 'sweet spot' so you can hit the ball harder.



Figure 2.85 Changes in tennis racquet technology

Activity 2.30



Technological change in sport

Complete the following research assignment.

- 1** Choose a sport that you are familiar with.
- 2** Through research in magazines, the internet, textbooks and sports shops, write down all the technological changes that have happened in the last 10 years in your sport. Make sure you cover:
 - equipment changes
 - facility changes
 - clothing changes
 - changes in safety/protective devices
 - the use of computers
 - the use of sports science.
- 3** For each change discuss the effect that it has had on improving performance in the sport or boosting participation in the sport.
- 4** Prepare a five-minute talk on your findings and present your research to the class using visual aids whenever possible.

Recreation and sport as a career

The sport and recreation industries are growing continually throughout Australia. Australia has always seen itself as a ‘sporting nation’, but in recent years there has been an increase in opportunities for financial rewards, national popularity and new careers.

Career opportunities in the sporting industry are extremely wide, ranging from physical education teaching to gymnasium instructing to sports reporting. The table below shows you some of the career paths available.



Figure 2.86 A sports journalist in action

Sports job search

The table below lists a number of careers in the sport/recreation/fitness industry.

- 1 Choose three of these career options and interview a professional working in each career either by visiting them or over the phone. Ask each interviewee:
 - the qualifications necessary to enter the profession
 - the personal attributes the job requires
 - the positives of the job
 - the negatives of the job.
- 2 Fill in this information on a table similar to the one below.
- 3 Share your information with your classmates and from them try to get information on the other careers you did not research.
- 4 From the information you gathered, do you feel encouraged or discouraged about a career in this industry?



Activity 2.31

Career	Personal attributes	Qualifications	Positives	Negatives
Physical education teacher				
Exercise physiologist				
Personal trainer				
Sports journalist				
Fitness centre manager				
Sporting coach				
Physiotherapist				
Sports psychologist				
Recreation officer				
Professional athlete				
Sports administrator				

Sport for people with a disability

In the last few decades, people with a disability are gaining increasing opportunities to take part in sporting activities. They can benefit from all the physical advantages of such activities, as well as gaining:

- ➔ increased social interaction
- ➔ increased mobility
- ➔ increased control over their use of leisure time
- ➔ an increased sense of self-worth and wellbeing
- ➔ a greater experience of a fuller life
- ➔ a way of developing and joining support groups within the disabled community
- ➔ opportunities to meet new people and make friends.

All this helps people with a disability to feel accepted as part of the community as a whole. This process is sometimes called **normalisation**—reducing the differences between the lifestyles of people with a disability and those of able-bodied people, therefore giving people with a disability equal rights in the community.

As part of this process of integration, a Sports Ability Program has been established to assist sporting organisations to include more people with a disability.

Adapted activities

People with a disability are able to take part in many sports because the sports have been adapted. These adapted activities include:

- ➔ wheelchair basketball
- ➔ blind cricket
- ➔ swish—a game similar to table tennis, played by the visually impaired
- ➔ croquet and mini-golf—visually impaired people can use an aiming aid
- ➔ goalball—played by the visually impaired, it is similar to soccer, but on a much smaller scale, and is a Paralympic event
- ➔ boccia—a bowls-style target game, also a Paralympic event
- ➔ sitting volleyball
- ➔ polybat—adapted table tennis
- ➔ table cricket—a dynamic version of cricket
- ➔ wheelchair slalom—guiding a wheelchair around an obstacle course
- ➔ disabled athletics.



Figure 2.87 Today disabled athletes compete in a huge range of sports

The Paralympics

In 1960, an international competition for paraplegic people was held in Rome, at the same venue as that of the Olympic Games. It was called the Paralympics. They have been held every four years (in Olympic year) since then.

International Games for the Disabled

In 1976, paraplegic people were joined by the visually handicapped, amputees and those with cerebral palsy in the International Games for the Disabled. By 1984 the Games had grown to become the second largest sporting event in the world, involving 1800 athletes from 45 nations participating in 18 sports.

They include:

- ➔ track and field
- ➔ bocce
- ➔ wheelchair soccer
- ➔ weight lifting and power lifting
- ➔ basketball
- ➔ pistol shooting
- ➔ lawn bowls
- ➔ wrestling
- ➔ wheelchair slalom.
- ➔ cycling
- ➔ swimming
- ➔ cross-country
- ➔ table tennis
- ➔ horse riding
- ➔ archery
- ➔ volleyball
- ➔ goalball

Special Olympic Games

In 1968, the first Special Olympic Games were held. They involved over 1000 intellectually disabled children. The Games continue to be held every four years.

The Special Olympic Games offer an international program of physical fitness, sports training and athletic competition for intellectually disabled children and adults.

Disabilities and activity

- 1 Visit the Australian Sports Commission website at www.ausport.gov.au/dsu/what_is.asp and research the range of adapted physical activities such as boccia, polybat, table cricket and sitting volleyball. Working in groups, adapt the available resources at your school to introduce your class to a new adapted activity. Have the whole class participate in your selected activity.
- 2 Research the media coverage of disabled sport in the local media.
- 3 Are there local community sports facilities adapted for disabled people in your area?
- 4 What are the rates of participation of disabled people in sport in Australia?



Activity 2.32

Literacy

The notion of completing Maths for homework would not even raise an eyebrow in schools today. But consider the notion of completing physical tasks for homework. Identify a list of physical skills that you believe are essential for healthy growth and development. Develop a checklist of tasks, to be completed at home, that can be used to assess these skills over the course of a 10-week term. Use the fitness-testing protocols outlined in this chapter to assist. For each task identify the fitness component that is being developed. Ensure that a range of fitness components are incorporated and test for improvements at the end of the 10-week block.

Numeracy

Using a heart rate monitor and a stopwatch complete the following activity with a partner.

Fit the heart rate monitor correctly to Student A. Student A wears the receiver that displays the heart rate.

Record the heart rate of Student A for one minute prior to exercise commencing. Take readings at 10-second intervals.

Commence two minutes of stepping at a rate of 24 steps per minute or cycling at 10 km per hour. Record heart rate every 10 seconds.

Continue taking 10-second readings for 2 minutes post-exercise.

Prepare a graph using Excel or similar software showing the heart rate recordings from 1 minute pre-exercise to 2 minutes post-exercise.

Calculate Student A's maximum heart rate and plot this on the graph.

Calculate the Training Zone for Student A and plot this on the graph.

Lifeskills

Research shows that children spend large amounts of time in front of a computer or television screen. In an attempt to get children active, develop technologies that require moderate levels of physical activity throughout the course of an interactive computer game.

Think outside the square! For example, you could connect an exercise bike to your computer to pedal your way out of a 3D chase scene. Be quick or game over.

Future perspectives

There is substantial evidence of the decline in physical activity of children. Combine this with the effects of poor eating habits and the result is the rise in number of overweight and obese children. In an attempt to get children more physically active, you have been assigned the task of designing a playground environment of the future that provides opportunities for children to become physically active.

Design a model playground of the future and outline the equipment that you have selected for inclusion. Identify the fitness components that each piece of equipment/station/area aims to improve. Be as divergent a thinker as you can and try to incorporate technology into your concept.

Present your design and its health benefits as a Powerpoint presentation to the class.

Where do I go from here?

www.ais.org.au/disabilities/indes.asp

www.thesource.gov.au

www.cultureandrecreation.gov.au

Human development

Chapter 3



After the completion of this chapter, and after experiencing a range of practical activities, you should have an understanding and appreciation of:

- human development
- skeletal systems
- circulatory systems
- digestive systems
- stages of growth and development
- sexually transmitted diseases.
- body systems
- muscular systems
- respiratory systems
- reproductive systems
- sexual activity
- contraception.

Physical development

Throughout your life you will experience many changes. The different stages of your life are influenced by physical, emotional, social, intellectual and spiritual factors.

You wake up every morning, go to the toilet, eat breakfast, have a shower, brush your teeth and go to school without even thinking about how your body does all these things. To understand how your body develops physically you must be aware of how your body works. This section enables you to become aware of your physical body and the ways you can keep it healthy and in great shape.

You may have already heard of the term **anatomy**. This is the way your body is constructed. The term **physiology** is closely related to anatomy; it explains the way your body works. Your whole body is made up of different kinds of cells. They are microscopic structures that come in all shapes and sizes, each with a special job to do. They include muscle cells, blood cells and nerve cells.

Cells of the same type are grouped together to form tissues, for example, a muscle is a huge bundle of muscle cells. These tissues are grouped together to form particular organs, for example, the heart, lungs and liver. These organs are then divided into groups, each with a special job.

The groups of organs in your body are called systems. Each of these systems performs a different task for you.

Systems of the body

- ➔ The **skeletal system** consists of your joints and bones.
- ➔ The **muscular system** controls movement.
- ➔ The **circulatory system** is responsible for moving nutrients around the body.
- ➔ The **respiratory system** is responsible for the exchange of gases between the air and the body.
- ➔ The **digestive system** breaks down food.
- ➔ The **reproductive system** is responsible for procreation.
- ➔ The **urinary system** removes wastes from the body.
- ➔ The **nervous system** controls all of the body's functions.
- ➔ The **lymphatic system** protects your internal systems and organs.
- ➔ The **endocrine system** is responsible for hormone development.

The skeletal system

Your skeleton is made up of over 200 bones, joints, cartilages and ligaments and is responsible for:

- ➔ providing shape and rigidity to your body
- ➔ protecting your various organs by forming protective walls and cavities, for example, your rib cage protects your heart and lungs and your skull protects your brain
- ➔ providing movement by allowing muscles to attach to the bones.

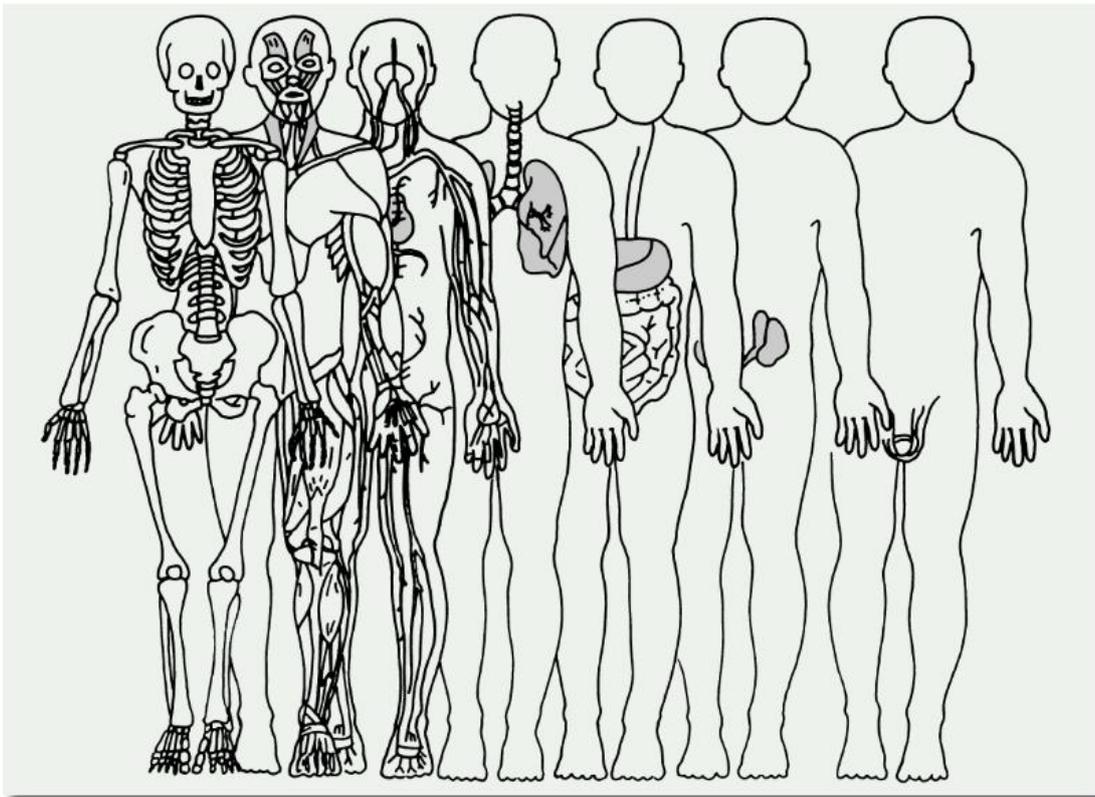


Figure 3.1 Your body systems

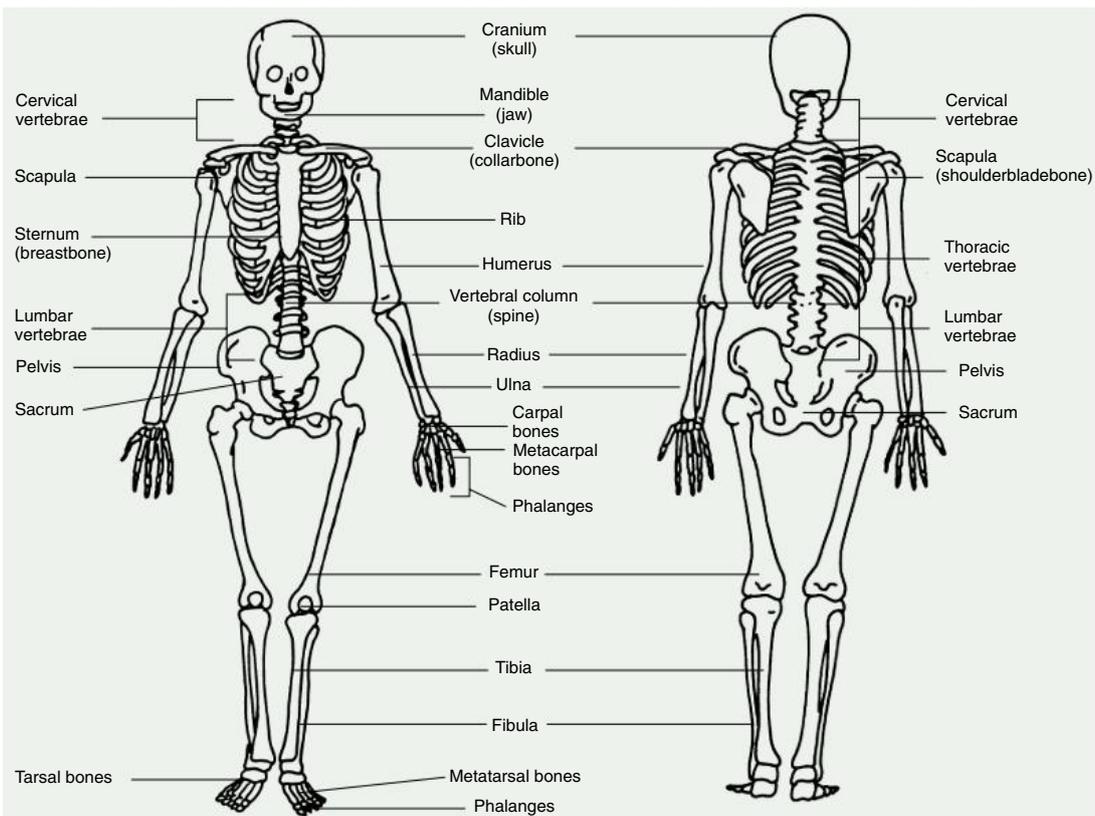


Figure 3.2 The human skeleton. Learn the real name and location of each bone

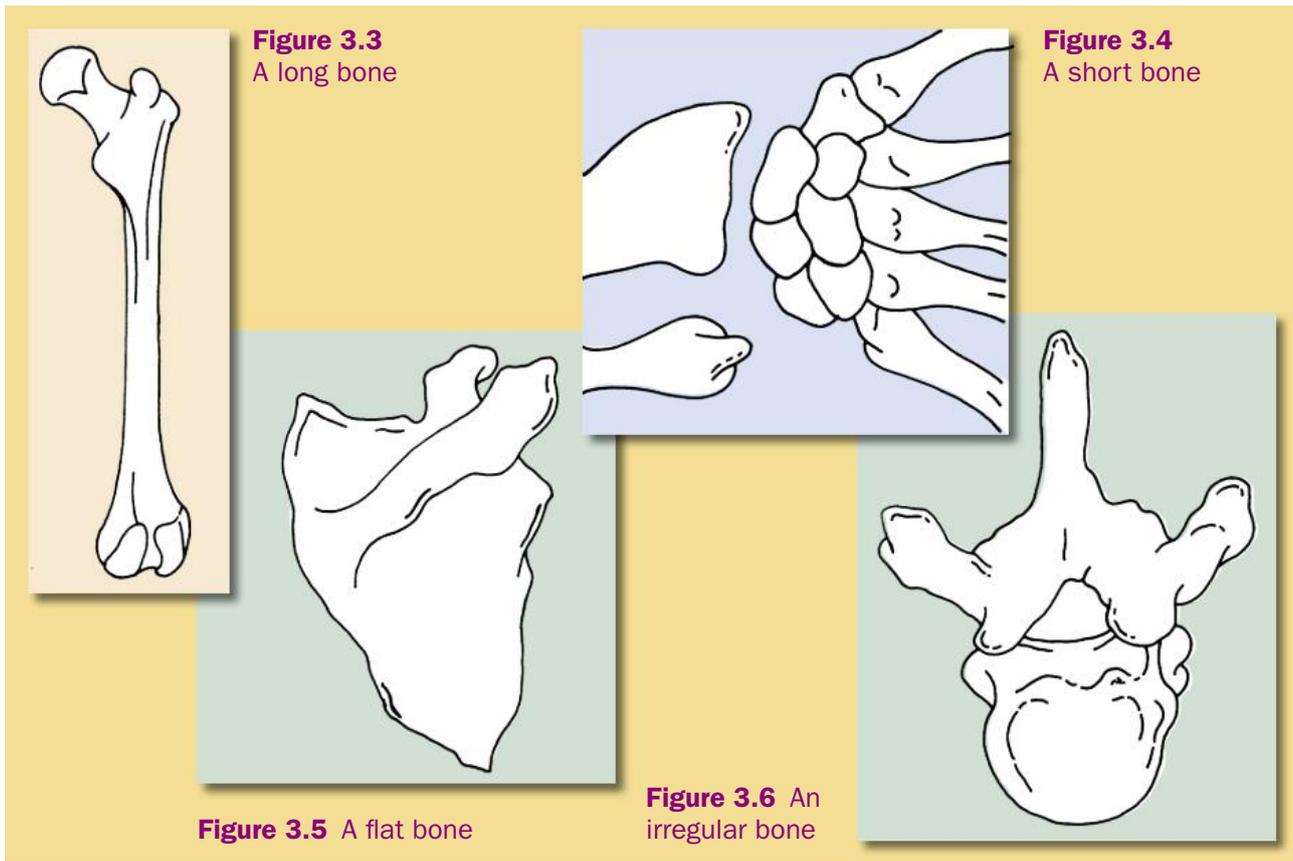


Figure 3.3
A long bone

Figure 3.4
A short bone

Figure 3.5 A flat bone

Figure 3.6 An irregular bone

Joints

We already know that the bones of the body fit together to form the skeleton. When two bones join they form what is known as a **joint**. There are three different types of joints in the body and they are characterised by the type and amount of movement they allow for. They are:

- ➔ **Immoveable joints**—this is where the bones are fused together, therefore allowing no movement to occur, for example, the skull.
- ➔ **Slightly moveable joints**—this is where the bones are joined by cartilage. Ribs joining the sternum are an example of this.
- ➔ **Moveable joints**—also known as synovial joints. Most of the bones in the body form moveable joints in that they can move freely in at least one direction, for example, the knee, ankle and hip. There are various types of synovial joints as outlined in Figure 3.7.

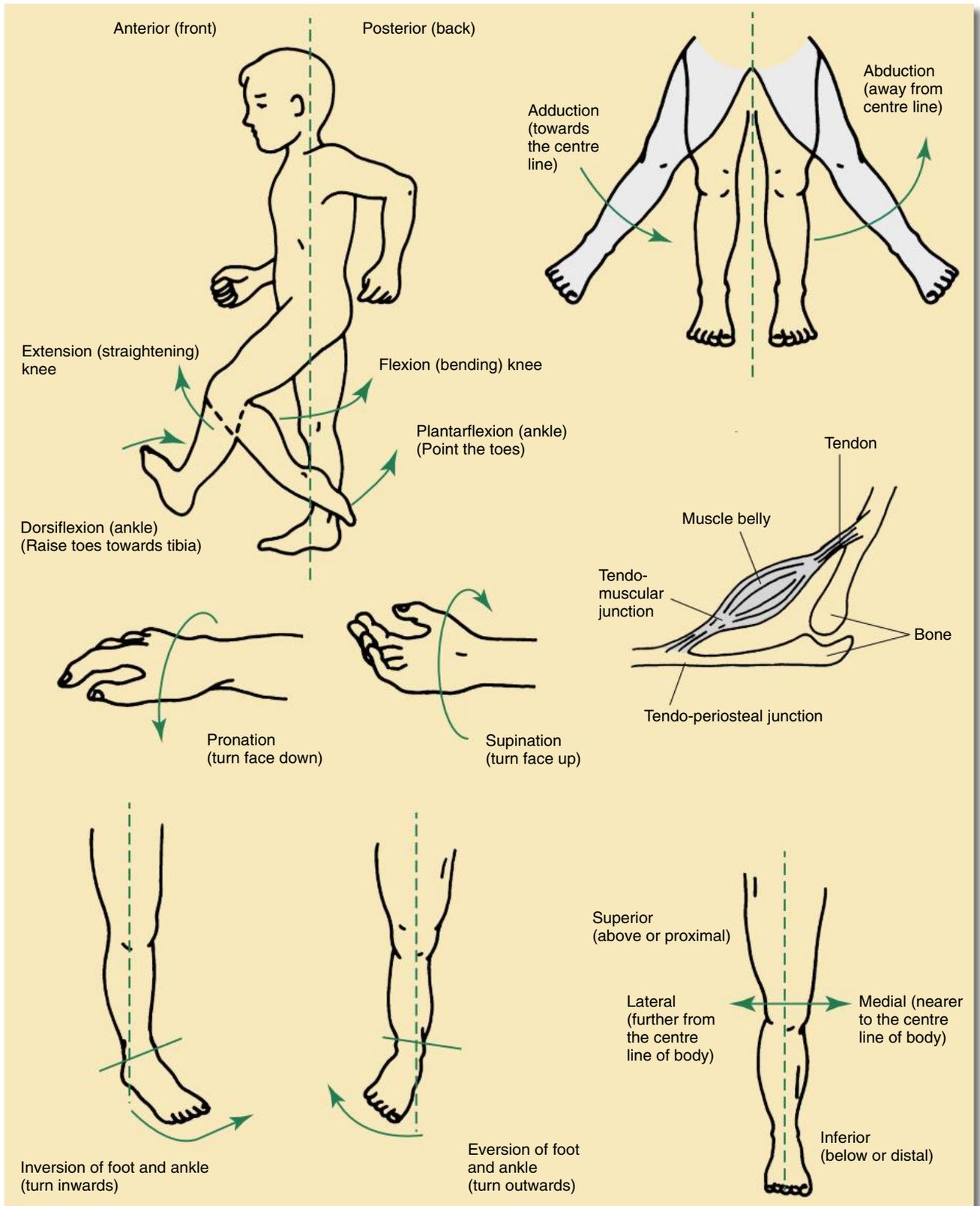
Type of joint	Example
Hinge joint	Knee
Ball and socket joint	Hip
Saddle joint	Thumb
Pivot joint	Vertebrae
Gliding joint	Carpals
Condyloid	Wrist

Figure 3.7 Types of synovial joints

Movement

The synovial joints all allow for various types of movement. Look at Figure 3.8 to see what the anatomical names for these movements are.

Figure 3.8 Anatomical terms



Joint structures

Connective tissues

Connective tissues are responsible for supporting the joints of the body, initiating movement and providing stability. There are three main types of connective tissue:

- ➔ **Cartilage**—a smooth slightly elastic tissue that is found covering the end of the bones in most synovial joints. It provides shock absorption, for example, in the vertebral column, and is resistant to wear.
- ➔ **Tendons**—join muscle to bone. They are very strong and rigid and allow for free movement of joints.
- ➔ **Ligaments**—join bone to bone across joints. Their slight elasticity provides stability however only allow minimal movement at joints.

Your joints

- 1 Next to the list of bones below, write the type of bone they are:

a femur	b vertebrae
c scapula	d skull
e carpals	f patella.
- 2 Discuss how joints are identified.
- 3 Use your own body to work out what type of movements occur at the following joints:

a hip	b wrist
c knee	d neck
e shoulder	f ankle.
- 4 Using the words in the box below fill in the missing words in the paragraph.

synovial	joints	tendons	hinge
cartilage	ball and socket	ligaments	

_____ are characterised by two bones joining. They are connected and held in place by _____ which supply stability. There are three main joints in the body. The joints responsible for movement are known as _____ joints. These joints are classified into six different categories. An example of a _____ joint is the knee, while the hip is a _____ joint. As these joints are frequently used they need protection from shock. _____ is found covering the end of bones of most synovial joints and acts as a shock absorber. In order for the joints to move, muscle must be attached to them via _____.



Activity 3.2

The muscular system

There are approximately 650 muscles in the human body, making up about 40–50 per cent of the total body weight. Muscles provide support to enable good posture, initiate movement and maintain essential bodily functions.

There are two types of muscles:

- **Voluntary muscles**—muscles in your body over which you have control.
- **Involuntary muscles**—muscles which work automatically. You have no control over them, for example, they move food through the digestive system and pump blood from the heart.

Skeletal muscle

Skeletal muscles are striped in appearance and work on a voluntary basis. They can either contract (shorten) or relax (lengthen) to allow for movement and develop good posture.

They work in opposing pairs to control joint movements. When one muscle in a pair contracts (agonist), the opposite muscle relaxes (antagonist). Your biceps bend your elbow while your triceps straighten your elbow (Figure 3.10) and your quadriceps straightens your leg while your hamstring bends your leg.

Figure 3.9 Body builders spend hours in the gym to boost the size of their muscles

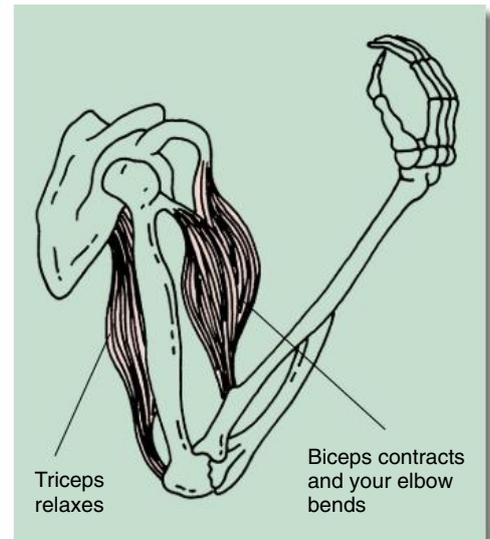


Figure 3.10 Muscle control of the elbow joint

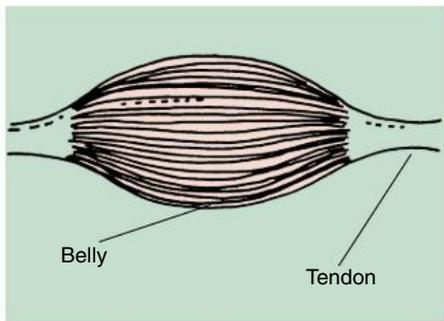


Figure 3.11 Skeletal muscle

The belly

Each skeletal muscle is made up of a belly, which is the bulk of muscle consisting of long fibres (cells) that are connected to bones at either end by a tendon. If you bend your elbow you can see your biceps belly.

The tendon

The tendon is a thick cord that attaches the belly of the muscle to the bone, for example, your hamstring tendons behind your knee.

Smooth muscle

These are involuntary muscles that are found in the digestive system and within the walls of other organs such as the bladder. The diaphragm is a very important smooth muscle since it is involved in the breathing process.

Cardiac muscle

As the name suggests, the cardiac muscle is the muscle of the heart. It is an involuntary muscle with a striped appearance.

Muscles of the body

- Name the major muscles for each of the following body parts:
 - chest
 - thigh (front)
 - shoulder
 - upper arm (front)
 - stomach.
- Carry out the following activity in pairs. Try to work out the major muscle working in each activity. Use the list of muscles in the box below to help you.

quadriceps	abdominals	triceps	biceps
pectorals	gastrocnemius	latissimus dorsi	

- 10 push-ups
 - 20 sit-ups
 - 15 soccer kicks
 - 10 squats
 - 5 chin-ups.
- What part of their body would an athlete have hurt if they sprained the muscle at the back of their lower leg?
 - What muscles have you, or someone you know, injured?
 - Look at the diagram of the skeletal muscles (Figure 3.12). Learn them so that if you hear of someone being injured you will know which body part is being talked about.

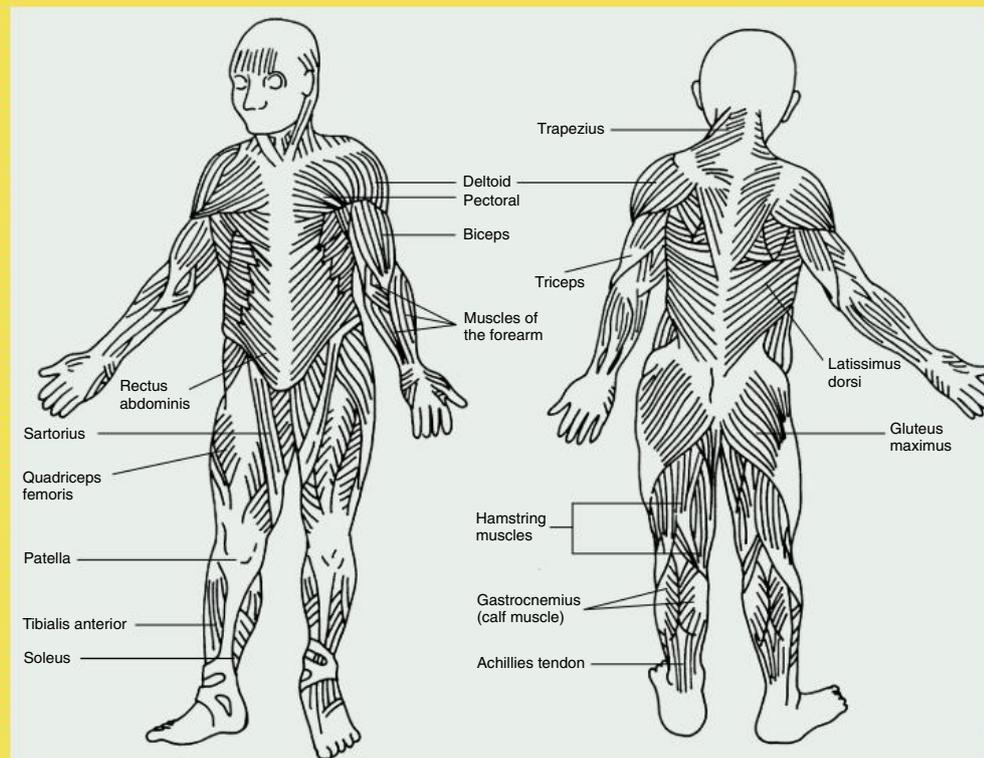


Figure 3.12
Major skeletal muscles of the body

Activity 3.3



The circulatory system

Your circulatory system is made up of a heart, blood vessels and 5.5 litres of blood. Its main functions are to:

- transport nutrients around the body
- maintain correct body temperature
- remove waste products, such as carbon dioxide.

Composition of blood

Your blood is 55 per cent fluid (plasma) and 45 per cent solid particles, including red blood cells, white blood cells and platelets.

Red blood cells

Red blood cells supply the blood with its colour. Their job is to carry oxygen from your lungs, where it is breathed in, to your body cells. Under a microscope, blood that contains oxygen is bright red whereas blood that contains carbon dioxide is dull in colour.

White blood cells

These cells provide protection from illness by killing bacteria and fighting infection. Pus is dead white blood cells that are killed while fighting an infection.

Platelets

Platelets mend injured parts by forming clots to stop excessive bleeding. Haemophiliacs are people who do not have enough platelets to develop clots unless they receive a transfusion of someone else's blood.

Plasma

Plasma is a yellow fluid that contains red and white blood cells, nutrients and waste products.

Blood vessels

Our blood moves throughout our body via a network called the vascular system, in order to deliver blood to all parts of the body and return it to the heart.

Arteries are the vessels responsible for taking blood away from the heart.

As they branch out and become smaller they are known as **arterioles**.

Arterioles branch into tiny capillaries, which are responsible for transferring nutrients to, and waste from, the body cells. The capillaries merge into **venules** (small veins) which lead into veins, and the blood returns to the heart.

The heart

Your heart is the muscular pump responsible for moving blood throughout the body. It contains four chambers—two **atria** (holding chambers) and two **ventricles** (pumping chambers). The **septum** separates the left and right sides of the heart ensuring that the blood does not mix (see Figure 3.13).

Looking at the diagram in Figure 3.13, you will observe that the blood enters the right atrium from the body. Here the blood is pumped into the right ventricle and onto the lungs to be **reoxygenated** (oxygen enters the blood).

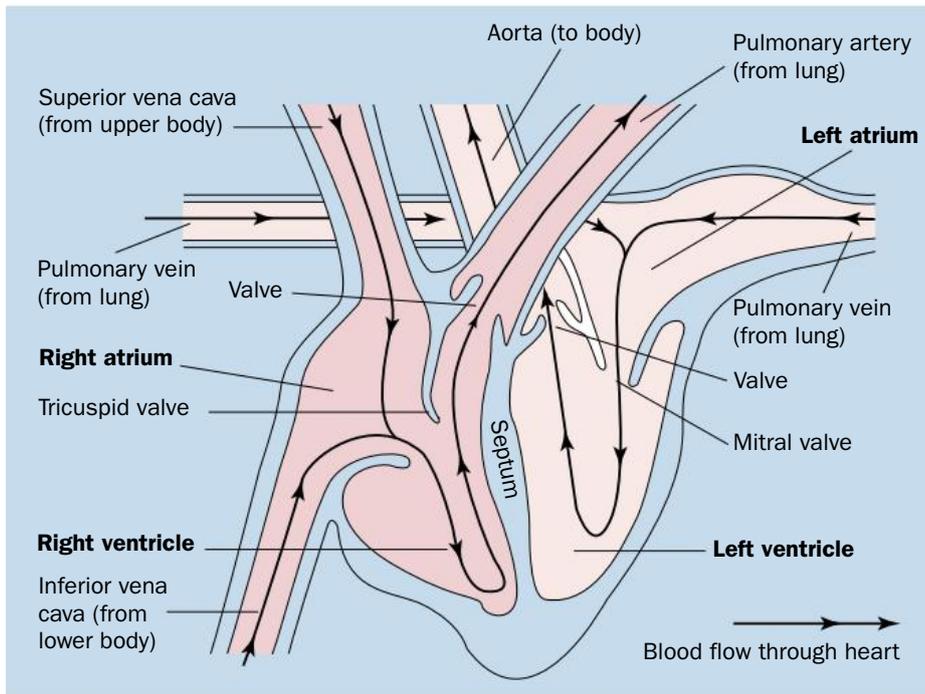


Figure 3.13 The heart

When the blood returns from the lungs it enters the heart via the left atrium. From here the blood is pumped throughout the body via the left ventricle.

Valves located between each of the atria and ventricles keep blood flowing in the right direction by avoiding back flow.

Each contraction of the ventricle is called a **heart beat**. For most people, the number of heart beats per minute—the heart rate—is 60–80 when resting. When your heart beats, blood is pushed into the arteries from the heart. This creates a wave effect (pulse), which can be felt in any artery. The two easiest places to feel your pulse are in your carotid and radial arteries.

Carotid pulse

The carotid pulse can be felt beside your windpipe (trachea) on either side of your neck.

Radial pulse

Your radial pulse can be felt with your fingers at the base of the thumb.

Blood pressure

Blood pressure is another means of using your heart to measure your health. A blood pressure reading indicates how hard the vascular system is working and whether or not it is in good shape.

When measuring blood pressure there are two main readings:

- **Systolic blood pressure**—this is the upper reading and indicates the amount of pressure when oxygenated blood is pumped to the muscles and cells of the body.
- **Diastolic blood pressure**—this is the lower reading and indicates the amount of pressure in the arteries while the heart is being filled.

The average blood pressure is 120/80 (mmHg), however, this may vary slightly depending on your age.

Factors affecting blood pressure

- ➔ Increased blood flow to the heart, for example, exercise and stress.
- ➔ Smoking.
- ➔ Diet high in fat or salt intake.

Activity 3.4



Circulation

- 1 How is blood transported around the body?
- 2 Explain what happens when you fall over and cut your knee.
- 3 Sometimes when you hurt yourself you may develop pus. Why is this?
- 4 Which organ keeps the blood moving around the body?
- 5 Which blood vessels carry blood away from the heart?
- 6 What is responsible for making blood red?
- 7 Name the major components of the circulatory system.
- 8 A cut artery is more serious than a cut vein. Why is this so?
- 9 **a** While you are sitting down count your heart rate for one minute using either your carotid or radial pulse.
 - b** Jog up and down on the spot for three minutes. Take your pulse again. Is there a change in the result? Why is this so?

The respiratory system

The term **respire** means to breathe, and the function of the respiratory system is to take in air from the atmosphere, to extract the oxygen and supply it to the blood. It also takes on the role of expelling carbon dioxide from the blood into the atmosphere. The respiratory system is also involved in creating speech as air is passed over the vocal cords.

The breathing mechanism

In many cases, breathing is an involuntary exercise that consists of two phases:

- ➔ **Inspiration**—breathing in: the diaphragm—the muscle controlling lung movement—contracts, allowing the lungs and chest to expand so that air is drawn into the lungs.
- ➔ **Expiration**—breathing out: the diaphragm relaxes and air is pushed out of the lungs into the atmosphere.
- ➔ When we take a breath air enters via the nose or mouth, where it is cleaned and warmed.
- ➔ The air then passes across the **larynx** (voice box), down the **trachea** (windpipe), where it is further cleaned until it reaches the **bronchi tubes**. These transport the air into the lungs.
- ➔ Once in the lungs the air travels from the **bronchi** into the **bronchioles**. There are hundreds of bronchioles that branch out and finally end with small sacs, known as alveoli. The **alveoli** are covered in capillaries and as both have a very thin lining, oxygen can be transferred into the blood and carbon dioxide can be transferred to the lungs, to be breathed out.

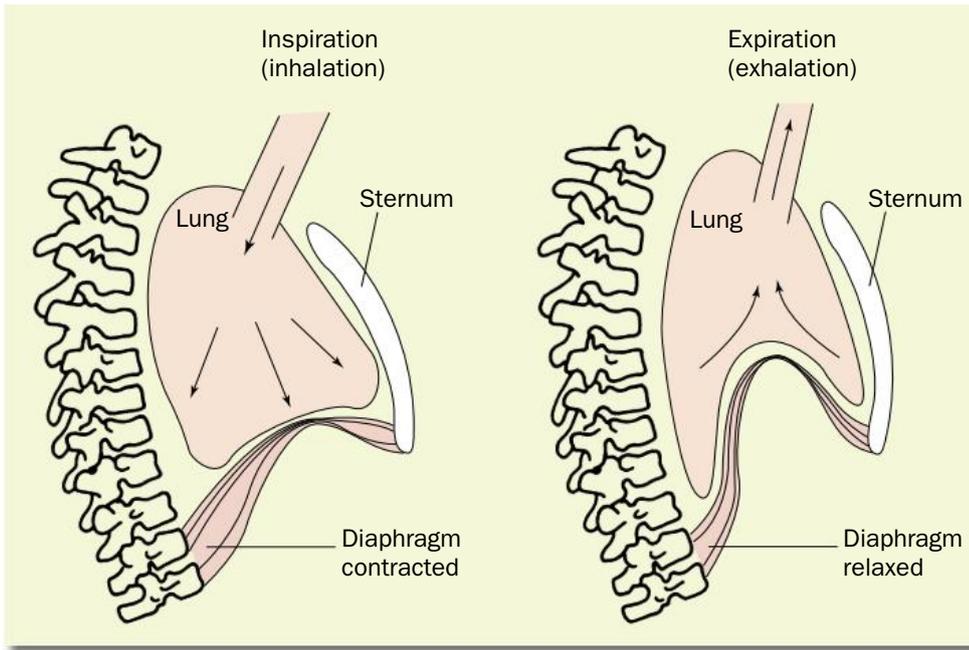
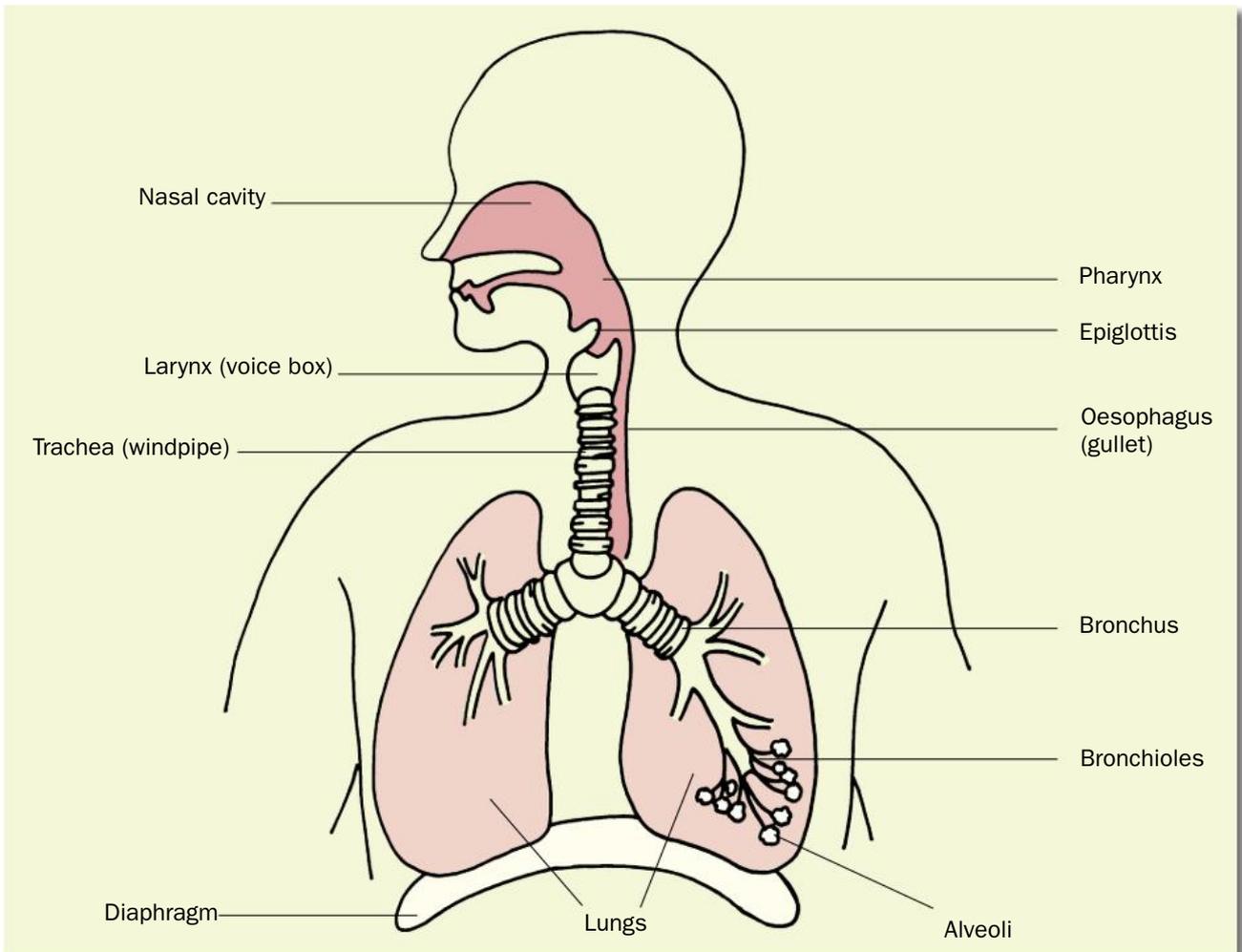


Figure 3.14 How we breathe

Figure 3.15 The respiratory system



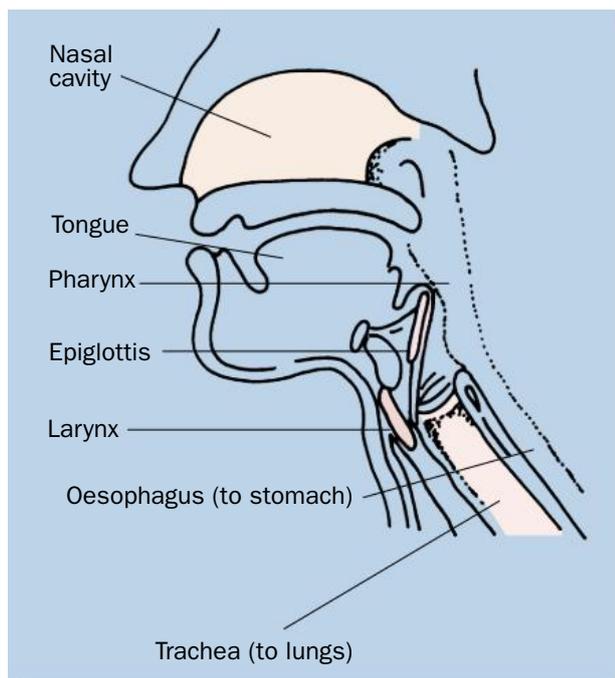


Figure 3.16 The upper structure of the respiratory system

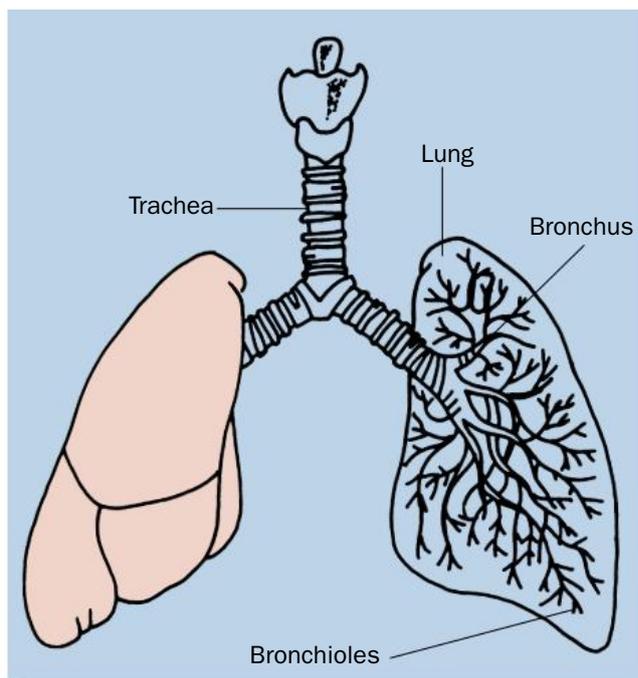
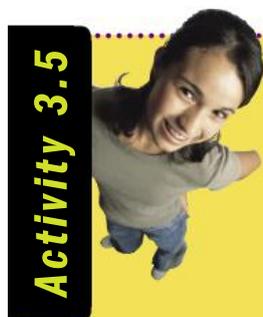


Figure 3.17 The bronchus and bronchioles



Activity 3.5

Breathe easy

- 1** Imagine you are an airborne particle of oxygen. Describe how you get from the atmosphere to a muscle.
- 2** Explain the process of the breathing mechanism from the time you breathe in air from the atmosphere.
- 3** Match up the words on the left with the statements on the right:

Larynx	Vessels covering alveoli
Capillaries	Small grape-like sacs responsible for gas transference
Alveoli	The windpipe
Trachea	The voice box
Diaphragm	Muscle responsible for breathing

- 4** Explain why you should breath in through your nose and not through your mouth.
- 5** What happens to your circulatory and respiratory systems when you exercise? Why do these changes occur?
- 6**
 - a** Using a stopwatch, record how many breaths you take in one minute.
 - b** Step up on a bench or step for three minutes. As soon as you finish, record your breaths for the following minute. Is there any change between your resting breathing rate and your breathing rate following the activity? Discuss the reasons for this.

The digestive system

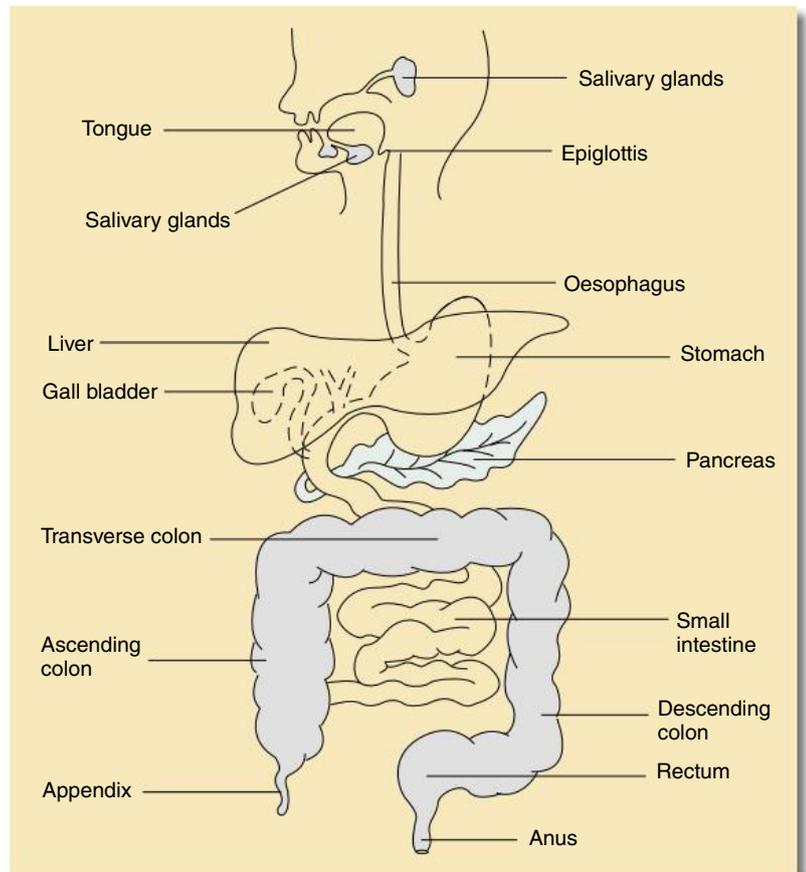
Your digestive system breaks down the food you eat into a form that can be used by the cells in your body. When you swallow a mouthful of food, it generally takes ten hours to travel the nine metres of tubes from your mouth to your anus.

Throughout the entire process, food is passed through the digestive system by involuntary muscle contractions. This is called **peristaltic movement**.

The digestive process

- Once food is taken into your mouth your teeth begin the digestion process by breaking food up into small pieces. Here the digestion is enhanced by the presence of saliva, which provides enzymes that aid in digestion as well as making the food easier to swallow.
- The food then slides down your oesophagus and into your stomach, where it remains for three to four hours, breaking down further until it is finally dissolved.
- The food then passes out of your stomach into the small intestine. Further breakdown occurs when it mixes with pancreatic juices from the pancreas and bile from your gall bladder. These juices play a major role in breaking down the food into nutrients that the body can use.
- The nutrients pass through the wall of the intestine into the capillaries that surround the intestine and are carried to the necessary cells via the blood.
- Any remaining substances are passed into the large intestine where the water in the food is absorbed into the blood. The left-over food is compacted into faeces, which you expel from your anus.

Figure 3.18 The digestive system



Don't speak with your mouth full!

- 1 Using the correct terms, follow the path of a piece of fruit from the time it leaves your hand to the time you visit the toilet.
- 2 Look at the following list of foods.

hot chips	orange	grapes	milk
pasta	chocolate	lolly	

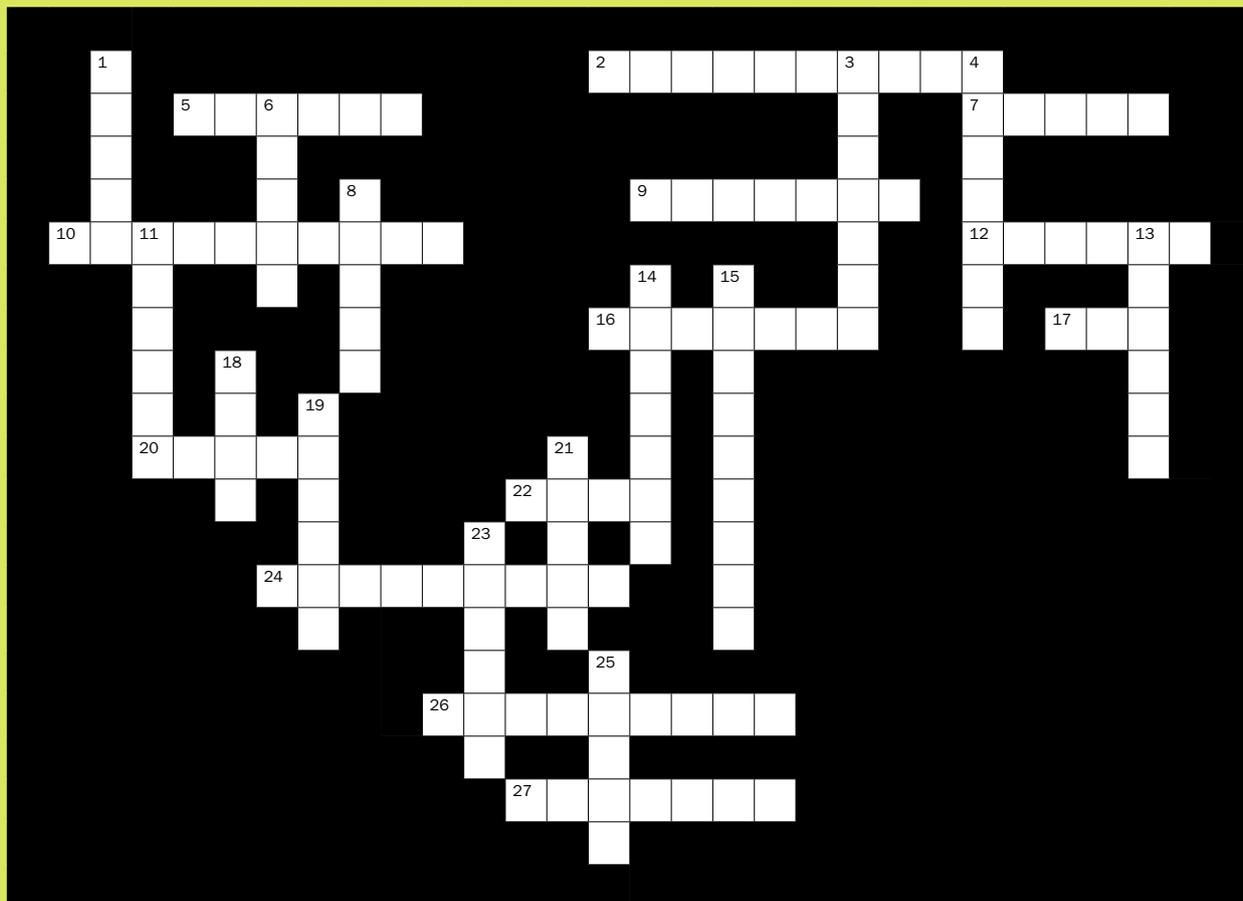
continued ...



Activity 3.6

Which would be broken down quickly and which would bring about the most waste? Discuss your answers.

- 3 What is the term used for the involuntary muscle movement within the digestive system?
- 4 Complete the following crossword puzzle.



Across

- 2 Passage between mouth and stomach.
- 5 The liquid part of blood.
- 7 Used to break up food in the mouth.
- 9 To have breathed in air.
- 10 The chambers of the heart that pump blood into the arteries.
- 12 Takes blood away from the heart.
- 16 Divided into hundreds of branches.
- 17 The colour of blood cells found in plasma.
- 20 Backbone.
- 22 Air enters through this part of the face.
- 24 Found in food.
- 26 These help to form clots to stop bleeding.
- 27 Pulse found in the neck.

Down

- 1 Blood cells that fight infection.
- 3 Air cells with very thin walls.
- 4 Food gets churned up here.
- 6 The chambers in the heart.
- 8 Red substance.
- 11 Carries messages.
- 13 Pulse found in the wrist.
- 14 Windpipe.
- 15 Small and large.
- 18 Takes blood to the heart.
- 19 Almost the end of the digestive system.
- 21 The start of the digestive system.
- 23 A small vein.
- 25 A muscular organ that pumps blood.

The reproductive system

The male

The major parts of the male reproductive system are the testes, penis and connecting tubes. The **testes** hang in a sac called the **scrotum** below the penis. The testes are responsible for the production of the male hormone (**testosterone**), and sperm which unite with the female egg to form an embryo. It is essential that the testes hang in the scrotum because it keeps them cool. Normal body temperature would result in the sperm dying and an increased risk of infertility.

When aroused the penis becomes erect and after stimulation sperm will travel from the testes, up the sperm duct, and through the urethra in the penis to reach the female reproductive system (see Figure 3.19).

After the onset of puberty, males continue to produce sperm throughout their lives.

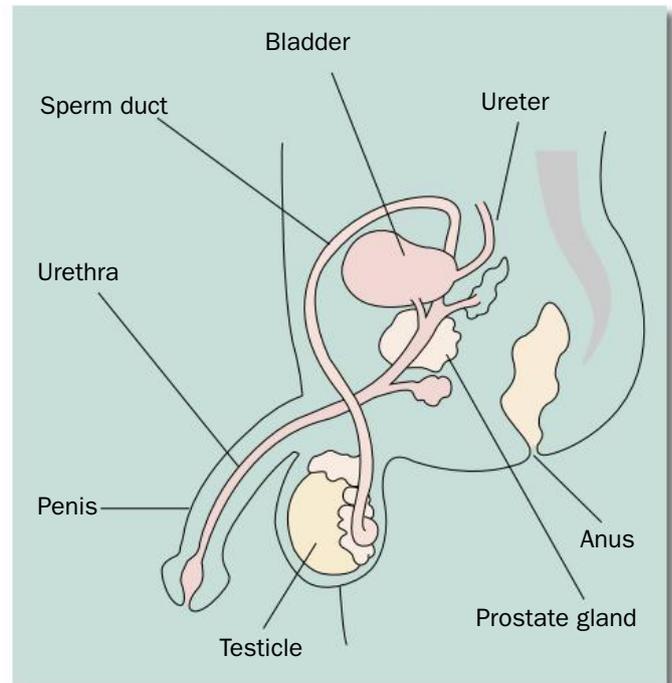


Figure 3.19 The male reproductive system

The female

The major parts of the female reproductive system are the ovaries, Fallopian tubes, the uterus and the vagina (see Figure 3.20).

The two **ovaries** produce eggs (**ova**) and the female hormones, oestrogen and progesterone. From the moment she is born, a girl possesses all of the eggs that will be released from her ovaries throughout her life. Each month, an egg travels along one of the **Fallopian tubes** into the **uterus**. If it is fertilised by a sperm, it embeds itself in the uterus and grows into a baby. If not, the uterus sheds its lining and flushes the egg out during **menstruation**.

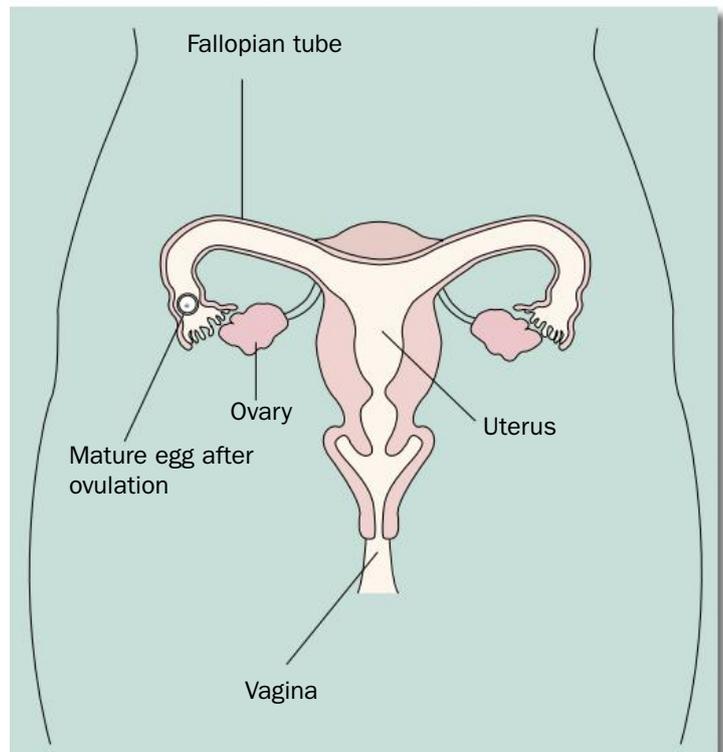


Figure 3.20 The female reproductive system

Activity 3.7



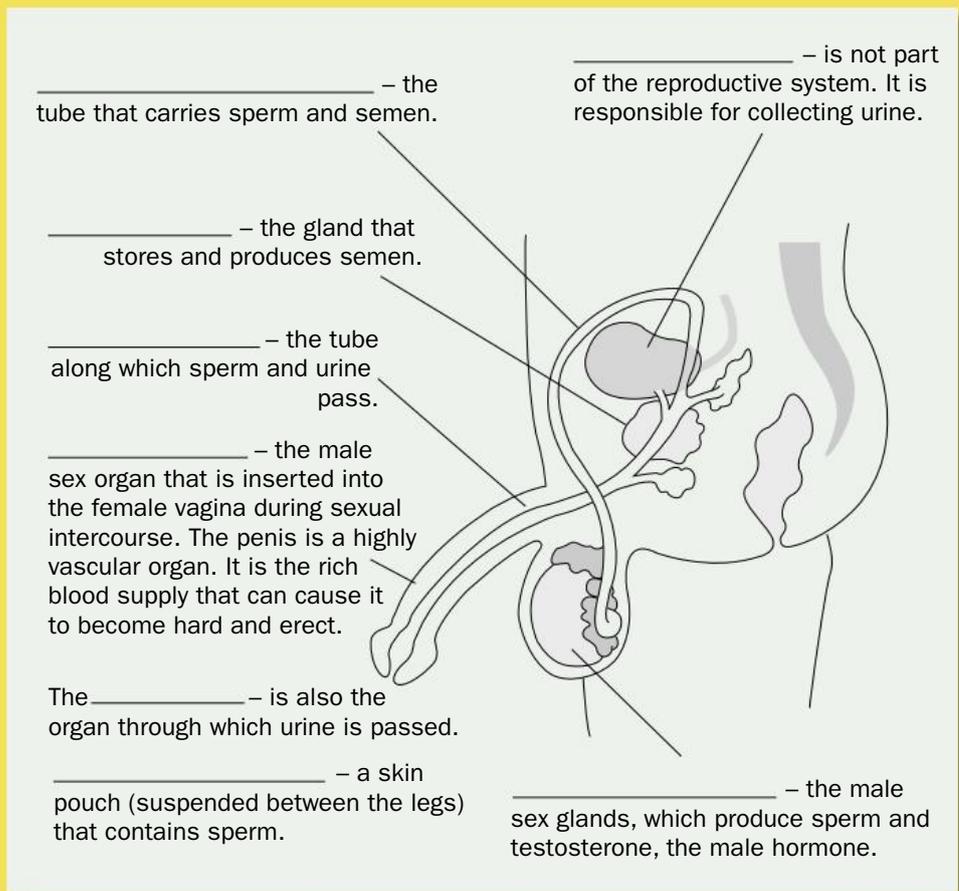
Reproduction

- 1** What is the main function of the reproductive systems?
- 2** Explain the path the egg in a female takes each month.
- 3** Name the hormones that are produced by:
 - a** the female
 - b** the male.
- 4** Label the reproductive systems in Figures 3.21 and 3.22.
- 5** Use the words given in the box to complete the statements below.

ovaries	Fallopian tube	penis	uterus
vagina	sperm	urethra	
ovum	semen	ovulation	

- a** _____ is the release of an ovum from the ovary.
- b** The mixture of sperm and liquid that is ejaculated by the male is called _____.
- c** When fertilised the egg is transferred to the _____ where it develops into a baby.
- d** The male sex cell is called the _____.
- e** The female sex cell is the _____.
- f** Semen and urine pass through the _____ to outside of the male body.

Figure 3.21 The male reproductive system



- g** When stimulated and filled with blood the _____ becomes erect.
- h** From the ovary the egg passes through the _____.
- i** The menstrual flow leaves the body via the _____.
- j** Ovum are produced in the _____.

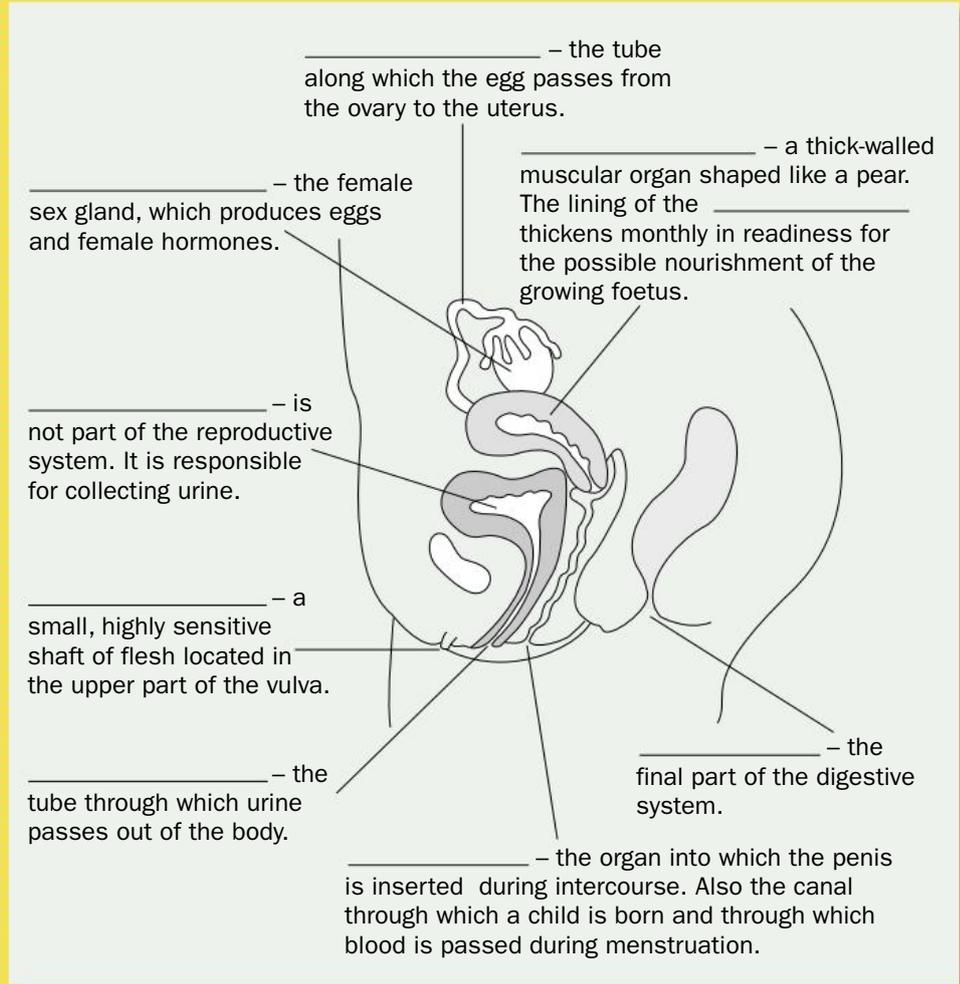


Figure 3.22 The female reproductive system

Growth and development

As you develop into a young adult you will notice many changes occurring within your body. Some you are able to measure as you get older, such as your height and weight. This is referred to as growth. How you deal with these and other changes, such as social, (forming new relationships), emotional (coping with changes in your life), and intellectual (finding school work difficult) changes is called development. Learning to walk, talk, relate to people and cope with change are considered to be very important developmental processes.

Types of development

By observing Figure 3.24 and reflecting on your own experiences, you will appreciate that people grow and develop at different stages of their lives and no two people are the same.

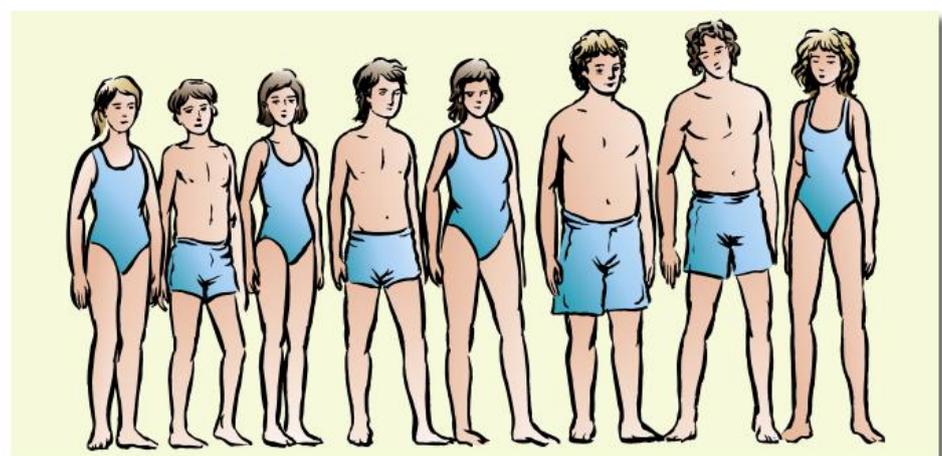
Rates at which you develop will also vary. For example, girls tend to develop earlier than boys. Your growth and development are the result of both **heredity** (genetic input from your parents) and your **environment** (all the things that happen to you throughout your life).

Figure 3.23 Types of development

Types of development

<p>Physical development: changes to your body, including height, weight, and what you can do with it i.e. skill learning</p>		<p>Intellectual development: learning to use your mind to gain knowledge and reasoning skills</p>
<p>Social development: learning how to act and behave appropriately</p>	<p>Spiritual development: developing values and beliefs</p>	<p>Emotional development: learning to cope with your feelings and to deal with changes in your life</p>

Figure 3.24 Variations of growth among Year 9 students



Change is a challenge

- 1 Look at the table below. Decide whether each of the listed changes is likely to happen to you within the next four years. Write whether you think it would be a pleasant or unpleasant change, then write in those people from whom you would seek help in coping with each change.
- 2 Compare your results with those of your classmates.



Activity 3.8

Change	Likely to happen within 4 years (Yes or No)	Pleasant or unpleasant	Seek help from ...?
Marriage			
Leaving school			
Career choice			
Earning my own money			
Meeting new friends			
Losing touch with friends			
Death in the family			
Moving out of home			
Falling in love			
Playing sport			
Gaining freedom and independence			
Using alcohol			
Changes in diet			
Car accident			
An injury			
House broken into			
Finishing puberty			
Using drugs			

- 3 Draw a large (whole page) crystal ball. Inside this ball write down the changes you predict for yourself in the next year. Try to cover these headings:
 - a physical changes
 - b emotional changes
 - c relationship changes
 - d family changes
 - e work changes
 - f school changes
 - g sporting changes
 - h leisure changes.
- 4 Do you think that you can prepare for future changes? How?
- 5 What attitudes and skills can help you cope with change?

Influences on growth and development

Throughout your life many things will influence your growth and the choices you make. Two main factors will be heredity and environment.

Influence of heredity

Has anyone ever said that you look just like your mum or dad when they were your age? This is because when you were conceived your parents passed on genes that contained certain characteristics that they have. This passing of 'information' from your parents to you during conception is known as **heredity** and may include all of your physical characteristics (skin and eye colour, shape of your face, blood group), and many aspects of your personality. Some diseases, such as diabetes, are also passed on from your parents' genes.



Influence of environment

Environmental factors are those events in life that affect your growth and development after you are born, for example nutrition, climate, education, peers, the media and your family. Your environment is your surroundings and the people within it.

Figure 3.25 Your physical characteristics can be inherited from your parents

Activity 3.9



My development

- 1** Make a list of the characteristics you have received from:
 - a** your mother
 - b** your father.
- 2** Sometimes characteristics are passed on through several generations. What are some of these within your family?
- 3** List the environmental factors that have helped mould you into the person you are today. In what way did these influences affect you?
- 4** Which characteristics do you feel you would like to pass on to your children?
- 5** Which ones do you not wish your children to inherit?
- 6** Look at the table on page 163.
 - a** For the situations in the left-hand column, write in the middle column the influence that you consider is greater: heredity or environment. Write both if you think they are equally important.
 - b** In the right-hand column, give a short reason for your choice.

Situation	Heredity or environment or both?	Reason
Tania broke the school 100 metres sprint record.		
Ashleigh won the Miss Teenage beauty contest.		
Liam is an excellent reader.		
Brooke has olive skin.		
Pat is a good diver.		
Tracey is an 'A' student.		
Neil is a hard worker.		
Darren wears contact lenses.		
Brett is a good footballer.		

Stages of growth and development

Growth follows an orderly and predictable pattern. Even though the exact age at which things happen does vary, people can follow a pattern of changes throughout their lives. A person's life cycle can be divided up into nine stages:

- ➔ conception
- ➔ pregnancy
- ➔ birth
- ➔ infancy
- ➔ childhood
- ➔ adolescence and puberty
- ➔ adulthood
- ➔ old age
- ➔ death.

Growth and development

- What major incidents have occurred in your lifetime that have helped mould you into the person you are today (for example, winning a medal in Grade 1 for swimming and therefore you got into surf lifesaving)?
- Are the following activities examples of growth or development?

a making friends	b getting a part-time job
c fingernails getting longer	d cutting your first teeth
e growing your hair	f learning a basketball lay up.
- Collect photographs of yourself at the ages of two, five and eight. Study each photo and then answer the following questions:
 - How have I changed physically since the photos were taken?
 - How have my interests changed since the photos were taken?
 - What can my mind do now that it could not do when these photos were taken?
 - How has my life changed socially since these photos were taken?
 - How were my emotions different then from those I feel now?



Activity 3.10

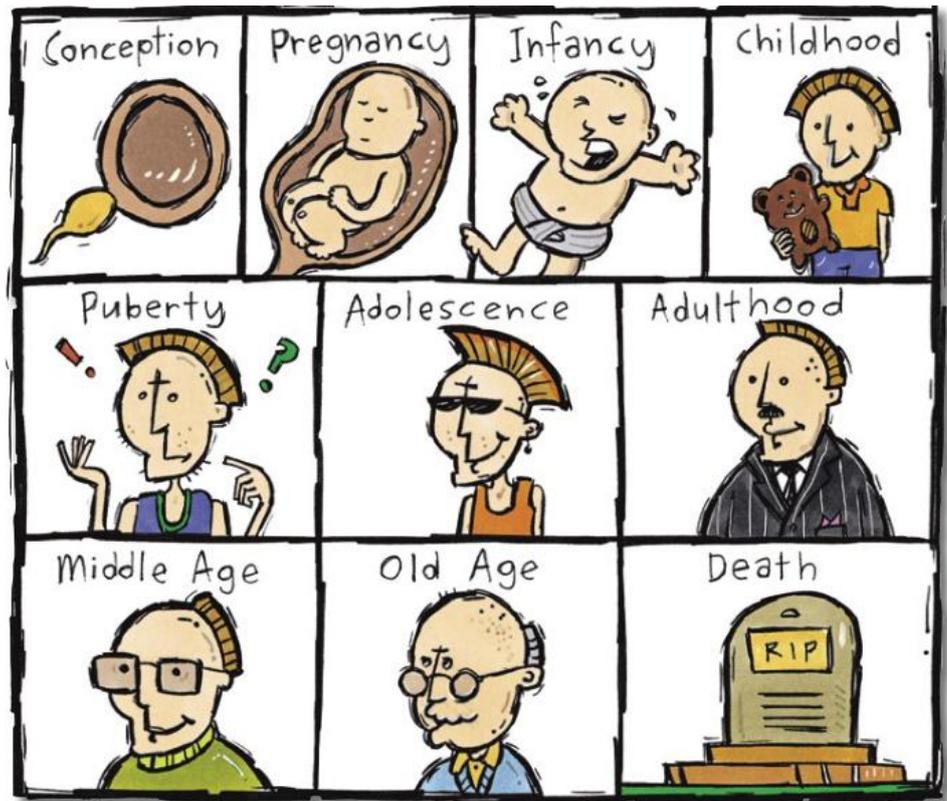


Figure 3.26 Stages of development

Stage 1: Conception

Conception is the moment of fertilisation where the ovum (female egg) and sperm from the male unite (see Figure 3.28). This is where most of the physical features are decided—sex, hair colour, eye colour, **somatotype** (a person’s build). The moment of conception occurs in the Fallopian tubes.

Figure 3.27 Conception is where most of your physical features are decided



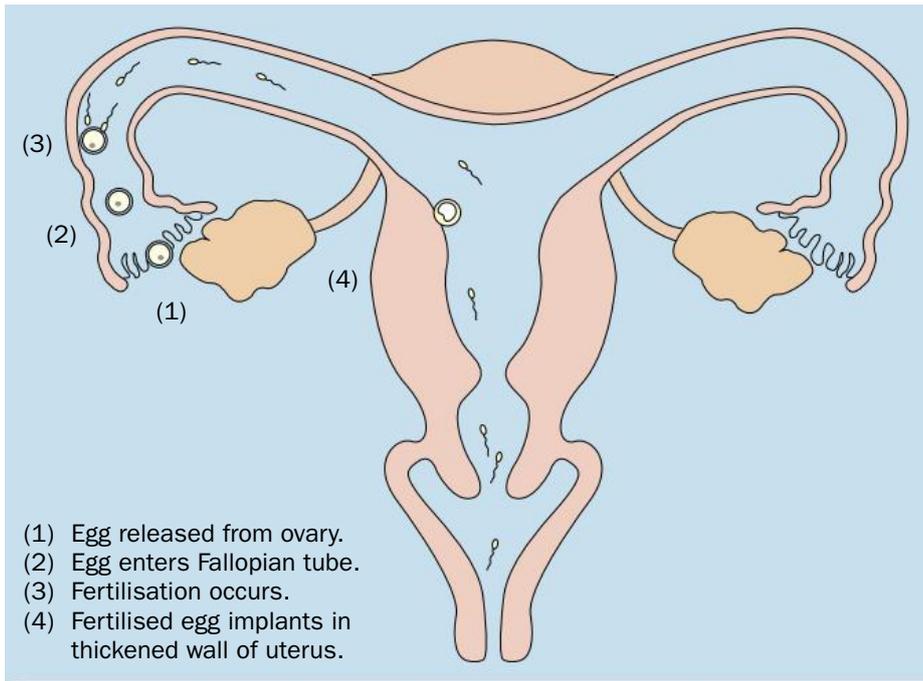


Figure 3.28 Conception

Stage 2: Pregnancy

Pregnancy is the stage of development where the embryo is embedded into the wall of the uterus and begins to grow. The baby undergoes many developmental changes within the nine months that it is in the mother's womb (uterus). Look at Figure 3.29 to see what these changes are.

Age	Development	Stage
6 weeks	Brain, heart and spine form.	Embryonic
2 months	Hands and feet have begun to form and fingers can be seen. Liver develops (beginning of production of red blood cells). Eyes appear.	Embryonic
3 months	Embryo looks like a baby, although it needs time to develop.	Embryonic
4 months	Pregnancy begins to show in the mother and the baby develops a red, transparent skin.	Foetal
5 months	Body hair starts to appear—eyelashes and eyebrows.	Foetal
6 months	The foetus is able to feel various sensations and may react to these.	Foetal
7 months	At this stage, the lungs are the only organs yet to be fully developed.	Foetal
8 months	Lungs have been formed. If born now the baby would have a good chance of survival.	Foetal
9 months	The baby is fully developed and ready to be born.	Foetal

Figure 3.29 Stages of embryonic development

Stage 3: Childbirth

The childbirth process involves three stages, all of which may vary in length of time and intensity.

Labour

The mother experiences contractions (powerful sensations) that enable the baby to move down towards the cervix (uterine entrance). The duration of this stage varies, but can take up to 10 hours or more.

Birth

During this stage the baby travels along the birth canal to be delivered. The baby usually comes out head first. A feet-first birth is known as a **breech birth**.

Some mothers are unable to give birth vaginally as it would be too dangerous for them and the baby. In these cases, women have a **caesarean section**, where an incision is made in the mother's abdomen through which the baby is delivered.

Figure 3.30 Childbirth is the third stage of the life cycle



Afterbirth

The delivery is not the final stage of the birth. After the baby is born the afterbirth, consisting of the placenta (the blood and nutrient-rich tissue that connects the mother to the baby during the pregnancy), is expelled.

Multiple births

When a mother has two or more children at a time it is known as a **multiple birth**.

- **Identical twins**—the egg splits and develops into two embryos. When born the children are virtually identical in appearance.
- **Fraternal twins**—two eggs are fertilised at the same time. The babies are born at the same time, however, they are not identical.
- **Triplets**—three eggs are fertilized at the same time, resulting in the birth of three babies.

Stages of growth and development

Using the words in the box, fill in the blanks in the paragraph below in order to show the complete life cycle of a foetus from conception to birth.

sperm	embryo	nine	pregnancy
fertilised	egg	uterus	Fallopian tube
birth	ovary	grows	

The _____ is released from the _____. It then enters the _____ where it meets the _____ and is _____. The fertilised egg, known as the _____ implants itself into the wall of the _____. It then _____ rapidly for _____ months. This stage of development until _____ is called _____.



Activity 3.11

Stage 4: Infancy

Perhaps the biggest amount of growth and development occurs throughout the first two years of a child's life. Here, height and weight increase rapidly and essential motor skills, such as sitting, crawling, standing, walking, eating, drinking and talking, develop. Throughout this stage the child is still very dependent on their parents and family members.



Figure 3.31 Playing with friends helps develop language and social skills



Figure 3.32 During infancy the baby will develop rapidly

Activity 3.12



When did I develop?

- 1 Find out from your parents, grandparents, brothers or sisters, or friends when you learnt to:

<ul style="list-style-type: none"> a crawl c talk e forward roll g kick a ball i hit a ball k swim m skip. 	<ul style="list-style-type: none"> b stand d walk f throw a ball h catch a ball j draw l jump
--	---
- 2 Record the information about your development in a time line. You can use words or pictures.

Stage 5: Childhood

The childhood stage marks the development of a person between the ages of approximately two to 12 years of age. During the latter part of this stage, the child becomes less dependent on their family as they develop new relationships with friends from kindergarten, pre-school and primary school.

This interaction enhances skills such as language and social skills (making friends), gender roles, play skills (sharing and team work) and allows for the refinement and enhancement of movement skills. The child also continues to grow in height and weight.

Figure 3.33 Childhood, which lasts from the age of two to the age of 12, is the fifth stage of the life cycle



Stage 6: Adolescence and puberty

Puberty is the onset of adolescence. It involves the rapid physical development of a young person. The age of puberty varies widely from individual to individual, but usually begins around the age of 12.

Adolescence marks the time between being a child and becoming an adult, and may be a period of much confusion and frustration to all involved.

In addition to many physical changes, you will also undergo many social, emotional and intellectual changes. The skills and attitudes you develop during this time influence your self-esteem and your perceptions of your life and the world around you. Try this activity to see if you have a positive outlook.

Can you bounce back?

- 1 For each of the skills listed in the table below, give yourself a number rating between 1 (I possess very little) and 10 (I possess a lot).
- 2 Your support network is made up of people you trust and to whom you can turn for advice. These people can be relied on for help and can keep a secret. Your support network is vital in helping you cope with change throughout your life. Draw and label your support network pyramid, showing you at the top.
- 3 It is very likely that you will be a member of someone else's support network. Write down whose network/s you are in and how you could be a valuable supporter.

Skill or attitude	I possess very little/a lot
I am able to be assertive and state my views.	
I am able to communicate clearly with my friends.	
I have a hobby that I am good at.	
I have someone else to care for or look after.	
I look on the bright side of life.	
I have a sense of humour.	
I have responsibilities at home, work or school.	
I get on well with my parents.	
I have a support network I can turn to.	
I know what my good points are.	
I have confidence in my ability.	



Activity 3.13



Figure 3.34 Developing relationships with older people is all a part of growing up

Activity 3.14



Adolescent pre-test—how much do you know?

Before you continue with this chapter, you may wish to test your knowledge about sex. For each of the following statements below, answer 'True' or 'False'. Don't worry if you don't know any of the answers. If you do not understand a question, leave it out. Remember you are testing yourself so don't ask anyone for the answers!

- 1 Sexual intercourse should be avoided during pregnancy.
- 2 It is dangerous for a woman to wash her hair during menstruation.
- 3 Urination after sexual intercourse will prevent pregnancy.
- 4 As long as the male does not ejaculate in the female she will not fall pregnant.
- 5 A hysterectomy will end a woman's sex drive.
- 6 If boys masturbate too much they will run out of sperm.
- 7 Progesterone is the hormone produced by males.
- 8 All menstrual cycles are 28 days long.
- 9 If you have a sexually transmitted disease, you do not have to tell your partner if you are wearing a condom.

Physical changes during puberty

Adolescents experience certain things happening to their bodies. In the majority of cases, these changes are caused by hormonal changes. **Hormones** are chemical substances manufactured by various glands, and travel via the bloodstream to the ovaries for girls and the testes for boys. The ovaries release female sex hormones (oestrogen and progesterone) and the testes release the male sex hormone (testosterone).

During puberty, the physical changes that occur enable you to reproduce. Figures 3.35 and 3.36 show the growth of secondary sex characteristics for males and females, respectively.

Changes for the female during puberty

Menstruation

The first period marks the onset of puberty for the female—she is in the first stages of becoming a young woman. **Menstruation** is the process whereby the lining of the uterus thickens to prepare for a fertilised egg to be implanted. If it is not fertilised, the egg and the lining are expelled from the uterus. This 'flushing out' may take up to one week and usually occurs every 28 days.

This process is called the **menstrual cycle**. It is not unusual for your cycle to be irregular during adolescence and it usually settles down during the latter stages of development. Menstruating is a natural part of being a woman and is nothing to be embarrassed about. Various types of sanitary napkins and tampons are available, and you can choose what feels most comfortable to you, and are not limited as to what you can and cannot do.

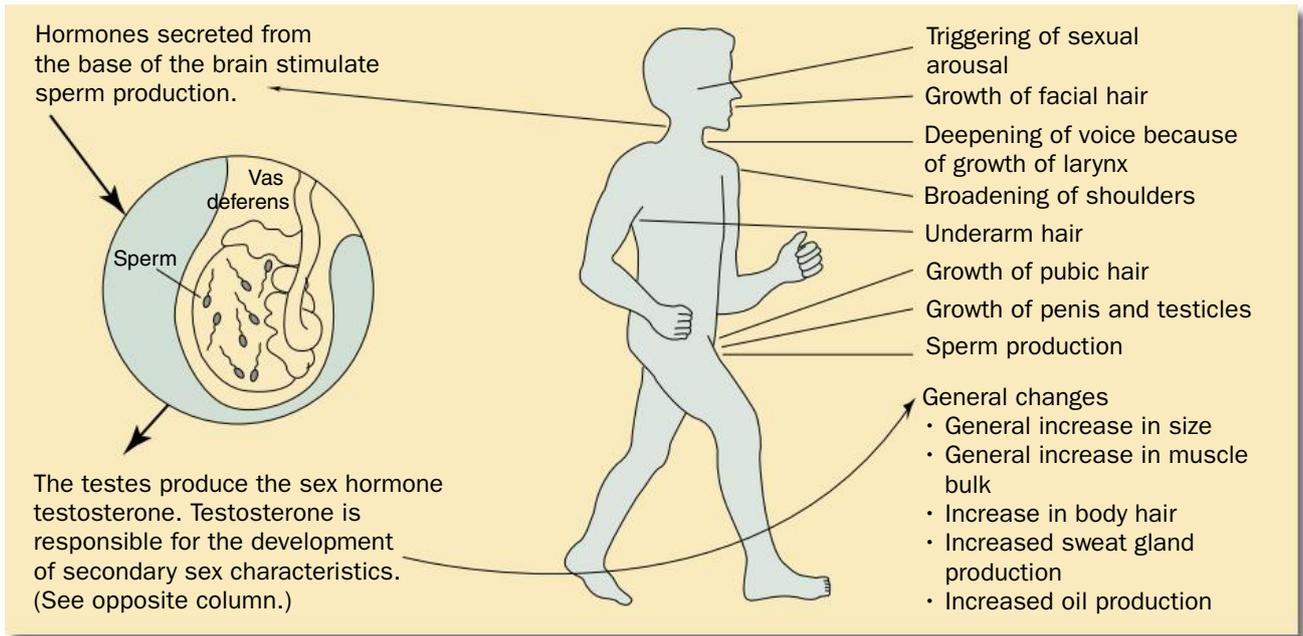


Figure 3.35 Secondary sex characteristics in males

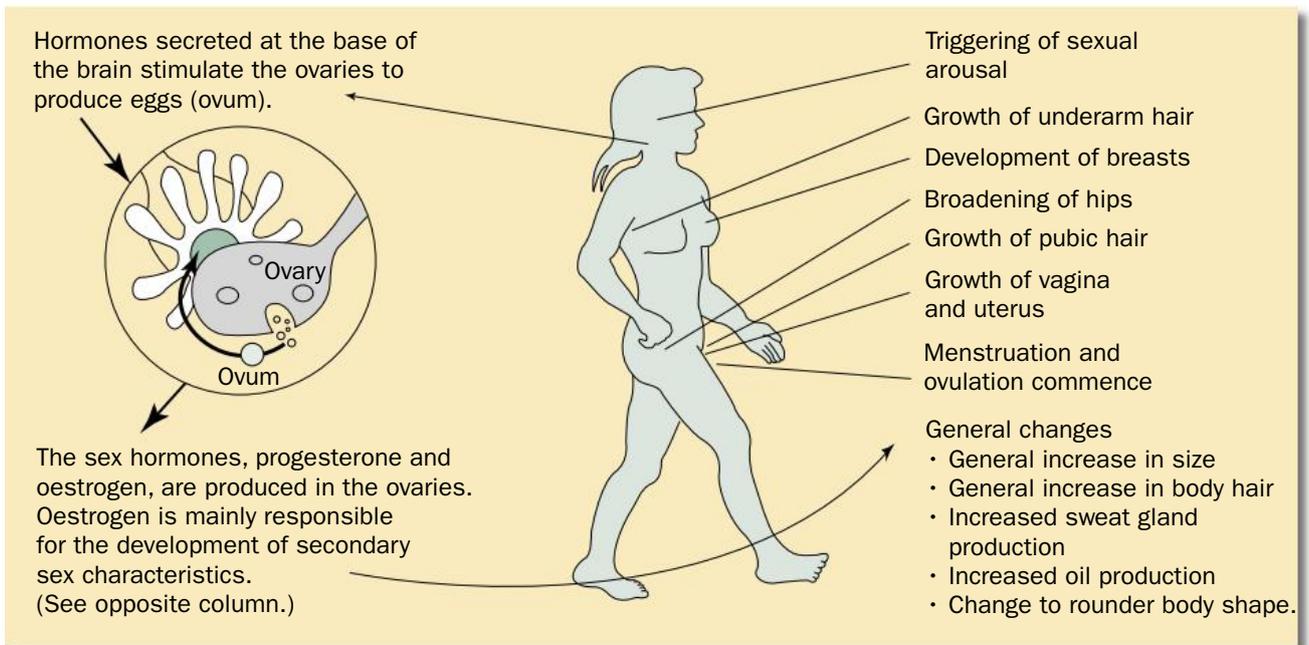


Figure 3.36 Secondary sex characteristics in females

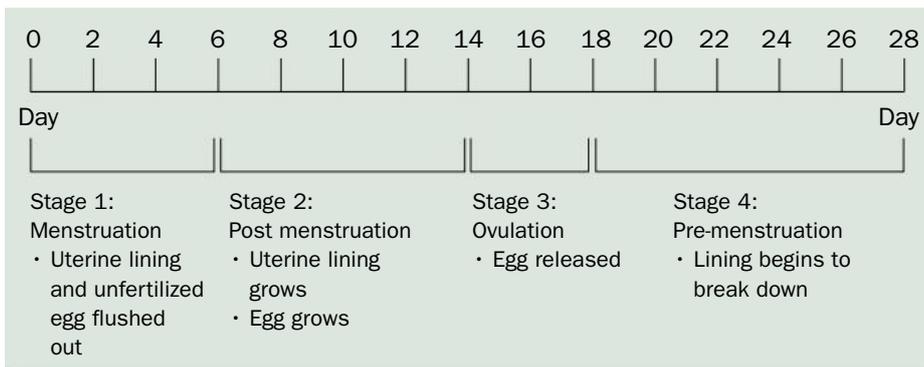


Figure 3.37 The menstrual cycle

Pre-menstrual tension

You may have already heard people discussing pre-menstrual tension or PMT. Before menstruating, a female may feel discomfort in one or more of the following ways:

- ➔ headache
- ➔ lower backache
- ➔ nausea
- ➔ tender, swollen breasts
- ➔ depression
- ➔ irritability
- ➔ bloated stomach.

Although the butt of many jokes, these symptoms are all quite natural and are triggered by the body's over-reaction to changes in hormone levels.

There are several things you can do to alleviate pre-menstrual tension:

- ➔ Exercise often alleviates the symptoms. A healthy, active person is less likely to be worried by pre-menstrual tension.
- ➔ An iron-enriched diet replaces iron lost during menstruation.
- ➔ Drinking a hot cup of coffee or tea is believed to increase urine output hence reducing fluid retention and the feeling of having a bloated tummy.

Figure 3.38 Female hygiene products—varied choices



Changes for the male during puberty

Ejaculation

Ejaculation may occur when a male's penis becomes filled with blood causing it to stand up and become stiff and hard. This is known as an **erection**.

Ejaculation is the discharge of semen (about a tablespoon of sperm cells and liquid) from the erect penis. During adolescence, males may get an erection for many reasons and perhaps at inconvenient times, however, it is best to remember that this is a natural part of your development, and it happens to all males at this stage in their life.

Wet dreams

Both males and females can experience wet dreams, although they are far more common in males. This is an unconscious ejaculation during sleep, and is a way of getting rid of excess semen. A wet dream usually occurs when a male dreams of sexual images and experiences an orgasm.

Masturbation

Masturbation is the deliberate stimulation of the genitals (the penis for males and the clitoris for females) and if continued an orgasm may be reached. Masturbation is a natural act and many people do it. It is a natural part of adolescence—one which is your choice.

Adolescent sexuality

- 1** Adolescence is a very confusing time and you may have many questions that you need answered. Make a list of the people you think you could talk to about certain problems. (This can include family members, friends or other people within your school.)
- 2** Now list the people you do not think you could talk too. With a friend discuss why you feel this way.
- 3 a** In a small group, prepare a role-play script about a parent telling a son or daughter about each of the following:
 - menstruation
 - wet dreams
 - masturbation.
 Include all the information that young people need to know about each topic.
- b** Act out your role-plays in class. Analyse each role-play and answer these questions:
 - What are the differences between the role-play for the son and that for the daughter?
 - Which parent was used more often in the role-plays to explain the facts about sexuality? Why?
- 4** For each of the following statements, write 'Fact' or 'Fallacy'.
 - a** Menstruation is an illness.
 - b** If a girl isn't menstruating by the time she is 14, there's something wrong with her.
 - c** Girls shouldn't exercise while they are menstruating.
 - d** Warm baths may relieve menstrual cramps.
 - e** If a girl misses a period, she is pregnant.
 - f** Most girls do not have a 28-day menstrual cycle.
 - g** The menstrual flow contains tissue as well as blood.
 - h** Girls can swim while they are menstruating.
 - i** Girls should not wash their hair while they are menstruating.
 - j** Only older women should use tampons.
 - k** Wet dreams can make a boy weak or ill.
 - l** An erection shows that a boy is thinking about sex.
 - m** Boys can urinate when they have an erection.
 - n** The urethra carries semen through the penis.



Activity 3.15

Adolescent sexuality

Sexuality is a broad term that relates to everything about you that has to do with sex. It does not merely mean sexual intercourse; it also covers:

- ➔ the physical changes you experience during puberty
- ➔ your sexual feelings and thoughts
- ➔ the ways in which you relate to others of the same and opposite sex.

During adolescence there are many things you need to experience in order to develop. Sexuality is influenced by many things such as what you see on television or read in the newspaper, your family, religion, culture, peers, and emotional and physical feelings. The most important influence on your sexuality will always be your personal values. These will undoubtedly be influenced by your own life experiences.

Sex-role stereotypes

Your gender, whether you are a boy or a girl, determines much of your behaviour in society. **Sex roles** are the types of behaviours that are expected of you merely because of your gender.

Sex-role stereotyping is the expectation that someone will act in a certain way because of their gender. Traditionally, males were expected to play sport, fix cars and mow lawns, while females were expected to cook, clean and become a good wife and mother.

Equal career opportunities have allowed many people to choose career paths that they enjoy. Females now have increased opportunities in such areas as sport and employment, while many men are now willing to share jobs around the house.

Growing up is all about making decisions. You need to consider every option; the use of family and friend support is helpful, however remember that whatever you decide ultimately affects you and you will have to live with the consequences.

Activity 3.16



Sex-role stereotypes

- 1 In groups of four, write down three advantages and three disadvantages of being a male and a female. Report your ideas back to the class.
- 2 **a** Males: What do you most like and most dislike about being male?
b Females: What do you most like and most dislike about being a female?
- 3 Apart from the obvious physical differences, what do you think are the major differences between males and females?
- 4 Examine the list of tasks and activities in the table on page 175. Decide which activities:
 - a** should be done only by males
 - b** should be done only by females
 - c** could be done by both.
 Indicate your decision by ticking the appropriate column. When you have finished, compare your answers with those of at least two other males or females in your class.

Task or activity	Males only	Females only	Both
Opening doors for partners			
Cooking meals			
Blow-drying hair			
Getting fit			
Paying when going out with partners			
Shopping for food			
Washing dishes			
Crying in front of others			
Doing repairs around the house			
Washing clothes			
Bathing children			
Staying home and looking after children			
Hugging your best friend			
Keeping the car in good order			
Playing basketball			
Ironing clothes			
Asking out someone you like			

Sexual feelings

Throughout adolescence you will experience many feelings and will have to make choices depending on those feelings:

- ➔ Will I have a relationship or not?
- ➔ Who will I have a relationship with?
- ➔ How much physical contact will I have?
- ➔ Will I have sexual intercourse?
- ➔ Will I use contraception?
- ➔ If so, what type?

It is very important that you gather as much information as possible in advance, weigh up the alternatives and consequences, then make your decision and stick to it.

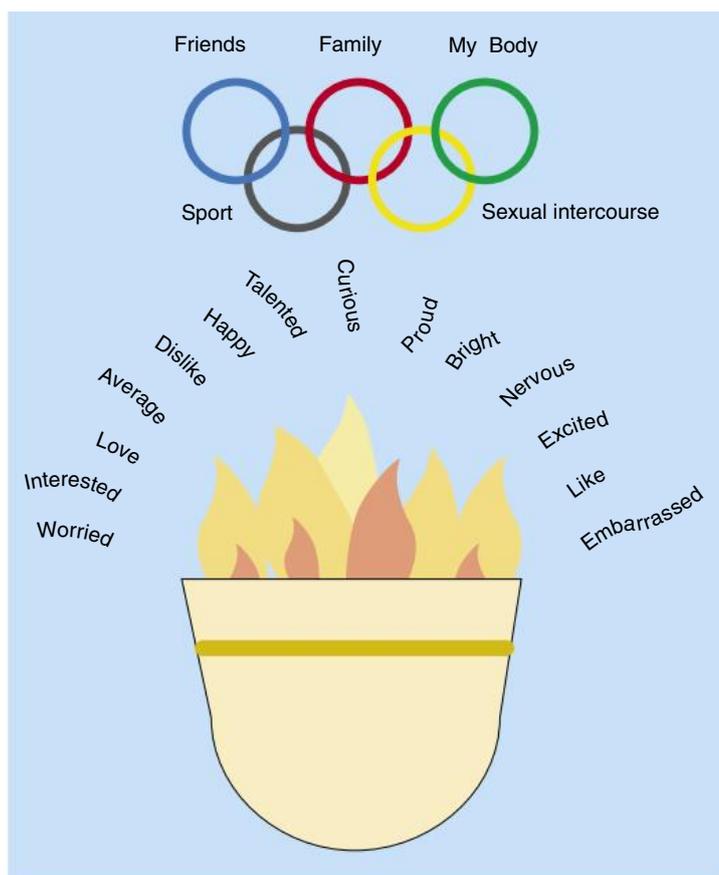
My feelings

- Adolescence is a time of change, especially in your feelings about certain issues.
- Draw a series of large linked Olympic rings in your workbook (see Figure 3.39 on page 176). In each, write words that show your feelings about each issue. You may place more than one word in each ring and you can use the same word twice.
- If you cannot think of words that accurately describe your feelings, choose from those listed in the Olympic torch.



Activity 3.17

Figure 3.39 Feelings in adolescence



Sexual preference

Sexuality can be very confusing, especially during adolescence. Your sexual preference is whether you prefer males or females as sexual partners. Sexual preferences can be grouped in the following ways:

- ➔ **Heterosexuals** have sexual preference for the opposite sex.
- ➔ **Homosexuals** have sexual preference for the same sex. Female homosexuals are often referred to as 'lesbians' and male homosexuals are often called 'gay'.
- ➔ **Bisexuals** are attracted to both sexes.
- ➔ **Trans-sexuals** are people of one sex who behave and look like members of the opposite sex.

Having strong feelings for, and showing affection to, people of the same sex does not necessarily mean that you have sexual feelings for them.

Homophobia is when a person feels uncomfortable around, and is not tolerant of, people who are not heterosexual. You may have your own ideas about sexuality, however, it is important not to discriminate against people with sexual preferences different from your own. Everyone deserves the same respect that you would expect to receive.

Romantic love

During adolescence you experience many types of love, including parental love, brotherly or sisterly love and friendship love.

Romantic love is common in adolescence. You feel fantastic, especially if the person you love feels the same way about you. When you are madly in love,

things that might normally irritate you don't matter much. This feeling may last for months, weeks or only days—so enjoy it while it lasts.

Some of the possible pitfalls of romantic love are:

- ➔ often the relationship is not equal, and only one person's needs are being met, often at the expense of the other person's feelings
- ➔ other things in life, such as friends or school work, are often forgotten or neglected
- ➔ the other person is often seen as perfect and without any faults at all
- ➔ the relationship often leaves the participants feeling emotionally exhausted and 'stressed out' from worrying whether they are still together or not
- ➔ the relationship is often short in duration
- ➔ often the people need constant reminding that the other person really loves them
- ➔ jealousy of time spent with other people is common
- ➔ sexual intercourse (if included) might happen without protection against pregnancy or sexually transmissible diseases
- ➔ sexual intercourse is often viewed as proof of love.

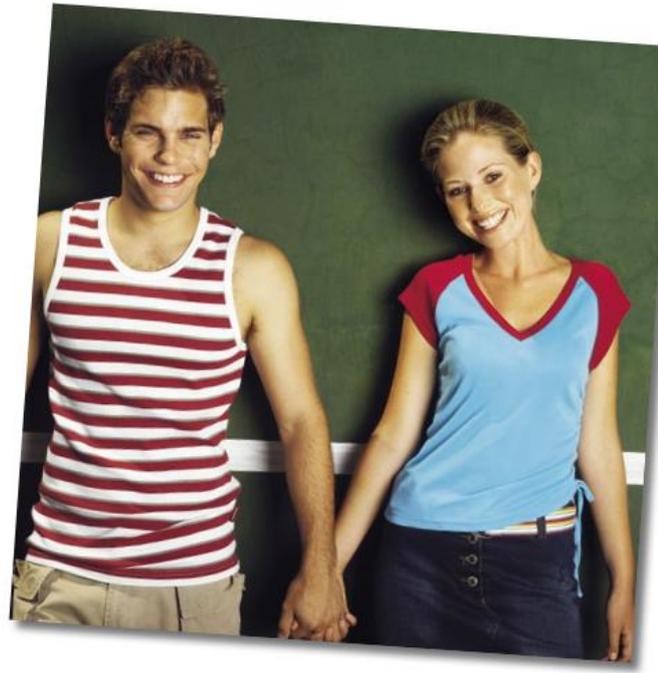


Figure 3.40 During adolescence you might fall in love

I'm in love

Answer the following questions honestly, then share your answers with your class.

- 1** Have you ever been in love? If so how did you know? If not, how do you know you haven't been in love?
- 2** If you have been in love before, what did you do about it?
- 3** What type of love was it?
- 4** Is it okay to be in love with someone at your age? Why?
- 5** What are five advantages of the romantic type of love usually experienced by secondary-school students?
- 6** In your opinion, what are the advantages and disadvantages of including sexual intercourse in secondary-school relationships?
- 7** Discuss with a partner what you would do in the following situations. Once you have come to a conclusion share your decisions with the class.
 - a** Your best friend is two-timing. Both of the people concerned are very nice and neither of them is aware of what he is doing to them.
 - b** You've lost your best friend—she has been dating this boy for four days and has not spoken to you since. You can see that he is using her but know that if you tell her she won't believe you.
 - c** You have had a crush on Kylie in Year 12 since the beginning of Year 8. You are not aware that she even knows you until one day she asks you out.
 - d** You and Mark are in Year 9 and have been going out for six months. Mark's friends keep pressuring him to go all the way with you and as a result he has been giving you a hard time, saying that you would have sex with him if you really liked him.



Activity 3.18

Activity 3.19



Adolescence—a time of change

Below is a list of statements and stories about adolescent situations. In each case, write your opinion of the situation and your reasons for it. Discuss your opinions in class with your teacher and classmates. This may help you to deal with adolescent situations you may face during the next few years.

- 1** Neil always has lots to say when he's with boys and girls at school, but as soon as he's alone with a girl, he clams up. What should he do?
- 2** Brett's girlfriend always wants to be alone with him. Some of his friends had a party and Brett took his girlfriend. She got upset when he danced with other girls. Should he have spent the whole evening with her?
- 3** Kerryn is a 13-year-old girl. The boys she knows act so silly that it makes her nervous to be around them. Should Kerryn force herself to go to school dances to meet older boys?
- 4** Brooke's boyfriend never has much money when they are together. Could she suggest a movie and offer to pay?
- 5** Tracey really doesn't want to go out with Peter, but he keeps asking her for a date. She keeps refusing with an excuse because she doesn't want to hurt his feelings. She would still like to be friends with him at school. What should she do?
- 6** Ashleigh's mum won't let her go out with a boy unless he picks her up at her house. When he turns up her mum starts talking to him and he never knows what to say. He acts stupid, although he isn't. What should she do?
- 7** Leigh and his friends are invited to a party on Friday, but he wants to see a movie on television that night. What should he do?
 - a** watch television
 - b** go to the party
 - c** try to persuade his friends to watch television with him.
- 8** Darren has a pair of shoes he likes, but his friends always wear sneakers. What should he do?
 - a** Keep wearing the shoes.
 - b** Wear a pair of sneakers.
 - c** Try to persuade his friends to wear shoes like his.
- 9** You like Liam, but none of your friends likes him. What should you do?
 - a** Stop being friends with Liam.
 - b** Keep Liam as a friend.
 - c** Try to persuade your other friends to like Liam.
- 10** Ann has been going out with boys for a few months. Patrick has taken her out a couple of times, and now calls her up almost every night. Ann likes Patrick as a friend, but not as a serious boyfriend. One night Patrick asks Ann to go steady with him. Ann is afraid that he will stop asking her out if she says no. What should Ann do?

Dating

Dating is one of the best ways of getting to know someone. It can be very nerve-racking, especially at the beginning, when you want to impress your date. The challenge is to be yourself and not merely the sort of person you think the other person is interested in. If you can be yourself, you can relax and enjoy the date.

Dating has many social rules and these change the more you get to know your partner. For example, the male does not necessarily ask the female out and paying for things can be shared equally.

Once the couple has gotten to know each other well enough and still enjoy each other's company, they may start to feel mature love.



Figure 3.41 Dating is about getting to know each other—relax and enjoy yourself!

Rights

Choose from the list below the rights you would like to have in a romantic relationship. Place the items you have picked into the heart on the right.

- to be respected
- to have time for friends and others
- to say 'no'
- to be nervous
- to feel loved
- to change your mind
- to be listened to
- to make mistakes
- to have an opinion
- to show my feelings.

Compare your list with that of your close friends or your boyfriend or girlfriend if you have one.



Activity 3.20

Stage 7: Adulthood

Throughout your entire life you continue to change. Becoming an adult means that you are physically mature, you are more in control of your life, are responsible for your choices and actions and are able to set goals to work towards. This is the longest period of your life.

Young adulthood

By the early twenties, a person's body stops growing but the personality changes rapidly through the influence of life experiences such as travel, work experience, courtships, marriage, the early years of a career, and bearing and raising children.

Mature love

People who experience mature love:

- have similar values and want similar things out of life
- appreciate and respect each other
- enjoy the entire relationship, not just the sexual aspects
- support and care for each other
- negotiate and make decisions together
- can keep his or her own friends without jealousy from the other partner
- take responsibility for maintaining the relationship
- feel responsible for the wellbeing and feelings of the other person
- are likely to be realistic about each other's strengths and weaknesses
- usually plan sexual intercourse and discuss and organise contraception beforehand
- take the good times with the bad times
- are not usually teenagers—they are usually (but not always) older.

Mature love for some couples may become more permanent and eventually lead to marriage.

Marriage

Marriage, for many couples, is a natural progression in their relationship. Love, friendship and common interests are the reasons why most people choose to get married. It is a very important part of their life and usually occurs during early adulthood.

Some people choose to live together and raise children without being legally married. This is known as a de facto relationship. Both conventional marriages and de facto relationships are legally recognised in Australia.

For most couples, marriage means a complete change of lifestyle. It means learning new skills, for example:

- housekeeping, especially if both partners have been living with their parents before they were married
- planning and working within a budget
- learning how to communicate, share responsibility and make decisions.

Not all marriages last. Often communication breakdown, financial worries, career stresses, sexual problems and the burden of raising children can lead to couples splitting up. In order to succeed in marriage, both partners must be willing to communicate honestly, take an interest in each other's lives, and work at the relationship.



Figure 3.42 For a successful marriage both partners must work at the relationship

Marriage

- 1** Survey a married couple by talking to the partners together and separately. Set up your survey as a number of precise questions, but in general the information you want to discover is:
 - a** What are the main factors that drew you together and keep you together?
 - b** What are the main continuing difficulties in your marriage? How do you solve these problems?
- 2** Survey a divorced person (or, if possible, both partners who have been divorced). Again, divide the following general questions into a large number of precise questions:
 - a** What were the main factors that led you to get married? Why were these factors not enough to keep the marriage together?
 - b** What were the main factors that caused you to split up and seek a divorce? In looking back, do you think any of these factors could have been avoided? How?
 - c** How have you changed your attitudes and lifestyle since the divorce? How will you change your behaviour when trying to set up a new relationship in the future?
- 3** As a class, use the results from all the surveys in order to set up a long list of 'Do this' and 'Don't do this' for marriage.



Activity 3.21

Middle age

This usually begins in people's forties. By this time most adults are established in their careers and become increasingly involved in social organisations such as sports clubs and community groups. By the late forties or early fifties, many adults go through a 'change of life', in which both males and females experience physical changes. In females, this is called menopause and is signalled by the end of the menstrual cycle. In males it is not as simple to detect, but may be accompanied by hair loss and weight gain.

Stage 8: Old age

This is the final stage of your development before death and usually begins at around 65 years of age. Throughout this stage, many physical and emotional changes continue to occur. Certain things you take for granted may begin to falter, for example, your hearing, eyesight or memory and your body is unable to function as effectively as it did when you were younger. The loss of a husband or wife may also occur, which can leave the surviving spouse lonely and depressed. Today, retirement villages are very popular among older people. They are able to live independently in a home and still have the support of friends and medical staff on hand.

Figure 3.43 During old age, many people take time out to relax and enjoy spending time with their family



Activity 3.22



Old age

You might have trouble imagining what it is like to be old. If so, conduct a half-hour interview with three old people you know. Ask them at least these questions:

- 1** Where and when were you born?
- 2** Where and when did you first go to school? What is a vivid incident that you remember from your schooldays?
- 3** What were the main ways you had fun when you were a teenager?
- 4** Who was the great love of your teenage years? Did you marry him or her?
- 5** Where and when were you married? What was the wedding like?
- 6** Did you have any children? How many? When were they born? What are they doing today?
- 7** What are the best aspects of old age and what are the worst aspects?

Stage 9: Death

Death is inevitable and usually happens to most people between the ages of 70 and 80. It is normally the result of many factors rather than just one cause. Many people are able to stay alert and cheerful until the end of their lives, but others are denied that possibility due to ill-health.

Death and despair

- 1 Debbie's father died last week after a long battle with cancer. It was expected he would die soon but Debbie, who was very close to her dad, was devastated when it happened. Debbie is your friend, and she will be back at school next week.
 - a How will you deal with this situation?
 - b Share your ideas in a class discussion led by your teacher.
- 2 Think about your own death for a few minutes. How does it make you feel? Discuss these emotions with others in the class.
- 3 Think back to when you were a child. Think about the first time someone close to you died. It could have been a person or a pet. How old were you, and how did you feel about it at the time? How does thinking back to that time make you feel now?



Activity 3.23

Euthanasia

Euthanasia is the termination of human life. It may take several forms:

- ➔ **Active euthanasia**—performed by a doctor in a medical setting.
- ➔ **Passive euthanasia**—the termination of life by withholding treatment that would keep a person alive.
- ➔ **Voluntary euthanasia**—death is brought about at the request of the patient.
- ➔ **Involuntary euthanasia**—terminating the life of a critically ill or unconscious patient, who has lost the power to understand what is happening, in order to prevent continued suffering.

Suicide

Euthanasia is a very controversial issue, as is **suicide**, or the taking of one's own life. Many people go through stages of their life where they feel depressed or confused and believe that there is no reason to continue living.

Suicide is final—there is no problem so big that other solutions can't be found. Your life is worth a lot, many people love you, and if you feel like life is getting too much, the best thing to do is to ask for help.

Sexual activity

When you hear the words 'sex' and 'relationship' what do you think of? Many people think of sexual intercourse. However, sexual activity refers to any intimate physical behaviour such as cuddling, kissing, holding hands, stroking or masturbating. Couples who are in love have many ways of showing it, and in many cases sexual intercourse is not an integral part of sexual activity.

Sexual intercourse is seen as a means of becoming an adult by many teenagers and is discussed frequently in the schoolyard. The fact remains, however, that the majority of teenagers are still virgins.

Despite this, there is still a lot of pressure placed on teenagers to know everything about having sex. The media use sex as a way of attracting people to watch television programs or buy products such as magazines; your friends may encourage you to be sexually active or attractive; and your partner may pressure you to have sex to prove your commitment to them.

A real partner or friend who cares about you would not put pressure on you to perform. They should like you for who you are and should not want to change you.

Activity 3.24



Pressure to perform

- 1 Make a list of all the videos or movies you have seen in the last four weeks that contained some sort of sex scene.
- 2 Make a list of all the television shows you have seen in the last four weeks that contained some sort of sex scene or sexual reference.
- 3 Make a list of all the songs you can think of that have sexual references in the lyrics.
- 4 Make a list of any articles on sex that you have read in magazines in the last four weeks.
- 5 **a** Share your answers to the previous questions with your classmates. Add to your lists if you remember additional videos, movies, songs or magazine articles.
b How much sexual pressure does the media place on you?
- 6 How can you cope with media pressure? Discuss your ideas in class.
- 7 Some adolescents experience pressure not to know about sexual matters. Where could this pressure come from? What do you think is more important: the pressure to perform, or the pressure not to perform? Why?

Personal identity

Your own personal identity is very important. You have certain values that at times may seem hard to keep or follow. During adolescence you will undergo many changes and if you are not prepared for these changes you may find it difficult to cope and do what you believe is right.

Throughout adolescence your relationships with other people will change dramatically. You are growing and becoming more independent and may be frustrated when your parents do not let you do everything you want to do. This is also a frustrating time for parents who may find it difficult to hand over the decision-making to you.

Your friends are also very influential at this time. They are experiencing the same changes and you will value their opinions and advice.

It is always important to remember that when it comes to the crunch, it is your choice and you must do what you believe is best for yourself.

You can develop your own personal identity by:

- ➔ **Setting your goals**—work out what you want to achieve, look at your limitations and decide how you are going to achieve what you want. These can be long-term goals (to complete Year 12) or short-term goals (to save up and buy a new shirt).
- ➔ **Keeping your independence**—realise that whatever you choose, you are responsible for your actions and must accept the consequences that your decision may bring about.



Figure 3.44 During adolescence your friends are very important

My personal identity

- 1 The following are factors that are considered important by the 'in crowd'. Rank them from 1 to 10 with 1 being 'very important' and 10 being 'not important at all'.

Factor	Rank	Factor	Rank
Personality		Good manners	
Good reputation		Good clothes	
Good looks		Money	
Friendly		Good at sport	
Come from the right neighbourhood		Honesty	

- 2 Now share your rankings with the rest of the class. Did most of your classmates consider these factors important? Why or why not?
- 3 Adolescence is also a difficult time for your parents. Think about a situation when you were very upset because you were not allowed to do something.
 - How did you feel?
 - How did you react?
 - Were your actions effective?
 - How else could you have behaved in that situation?



Activity 3.25

Sexual intercourse

Once you have been in a relationship for some time and feel that you wish to make love to your partner, it can be a very enjoyable experience. Once this decision is made there are many other factors to be considered, such as unwanted pregnancy, protection from sexually transmitted diseases, guarding your reputation, being used by others, and sometimes legal issues (the legal age of consent is 16 years of age). This is why some teenagers postpone sexual intercourse. They are physically ready for it, but not emotionally ready. Most people find that their first time is very difficult:

- They are not aware of the skill involved.
- They may be very anxious the first time, hence problems may arise, for example, premature ejaculation for the male or poor lubrication for the female.
- They are unaware that males and females can have different responses to sex that need to be taken into consideration.

Activity 3.26



Sex—your choice

- 1 At this time in your life what would you perceive the biggest deterrent for having sex?
- 2 Sexual intercourse has many purposes. Read and think about the list in the table below. Decide for yourself whether each one is a good or a bad purpose, and tick the appropriate column. Prepare a reason for each of your opinions.
- 3 Discuss your responses, first with a classmate, and then with the rest of the class.

Sexual intercourse can be for:	A good purpose	A bad purpose	Why?
Showing feelings of love between married people			
Showing feelings of love between unmarried people			
A way of having some fun with someone			
Humiliating and hurting someone else, that is, sexual assault			
Releasing pent-up frustration			
Enabling human beings to continue as a species			
Creating greater feelings of intimacy			
Proving adult status			
Rebellion against parents			
Increasing your popularity with others			
Expressing power over someone else, for example, by sexual assault and child sexual abuse			
Satisfying your curiosity about it			
Having something to be good at			
Expressing feelings of closeness and caring			
Having something to boast about			

Contraception

The decision to have sexual intercourse raises two very important issues:

- ➔ How can I avoid an unwanted pregnancy?
- ➔ How can I avoid contracting sexually transmitted diseases (STDs)?

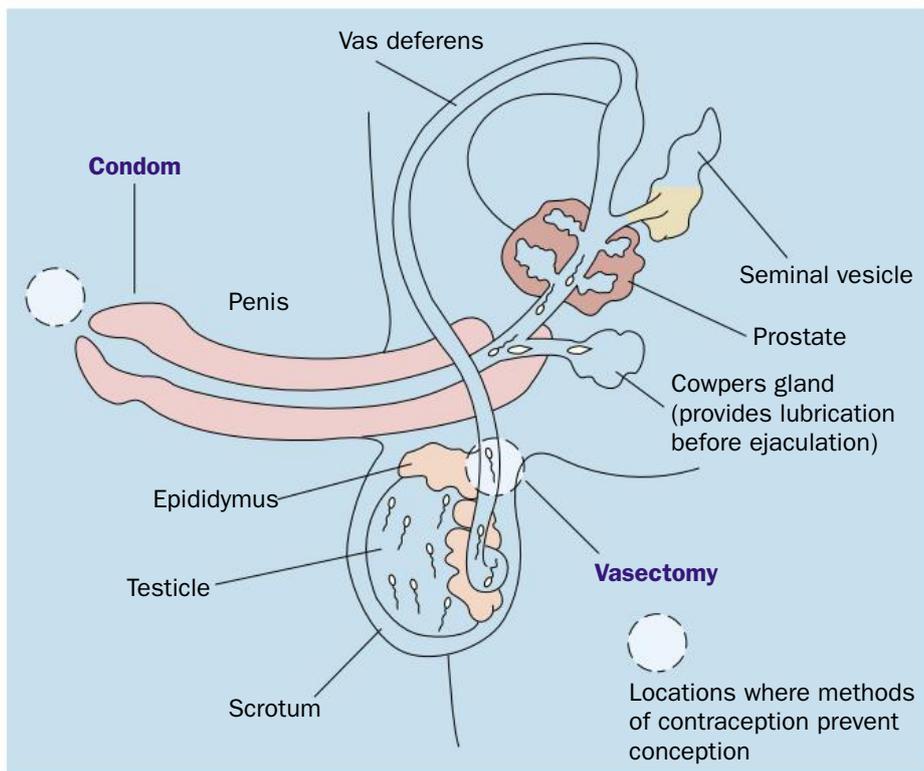
Abstinence (not having sex) is the most effective way of avoiding an unwanted pregnancy or contracting an STD. Your relationship can still flourish with other forms of sexual contact, such as kissing, cuddling and holding hands.

If you and your partner do decide that you are ready for sexual intercourse you will need to consider what type of contraception (preventing the sperm uniting with the ovum) you will use.

There are various types of contraception to choose from. Your choice will most likely depend on things such as availability, side effects, convenience and reliability. If you choose the most suitable form of contraception and use it effectively, you will enormously reduce your chance of pregnancy and contracting diseases. The most common cause of unwanted pregnancies when using contraception is human error, so make sure you read the instructions first!

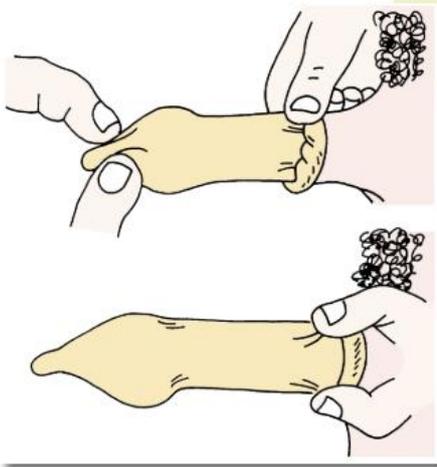
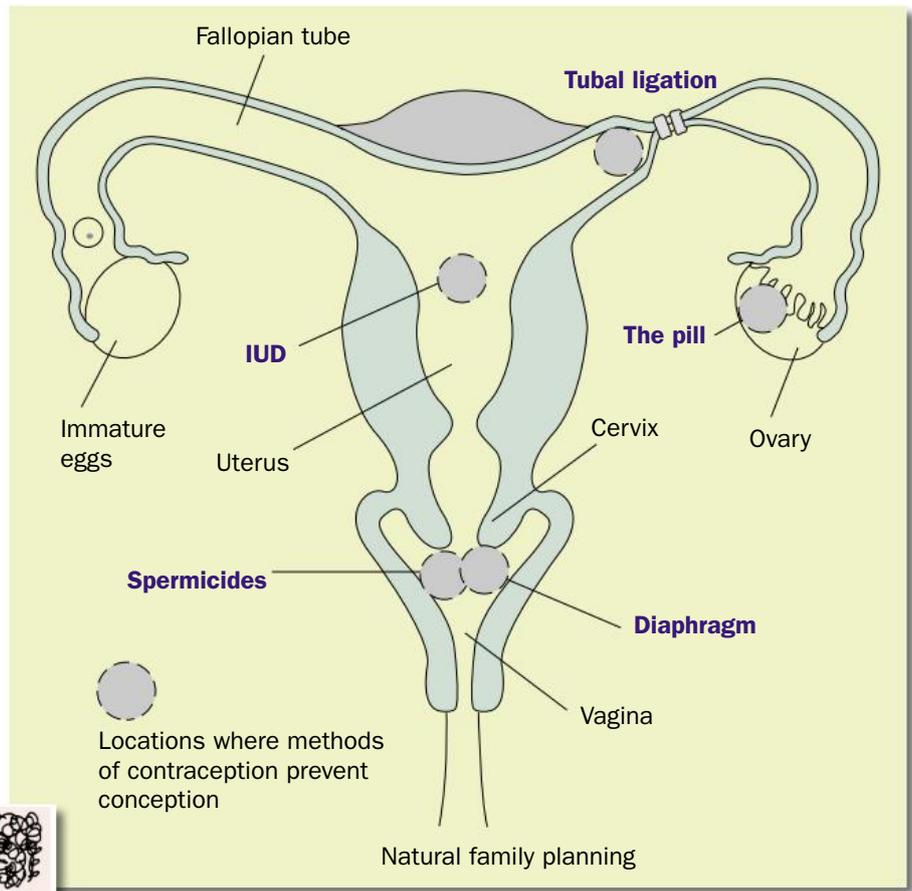


Figure 3.45 There are many forms of contraception available—choose the one that suits your needs



Figures 3.46 Contraceptive choices for males

Figures 3.47 Contraceptive choices for females



Figures 3.48 Condom usage

Condom

A condom is an example of a barrier method of contraception. It consists of a rubber sheath that is rolled onto the erect penis before it enters the vagina. It works by stopping the sperm entering the uterus. After ejaculation, the condom is removed carefully so that the sperm does not leak out and is disposed of carefully. Used in conjunction with spermicide, the condom is even more effective.

The condom is the only form of contraception that can prevent HIV and other forms of STDs. Condoms are readily accessible—you can buy them from supermarkets, chemists and from dispensers in public toilets.

The contraceptive pill

The **contraceptive pill** is taken orally and works by stopping the ovary releasing the egg, hence preventing fertilisation. The woman must take the tablet orally and if she forgets to take it, she runs the risk of an unwanted pregnancy.

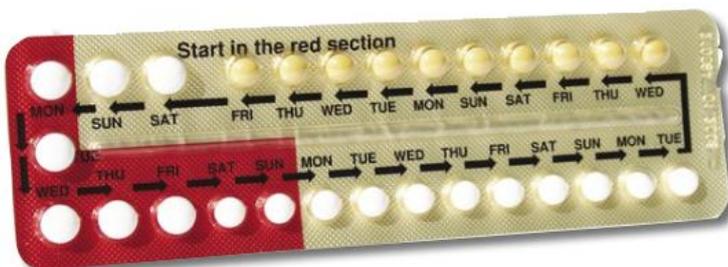


Figure 3.49 The contraceptive pill

The pill is also used for regulating the menstrual cycle and has been linked to reducing the symptoms of pre-menstrual tension.

The pill is available by prescription and is suitable for couples who are certain that no STDs will be transmitted (their only partner is each other and neither partner has an STD).

Diaphragm

A diaphragm is another barrier method of contraception. It is inserted into the vagina, over the cervix, to prevent sperm getting into the uterus (see Figure 3.50). In order to be effective it needs to be properly fitted by a doctor, and must be inserted before intercourse. As with the condom, the use of spermicide can increase its effectiveness.

The diaphragm may be chosen because it cannot be felt during intercourse, and because it is inserted before sex it does not spoil the mood. Disadvantages of the diaphragm are that it may cause irritation and infection if not cleaned properly. In addition, because the diaphragm cannot be duplicated to the exact shape of the cervix, sperm may be able to get around it. Women who gain or lose a lot of weight should be refitted and spermicide should be used with it.

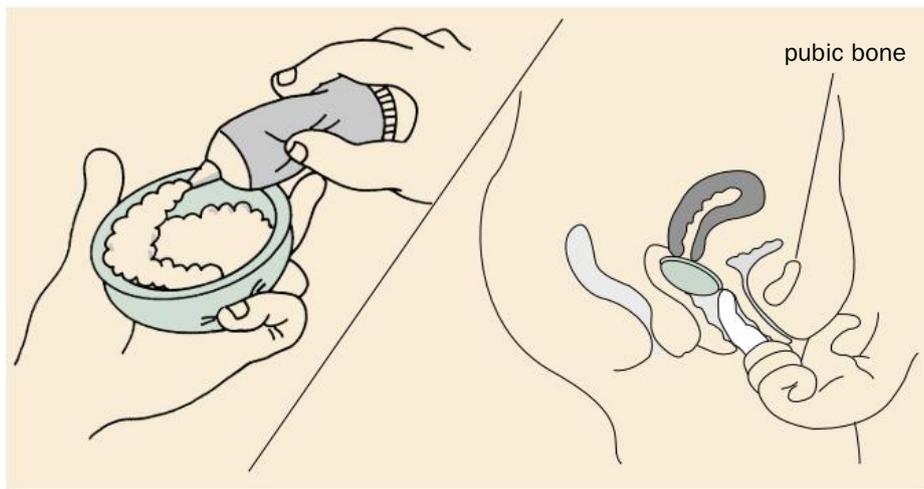


Figure 3.50 Inserting a diaphragm

Inter-uterine device

The inter-uterine device (IUD) is a small device that is inserted, by a doctor, into the uterus to form a barrier between the egg and the sperm. The IUD can remain in place for many years, however, it may cause discomfort in the form of period pain and cramps, especially if it slips out of place. In some cases, vaginal infection has resulted, leading to infertility. This option is usually taken up by older women.

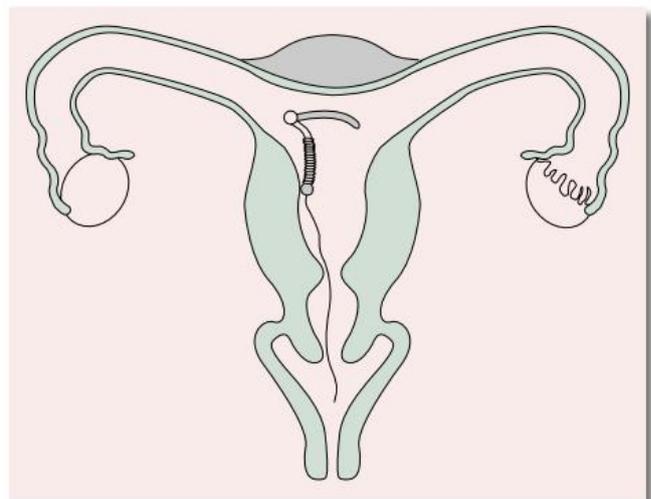


Figure 3.51 Intra-uterine device

Spermicides

Spermicides come in the form of creams, jellies or foams and they kill the sperm before they reach the egg. On their own they are not very effective, however, if used in conjunction with a diaphragm or condom, they can be very reliable. Spermicides are available from the chemist.

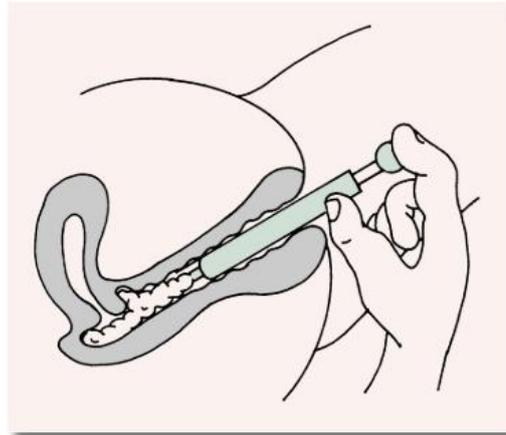


Figure 3.52 Spermicide application

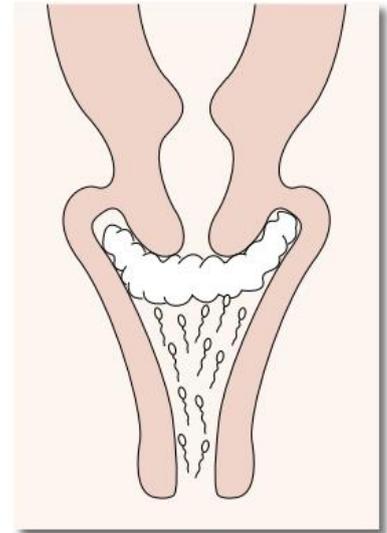


Figure 3.53 How the spermicide prevents fertilisation

Withdrawal method

The withdrawal method is where the male withdraws his penis before ejaculation. It is not an effective method as sperm leak from the penis in the vagina before ejaculation, and it relies a lot on self-control by the male. It is best that only couples who are in a stable relationship and who do not mind if a pregnancy occurs use this method.

Sterilisation

Sterilisation is any method that permanently stops the sperm from reaching the egg. It is a very effective method, however, it should only be used by older people who do not wish to have children. People who have had children and do not want any more usually use this method of contraception.

- ➔ **Female sterilisation**—the most common method is **tubal ligation**, where the Fallopian tubes are cut and tied, therefore preventing any eggs reaching the uterus.
- ➔ **Male sterilisation**—a vasectomy is where the vas deferens is surgically cut, stopping the path of sperm from the testes through the penis to the vagina.

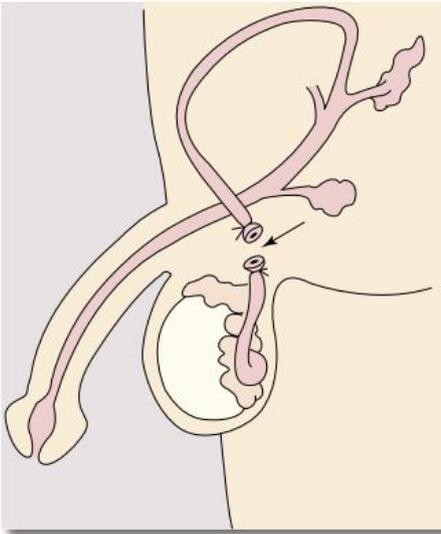


Figure 3.54 Vasectomy

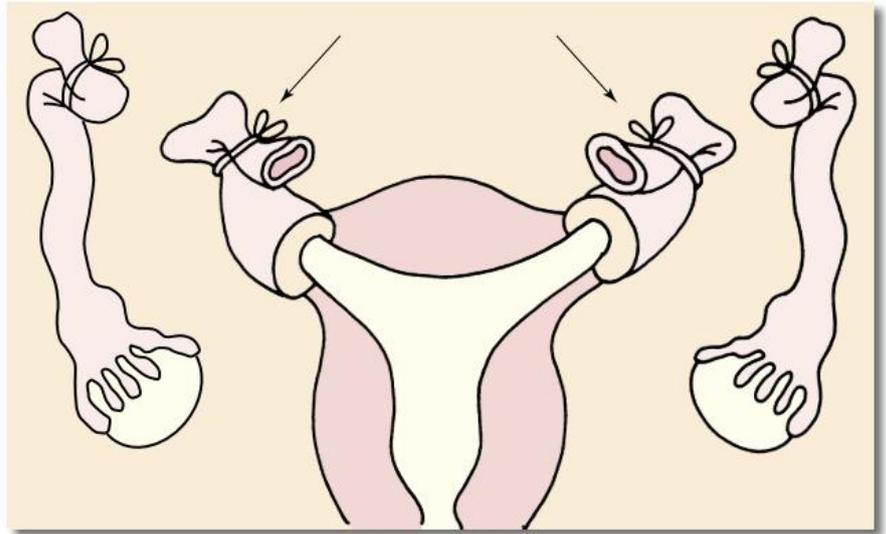


Figure 3.55 Tubal ligation

The calendar method

The **calendar method** uses the menstrual cycle to determine when it is safe to have sex without falling pregnant. In order for this to be effective, the female must be very aware of her body. This is not recommended for teenagers as their menstrual cycles may still be irregular. Many females use this method to work out when they are able to fall pregnant.

If your shortest cycle has been (no. of days)	Your first unsafe day	If your longest cycle has been (no. of days)	Your last unsafe day
21	3rd day	21	10th day
22	4th	22	11th
23	5th	23	12th
24	6th	24	13th
25	7th	25	14th
26	8th	26	15th
27	9th	27	16th
28	10th	28	17th
29	11th	29	18th
30	12th	30	19th
31	13th	31	20th
32	14th	32	21st
33	15th	33	22nd
34	16th	34	23rd
35	17th	35	24th

Figure 3.56 Calendar method: how to calculate 'unsafe' days

Douching

To **douche** means to wash out your vagina with water after sexual intercourse. This definitely does not work as a method of contraception.

Abortion

Abortion is the termination of pregnancy. If a couple decide to terminate a pregnancy, abortion usually takes place during the first 12 weeks of pregnancy and should not occur any later than 20 weeks. Professional counselling and support is strongly recommended to any female considering abortion. Abortion should not be considered a 'quick' solution to the problem of an unwanted pregnancy.

Unwanted pregnancies do not have to be terminated. Alternatives include offering the baby for adoption or fostering, if there are no other ways of keeping the baby.

In-vitro fertilisation

So far we have looked at ways in which you can prevent pregnancy, however, what about the people who have trouble falling pregnant? Couples who have not managed to conceive naturally can try **in-vitro fertilisation**. This involves the placing of a woman's egg and a man's sperm in a glass dish in the hope that the egg will become fertilised. When fertilisation does occur, the egg is placed back inside the female. This is not a very reliable method, however, it does give hope to many couples who are unable to conceive naturally.

Activity 3.27



Contraception

- 1 Fill in the spaces using the words from the box.

abstinence	STDs	pregnancy
spermicide	condoms	

Contraception is a means of reducing the chance of _____ and contracting _____. _____ and _____ are the only two forms of contraception that can prevent STD transmission. Condoms can be used in conjunction with _____ to increase their effectiveness.

- 2 For each of the following statements, write whether you agree or disagree, and state why. Discuss your answers in class.
 - a Girls under the age of 18 should only be allowed birth control with their parents' permission.

- b** It is up to the woman to use birth control. After all, she's the one who can get pregnant.
 - c** For health or personal reasons, many women do not want to become pregnant. Birth control devices should be available to any woman who wants them, regardless of the woman's age.
 - d** The man should always have a condom available in case the woman uses no form of birth control.
 - e** The reason for having sexual intercourse is to have children. It is wrong to interfere with this process. Abstinence is the only acceptable way to avoid pregnancy.
 - f** If a woman gets pregnant, she should pay the penalty and have the baby. Abortion should not be allowed.
 - g** Abortion is one way to limit the world's population.
 - h** Abortion has nothing to do with murder. The foetus isn't alive until it can survive outside its mother.
 - i** A woman has the right to decide whether or not to have a child. Abortion should be one of her legal choices.
 - j** If teenage girls know that they can end a pregnancy easily, they will go to bed with anyone, so I am opposed to abortion.
 - k** An abortion can save a young couple from being forced to marry. It can also save them from having to quit school to earn money to take care of a baby.
 - l** A woman might not be emotionally mature enough to be a good mother. Her child would suffer as a result of being unwanted.
- 3** Read the following scenarios and record what type of contraception would be suitable.
- a** Jacqui and Jim are both in their forties. They have two children and neither of them wishes to have any more.
 - b** Daniel and Lyndell have been dating for three years and are both at high school. They are in the process of discussing whether or not to have sex.
 - c** Roger and Rachael were recently married. They are paying off their house and do not wish to have children until this is done. Neither of them has an STD.
 - d** Michele and Mario have decided to have a baby.
 - e** Kent and Renee are comfortable within their relationship and are not worried if Renee falls pregnant.
 - f** Sharon is 30 years of age and is sexually active with her partner. She does not want to take the pill and both she and her boyfriend find condoms a 'mood killer'.

Sexually transmitted diseases

A **sexually transmitted disease** (STD) is any disease that can be passed on by an infected person to another through sexual contact. STDs are contagious, and are caused by a bacterial or viral infection of the sex organs.

Treatment of STD symptoms

In many cases, you cannot see obvious symptoms of an STD. If left, however, it can cause major damage and may lead to infertility, especially in women. If you think you may have contracted an STD, make sure you visit a doctor, who will most likely be able to give you something to alleviate the problem. Remember, if you are planning to have sex and you have an STD, you are responsible for your partner as well as yourself and should use the appropriate means of contraception.

Prevention

Abstinence is the safest way of preventing the transmission of STDs. If you choose to have sexual intercourse, however, both partners must take the responsibility for preventing STDs. The best method is using a condom. If you have an STD, it is your responsibility to inform any sexual partners.

Acquired Immune Deficiency Syndrome

What is AIDS?

Acquired immune deficiency syndrome, AIDS, is a disease in which there is a breakdown in the body's natural immune system.

Your immune system is your defence against infection and some cancers. It consists of white blood cells and chemicals called antibodies, which are produced by the body to combat invading infections. Antibodies and white cells are carried through the body in the bloodstream and into the body tissues.

The antibodies attach to viruses and usually inactivate them; the white cells attack infectious agents and some cancers and destroy them.

In AIDS, white blood cells (lymphocytes) are damaged, rendering people with AIDS vulnerable to one or more unusual infections or cancers which do not pose a threat to anyone whose immune system is working normally.

What causes AIDS?

AIDS is caused by the human immuno-deficiency virus (HIV). A virus is the smallest infectious particle known. Other viruses that affect humans include those that cause the common cold.

How is HIV transmitted?

The HIV virus is spread through certain specific sexual practices, sharing of intravenous needles and syringes or, more rarely, through blood transfusions,

either with whole blood or blood components. Testing kits have now been installed at all blood banks to avoid contaminated blood being given.

There is no evidence that AIDS can be transmitted through air, food, water or casual body contact. However, it is transmitted through direct blood-to-blood contact and through semen and vaginal fluid contact during intercourse.

Who is at risk?

It is clear that there are certain groups of people who engage in behaviour likely to transmit the virus and are therefore more likely than others to contract HIV/AIDS.

Since HIV/AIDS was diagnosed in Australia, the following groups have been most at risk:

- ➔ sexually active homosexual or bisexual men
- ➔ intravenous drug users who share syringes.

Anyone who has unprotected sex or who shares a syringe is also at risk of contracting HIV/AIDS.

Can you get AIDS by donating blood?

No. Blood collection centres use sterile equipment and disposable needles and collection packs.

Can you get AIDS by touching an infected person, by living in the same house, by drinking from the same glass or eating from the same dish?

No. AIDS is not spread by casual contact, such as handshakes, bumping together in a crowd or even casual kissing.

People living in the same household are not at risk unless they have unsafe sexual contact (i.e. without condoms).

The AIDS-related virus is removed by normal washing of cups and dishes, therefore HIV/AIDS is not transmitted in households where people may eat or drink from common dishes.



Figure 3.57 Using a condom is the best method of preventing the transmission of STDs

Disease	First symptoms	When first symptoms appear	What happens if disease is not treated	Treatment
Chlamydia (cause of NSU or NGU in men)	Often no symptoms, particularly in women. Men have discomfort (burning) when passing urine. Secretion of pus from penis.	Few days to a few weeks.	In women: PID can develop, followed by infertility and ectopic pregnancy. In men: painful swelling of testes, sore eyes, skin, mouth.	Antibiotic tablets (tetracyclines).
Human papilloma virus (genital warts)	Tiny white raised lumps on penis or vulva. Often microscopic in size.	A few days.	Risk of secondary infection. Linked with development of cervical cancer.	Special creams and ointment. Strict personal hygiene. Warts can be removed but virus cannot. Women should have Pap smear every 12 months.
Human immunodeficiency virus (HIV) leading to AIDS	Extreme tiredness. Fevers, chills. Rapid weight loss. Swollen lymph glands. White spots in mouth. Skin marks or bumps—usually purple. Dry cough, diarrhoea, poor appetite.	4–7 years	Immune system breakdown, frequent infections, cancers, (AIDS), death. Pregnant women can infect foetus.	No cure at this time. Some treatments are available for the various infections and cancers. Special AIDS drugs help to prolong life and improve quality of life.
Hepatitis B (Hep B)	Jaundice, fatigue, nausea, vomiting, diarrhoea. Abnormalities of the senses of smell and taste. Fever rash.	40–180 days.	Liver disease, e.g. cancer, cirrhosis. Liver failure. Death.	Vaccine for prevention. Isolation: medication varies, depends on severity.
Genital herpes	Look like ‘cold sores’ on penis or vulva.	A few days.	Risk of other STD infections. Baby can be infected during birth.	No effective treatment. Strict personal hygiene. Abstinence while sores are present then use of condoms.
Hepatitis C (Hep C)	80% of people with Hep C do not have symptoms. A minority of people have symptoms in the acute (early) phase: fever, fatigue, nausea, vomiting and diarrhea.	Varies. Some people’s symptoms develop 5–12 weeks after infection and other’s develop after 10–20 years.	20% of infected people clear the virus from their blood. 80% continue to carry Hep C and this can lead to liver disease e.g. cirrhosis and cancer.	No cure or vaccine at this time. In the acute stage of the disease: rest and abstinence from alcohol. In the chronic stage: interferon and ribavirin.

Figure 3.58 Common sexually transmitted diseases

Disease	First symptoms	When first symptoms appear	What happens if disease is not treated	Treatment
Gonorrhoea ('clap')	Men: Burning pain when urinating. Smelly discharge or pus from penis. Women: 70% have no symptoms. Increase in discharge from vagina. Can also infect anal passage as a result of anal sex; the throat as a result of oral sex.	Average 3–5 days, not longer than 3 weeks.	The linings of sex organs become swollen as bacteria breed. Scars from PID develop. The oviducts and sperm-carrying tubes become blocked, causes infertility. Baby can be infected at birth.	Course of antibiotic injections or tablets. Check-ups for two weeks after.
Syphilis ('pox')	Men: Sore or ulcer on sex organs. Called a 'chancre'. Women: Sore or ulcer on or inside sex organs. Sore is painless. Very rarely found in mouth.	Average 21 days. 10–90 days.	Bacteria enter blood stream travel to all organs of body. In the late stage it attacks the aorta, brain, and spinal cord, causing heart disease, insanity, blindness, paralysis—death. Foetus can get disease from mother.	Course of penicillin injections. Check-ups for 2 years for complete cure.
Candidiasis ('thrush')	Men: Quite rare in men. Tip of penis red and sore. Women: Thick discharge. Soreness of the vagina and vulva. Urination may be painful.	Less than a month.	Lasting vaginal discharge, pain and itchiness.	Tablets, usually given in one large dose. (Alcohol must be avoided at that time.)
Scabies ('itch')	Itchiness. Can be seen on pubic hairs. Risk of secondary infection. Parasite spreads to rest of body.	A few days.	Risk of secondary infection. Parasite spreads to rest of body.	Treatment with a special lotion. Strict personal hygiene.
Pubic lice ('crabs')	Intense itchiness.	A few days.	May spread to rest of body.	Special lotion. Strict hygiene.

Source: Riddell and Wright, **Health: Individuals and Communities**, Longman, p. 126

Figure 3.58 (continued) Common sexually transmitted diseases

Activity 3.28



No sex—safe sex

- 1** Jot down the answers to the following questions in your workbook.
 - a** List some common names for condoms.
 - b** Where can you buy condoms?
 - c** How much do they cost?
 - d** Why do people use condoms?
 - e** Why should sexually active people carry condoms?
 - f** How do condoms prevent the spread of STDs?
- 2** Design an advertisement aimed at 18-year-olds, encouraging them to use condoms and stay safe.
- 3** For each of the following statements, state whether you strongly agree, agree, disagree or strongly disagree and why. Then share your thoughts in a discussion led by your teacher.
 - a** Some STDs cannot be prevented.
 - b** You don't always know whether you have an STD.
 - c** You can get an STD the first time you have sexual intercourse.
 - d** Clean people can catch STDs.
 - e** A condom can provide protection from STDs.
 - f** The more sexual partners you have, the greater your risk of STDs.
 - g** Certain groups are more at risk of STDs.
 - h** You can catch STDs from toilet seats and sharing towels.

Activity 3.29



Case studies

For each case study, write what you would do if you found yourself or a friend in that situation. Share your answers in a class discussion.

Case study 1

Debbie is a 15-year-old girl. She has been dating Brett for four months. All her friends seem to talk about is sex. Debbie is still a virgin but is feeling pressured by her friends. She does not feel ready. What should she do?

Case study 2

Helen is 16 years old. She has just found out that she is pregnant. No one else knows, not even her boyfriend Warren. She is scared to tell her parents and feels very alone. What should she do?

Case study 3

Josh is 17 years old and has been dating Rhonda for four months. Lately, Rhonda has been pressuring him for sex, but he has sores around his genital area. He has had them for a month but is too embarrassed to tell anyone. What should he do—seek medical advice or hope it will go away?

Case study
4 Michelle was raped a month ago and has just found out she is pregnant. She is very confused. She does not agree with abortion but does not feel she can carry the child to full term. Where can she go for help and what should she do?

Case study
5 At a party on Friday night, David told Jack that he was attracted to him. Jack was very embarrassed—he likes David but only as a friend. What should he do?

Case study
6 Pam got drunk at a party last night and had sex with a guy she had just met. She does not know if they used contraception.

Literacy

Write a children's story on a topic relating to development. Storylines may relate to coping with death, divorce or where babies come from. Your story should relate to the target audience and include colourful pictures.

Numeracy

Over the course of one week, record how much time you spend with the following groups of people:

- family
- boyfriend/girlfriend
- friends—outside of school
- friends—school
- coach/boss/work colleagues.

Calculate what percentage of time was spent with each group.

Analyse the results and make predictions regarding how much you think this will have changed in five years.

Lifeskills

Using the school library, teacher resources and the internet, find a poem that you believe expresses what being a teenager means to you.

Download this poem onto a computer, and write a short paragraph to accompany it on why you believe it is relevant to teenagers.

Email this information to your teacher, who will create a poetry anthology using the class's responses.

Future perspectives

Draw an outline of both of your hands. In the left hand list all of the physical and personal attributes that you have. In the right hand list the attributes that you want to have when you become an adult.

Compare the two hands and make a 'To do' list of what you must do to achieve your goals, and who you can ask to help you in your quest to succeed.

Where do I go from here?

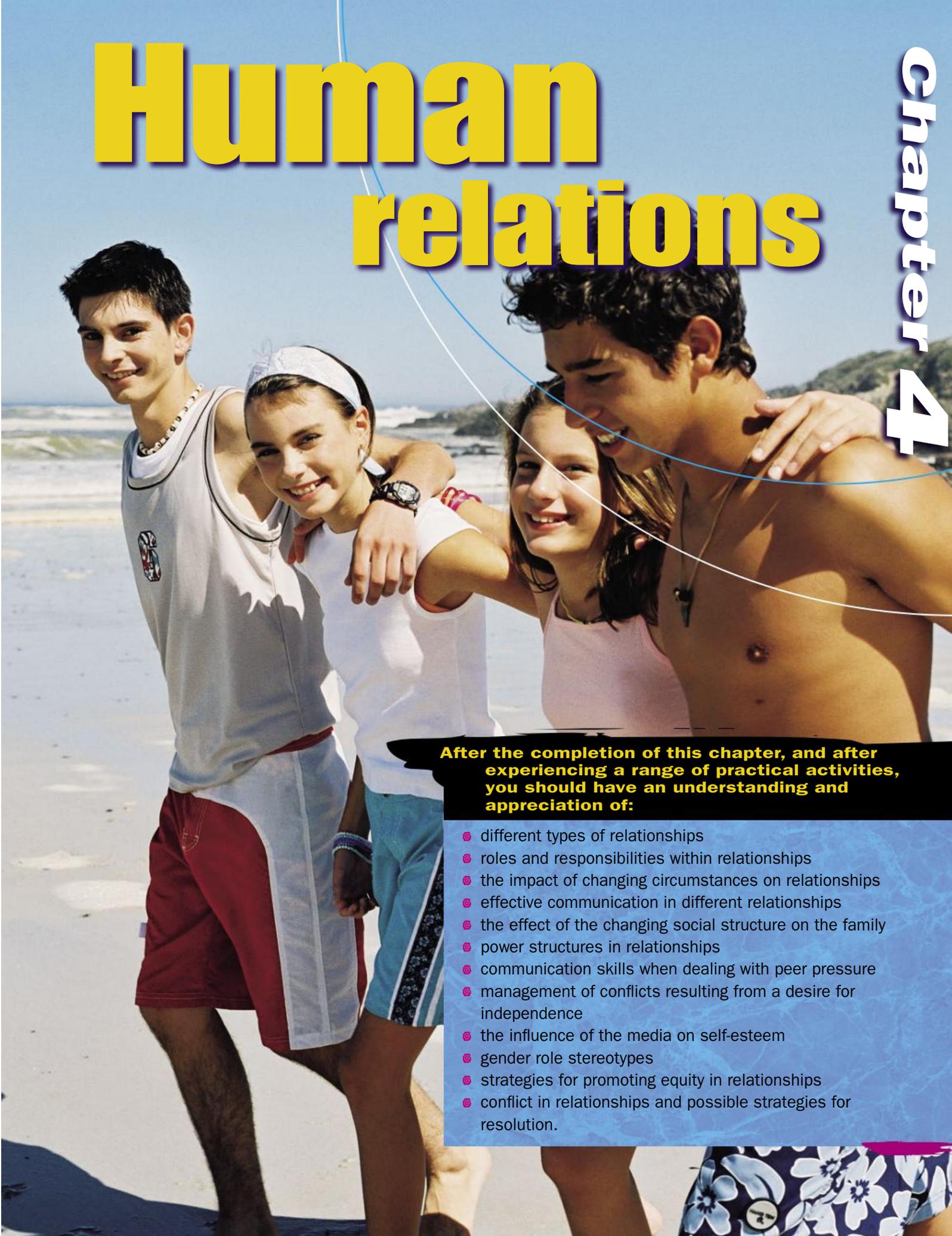
www.reachout.com.au

www.fpq.com.au

www.cyh.com

Human relations

Chapter 4



After the completion of this chapter, and after experiencing a range of practical activities, you should have an understanding and appreciation of:

- different types of relationships
- roles and responsibilities within relationships
- the impact of changing circumstances on relationships
- effective communication in different relationships
- the effect of the changing social structure on the family
- power structures in relationships
- communication skills when dealing with peer pressure
- management of conflicts resulting from a desire for independence
- the influence of the media on self-esteem
- gender role stereotypes
- strategies for promoting equity in relationships
- conflict in relationships and possible strategies for resolution.

Relationships

Your life is full of relationships with other people. A **relationship** is any association you have with other people. Your current relationships include those you have with your parents, brothers, sisters, neighbours, family friends, relatives, school friends, teachers, coaches and perhaps religious, sporting and hobby groups. Some of your relationships help to make you a happier, healthier or more knowledgeable person. Some may have a negative influence on you by undermining your self-esteem, making you unhappy and pushing you into conflict situations.

However, regardless of the types of relationships you have, life would be lonely and boring without other people. Humans are often called 'social animals'. We like to be with other people. In particular we like to feel close to the people who are important to us.

Whether you have lots of relationships or only a few, it is important for you to have some close relationships. Those close relationships give you security, love, happiness, pleasure and wisdom.

Activity 4.1



Good relationships

In the table below, record information about people with whom you have a good or important relationship.

Name	Type of relationship	Relationship length	Good things about the relationship
Mum	Mother	13 years	Love, security, support

Figure 4.1 A family





Figure 4.2 The relationship cauldron

Groups

To have any relationship you must be a member of a group. Groups can be small, such as a two-person group of you and your best friend. Groups can be large, such as you and 40 000 other fans at the cricket all doing the Mexican wave. It can be compulsory to be a member of some groups, for example, you and the other members of your class, or you can choose to be in a group, for example, your local sports team.



Figure 4.3 Being part of a group gives members a feeling of security

People skills and groups

Most teenagers are members of several different groups. How much you enjoy being a part of these groups often depends on your people skills, and the people skills of others in your groups.

Good people skills help keep a group friendly, closely knit and productive. People skills include your ability to:

- ➔ respect other people's rights and responsibilities
- ➔ communicate and cooperate
- ➔ develop the ability to make good decisions
- ➔ negotiate and handle authority
- ➔ be assertive
- ➔ cope with disagreement and frustration
- ➔ respect the opinion of others
- ➔ develop the trust and self-esteem of others
- ➔ express feelings for others.

This chapter is all about developing your people skills and applying them to the various groups of which you are a member.

Activity 4.2



A good group member

1 Look at the list of qualities shown in the box below.

- | | |
|--|--|
| <input type="checkbox"/> cooperative | <input type="checkbox"/> prepared to get involved |
| <input type="checkbox"/> intelligent | <input type="checkbox"/> trustworthy |
| <input type="checkbox"/> clear about the group's goals | <input type="checkbox"/> assertive |
| <input type="checkbox"/> friendly | <input type="checkbox"/> caring of other people's feelings |
| <input type="checkbox"/> diplomatic | <input type="checkbox"/> helpful |
| <input type="checkbox"/> energetic | <input type="checkbox"/> honest |
| <input type="checkbox"/> conscientious | <input type="checkbox"/> a good listener |
| <input type="checkbox"/> decisive | <input type="checkbox"/> prepared to discuss issues |
| <input type="checkbox"/> organised | <input type="checkbox"/> considerate |

- a Think about the groups you are in and the qualities of the members of these groups.
 - b Write down what you think are the five most important group member qualities from the box. You can add some ideas of your own. Justify why you made your choices.
- 2 Which of these qualities do you think you possess?
 - 3 Which of these qualities can you improve most easily in order to become a valued group member?
 - 4 Which do you prefer: group work or individual work? Why?

Group trust

One of the most important people skills is getting people to trust you. For any group to get along well, group members must trust each other and feel confident that sensitive issues discussed within the group will not be mentioned to outsiders.

For example:

- ➔ If you have an honest discussion about the problems of adolescence, you rely on other members of your class group not to go blabbing about what you said to the rest of the school.
- ➔ If you tell members of your basketball team you are not confident when taking foul shots, you expect them to keep it to themselves.

Changing relationships

Throughout your life you will form relationships with many different people. Some relationships become close very quickly. Some start off as distant relationships and after several years become very close.

There are many reasons why relationships change. They include:

- ➔ moving house
- ➔ changing schools
- ➔ developing new hobbies
- ➔ growing older
- ➔ death of a friend or family member
- ➔ changing sporting interests
- ➔ divorce of parents.

Activity 4.3 is designed to help you to investigate why relationships change. It also shows ways of coping with changes so that you do not become confused and disappointed when you grow apart from old friends.

Close, distant, old and new

- 1 Copy out the headings from the table below and fill in the names of the people with whom you have had a close relationship.
- 2 For each relationship write down:
 - a the basis of the relationship, for example, school friend, neighbour, sister or family friend
 - b a list of the things you have or had in common
 - c a list of reasons why your relationship changed in the past or might change in the future
 - d a list of ways in which you coped with past changes in the relationship, and how you would cope with future changes.
- 3 As a class, discuss your methods of coping with changes in relationships.
- 4 Draw a timeline that identifies the types of lifecycle changes that you might experience. Start the timeline with leaving school.

Person	Basis for relationship	Things in common	Causes or possible causes of change	Your way of coping



Activity 4.3

Power in relationships

As a member of many different groups, you have many different relationships. One of the people skills that makes these relationships work is knowing how to handle power. In some relationships you share power equally with other group members, such as classmates, your peer group, your friends and your boyfriend or girlfriend. In other relationships, such as those with your teachers, parents or employer, you have less power.

As an older brother or sister or as an older student, you have power over younger children with whom you have a relationship.

It is important for you to accept these variations in power by accepting the rights of the people with whom you have a relationship and realising that your responsibilities may vary depending on the balance of power. Problems arise when people abuse power, either by not accepting that someone else has more power or by misusing power in a relationship.

Activity 4.4



Power play

The following people have power problems. What sort of problems does each have? How could it be solved?

- 1 Child abuser.
- 2 The player who never does what the captain asks.
- 3 Wife basher.
- 4 Police hater.
- 5 The player who ignores the coach's instructions.
- 6 The adolescent who thinks all parents are stupid.

Relationship rights and responsibilities

In any relationship, whether in a two-person group or a 30-person class, you have certain rights and responsibilities:

- Your rights are the ways in which the other group members should treat you.
- Your responsibilities are the ways in which you treat other group members.

For example, you can expect to be treated with respect in your groups. This is your right. On the other hand, you have a responsibility to treat other group members with respect.

When group members are aware of their rights and responsibilities, the whole group becomes more fun. A good guideline to follow in all your relationships is:

Treat others the way you would like to be treated.



Activity 4.5

Case studies—groups

- 1 For each of the following case studies, answer these questions:
 - a Have the group members betrayed one another's trust?
 - b Have the group members stuck to their rights and responsibilities?
- 2 Discuss your answers to Questions 1a and 1b in a class forum led by your teacher.

Case study 1

Peter is a peer group leader. He is big, loud and talented. Sam, who is in the same group, confides in Peter when they are alone that he really likes Christie but he doesn't know how to approach her. Peter says nothing, but when the members of the group are hanging around the corner shop the next day, Christie walks past. Peter turns to the group and booms, 'Hey guys, that's who Sam wants. Come on, Sam, don't be a woosie. Go and chat her up.' Sam glares at Peter.

Case study 2

Susie and Emily play in the same basketball team. Emily is a player of average ability who makes her fair share of errors. Susie is quite a good player who always supports her team members. Tonight's match is very tight, with scores locked into the last minute. The opposition goes two points ahead, then Susie is fouled. As she goes to the foul line she can tie the game if she makes both shots. Unfortunately she misses one shot. As the players leave the court Emily loudly says to another team-mate, 'Trust Susie to stuff it up.' Susie hears it and feels crushed.

Prejudice and tolerance

Prejudice (meaning 'pre-judgment') is the formation of an opinion or feeling without sufficient knowledge, thought or reason. For example, you can be prejudiced against:

- ➔ certain religions, for example, 'All Catholics are snobs'
- ➔ certain races, for example, 'Greeks are the biggest cheats around'
- ➔ hair colour, for example, 'Blondes are complete airheads'
- ➔ body size, for example, 'I don't like fat people'
- ➔ certain sports, for example, 'Only Italians play soccer'.

Prejudice tends to destroy relationships because it leads to narrow-minded conflict. A more informed approach to living in our multicultural Australian society is **tolerance**. A tolerant person:

- ➔ collects information before making decisions
- ➔ allows for the differences between people
- ➔ treats each person as an individual rather than branding him or her as a member of a group.

Tolerant people tend to be good communicators who use the skills of consensus, negotiation and assertiveness. They have a wide knowledge of current issues.

Prejudiced people operate through aggression and confrontation and are usually ignorant of the facts.

Consensus and negotiation

Consensus is a general agreement made by most of the members of a group. The other main form of agreement is **majority agreement** (plurality agreement), which is a decision made by more than half of the members of a group by means of a vote.

Many groups prefer to make decisions by consensus rather than by vote. Often after a vote, the 49 per cent of losers (the minority) feel rejected by the majority.

Here is an example of consensus. It is a hot Sunday afternoon. The members of the group meet at Brad's house. After a quick discussion, everyone decides to go to the beach.

Consensus

Attempting to reach consensus is more difficult for some decisions and groups than others. If the group cannot reach consensus, it usually ceases to be a group because everyone goes off in his or her own direction.

To reach a real consensus, each group member should present her or his opinion on the issue and therefore become actively involved in the decision-making process. This means that you have to be assertive and give your opinion rather than just follow the strongest, loudest or smartest member of the group.

Negotiation

Like consensus, negotiation is a mature people skill that you must try to develop. Negotiation is the technique of finding a solution to a problem that is agreeable to all concerned and involves everybody concerned giving in a little.

Negotiation is a mature, responsible way to solve problems or change rules. Its opposite is the immature method of throwing a tantrum, shouting and yelling.

The tricks to negotiation are:

- ➔ look at the problem and the people involved
- ➔ ask yourself why each person has taken her or his position or viewpoint
- ➔ find out how each person feels about the situation
- ➔ decide each person's non-negotiables (issues on which they will not give in)
- ➔ decide each person's negotiables (issues on which they can be persuaded to change)
- ➔ work out a plan so that each person can end up saying 'yes'.

Examples of negotiation

Here are two examples of negotiation.

Problem 1

A problem at school

What do you say the problem is?

What does your teacher say the problem is?

What do your words mean underneath?

What do your teacher's words mean underneath?

How do you feel about this?

How does your teacher feel about this?

Your assignment has not been done.

The assignment was too long and you didn't finish it.

You didn't finish the assignment and you had a week to do it.

You really mean that you tried to do it at the last minute.

He or she thinks you had the time but you didn't try to get it done.

You feel that you are being picked on.

He or she feels let down that you thought the assignment wasn't important enough for you to think about in advance.

Having identified the stated problem, what the problem means, and how all the people involved in the problem feel, you can:

Decide what the non-negotiables are.

Decide what the negotiables are.

Work out a plan for solving the problem.

The assignment must be done.

The assignment may still be submitted, but a lower mark may be given for late submission.

The assignment will be completed by next Monday and you will use the weekend to complete it.

Problem 2

A problem at home

What do you say is the problem?

What do your parents say is the problem?

What do your words mean underneath?

What do your parents' words mean underneath?

How do you feel about this?

How do your parents feel about this?

You want to go to the shopping mall with your friends.

You want to go to the mall on Saturday afternoon with your friend for a couple of hours—just to muck around.

There are a lot of things to be done around the house on Saturdays and that you should stay and help.

You really would like to go and be with your friends, to hear what they are saying and to be part of what is going on.

They are afraid you will get into trouble, may be influenced by some older kids and get involved with drinking or drugs.

You feel that your parents should let you go. You should be trusted not to do anything you shouldn't.

They are afraid that you might get into a situation that you can't handle and where you will be too far from them to ask for help.

Having identified the stated problem, what the problem means, and how all the people involved in the problem feel, you can:

Decide what the non-negotiables are.

You must be safe and you must help at home.

Decide what the negotiables are.

You will do the necessary work another time and will promise not to leave the mall.

Work out a plan for solving the problem.

You can go every second Saturday with your best friend (who your parents know well) for support.

Activity 4.6



Let's get some agreement

- 1** Your teacher will divide you into groups of five. Within your group you must come to a consensual decision for each of the following problems. When a consensus has been reached, write down the action that the following individuals should take:
 - a** Belinda's coach wants her to break the rules deliberately to slow down play so the team can win.
 - b** Pauline's parents want her to go away with them for the weekend, but Pauline's best friend is having a party on Saturday night.
 - c** Brock has just passed his driver's licence test and he has been invited to a party where he knows there will be pressure to drink alcohol or smoke dope.
- 2** For each of the following situations, plan how you could negotiate an acceptable deal:
 - a** Anthony has a part-time job at McDonald's. He works Friday nights but he has just won tickets to a rock concert next Friday. He can either approach his boss or change days with his friend Nick.
 - b** Rebecca has a full-time summer holiday job. The day is perfect. Rebecca's friends ring to ask her to skip work to go to the beach with them. She wants to keep her job, but she doesn't want to disappoint her friends.
 - c** Dave is taking Sophie to the school dance. Dave's parents want to pick him up at 11 pm. Dave doesn't want to look like a nerd—11 pm is too early.

Assertiveness

Assertiveness is an important people skill because it allows you to stand up for your own rights without putting down the person you are communicating with. **Assertiveness** is the ability to:

- ➔ state your feelings
- ➔ ask a favour
- ➔ begin a conversation
- ➔ deal with criticisms
- ➔ make a complaint
- ➔ ask or state an opinion
- ➔ behave how you choose

- ➔ give a compliment
- ➔ disagree in a positive way
- ➔ say 'no'.

Assertiveness is the mid-point between **submissive behaviour** (giving in) and **aggressive behaviour** (starting a fight without thinking first).



Figure 4.4 Being assertive means standing up for your rights in a positive way

Submissive behaviour

A submissive person avoids situations or makes decisions by pretending that a difficult situation does not matter. Such a person follows other people's decisions about an issue instead of taking control of it.

Submissive people often feel angry with themselves for missing out on things they wanted or for doing things they really did not want to do. This can lead to sudden outbursts of aggression, tension headaches or stomach upsets.

Aggressive behaviour

Aggressive people want to win at all costs. Aggressive people never consider the rights or feelings of others in the group. Eventually this makes them very unpopular. Aggressive people tend to use criticism, threats, putdowns, sarcasm, rumours or shouting down other people to get what they want.

	Submissive	Assertive	Aggressive
Behaviour	Downcast eyes Slumped stance Hesitant speech Keeps at a distance	Good eye contact Warm, open stance Comfortable distance	Loud voice, glaring eyes Standover physical presence Points finger or physical contact
Feelings and beliefs	'I allow others to disregard my rights.' 'What I think and feel is not as important as what you think and feel.'	'I consider my rights and the rights of others.' 'What I think and feel is important, but I am willing to listen to you.'	'I disregard the rights of others.' 'What I think and feel is more important than what you think and feel.'
Basic message	'You win; I don't count.'	'We can both win; we are both important.'	'I win; you don't count.'

Figure 4.5 Submissive, assertive and aggressive behaviour

Assertive behaviour

Assertive people tell other people what they think or what they would like without becoming defensive or angry. The assertive person does not threaten, make demands or trample over the rights of others. She or he states openly an opinion in a firm way that cannot be ignored but does not offend anyone. Assertive behaviour is the best way of getting what you want in life.

Saying 'no'

Assertive behaviour also includes being able to say 'no'. Some teenagers find it very difficult to say 'no'. As a result they get talked into doing things they really do not want to do. To say 'no' successfully, follow these tips:

- If possible, plan your 'no' answer in advance. Begin with 'no, thanks', then give a reason. For example, you are going to a party where there will be pressure on you to drink alcohol. You don't want to drink. When it is offered to you, you plan to say 'No, thanks, I'm feeling crook.'
- Your 'no' answer must not put down the person you are talking to or that person will become defensive and argumentative.
- Your 'no' answer must be quick, firm and decisive. If you 'um' and 'er', people will put pressure on you.

Activity 4.7



Aggro, woosie or assertive?

- 1 For each of the situations below, identify whether each reply is 'aggressive', 'assertive' or 'submissive':
 - a Situation 1:
You have just bought a pair of runners. You notice that the shop assistant has shortchanged you five dollars. You say:
 - 'What are you doing? Trying to rip me off?'
 - 'Sorry, but you have shortchanged me.'
 - 'Thanks.'
 - b Situation 2:
You are at a party. Someone offers you some little white tablets to take. You say:
 - 'No, thanks. You never know what's in those things.'
 - 'Um, er, I don't know ... oh, all right.'
 - 'Piss off. Only idiots take drugs.'
 - c Situation 3:
You are playing basketball. You are in the perfect position to shoot. You take the shot but it just misses. A domineering team-mate comes up to you and says, 'Next time pass it to me.' You say:
 - 'Okay.'
 - 'Only if you are in a better position than me.'
 - 'Go to hell. You're a hog, anyway.'
- 2 Your teacher will divide you into groups of four. Each group member will play one of the following roles:

▪ aggressive	▪ submissive
▪ assertive	▪ other person in the role-play.

- a** Read through the following situations. By consensus your group must choose one situation to turn into a role-play. Each group will act out its role-play three times: once with the aggressive role, once with the submissive role, and once with the assertive role. Keep it secret who is playing each role.
- b** As each group acts out its role-plays, the rest of the class must write down who played each role.

Situation 1:

You buy a hamburger. You notice that it tastes strange.

Situation 2:

You arrive at a party. A friend tells you that you look cool.

Situation 3:

You look at the sports noticeboard. You find that you have been dropped from the team.

Situation 4:

You are in a clothes shop trying on jeans. The salesperson is putting pressure on you to buy a style you don't really like.

Situation 5:

You are following a controlled diet. You have had your junk food quota for the week. A friend offers you a bag of chips.

Situation 6:

You are about to go to the local gym for a workout when a friend rings and invites you around to watch a video.

'I' statements

Another important people skill is being able to tell another person how you feel without making that person defensive by putting them down or by criticising, blaming or threatening them. The key to doing this is to use 'I' statements rather than 'you' or 'it' statements.

An 'I' statement lets the other person know how you feel, what causes your feelings, how what that person is doing affects you, and if possible, suggests how to change the situation. Figure 4.6 gives some examples.

'I' statements	Examples
State how you feel	I feel frustrated ... I feel upset ... I feel great ...
Identify the cause	When you look away while I'm talking ... When you tease me about my braces ... When you compliment me ...
State how it affects you	Because it makes me feel boring ... Because I feel ugly ... Because I like to look good ...
Give a positive solution	So if you are interested, look at me. So please don't draw attention to them. And it makes me feel so positive about you.

Figure 4.6 Some 'I' statements and examples

Activity 4.8



An 'I' opener

For each of the following situations, develop an 'I' statement that includes the necessary four parts:

- 1** You know that someone has been spreading rumours about you. A good friend rings to tell you that Jodie, another member of the class, is the source. What do you say to Jodie the next day at school?
- 2** A family friend has flirted with you on one or two occasions. You want this to stop. You know the friend will be at your parents' party on Saturday night. What do you say to them?

Family relationships

A **family** is a group of people who live together and care for each other. Some of the strongest relationships happen within a family. There are many different types of families. In most families the members are related by birth or marriage. However, some family members may be adopted. The composition of families has changed enormously over the last 20 years as the structure of society has changed.

There were 5.5 million families in Australia in 2003: 87 per cent of the population live in family households. Of these families, 4.6 million families contained a couple (84 per cent), and 14 per cent were one-parent families.

There are many different types of families. Families are classified according to which members of the family live with other members. Figure 4.7 shows common types of Australian families.

Activity 4.9



Draw your family tree

- 1** Draw your family tree (see Figure 4.8 on page 216 for an example):
 - a** Make the trunk your grandparents.
 - b** Make the branches your parents, step-parents, aunts and uncles.
 - c** Make the leaves your brothers, sisters and cousins. Only include people who are still alive.
- 2** When you have finished drawing and filling in your tree, compare it with those of the other members of your class.
- 3** What type of family do you live in? (Look at Figure 4.7.)
- 4** What is the most common type of family in your class?



The nuclear family

The nuclear family is usually made up of a man, a woman and children.



The extended family

This type of family contains other relatives—usually of another generation (e.g. grandparents).



The childless family

The childless family is a couple without children.



The single parent family

A man living with his children or a woman living with her children.

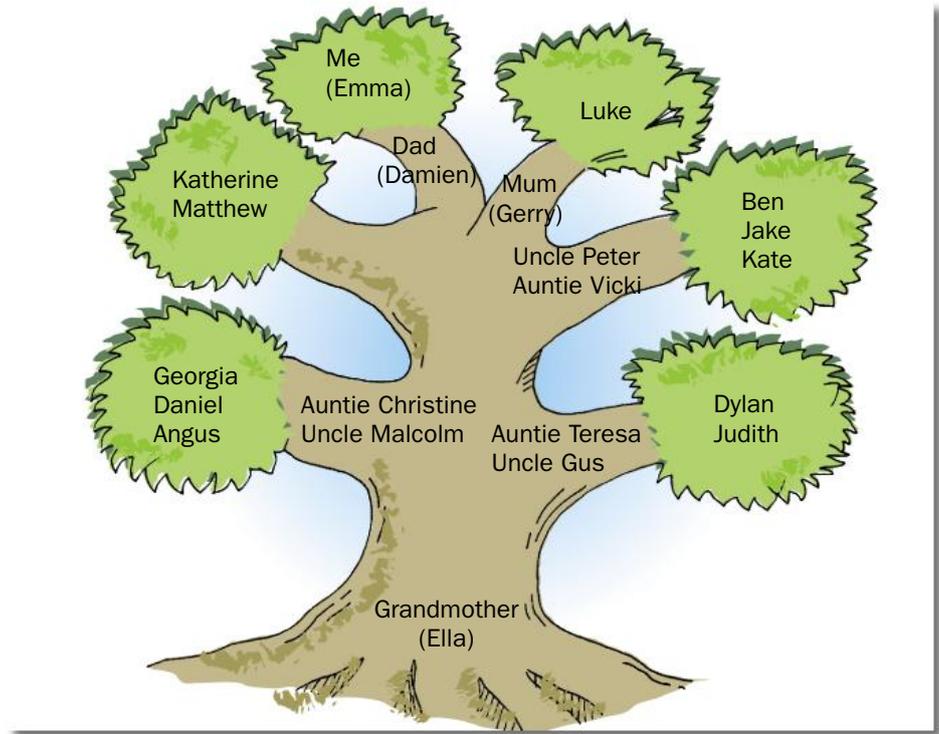


The de facto or blended family

When two single-parent families live together it is called a de facto family. If the parents marry, it is called a blended family.

Figure 4.7 Types of families

Figure 4.8 My family tree



Family roles and responsibilities

Each family member has a role to play. This includes certain responsibilities. Parents have the responsibilities of caring for you, socialising you and earning money to provide for you. As a son or daughter, you have the responsibility of following your parents' instructions and rules, performing duties about the home and learning how to one day provide for your own family.

All family members should work to support the family. That work may be financial (bringing in money from a job), doing household chores, completing schoolwork, or just helping with problems as they arise. The responsibilities of adolescent members of the family vary from family to family (see the table below).

Activity 4.10



Support from your immediate family

Think about your immediate family. Think about all the things members of your family do for you. List them under the two headings shown below.

My family shows they love me by ...	Things my family gives me are ...
Hugging me	Three meals a day

Your responsibilities

Consider the responsibilities within your family listed in the table below.



Activity 4.11

Responsibility	Is this one of your responsibilities?	If 'no', whose responsibility is it?	Number of 'yes' answers in class
Help look after younger children			
Clean your room			
Complete your homework			
Help with preparing dinner			
Mow the lawns			
Earn pocket money			
Help with the ironing			
Hang up your clothes			
Put out the rubbish			
Look after pets			
Make your bed			
Clean your shoes			
Be on time for school			
Do the grocery shopping			
Vacuum the floor			
Lock up the house when going to bed			
Bring the washing in			
Make packed lunches			

- Next to each responsibility write 'yes' if that is an activity for which you are responsible.
- If 'no', write who is responsible for that duty.
- After you have answered each item, your teacher will tally in Column 3 all the responsibilities that are marked 'yes'.
- How do you know what your family responsibilities are?
- Does your family expect more or less of you compared to your classmates?
- Why are responsibilities such an important part of growing up?

Figure 4.9 Families can enjoy activities together



Teenagers and parents

As an adolescent in your mid-teens, you are changing rapidly physically, socially, mentally and emotionally. Your interests are changing, you are developing a wide range of skills, and you are keen to assert your independence. Because of all this, your role in your family and your relationships with family members tends to change.

For some teenagers, this can cause an increase in the number of arguments. This is a natural part of growing into an adult. However, conflict can be minimised if you work at improving your people skills, such as learning to negotiate, acknowledging your responsibilities, accepting power differences and learning to be assertive.

Remember—developing independence does not mean you have to isolate yourself from your family. Your family will always provide support, love and affection, no matter how old you are. That’s why families come together in times of crisis or for fun times such as Christmas and birthdays.

Conflict resolution

Conflict between adolescents and their parents usually occurs over differences of values and expectations of behaviour. Resolving conflict can be a difficult task and it relies heavily on the ability of family members to make the effort to communicate effectively with each other. Conflict in families should not be ignored.

The first step in conflict resolution is dealing with your own and the other person's anger:

- ➔ Focus on the issue rather than the person ('You left the house unlocked.')
- ➔ Listen to the other person's point of view.
- ➔ Avoid talking over the top of another person.
- ➔ Express your feelings in terms of 'I': 'I feel ...'

Dealing with conflict

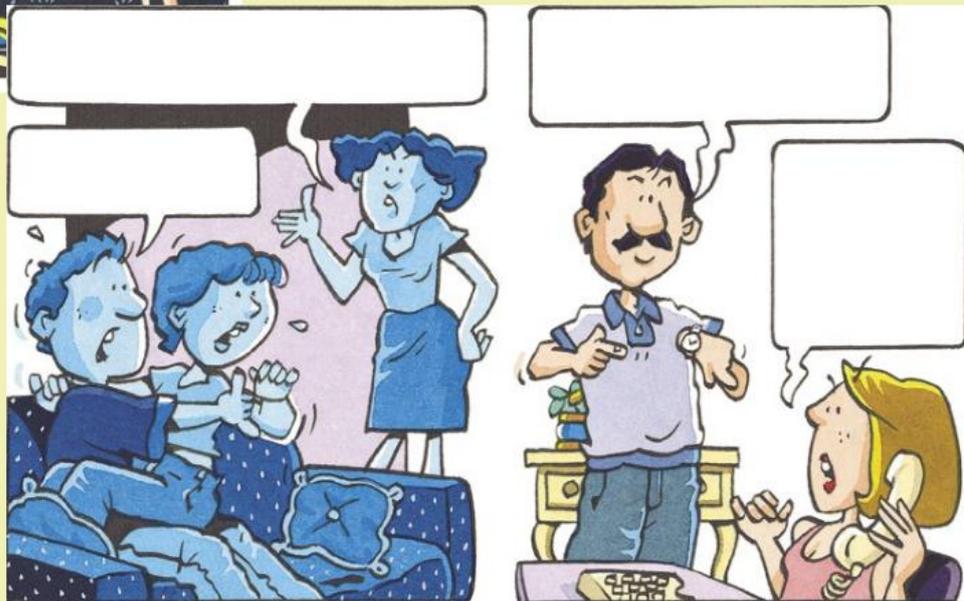
- 1 Look at the cartoons in Figure 4.10 and write dialogue to go in the speech bubbles. Suggest a possible solution to each conflict.
- 2 Perform a role play using the cartoons as prompts for a potential conflict situation. Demonstrate effective interpersonal skills by resolving the conflict with effective negotiation and communication techniques.



Activity 4.12



Figure 4.10 Conflict



Activity 4.13



Happy families or family feud?

- 1 Sometimes you are more tolerant of other people's opinions if you understand their background and why they hold certain opinions. Your parents are in this category. To find out more about why they are like they are, interview each of your parents separately.

Questions	My father's family life	My mother's family life
Name		
Where were you born?		
When were you born?		
How many brothers and sisters do (did) you have?		
At what age did you leave school?		
What was your first job?		
How old were you when you were first married?		
How old were you when your first child was born?		
How have things changed since you were a teenager in terms of behaviour expected of boys and girls?		
In what other ways has family life changed since you were a teenager?		
How has the role of teenagers changed since you were a teenager?		
What were the major challenges facing you as a teenager?		
What do you think are the major challenges facing teenagers today?		
What were the major challenges facing families when you were a teenager?		
What are the major challenges facing families today?		

- 2 From the information you have gained from your interviews, what do you think are the biggest differences between your life at your age and your parents' life when they were your age?
- 3 What useful facts or insights did you learn from these interviews?
- 4 How has your family role changed in the last two years? Are they good or bad changes? Is there anything you can do about the bad changes?

Your friendships

Your friends are a very big influence on your health and happiness. You share your thoughts, feelings, problems, dreams, fun times and active times with friends. Friendships with people your own age give you the opportunity to learn about life and practise your friendship skills.

These friendship skills are all the interpersonal skills you have been encouraged to develop throughout this book. They include:

- ➔ decision-making
- ➔ conflict resolution
- ➔ assertiveness
- ➔ communication skills
- ➔ self-esteem development.

These skills help you to:

- ➔ make new friends
- ➔ feel positive about yourself
- ➔ feel positive about others
- ➔ end relationships without hurting the feelings of others
- ➔ protect your rights and stick to your responsibilities
- ➔ pay a compliment
- ➔ receive a compliment gracefully
- ➔ ask for a favour or a date
- ➔ express your feelings in an acceptable way
- ➔ listen to other people's opinions
- ➔ recognise the needs of others.

In other words, you need to work at your friendship skills in order to develop into the type of person with whom everyone wants to be friends.



Figure 4.11 Friendships play an important role in your life

Activity 4.14



Best friends

- 1** The table below lists various qualities that best friends could or should possess. Rate each quality according to how important you think it is in a relationship: '1' means most important and '5' means least important.
- 2**
 - a** List three friendship skills that you use well.
 - b** List three friendship skills that you would like to improve. Describe how you could improve each.
 - c** List three friendship skills that your best friend uses well.
 - d** List three friendship skills that your parents use well.
- 3** What do you think are the five most important friendship qualities or skills? Check your ratings.

Qualities in a friend	Rating
Shares and keeps secrets	
Honest	
Brings out the best in you	
Trustworthy	
Fun to be with	
Good-looking	
Helpful	
Caring	
Interested in you	
Intelligent	
Fit	
Tall	
Sharing	
Slim	
Cooperative	
Outgoing	
Confident	
A good listener	

Activity 4.15



How close are my friendships?

Draw up a chart similar to the one shown in Figure 4.12.

- 1** If you have one, put a photograph of yourself in the middle of the chart.
- 2** In each of the boxes, list the names of some of the people you know.
- 3** Beside each name, write one of the following:
 - a** VCF Very close friend
 - b** ACA A casual acquaintance
 - c** ACF A casual friend

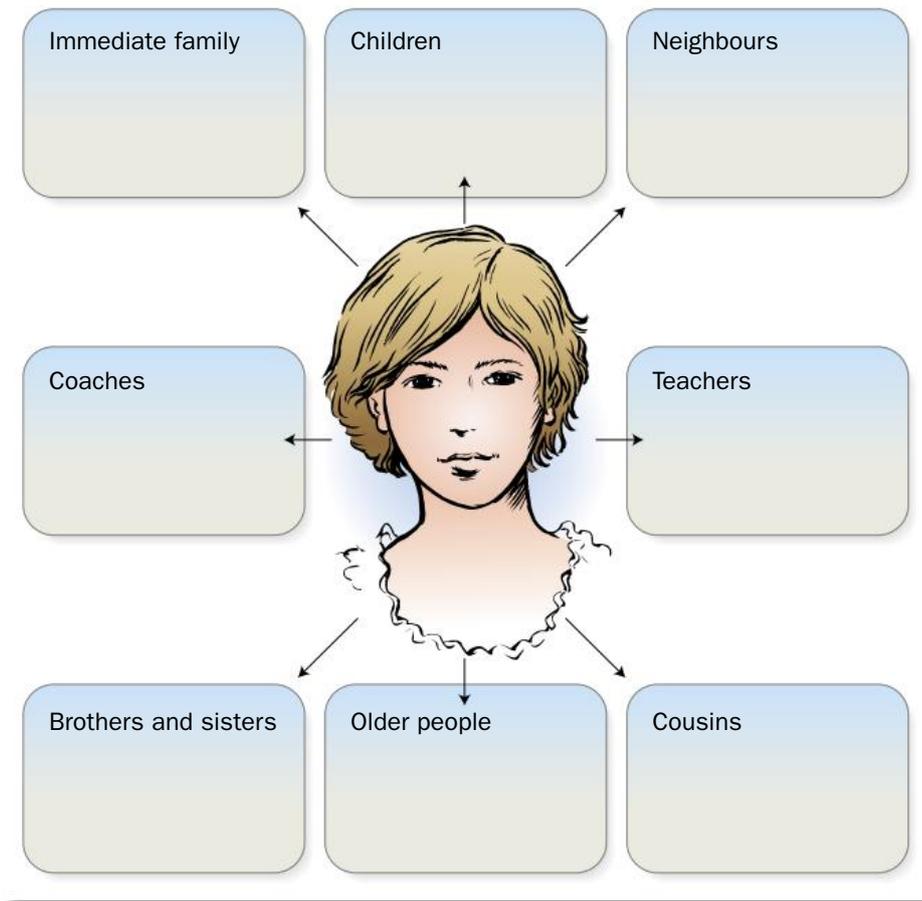


Figure 4.12 My relationships

Romantic friendships

If you haven't already experienced a romantic friendship, you may during your teenage years. Becoming romantically interested in another person is a totally natural and healthy part of your sexual development.

Your rights and responsibilities in a boyfriend/girlfriend relationship are just the same as in any other type of relationship. Remember the golden rule: 'Treat others the same as you would like to be treated yourself.'



Figure 4.13 Romantic friends

Activity 4.16



Gender and friendship

- 1** Look at the table below. Column 1 lists friendship qualities.
 - a** In Column 2, rank these qualities for friends of the same sex as you. Write '1' for the most important quality, '2' for the next most important quality, and so on.
 - b** Complete Column 3 in the same way, but this time ranking the qualities for friends of the opposite sex.

Qualities in a friend	Rank for friends of the same sex	Rank for friends of the opposite sex
Honest		
Trustworthy		
Good-looking		
Caring		
Intelligent		
Fit		
Tall		
Slim		
Outgoing		
Confident		
Other qualities		

- 2** Are there any differences between your two lists of rankings? Give your reasons for any differences.
- 3** Pair up with a member of the opposite sex. Your task is to write a 'Teenage Friendship Rule Book'. Include rules about behaviour, attitudes or interpersonal skills.
- 4** Take turns presenting your rules to the rest of the class.

How to get along: useful hints

Two of the biggest problems teenagers experience when they become interested in opposite-sex relationships are:

- How do I behave when I am near the person I am interested in?
 - How do I tell that person I really like them and I want to 'go with' them?
- Here are some useful hints:
- Show that you like someone:
 - start slowly
 - don't rush in
 - smile a lot
 - mix in the same group
 - talk
 - listen.

- ➔ Be yourself:
 - don't put on an act
 - don't expect perfection
 - don't be possessive.
- ➔ When things go wrong:
 - say 'no' gently but assertively
 - don't lash out or retaliate
 - remember that everyone gets knockbacks.
- ➔ For best results:
 - enjoy being together and enjoy being apart
 - share costs
 - first go on group dates where there is less pressure
 - parents worry, so talk to them about your friendships.

The following activities are designed to get you thinking and discussing the many issues surrounding boyfriend/girlfriend relationships. Try each activity to get some good ideas for your friendship future.

Attraction or repulsion?

To get a girlfriend or be admired by the girls, some boys feel that they have to:

- show off
- act tough
- take girls out and pay for them at the movies
- have a sports car
- be really handsome and sexy-looking.

To get a boyfriend or be admired by boys, some girls feel that they need to:

- look sexy
- be good looking
- wear make-up so that they look older than they are
- wear clothes that are really in fashion
- always be around when the boys want them.

- 1** Your teacher will divide you into groups of five. Within your group, go through each of the points made in the boxes above. Come up with a consensual answer on whether each statement is 'True' or 'False'.
- 2** In your group, brainstorm as many useful ideas as possible as to how to attract a boyfriend or girlfriend. Write them down so that they can be pinned up on the wall.



Activity 4.17

Activity 4.18



Relate and communicate

Here are some case studies about adolescent situations. In each case, write your opinion of the situation and your reasons for it. Discuss the opinions in class with your teacher and classmates. This may help you deal with some adolescent situations.

Case study 1

'I am a 16-year-old boy. When a girl flirts with you, does that mean she wants to go out with you? If she does, why doesn't she just say so?'

Case study 2

'I am a 15-year-old boy. I want to go out with a girl I know, but I'm too shy to ask her out. What should I do?'

Case study 3

'Some kids in my class go out on dates. I couldn't care less about dating—at least not during cricket and football seasons. What should I tell the others who date, the next time they start bragging about their dates?'

Case study 4

'I have been dating a boy for two months. We're both 15 years old. He's never kissed me. Is there something wrong with him? Should I kiss him?'

Case study 5

Leanne and Glen had just agreed that they were 'going together' and they felt terrific about it. They used to meet in the lunch hour at school each day and really enjoyed chatting and getting to know more about each other. They walked to and from school together and also used to talk at length on the phone. It was great. Looking back at the end of the third week, Leanne realised that at times she'd felt lonely, delighted, irritated, peaceful, embarrassed, excited, awkward, contented and depressed since she'd been going with Glen. What sort of things could have happened that would make Leanne experience each of these feelings about her relationship with Glen?

Case study 6

John and Sandy are 15 years old. They are part of a group of kids who enjoy going to the beach and parties, swimming at the local river and playing sport together. John likes all of the girls in his gang. He especially likes Sandy, but he is not sure if Sandy likes him more than she likes the other guys. He has rehearsed in his mind many times asking Sandy if she cares for him in the same way he cares for her. Sandy thinks John is the nicest guy in the gang. He is very popular among the girls at school and especially the girls in the gang. Sandy has no idea how John feels about her but she knows he is her favourite. 'Surely if he cared for me he'd

say something,' Sandy thinks. 'He's such a confident guy.' John, Sandy and the other kids have arranged to meet at the bus stop to catch the 9 am bus to the beach. What should they do?

Case study 7

Stuart and Sally like each other a lot and want to go steady. Sally's mother thinks Sally is too young to date just one person. She won't let Sally go out with Stuart unless Sally also dates other boys. What should Stuart and Sally do?

Case study 8

Charles is going out with both Linda and Susan. He likes Linda a little more than Susan, but he likes Susan too. Linda is very jealous of Susan. Linda wants Charles to go out only with her. What should Charles do?

Case study 9

Lucy goes out with lots of boys and always has a good time. She thinks it is foolish to limit her dating to one boy. But her girlfriends have been trying to persuade her to go steady with one boy. They tell her that if she doesn't go steady she will get a reputation for being 'slack'. Lucy thinks they are just jealous that she has so many different boyfriends. But she's not sure. What should Lucy do?

Communication

During your teenage years, an important part of preparation for adulthood is to develop your communication skills. Good communication allows you to:

- ➔ develop and maintain relationships with others
- ➔ express your feelings and show your emotions without resorting to unacceptable behaviour such as tantrums, vandalism or violence
- ➔ learn from others, share ideas and pass information you have learned onto others
- ➔ express your needs in socially accepted ways, for example, you may need affection from a partner. Good communication allows you to speak to her or him instead of showing off to gain attention.

Communication skills

To communicate means to get your message across. You can do this by either speaking (verbal communication) or by your behaviour (non-verbal communication). Here are some examples of both types of communication and what each means:

- ➔ You kiss someone—you are saying hello and/or you like that person.
- ➔ You teach someone something—you are sharing your knowledge.

- ➔ You push someone—you don't like that person and you want to hurt her or him.
- ➔ You slam the door—you are angry.
- ➔ You tear your hair out—you are frustrated.
- ➔ You speak to someone—you want to share your thoughts.
- ➔ You nod—you agree.
- ➔ You remain silent—you don't like what you hear.

To be a good communicator you must send and receive messages well. Sending messages includes the skills of speaking and giving non-verbal messages. In order to send messages clearly you need to:

- ➔ speak clearly (do not rush what you want to say)
- ➔ face the person to whom you are speaking, maintain a comfortable distance and good eye contact
- ➔ use words and phrases that will be understood by the receiver (appropriate for their age, knowledge and understanding)
- ➔ check that the receiver has understood your message: 'Is that all right?' or 'Are you clear?'
- ➔ use expression in your voice (a dull tone becomes boring)
- ➔ stay on the point; don't waffle.

Receiving messages includes the skills of listening and giving full attention to the sender of the message. In order to receive messages effectively you need to:

- ➔ listen carefully and evaluate what is being said
- ➔ face the person sending the message and maintain good eye contact
- ➔ make it clear that you are interested in the message
- ➔ ask questions when you need to clarify meaning
- ➔ stop yourself from fidgeting or distracting the speaker
- ➔ concentrate.

Activity 4.19



Self-analysis

- 1 Describe your abilities as a communicator.
- 2 Think of a recent occasion when you communicated really well. What made this a good communication experience?
- 3 Think of a recent occasion when you did not communicate very well. What made this a bad communication experience?
- 4 List your five communication strengths and your five communication weaknesses. To get some feedback, show your list to some good friends.
- 5 How can you use your strengths and improve your weaknesses to become a better communicator?

Blocks to effective communication

To help develop your communication skills, try to avoid the following **communication blocks**:

- ➔ acting bored (yawning or deadpan voice)
- ➔ assuming you know what is being said or jumping to conclusions
- ➔ talking too much or too fast
- ➔ criticising or blaming
- ➔ putting the other person down.

Practice makes perfect

- 1 In a group of three, make a list of all the communication blocks (turn-offs) you have experienced.
- 2 As a group, present your list of communication blocks to the whole class, then make a class poster of communication blocks.
- 3 Some topics are difficult to talk about and some people are difficult to talk to. Each becomes easier with practice. Think of a topic you find difficult to talk about to a particular person. For example:
 - a breaking off a relationship—a boyfriend or girlfriend
 - b not understanding—a teacher
 - c embarrassing you—the person who embarrasses you
- 4 With a partner discuss:
 - a why you find this situation difficult
 - b how you could approach the problem
 - c what you hope to achieve from the communication, for example, we remain friends but not girlfriend and boyfriend.
- 5 Role-play the situation with your partner as the other person. At the end of the role-play, discuss what happened and the improvements that can be made to your communication.



Activity 4.20

Gender-role stereotypes

A **gender-role stereotype** is the image and behaviour supposedly typical for a person of either sex. For example, in the past:

- ➔ The gender-role stereotype for the male was a person who earned the family income, repaired cars and followed football.
- ➔ The gender-role stereotype for the female was a person who cleaned the house, cooked, sewed and looked after the children.

Fortunately these stereotypes are gradually disappearing, leaving you with greater choice about how you, as a male or female, want to live your life. Unfortunately, relationships are one area where gender stereotypes have been slowest to change:

- ➔ Many teenage boys still believe that they have to act tough, not show their real feelings and always be in control of the situation.
- ➔ Many teenage girls still believe they have to be passive, look attractive and let the boys make the decisions.

Many relationship problems are the result of one partner expecting the other partner to conform to the old gender role stereotypes. In some cases, this can lead to abuse, assault and domestic violence. You need to be aware of these stereotypes and the pressure sometimes exerted on you to act a certain way because of your gender.

Activity 4.21



Debunking the stereotypes

- Examine the list of tasks and activities in the table below. Decide which activities:
 - should be done only by males
 - should be done only by females
 - could be done by both.
- Indicate your decision by ticking the appropriate column. When you have finished, compare your answers with those of at least two boys and two girls in your class.

Task or activity	Males only	Females only	Both
Choosing where you go on a date			
Cooking meals			
Blow-drying hair			
Getting fit			
Paying when going out			
Shopping for food			
Washing dishes/loading the dishwasher			
Crying in front of others			
Pressuring someone to engage in sexual activity			
Washing clothes			
Bathing children			
Staying home and looking after children			
Hugging your best friend			
Organising contraception			
Playing basketball			
Ironing clothes			
Asking someone out that you like			
Dressing in trendy clothes			
Surfing			
Saying 'no' to sexual activity			

- What activities are considered by the majority of the class as specifically for:
 - Females? Why?
 - Males? Why?
- Are there any activities not ticked in Column 3 ('Both')? Why?
- Do you agree with these reasons?
- What differences, if any, can be observed between the tables completed by boys and those completed by girls in your class?
- List five activities that you really enjoy. Could they also be performed and enjoyed by members of the opposite sex?

- 8** Read the case study below. Write down your responses to the list of statements.

Case study

John and Marlene both really enjoyed their jobs. She was a financial adviser and he was a car mechanic. They were very good at their jobs, but there was one difference—Marlene was ambitious while John was happy just doing the same job. She was gradually promoted until she had a very important job in the company and was often away at meetings, working late in the evening and sometimes at weekend conferences. John was quite happy about this, as he could see that she enjoyed her job and he found looking after their two children and doing the housework no problem at all.

However, John's mother was always complaining that Marlene should be home more—looking after the children and doing more of the housework. Even when John said that he enjoyed it, his mother still nagged at him. One day she got very angry and told him that if he was a *real* man he would *make* his wife stay at home. John was very upset by this, but did not know what to say to his mother!

- a** His mother had no right to interfere in the way her son and his wife organised their lives.
- b** His mother was right: he was not a real man because his wife was the 'man' in the home.
- c** It does not really matter who does the household jobs as long as they are done effectively.
- d** Marlene should have tried to do more around the house so that she seemed more a part of the home.
- e** It was not fair on the children that their mother was not around very much; they would probably grow up deprived of a proper home life.



Figure 4.14 Is this role normal or unusual for a woman?

Peer relationships

Your **peers** are people who are equal to you in either age or status. **Peer groups** happen when a number of peers (equals) come together for some reason, either organised or informally. Peer groups can include an informal friendship group, a school class, a sports team or a youth club.

Your peer groups tend to play a very significant part in your development during your teenage years. This is because you are changing rapidly and it takes time for your family to adjust to you. While your family is adjusting, family influence decreases. However, your peers are all changing at much the same rate as you are. Therefore their influence on you and your influence on them can be very strong.



Figure 4.15 Peer relationships

It is important for your physical, social, emotional and mental development that you mix in a number of different peer groups. You need companionship, support, approval, praise and acceptance. Different peer groups will provide for different needs.

Sometimes joining a peer group can happen without trying, but often you need to make an effort to join a group. If you do not belong to a range of different peer groups, you may have to go out of your way and make a deliberate decision to join some new groups. They could be groups based on shared interests, sports or other activities where you can make new friends and feel accepted. Loneliness can destroy you, so be prepared to make that effort!

Peer pressure

Your peers are constantly exerting pressure on you to take part in a wide variety of activities. Some of this pressure is positive peer pressure, while some is negative peer pressure.

Positive peer pressure

Positive peer pressure happens when your peers encourage and help you to make wise decisions or develop new skills. This could include assistance or pressure to:

- ➔ join a sports team
- ➔ complete your homework
- ➔ talk about your problems
- ➔ talk to members of the opposite sex
- ➔ make peace with your family
- ➔ enjoy social occasions
- ➔ develop your communication skills.

Negative peer pressure

Negative peer pressure happens when your peers encourage or push you into making poor decisions or developing self-destructive behaviour. This could include pressure to:

- ➔ act in a way that goes against your real personality
- ➔ go somewhere you really don't want to go
- ➔ take dangerous risks
- ➔ drink too much alcohol when you don't want to
- ➔ smoke
- ➔ take drugs
- ➔ wag school
- ➔ shoplift.

Peer influence—positive or negative?

For each of the case studies shown below:

- 1 State whether each is a positive peer influence or a negative peer influence.
- 2 Complete each story, showing how a friend can exert a positive influence.



Activity 4.22

Case study 1

Your friend Tom is very frustrated because of his poor school marks. He is working hard at his study, but still doing badly. Cindy tells him to just give up, but you are not sure.

Case study 2

Every time Chris plays sport, he throws a tantrum if he begins to lose. Wendy and Greg think that it is funny and encourage him to 'spit the dummy'. You think there is a better way to handle the situation.

continued ...

Case study 3

Simone and her best friends Julie, Mick and Rebecca have planned to go to the movies on Saturday afternoon. Simone gets on well with her parents and is a great help around the house.

Simone's mum gets very sick on Friday night. Simone's dad tells her that she will have to stay home on Saturday to do the housework and look after her mum because he has to work.

Simone meets her friends early Saturday morning to explain that she cannot go to the movies.

Mick says, 'Why not? Just tell her to look after herself.' Julie can see how unpleasant it is for Simone and intervenes.

It's okay to say 'no'

One of the reasons some teenagers have problems with negative peer pressure is that they forget that it is okay to say no. In other words, they don't practise being assertive.

Being a valuable member of a peer group does not mean you give up being an individual and become a slave to the most forceful member of the group. When you feel you are being forced to do something you do not want to, try these techniques:

- Act decisively—look people in the eyes and stand or sit tall.
- Feel strong—feel proud of being an individual and value your own feelings.
- Be firm—state your decision firmly using an 'I' statement. Repeat it if necessary.

Activity 4.23



Under pressure

- 1 Name each peer group of which you are a member.
- 2 Give five examples of positive peer pressure that you have experienced.
- 3 Give five examples of negative peer pressure that you have experienced.
- 4 Why does peer pressure sometimes become a problem when you are a teenager?
- 5 Form into groups of five. By consensus, each group chooses a role-play to act out from the list below. One member of the group will be the victim of pressure. He or she has five minutes to work out how to resist the pressure. The other group members have five minutes to work out how to apply the pressure. Each group then performs its role-play.
 - a dying your hair red or blonde
 - b getting your ears pierced

- c** getting drunk
- d** smoking a joint
- e** wagging classes
- f** stealing a car
- g** giving up sport.

6 After each role-play, discuss the following:

- a** Was the situation realistic?
- b** Did the person resist the pressure successfully? How could she or he improve?

7 Some teenage boys take drugs or drink too much to try to impress girls. They feel pressure to do it—but what do girls think? The quotes below come from girls aged 16 and 17 years old.

- ‘Who wants to go out with guys who veg out?’
- ‘They turn you off. They’re just jerks, real drop kicks.’
- ‘You think you’re going to have a good night out and you get yourself all ready, and the next thing you know the guy you’re with is so off his face he can’t even talk. Who needs it?’
- ‘They talk slow and stare a lot. Makes for a great night.’
- ‘They threw up all over the carpet. I really didn’t know what to say when my mum came home. I just burst into tears.’
- ‘What scares me most is the drive home when you know your guy is wiped out.’
- ‘Oh boy. If boys only knew what girls really think of them when they use drugs or drink too much, half the drug problem would disappear overnight.’

Some teenage girls take drugs or drink too much because they are offered them by their boyfriends. But what do boys really think of girls who lose control? These quotes come from young men aged 17 and 18 years old.

- ‘Boys just don’t respect girls who allow themselves to lose control.’
- ‘When girls lose control they look cheap—real pushovers.’
- ‘They become an embarrassment.’
- ‘You expect girls to be different. It’s kind of expected when guys throw up or flake out. But when girls do the same thing it’s bad. It’s wrong. You just don’t want to know them.’
- ‘I can’t stand it when girls lose control ... it’s hard to explain but they sort of lose all their dignity.’

- a** Why do teenagers feel pressure to get drunk or take drugs when they really don’t admire the teenagers who do?
- b** Do you agree with the teenagers quoted above?

Your self-concept and self-esteem

Your **self-concept** is the mental picture you have of yourself as a total person.

It includes the picture you have of your:

- ➔ body (body image)
- ➔ academic ability
- ➔ ability to get on with other people
- ➔ personality.

When you visualise yourself, you develop an image about yourself as a person. These feelings you have about yourself are called your **self-esteem**. If you like the person that you are, you have a positive self-esteem.

It is important for you to work at developing a positive self-esteem because it will enable you to:

- ➔ mix better socially
- ➔ perform better academically
- ➔ perform better at sport
- ➔ have more confidence
- ➔ make better decisions
- ➔ be healthier
- ➔ set more effective personal goals
- ➔ be less likely to engage in destructive behaviour, such as vandalism, getting drunk, binge eating or bulimia
- ➔ be more assertive and therefore less likely to let others pressure you into doing silly things.

How you feel about yourself (self-esteem) and the mental picture you have of yourself (self-concept) influence how you behave. Unfortunately teenagers with low self-esteem tend to demonstrate behaviour such as:

- ➔ being very moody and depressed
- ➔ being unhappy with life
- ➔ being self-critical
- ➔ trying to boost their self-esteem by showing off, boasting, smoking, drinking or taking dangerous risks
- ➔ giving up ('spitting the dummy') to avoid failure
- ➔ setting goals that are not challenging.

If positive self-esteem is so important in life, you need to know:

- ➔ who has influenced the development of your self-esteem up to this stage of your life
- ➔ how to maintain positive self-esteem in the future.

Influences on your self-esteem

Your self-esteem is shaped by a combination of your own internal feelings and by the reactions of people around you. For example, if someone during the day calls you hunky, cute, tough, bright or talented, this boosts your self-esteem. However, if as you walk past a group at lunch time, someone makes a comment and they all laugh at you, this is likely to lower your self-esteem.



Figure 4.16 Friends have a big impact on your self-esteem

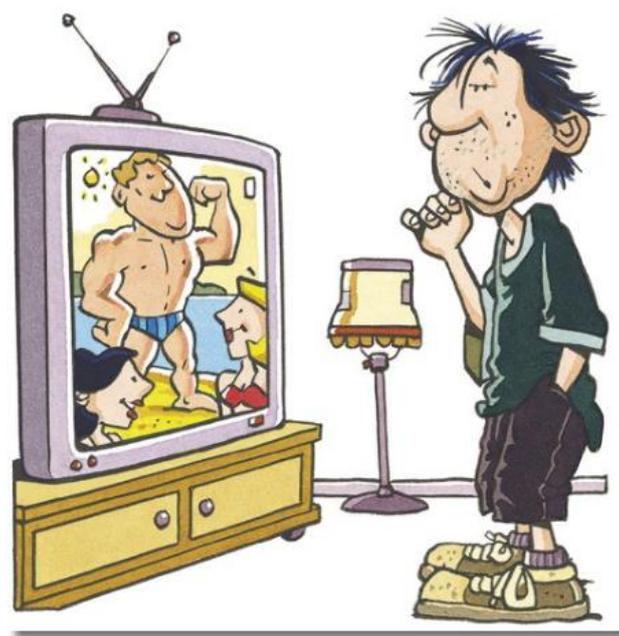


Figure 4.17 The media often have negative effects on the self-esteem of teenagers

The main influences on your self-esteem are your family, friends, body image, personal achievements and the media.

Your family

If members of your family treat you with respect, praise your achievements and support your efforts to succeed, your self-esteem will be high.

Your friends

If your friends support you, make you feel good and enjoy being your friend, this helps boost your self-esteem.

Your body image

If you are happy with your appearance and try to present yourself as well as possible, your self-esteem will improve.

Your personal achievements

If you plan reasonable goals for yourself that you regularly achieve, each achievement boosts your self-esteem.

The media

Unfortunately the media, especially television, can have a negative effect on your self-esteem. This happens because the media tend to show stereotypical males and females with bodies and behaviour that do not match yours. This can lead to personal discontent and a loss of self-esteem.

However, if you treat these images as totally uncharacteristic of reality, you will not be badly affected by these fantasy images.

Activity 4.24



How do you develop your self-esteem?

- 1** Look at Figure 4.18. For each of the frames, write down:
 - a** How the situation could affect the teenager's self-esteem.
 - b** How the parents could have handled the situation differently.

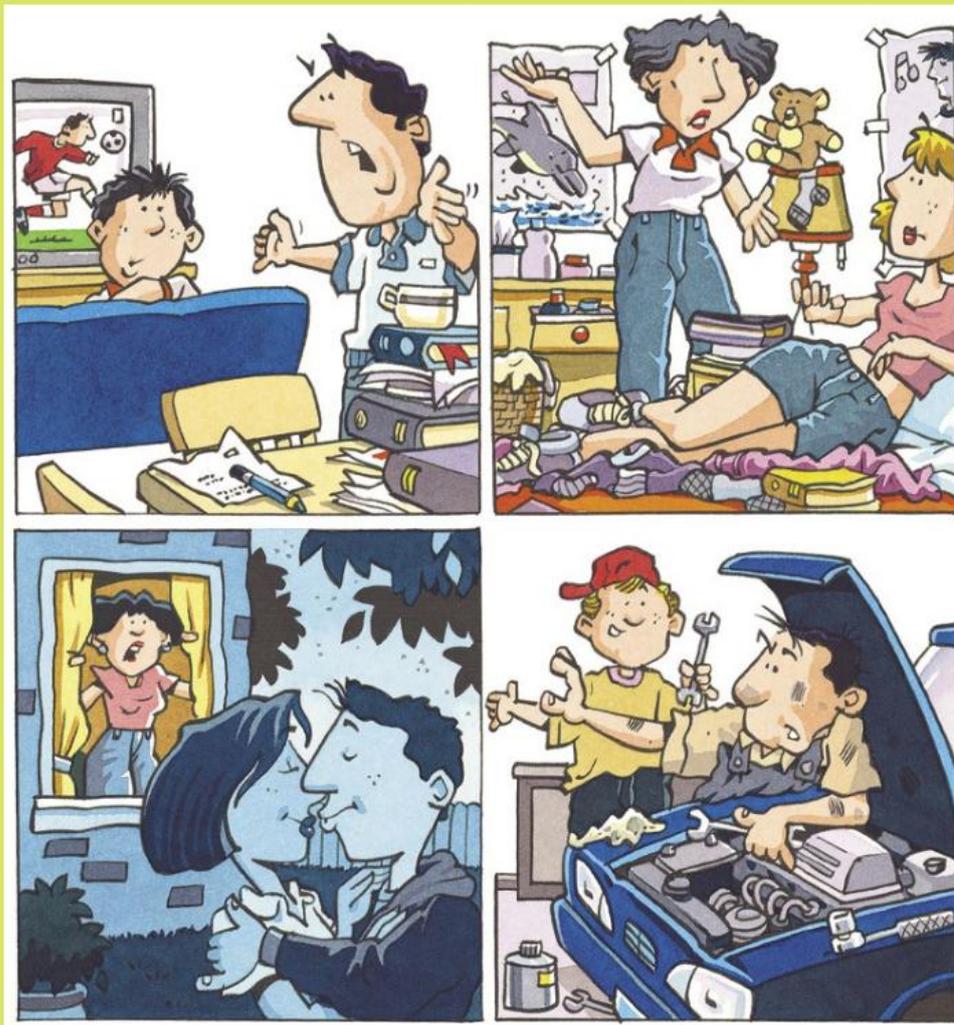


Figure 4.18 Parents and self-esteem

- 2** Develop a cartoon strip showing how your friends can either damage or boost your self-esteem.
- 3** Read the case study below:

Case study

Thommo slept in this morning and his mother yelled at him. He was in such a hurry that he forgot his lunch, then missed the bus to school. When he finally got to school, he found out that he had forgotten his homework book. His teacher was very upset and told him that he was always forgetting things and that he would forget his head if it wasn't screwed on. During maths he received his exam back and scored 40 out of 100. Then, in Japanese he was asked to read a passage and everyone laughed at him.

- a** If you were Thommo, how would you have felt by the end of the day?
- b** What could you do to make sure it didn't happen again?
- c** If Thommo was your mate, how could you help?
- d** Is there anything you can do in advance to avoid bad days that chip away at your self-esteem?

Improving your self-esteem

You can improve your self-esteem in a number of ways:

- ➔ Know yourself. Learn to recognise your own abilities and positive features, and concentrate on these rather than on your failings.
 - ➔ Develop a positive approach to things that go wrong in your life. Plan for improvement next time (where this is possible).
 - ➔ Use your talents to the fullest.
 - ➔ Set yourself realistic goals and be proud of your achievements.
 - ➔ Change negative beliefs you have about yourself to beliefs that are positive and constructive.
 - ➔ Associate with people who care about you and make you feel good. Keep away from people who knock you, put you down or make you feel useless.
 - ➔ Give everything your best effort so that you are more likely to achieve.
 - ➔ Build a lifestyle that helps boost your body image.
 - ➔ Use other people's feedback to improve yourself, not destroy yourself.
- Now let's look at several of these in detail.

Know yourself

You might think that getting to know yourself is a waste of time. Most people never think deeply about what sort of person they are, so they are never sure about what they are good at, what they need to improve at, what they want in the future, what sort of people they like or what they really value.

Part of developing your self-esteem is to develop a balanced view of your good points and bad points. Activity 4.25 will help you with this process. Teenagers who do not know themselves tend to float along and let things happen rather than plan and make things happen.

Who am I?

- 1** Look at the table on the next page. For each description, give yourself a rating in each of the three columns. Use the following ratings:
 - 5—I am always like that.
 - 4—I am usually like that.
 - 3—I am often like that.
 - 2—I am occasionally like that.
 - 1—I am never like that.



Activity 4.25

continued ...

Description	As I see myself now	As I think others see me	As I would really like to be
Friendly			
Boring			
Successful			
Aimless			
Unimportant			
Stable			
Cautious			
Clever			
Enthusiastic			
Happy			
Sporty			
Kind			
Tense			
Aloof			
Assertive			
Independent			
Creative			
Aggressive			
Humorous			
Jealous			
Argumentative			
Honest			
Ambitious			
Cheerful			
Conscientious			
Complaining			
Generous			
Considerate			
Immature			
Tolerant			
Healthy			
Shy			
Sarcastic			
Reliable			
Patient			
Emotional			
Slack			
Dominant			
Decisive			
Sensitive			
Stubborn			

- 2 a** Are there any differences between the way you think others see you and the way you see yourself? What makes you think this?
- b** Get a couple of friends to scan your 'As I think others see me' column. Do they agree with your ratings? If they don't, have you been optimistic or pessimistic about the way others see you?
- c** Is your 'As I would really like to be' column different to your 'As I see myself now' column? What can you do to make these columns identical in six months' time?
- d** Look at your 'As I see myself now' column. Write down your ten biggest strengths. How can you use these to build a positive self-esteem?

Teenage woes

Everyone has days where they feel down and it seems like the world is falling in around them. During adolescence there may be times when you feel highly stressed or upset. This is normal and in most cases only lasts for a short period of time.

There are many things you can do to reduce your chances of falling victim to these negative feelings:

- ➔ Get organised. Use a diary or a calendar to plan your schedule. Keeping to a routine will help you to feel in control of your life.
- ➔ Get social. In many cases getting together and talking with friends or family can help you put things in perspective.
- ➔ Get active. Participating in physical activity is a great stress release and pick-me-up.

Depression

In some cases, people find that their feelings of sadness last for long periods of time and begin to affect their physical, emotional, social and mental health.

Clinical depression is just one of many forms of depression. It is a medical condition that affects your mood, behaviour and health.

People suffering from depression are not alone. Studies show that one in five people will experience depression in their lives: one in four females and one in six males. (Go to www.beyondblue.org.au for more information about depression.)

Taking control of depression

Coping with depression can be a difficult task, however there are many avenues of treatment:

- ➔ Get informed. Find out about the illness and what you can do to recover from it.
- ➔ Get help. There are various forms of therapy—including counselling—which have proven to be valuable weapons in the war against depression.
- ➔ Research. Find out how you can manage stress and organise your life.
- ➔ Medication. If used appropriately antidepressant medication can be used to treat depression.

Rather than frowning upon people suffering from depression we need to acknowledge that it is a serious condition which affects many of us.

Activity 4.26



What can I do?

- 1 Use the internet to make a list of agencies that provide support to people suffering from various levels of depression.
- 2 Research one of the agency's websites to develop a list of strategies that you could employ to support a friend who is suffering from clinical depression.
- 3 One of your friends is upset as she has just found out her parents are splitting up. How can you employ the strategies you developed in question 2 to support your friend?

Activity 4.27



Love the body you're in

Read the article, 'Body Beautiful' and answer these questions.

- 1 The article identifies the issues girls face in relation to body image. Make a list of the issues that may be faced by teenage boys. How are they similar and how are they different to the issues faced by girls? Discuss your ideas as a class.
- 2 Girls and boys both suffer from misinformation in the media. Think about the people in your life (male and female) and identify a role model. What qualities do they have that foster and promote a healthy body image?
- 3 Using the tips given in the article, design a poster to promote positive body image among a particular age group.
- 4 Having read this article, what things can you do to foster confidence and a positive body image among your classmates and friends?

Body beautiful

'I'm too fat. I'm too short. I'd be happier if I were skinnier, had straight hair, a smaller nose, longer legs, no freckles.'
Sound familiar?

In June 2005, *Girlfriend* magazine editor, Sarah Oakes, and Nikki Goldstein, author of the *GirlForce* series of teen books, posted a questionnaire on body image on the *Girlfriend* website. Over 14 000 girls responded, producing Australia's largest survey of teenage girls ...

At this time of life, personal appearance takes on new meaning. Weight and body shape become a focus for many, and this was reflected in some of the key findings in the survey.

According to Professor Susan J. Paxton of La Trobe University, an expert on teen body image and president of the Australian and New Zealand Academy for Eating Disorders, girls are particularly sensitive to issues of body shape and appearance at this age.

'Until their early teens, many girls are the "desired shape" promoted by the media,' she explains. 'Then normal teen changes push them away from the ideal. But I also think that the message of good health and being thin has been mixed up in people's minds. Girls tend to exaggerate, and will believe themselves to look heavier than they actually do.'

The dieting drama

Almost one in two girls surveyed had dieted. 'The idea that girls feel they have to diet and change their shape before they've developed properly is a big concern,' says Goldstein. 'If you are born with a certain body shape, you can't really do much to change that.'

Another problem is that teenage diets today are very different from a generation ago. Nutritionist Catherine Saxby says that encouraging teens to follow a healthy diet isn't easy.

'I've got a 15-year-old daughter, and if I was to say to her friends that they need to eat well to prevent heart disease or cancer in the future, it just doesn't gel,' she explains. 'I

think the fact that food is connected to weight control is a big factor in itself, but what we need to instil in teens is the idea of not eating to be thin, but eating to nourish and to be healthy.'

And then there's the celebrity factor. Forty-four per cent of girls said they compared their looks with celebrities, citing pressure from the media and friends.

'This is also a very important finding, because we've only just realised how important this body comparison tendency is in terms of being a risk factor for the development of body image problems,' says Professor Paxton.

'Even celebrities don't really look the way they are presented in the media. You can hardly find a single image which hasn't been tampered with in a magazine, so girls are comparing themselves to unrealistic images.'

Goldstein agrees, adding that these images are flashed in front of teenagers at a 'hypnotic rate' and are hard to ignore. 'There are hardly any role models that aren't painfully thin,' she says. 'Girls want an alternative vision and voice but it is not there.'

Sixty-one per cent of girls admitted they had been teased about their appearance—a major risk factor in the development of body image problems, says Professor Paxton. 'People often think of teasing as being benign, but it's surprising the extent to which it can stick with people.'

Goldstein says teasing is 'unacceptable'. 'It means many girls are being abused on a daily basis,' she says. 'Even if they're not torturing themselves physically by dieting, or berating themselves for the way they look it creates a current of sadness when girls feel they are not

good enough if they don't fit the ideal.'

Confidence-boosters for teens

- Challenge yourself to try new things—proving to yourself that you are up to any challenge is a great confidence-booster.
- Smile more—it's a sign of self-confidence.
- Don't beat yourself up about your looks—you don't have to look like Jessica Simpson or Mischa Barton to feel good about yourself.
- Play up to your passions—doing things you love makes you feel good about life.
- Be compassionate—learn how to put yourself in other people's shoes.

The Sunday Mail 23 April 2006
Reprinted with permission from body + soul, *The Sunday Telegraph*

Strengths and weaknesses

- 1 Look at Figure 4.19. Select two characteristics that you consider are your weak points and list these on the left side of the self-esteem scale in Figure 4.19.
- 2 Select four characteristics that you consider are your strong points. List these on the right side of the self-esteem scale.
- 3 For each of the weakness you have listed above, describe one way in which you could work towards overcoming it.
- 4 For each of your strengths, describe how you could use it to gain success.



Activity 4.28

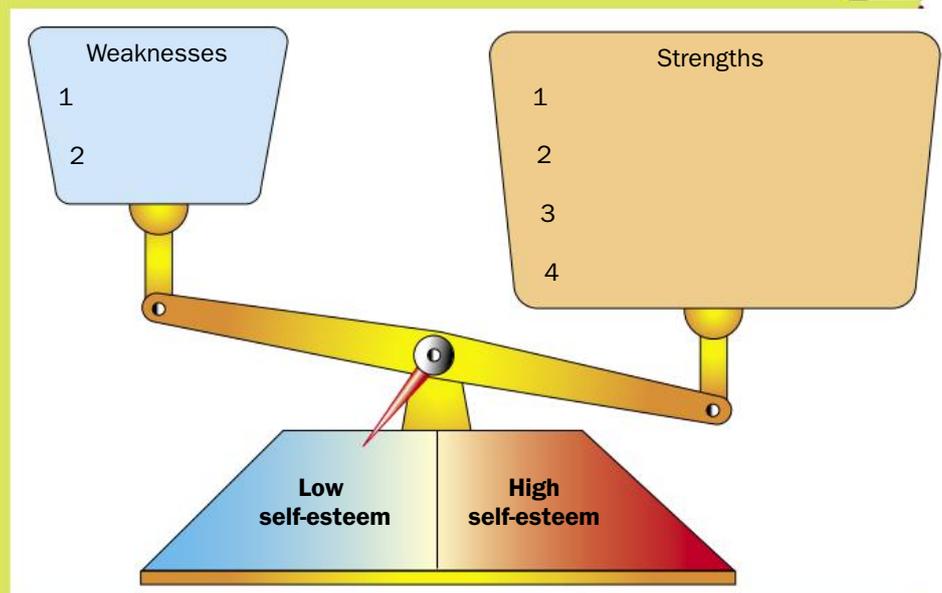


Figure 4.19 Self-esteem scale

Use feedback positively

One of the important factors that influences the development of your self-concept is what you believe important people in your life think of you. So how you feel about yourself (your self-esteem) depends on how people act towards you. You tend to use other people as a mirror to reflect how they see you.

This is fine as long as you make a correct interpretation of how they are behaving towards you. For example, if you think other people see you as tough, strong and a leader, you will see yourself this way and act like it. But if you think people see you as dumb and boring, you will think this about yourself and probably act like it.

To help build a positive self-concept so that your self-esteem stays high:

- ➔ you need to communicate well so you know how people feel about you
- ➔ you need to act the way you want people to see you.

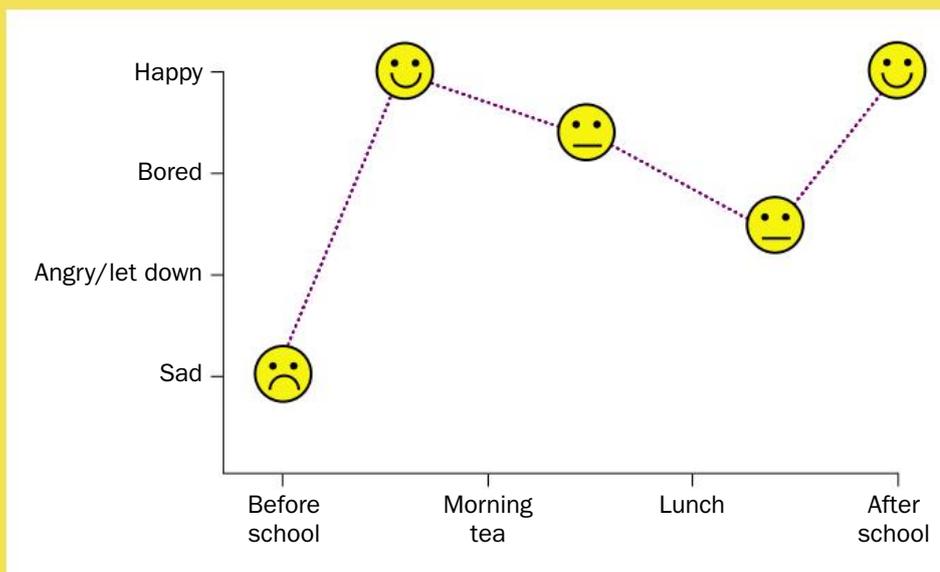
Activity 4.29



I'm unique

- 1 Write down all the comments about yourself, both positive and negative, that you can remember hearing in the last two weeks. These comments could have been made by friends, teachers, parents, coaches, other adults or strangers.
- 2 How did the positive comments make you feel?
- 3 How did the negative comments make you feel?
- 4 Do you think these comments influenced your behaviour?
- 5 Can comments be harmful? Explain your answer.
- 6 Can comments be helpful? Explain your answer.
- 7 How can you modify your behaviour so that people are less likely to make negative comments?
- 8 Think about how your feelings change over the course of one day in response to what is happening around you. Using Figure 4.20 as an example, complete a Feelings chart for yesterday.

Figure 4.20 Feelings chart



- 9** Rank the following ways of improving your image to others from 'Most successful' (1) to 'Least successful' (14):
- a** smile
 - b** look at people with interest
 - c** do not put people down
 - d** do not criticise other people
 - e** do not repeat gossip
 - f** get people to talk about themselves
 - g** express your thanks and enjoyment when you are with other people
 - h** say kind things to other people
 - i** pay compliments to others
 - j** forget yourself and think about others
 - k** be a good friend
 - l** always be there when you are needed
 - m** be a good listener
 - n** respect others' wishes and opinions.
- 10** Compare your rankings with those given by your classmates in a discussion led by your teacher. As a result of the discussion, do you want to alter your rankings?

Build a better body image

Your **body image** is the mental picture you have of your own body and how you feel about it. If you are happy with your body shape and size, you have a **positive body image**. If you believe you are the wrong shape and size, you have a **negative body image**.

Teenagers with a positive body image tend to have a greater self-esteem than teenagers with a poor body image. Therefore it is important for you to develop a good body image to improve your self-confidence and give you a positive outlook on life.

The body you live with is the result of a combination of your heredity and your environment. The three major factors are:

- ➔ Genetically inherited body type—you inherit some of each of the three different body types: endomorphy (fatness), ectomorphy (skinniness) and mesomorphy (muscularity). However, girls tend to be more endomorphic and boys more ectomorphic or meso-ectomorphic. While it is possible to modify your body shape to some extent by diet and exercise, you have a genetically imposed limitation on the shape.
- ➔ Diet—the type and quantity of food you eat or drink affects the proportion of body fat, therefore altering your body shape.
- ➔ Exercise—regular exercise tends to reduce the percentage of your body that is fat and increase the percentage that is muscle. As a result, your body shape becomes more toned.

Needed: a realistic body image

To build a better body image, you need to take control of the environmental influences on your body shape and develop a realistic image of the perfect body. This image must take genetics into account. Here are some valuable hints.

Do not believe the mass media stereotypes

Learn to accept the fact that the stereotypical images of bodies that bombard you every day from the mass media (television, videos, magazines, etc.) are really genetic ‘freaks’. The average female is endomorphic, not an ectomorph like models who adorn magazines. This means that most women can never look like models, no matter how hard they try. While it is unhealthy to be overweight, it is equally unhealthy to starve yourself to try and look like someone that, due to genetics, you never can imitate.

The same is true for boys. Arnold Schwarzenegger is genetically very mesomorphic. He has also trained hard over many years. Training and exercise are good for your body, but if you are born very ectomorphic you will never look like Arnie. That does not mean there is no point in training, but it does mean you must be realistic. Resorting to anabolic steroids to try and look like a genetic freak is very dangerous.

Develop good eating habits

Develop good eating habits to help you maintain a healthy body shape. Dietary guidelines and hints are outlined in Chapter 7. Remember that endomorphs need less food and drink than ectomorphs. If you put on fat easily, it is no use pointing at your ectomorphic friend and saying ‘Why can’t I eat like you?’ The answer is that your body does not need the same amount of food. If you eat as much as your ectomorphic friend, you will put on fat.

Choose enjoyable, regular aerobic exercise

Choose some sort of enjoyable aerobic exercise and do it regularly. Guidelines and hints are given in Chapter 2. Regular aerobic exercise burns fat and tones your body shape, no matter what body type you have inherited.

Figure 4.21 Cross-country runners



Media and stereotypes

- 1** Choose a two-hour time slot on a commercial television channel. For each advertisement, record the following details:
 - a** the product that is being advertised
 - b** two or three main people in the advertisement and the approximate age and body type/appearance of each
 - c** the age group the advertisement is aimed at.
- 2** Choose ten advertisements from two popular magazines. For each advertisement, record the following details:
 - a** the product that is being advertised
 - b** two or three main people in the advertisement and the approximate age and body type/appearance of each
 - c** the age group the advertisement is aimed at.
- 3** What patterns emerged from your findings in questions 1 and 2? What predominant body type does the media use to sell products?
- 4** Go to a shopping centre and watch adults walk past. Record how many people are predominantly of each body type. Is there a difference between body shapes in the real world and body shapes in the media? If so, what are they?



Activity 4.30

Positive image letter

Some of you may find it hard to list your positive qualities and abilities. Fill in the missing gaps in the letter below with words that will help to create a description of your positive image.

Hi! My name is _____ I am _____ years old and I attend school at _____ . I am writing to tell you about me. I am _____ centimetres tall, I have _____ hair and _____ eyes. I think that my most attractive feature is _____ .

At school my favourite subject is _____ and the subject I usually get the best marks in is _____. My proudest achievement at school so far is _____ .

In my spare time I like to _____. My proudest achievement in my spare time activity was when I _____ .

When I leave school I would like to be _____. I think I would be good at this or enjoy it because _____ .

My favourite place is _____. I like it there because _____ .

My best friends are _____ , _____ and _____. I like spending time with them because _____. I think my friends like me because _____ .

I also _____ .

It has been nice writing to describe myself to you,
Your new friend



Activity 4.31

Activity 4.32



A 'me' collage

A good, fun activity is to design a collage that represents you. This can be done by taking a large piece of paper and decorating it with items that illustrate your positive characteristics. For example:

- photos of yourself and things you like (you can use cut-outs from magazines)
- drawings
- positive statements.

Ask each class member to write one positive trait about you. Include these notes in your collage.

Literacy

Family stories are tales about people, places and events related to the members of our immediate family. Family stories casually chatted about at the dinner table take on special importance because they are true, even if everyone tells different versions of the same event. They are a gift to the next generation, which preserves them by remembering them and passing them on.

Select one family member and interview them about their past. Make a written list of topics that might generate some questions to ask. Suggested questions might fall into two categories: people questions and places questions. Use the questions listed below as a guide. Ensure that an audio device is available to record the interview. Transcribe the interview verbatim (word for word).

Retell the story as a personal recount as if narrated by your relative, e.g. 'I used to get up especially early on the weekends because I was the eldest of three boys and expected to do all the chores before breakfast.'

People questions

- Can you describe your father and mother?
- Did you have any brothers or sisters? How old were they and how did you get along with them?
- Did you have friends over after school?
- How did you travel about?
- Did you celebrate family occasions with get togethers? If so, who with?
- What work did your father and mother do?
- What did you do when you got home from school?

Places questions

- Can you describe the house you lived in?
- What school did you go to?
- Did your family live in the same house or did you move?
- Did you have any pets when you were young?
- Did you go away for holidays? If so, where to?
- Did you have to go to church on Sundays?

Numeracy

Complete the following investigation to determine the effect body language can have on how people respond to you.

Throughout the course of a day you are to record the number of times that people initiate interaction with you using body language. This may include tapping you on the shoulder, eye contact or nodding their head.

On the second day, go out of your way to acknowledge as many people as possible and record the number of positive responses that you receive.

As a class, collate your data. Using these results and your own personal experience, discuss how your actions can influence others both positively and negatively.

Finally, develop a mathematical formula that can be used to explain your results.

Lifeskills

Some topics are difficult to talk about and some people are difficult to talk to. Each becomes easier with practice. Think of a topic you find difficult to talk about to a particular person. An example of this may be breaking off a relationship, being in an embarrassing situation or not understanding what you are learning in class.

Share your response with a partner and work together to develop a role play which addresses one of these topics.

Record your role play using a digital camera so that you can view your scenario and suggest improvements you could make to your communication skills.

Future perspectives

Multiculturalism is always a popular topic within our society. As a class list the positives and negatives of living within a culturally diverse country.

Develop a list of strategies that can be implemented to promote a multicultural society which is built on acceptance and tolerance.

Where do I go from here?

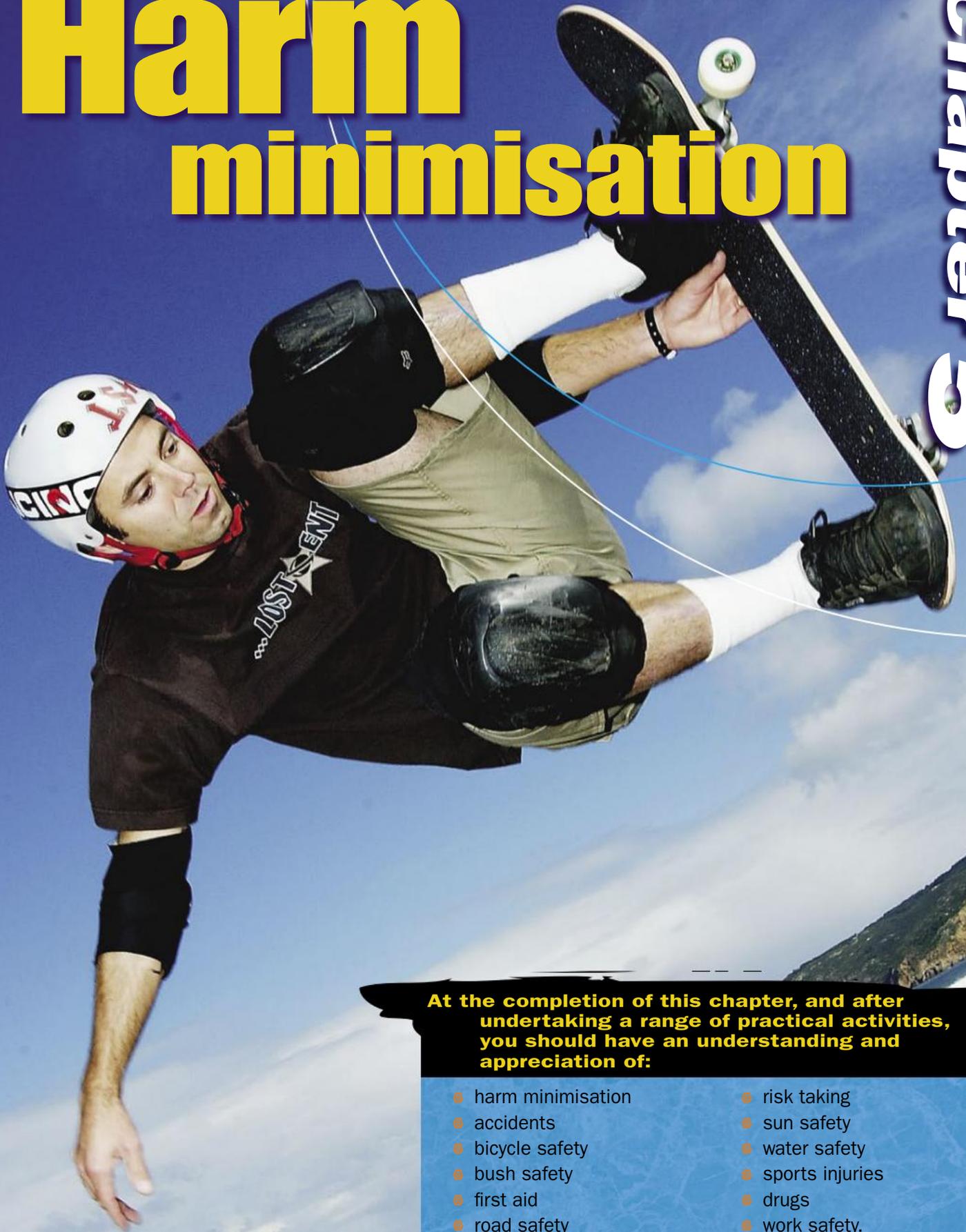
www.kidshelpline.com.au

www.dvirc.org.au/whenlove

www.communities.qld.gov.au

Harm minimisation

Chapter 5



At the completion of this chapter, and after undertaking a range of practical activities, you should have an understanding and appreciation of:

- harm minimisation
- accidents
- bicycle safety
- bush safety
- first aid
- road safety
- risk taking
- sun safety
- water safety
- sports injuries
- drugs
- work safety.

Risk taking

Harm minimisation is any act that is performed with the purpose of reducing risk. We are constantly taking risks, therefore harm minimisation can be linked to many areas of life. This chapter will discuss ways of reducing the risk of negative things occurring in your life.

A **risk** is any action with an unpredictable outcome. Potentially harmful risk taking is any unsafe action or stupid, thoughtless and careless behaviour. Many of your daily activities involve taking risks; you need to be aware of how you can minimise them.

Acceptable risk taking

Some risk taking helps you develop into a responsible individual. Examples of risk taking that can help you grow as a person are:

- ➔ forming new relationships
- ➔ beginning something new, such as a part-time job
- ➔ admitting you made a mistake.

Why do we take these risks?

- ➔ You learn to recognise your strengths and weaknesses.
- ➔ You find it easier to accept your own mistakes.
- ➔ You can use the feedback you get to improve yourself.

Destructive risk taking

Some risk taking can be self-destructive or destructive to others. These include:

- ➔ drink driving
- ➔ drug abuse
- ➔ stealing
- ➔ smoking
- ➔ unprotected sex
- ➔ vandalism.

People who take dangerous risks seem to have low self-esteem and they feel they need to boost it by showing off or being aggressive.

Calculated risks

Many activities involve risk, for example, surfing, skating, skiing, cycling and netball. However, you do not need to avoid all risky activities, or you will be left with no activities to choose from! Instead, you need to take action to change an activity from a risky activity to one that involves a **calculated risk**. In doing so, you are taking steps to minimise harm. You calculate a risk when you:

- ➔ know the dangers
- ➔ have the necessary skills to perform the activity
- ➔ have all of the safety equipment required
- ➔ understand and obey the rules and safety precautions.

Next time you participate in an activity, make sure you calculate all of the risks and do something about them.

Decision making

As you get older, you will be required to make many choices about things such as your diet, career, friends, and whether you drink alcohol or smoke. You will need to be able to calculate the risks associated with all of these areas of your life in order to make informed decisions.

The following hints will allow you to make choices when attempting to minimise harm in your life.

- ➔ Rely on your feelings—if what you are about to do doesn't feel right, don't do it.
- ➔ Look before you leap—you may have heard this saying before. Before you perform any activity look around the area to ensure that you will be safe.
- ➔ Be assertive—if you do not want to do something do not be forced into it. Simply say 'no' and stick to it. Don't be influenced by peer pressure—it is better to be safe than sorry.
- ➔ Use safety equipment—if the activity you are going to do has specific safety equipment, make sure it is in working order and that you use it.
- ➔ Know your limitations—you know yourself better than anyone. If you know something is beyond your capabilities don't do it!

It's up to you

No matter what your values, goals or personality, to make good decisions regularly you need to follow a process to arrive at the best solution for you.

Smart teenagers:

- ➔ decide on what the problem is
- ➔ weigh up all of their options by talking to people and doing some research
- ➔ assess the pros and cons
- ➔ choose the solution that best suits their needs at the time.

I think I will ...

- 1** Use the information discussed in the section 'It's up to you' to develop an acronym for a set of steps that you could use when making decisions.
- 2** Use your acronym to make a final decision in each of the following situations.
 - a** You have been invited to go camping with your best friend and their parents, but you have a sporting final on the same weekend. What do you decide to do?
 - b** You have been given \$50 for your birthday. What will you do with the money?
 - c** Your boss rings and asks you to do an extra shift on Saturday night. If you decide to work you will miss out on hanging out with your boyfriend/girlfriend.
- 3** Compare your responses with a classmate.



Activity 5.1

Activity 5.2



Risky business

- 1** Choose one of the hints on good decision making and draw a cartoon to describe a situation in which it may be used.
- 2** Calculate your risk and decide on your action in each of these situations:
 - a** You have been invited to go on an all-day bike ride with two friends who are thrill seekers. You want to go, but you also want to come back in one piece. What should you do?
 - b** You are quite a good boogie board rider, but your friend is only a beginner. Your friend's mother, who is driving you to the surf, does not have a clue about surf-beach safety. On the way, you find out she is driving you to the most dangerous beach on the coast. What do you do?
 - c** You are playing in an important tennis final on Saturday afternoon. On Friday night you hear the weather report—it will be a blistering 38°C. What do you do?
- 3** Look at Figure 5.1. Are the risks in both cases the same? If they are different, why?

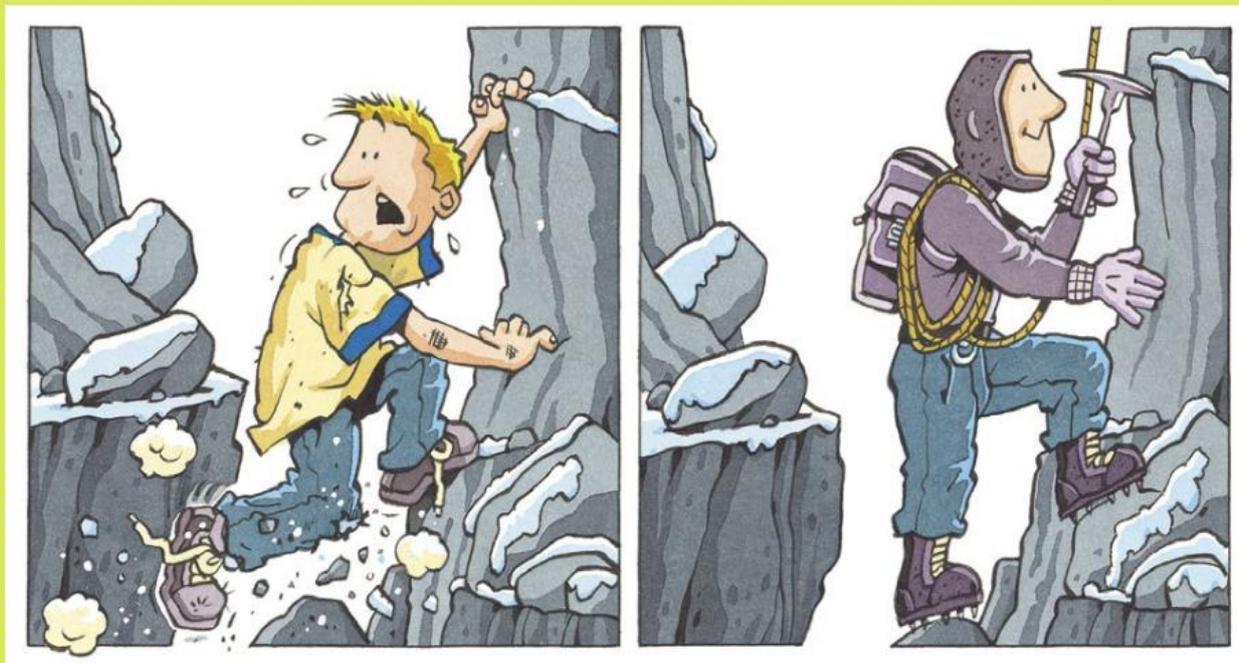


Figure 5.1 Assess the situation to determine the risk

- 4** With the help of a partner, make a list of risky activities and suggest how the risk of injury or illness can be reduced in each case.
- 5** Form groups of four. By consensus, each group will choose one of the case studies on page 255 and answer the following:
 - a** Which factors led to the accident?
 - b** Was the accident preventable or unavoidable?
 - c** What could have been done to prevent the accident?
- 6** Have each group present their findings to the whole class.

**Case study
1**

'It will never happen to me,' said 16-year-old Peter, who had a few beers and dived off the pier, turning himself into a quadriplegic. Famous last words! For the rest of his life, Peter cannot feed himself, dress himself, blow his nose or wipe himself after going to the toilet. To make matters even worse, this accident does not qualify Peter for either WorkCover payments or Traffic Accident Commission payments.

**Case study
2**

Graeme was 15 and quite a competent sailor. He liked to take friends out onto the river in his catamaran and scare them by almost capsizing. One day, Graeme took out his new girlfriend, Pam. To show off, he kept turning so he was sailing on one hull. Unfortunately a sudden gust of wind hit the sail and flipped the cat. Pam was thrown forward and smashed her head on the mast as she went under. Graeme was wet but unhurt.

**Case study
3**

Ray was a gun surfer and was far too tough to care about sun protection. He thought it was for wimps, and often used to surf in only his boardshorts. After a five-hour session one Saturday morning, his lips were a blistered, swollen mess. That night at a party he got so furious when his girlfriend wouldn't kiss his lips that he punched a wall and fractured a knuckle.

**Case study
4**

Carly was 16 and very attractive. She looked a million dollars in her miniskirt and low-cut top as she went out on Saturday night. At the party, she had a few drinks and came on to Simon who she thought was a spunk. Simon was fairly tanked and he invited Carly outside for a kiss and a cuddle. Outside, Carly soon realised that Simon had more than a kiss and a cuddle in mind. She told him that she wasn't interested, but he became angry and started to molest her. She pushed him away, but he struck out and knocked her backwards. She fell awkwardly on her arm and there was a loud snap.

The consequences of unsafe living

When you choose to take unnecessary risks, you must be prepared for the consequences.

- ➔ **Injury and pain**—no one enjoys the pain and discomfort of injuries such as concussion, fractures and stitches, yet these are common occurrences of unsafe living.
- ➔ **Embarrassment and grief**—it is unpleasant and embarrassing to explain to a stranger you have just knocked over what you were doing riding a bike on the footpath. It is horrific to live with the grief of your best friend's death knowing you were the one who encouraged him to skol the bottle of whisky.

- **Financial costs**—accidents often result in medical expenses, such as doctor’s and hospital fees. You may also be up for legal fees if you are sued for the damage you caused (to people or property), payment for damage you caused and fines you may have received for any law infringements. Unsafe living can be a financial burden for life.

Activity 5.3



Calculating the risks

- 1 Read each of the case studies below.
 - a For each case study, write down whether you think each person was taking a calculated or unnecessary risk and what the results might be.
 - b If you think any of the cases involved unnecessary risk, how could the situation be changed to make it a calculated risk?

Case study 1

Sally has been over at her friend Ellen’s house for the day. Sally’s parents told her to ring them so they could pick her up. At about 8.00 pm Sally decided she had better leave, but instead of ringing her parents she decided to walk. ‘It’s only one kilometre, and I’m not afraid of the dark,’ said Sally. On her way home Sally had a terrifying experience when she was chased by a car full of drunken young men.

Case study 2

Ross and a group of friends go to the local surf beach. Ross climbs a huge sand dune that has a steep sand drift down one side. He thinks about jumping and landing on the sandy face of the drift but he is not sure what is underneath. Suddenly a mate calls out, ‘Come on, Ross. Jump, you wimp.’ Ross jumps, and lands on an old fence post just under the surface of the sand.

Case study 3

Daniel has been asked to light the wood barbecue. He sets the fire. To make sure it lights, he throws some petrol on it. As he reaches forward with the match, the whole lot explodes into flames.

- 2
 - a List three activities you have taken part in recently that involved risk.
 - b Was each a calculated risk or an unnecessary risk?
 - c If any were unnecessary, how could you have made them calculated?
- 3 Choose a sport in which you are interested.
 - a What are the risks involved?
 - b List the rules, safety tips, equipment and types of training that minimise the risk of injury.
- 4 What safety guidelines do you think are necessary for each of the following sports?

<ol style="list-style-type: none"> a softball c swimming e javelin 	<ol style="list-style-type: none"> b gymnastics d hockey f archery.
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Unsafe environments

Figures 5.2 and 5.3 show that almost every day of your life you move into environments that are likely to be unsafe. Such an environment could be:

- ➔ **Your home**—boiling water, unattended fires, slippery floors, sharp knives, electrical appliances.
- ➔ **Your school**—science chemicals, sporting activities, crowded corridors.
- ➔ **Your recreation**—cycling, team sports, traffic hazards, swimming pools, beaches.

We are surrounded by potential accidents. Many of us take no action to prevent accidents. As a result, thousands of Australian children and teenagers need medical treatment for injuries caused by accidents every day.

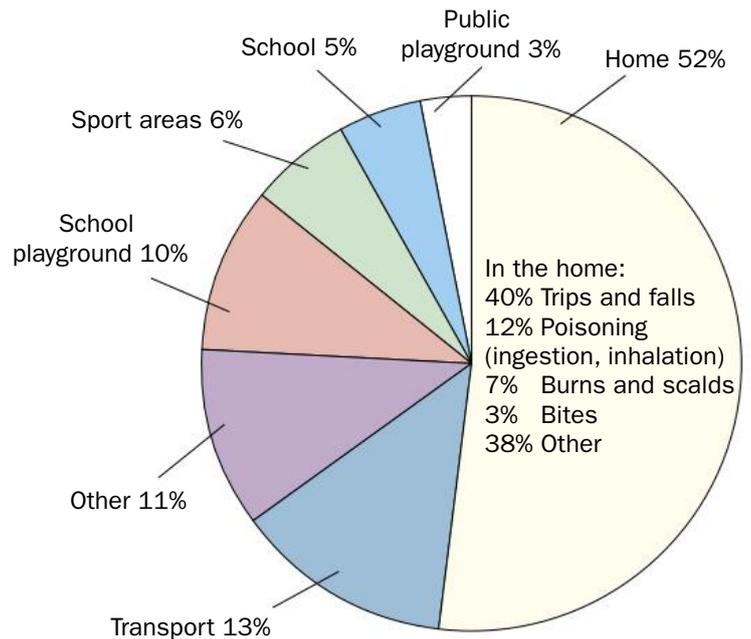


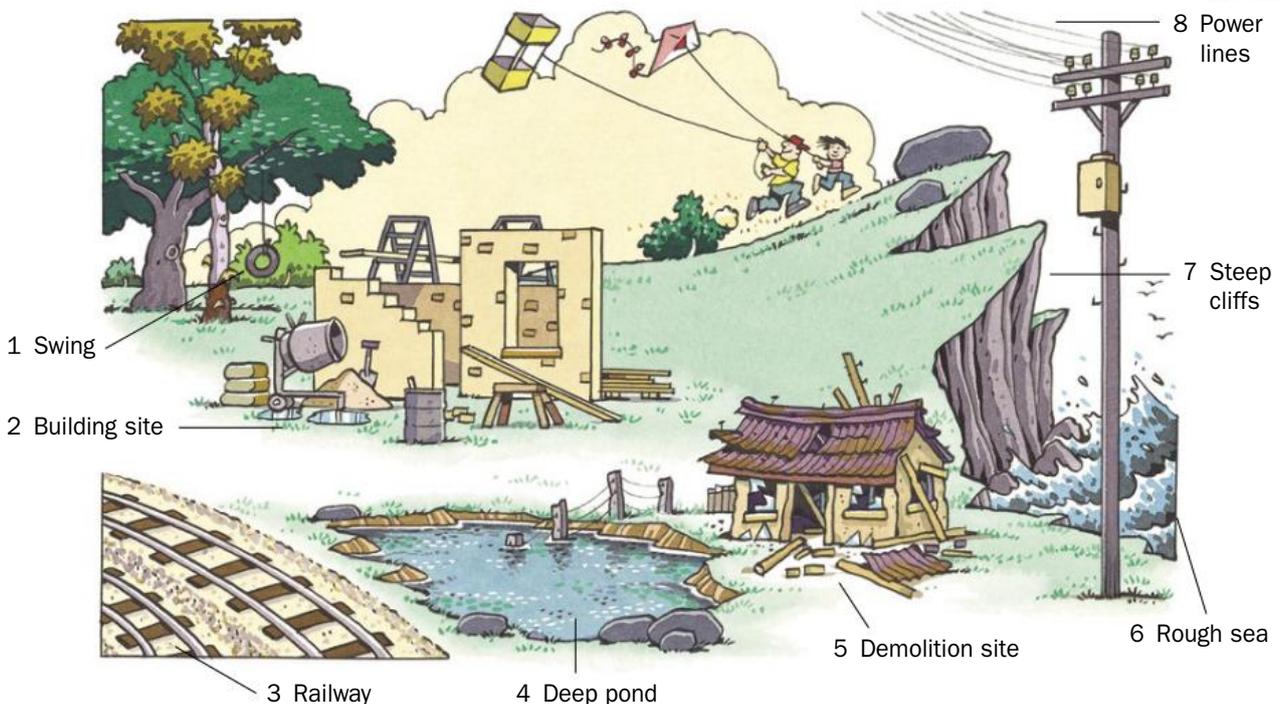
Figure 5.2 Danger spots for children and teenagers

Is your environment safe?

- 1 Study Figure 5.3. For each of the eight sites shown, write down a potential accident.
- 2 How could each accident have been prevented?

Activity 5.4

Figure 5.3 Potential accident sites



Activity 5.5



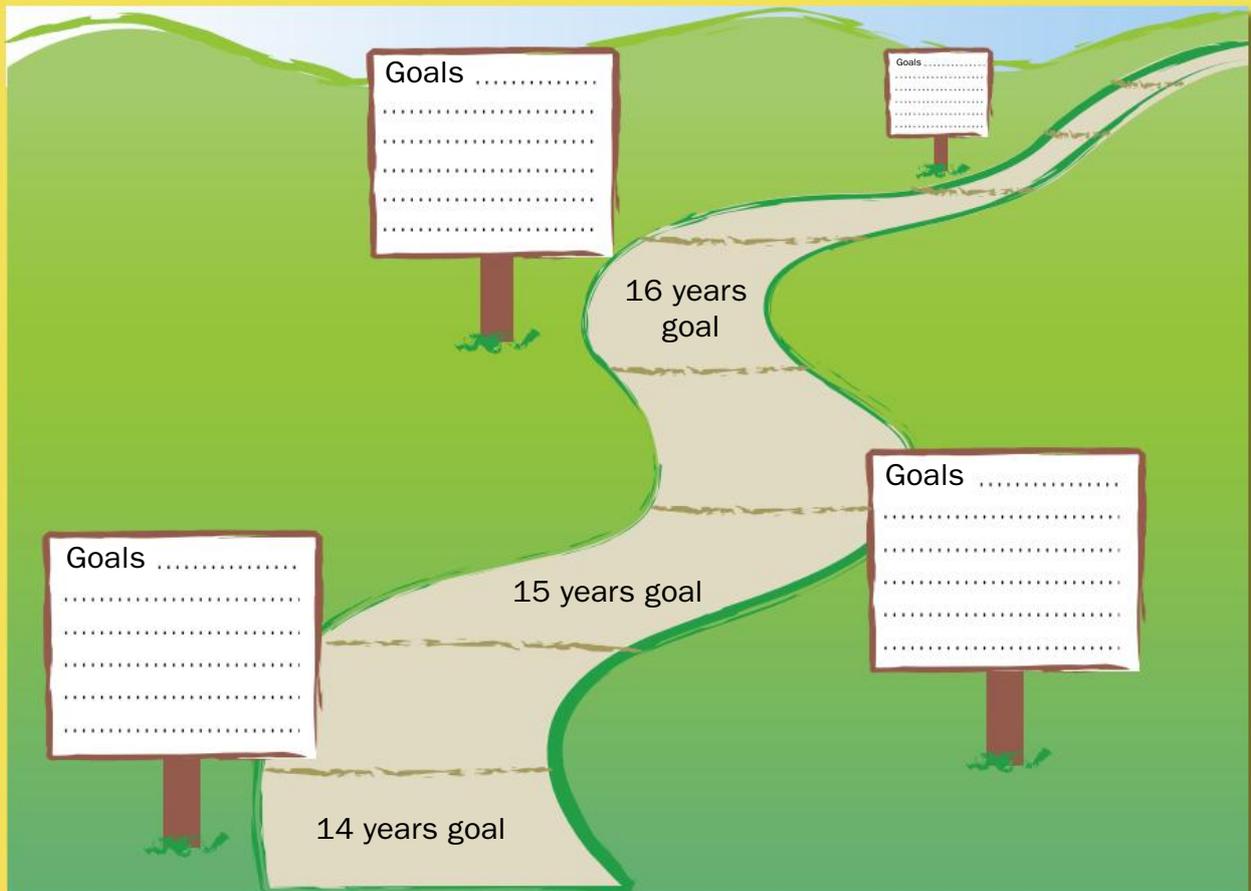
Influences on your behaviour

- 1** Look at the influences on your behaviour listed in the table below. For each influence, write down:
 - a** two positive ways in which each could affect your safety
 - b** two negative ways in which each could affect your safety.

Influence	Positive effects	Negative effects
Family		
Teachers		
Friends		
Media		
Advertising		
Religion		

- 2** Share your answers in a class discussion.
- 3** Which influences have the greatest negative effect on your safety? Why?
- 4** Which influences have the greatest positive effect on your safety? Why?
- 5** How can you make the negative influences on your safety more positive?
- 6** Set yourself some positive safety goals to work towards over the next few years.

Figure 5.4 Positive safety goals



Accidents

You usually don't wake up in the morning and think 'I might have an accident today'. An accident is any unplanned activity that causes injury or damage. Accidents are events that happen even though you do not want them to happen.

Accidents can be preventable or unavoidable. Since three out of four accidents are preventable, you need to be informed about their causes in order to take preventative action.

Causes of accidents

Accidents generally don't just happen. They occur because of people's actions, behaviour, attitude or lack of knowledge.

Think about an accident you have had recently. What caused it?

Unsafe behaviours and attitudes

You are more likely to have an accident if you are:

➔ Impulsive

Impulsive people act on the spur of the moment without thinking about what could happen. For example, you are hot, the water is there, so you dive in. Bad 'luck' about the rocks under the surface.

➔ Impatient

Impatient teenagers rush into doing something because they get sick of waiting. For example, the queue is long, you're sick of waiting, so you begin to push. Bad 'luck' that the person in front gets squashed.

➔ Disobedient

Some teenagers resent being told what to do irrespective of whether they are told by a policeman, a teenager, another adult, a friend or a warning sign. These teenagers think it is a sign of toughness to ignore safety rules or precautions.

➔ Careless

Careless teenagers tend to be slack or sloppy when they attempt to do things. Many car accidents are the result of day-dreaming.

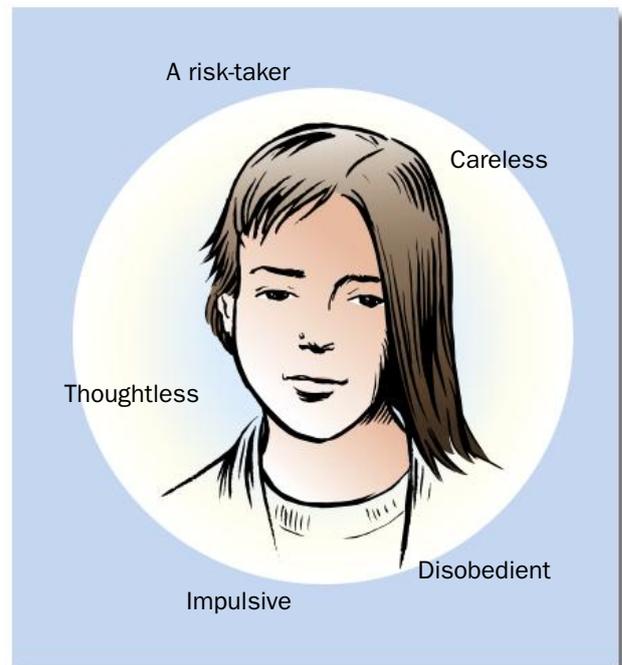
➔ A risk-taker

Risk-takers like the thrill of living on the edge. They are often insecure people who feel they have to show off to boost their self-esteem.

➔ Thoughtless

Thoughtless teenagers act without thinking about how their actions could affect others. These people cannot see that a practical joke or clowning around is sometimes not on.

Figure 5.5 Unsafe behaviours and attitudes



➔ **Aggressive**

Aggressive teenagers try to use force to get what they want. These people often start fights that result in someone getting hurt.

➔ **Invincible**

Teenagers who feel invincible think that they can do anything but never get hurt. They are into the 'it won't happen to me' syndrome.

➔ **Irresponsible**

Irresponsible teenagers don't accept the consequences of their actions. It's always someone else's fault.

Lack of knowledge

An accident is likely if you attempt a job or activity that involves a risk but you have no real knowledge of what is involved in the activity. For example, you decide to borrow a surfboard to try it out, but you know nothing about how to surf, and you have not spoken to any

of your friends who could teach you. Next thing you know, you are being dragged from the water with a gash to your head.



Lack of skill

If you attempt to do something that is well beyond your current level of skill, you are more likely to have an accident. For example, if you have only just learned to skate, now is not the time to try dropping down the steep side of the local skate bowl.

Clumsiness

Some people your age are prone to being clumsy. This happens because during the growth spurt, your coordination does not always keep pace with your increased height and strength. As your growth slows down, your coordination returns and you tend to have fewer accidents.

Figure 5.6 Build up your skills gradually to reduce the possibility of having accidents

Bad habits

If you develop bad safety habits, you not only increase your chances of injury but you make it hard to change yourself in the future. It's easier to practise safe habits from the beginning, for example, turning off the switch before pulling out the plug.

Accidents are not accidental

- 1** Read each of the statements below. Each person is making a statement displaying an attitude or type of behaviour that tends to cause accidents.
 - a** 'It won't happen to me. She'll be right, mate.'
 - b** 'It seemed like a good idea at the time.'
 - c** 'Get out of the way and give me a go.'
 - d** 'I don't care. Near enough is good enough.'
 - e** 'Let me at it.'
 - f** 'The bigger the risk, the better the fun.'
- 2** Match up each statement with an attitude or type of behaviour that you've just read about. Explain how each could cause an accident.
- 3** Which of the accident causes apply to you? How could you act to stop these causes from happening?
- 4** Describe an accident in which you have been involved.
 - a** What were the causes of the accident?
 - b** How could you have prevented the accident?
 - c** Present your example to the class.
- 5** Figure 5.7 on page 262 shows a backyard scene.
 - a** Make a list of the possible accidents shown in this scene.
 - b** Next to each potential accident, write down a safety tip that could prevent the accident or injury.
- 6** Look at Figure 5.8 on page 263. Make a list of safety tips that would prevent the accidents about to happen in this picture.



Activity 5.6

Sorry is too late

- 1 a** You have probably seen or heard of a number of injuries at your school. Choose five of these examples and write down what led to each injury. Suggest ways in which each might have been prevented.
 - b** Share your ideas in a class discussion.
- 2** There are now many programs set up in communities and schools to show people how to stop injuries from happening. An example is a bike education program. How many more can you name?



Activity 5.7



Figure 5.7 In your backyard



Figure 5.8 In your home

Sun safety

Climate and lifestyle are the two main reasons why skin cancer is the most common form of cancer in Australia and why we have the highest rate of skin cancer in the world. It is up to you to take precautions to ensure that you are not a skin cancer statistic.

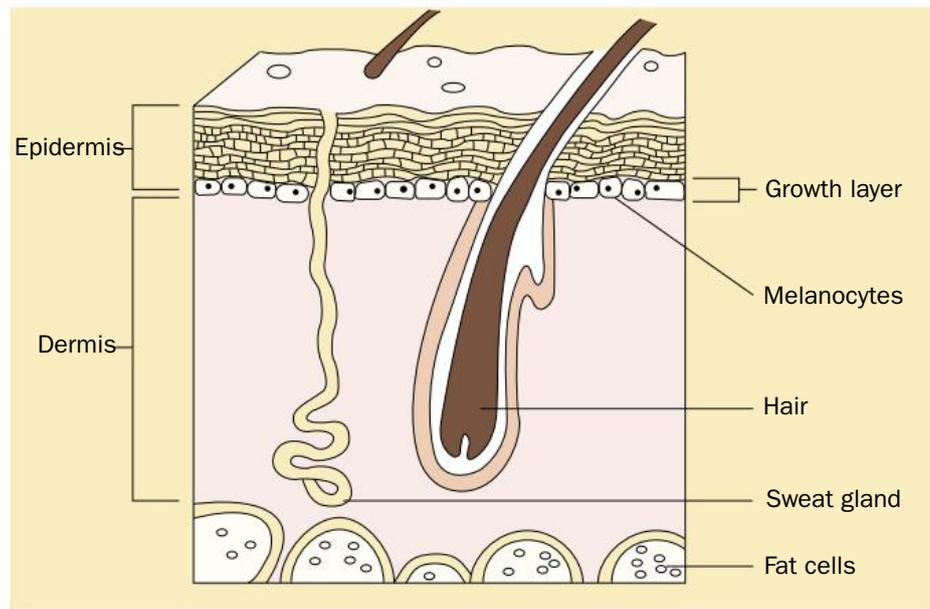
Your skin

Your skin can be divided into two layers. The outer layer is known as the epidermis and the inner layer is called the dermis (see Figure 5.9).

- Your dermis is a tough, elastic structure that contains the roots of the hairs, glands that produce sweat and oil, blood and lymph vessels, and nerves.
- Your epidermis is largely made up of cells containing keratin—a substance that resists heat, cold and the effects of many chemicals.

Your skin's pigment cells (**melanocytes**), which give your skin its colour, are located in the growth layer of the epidermis. They produce a pigment called **melanin**, which is able to absorb the damaging ultraviolet part of sunlight. Unfortunately, the vast majority of Australians are unable to produce enough pigment to protect their skin against the harmful effects of the very strong sun.

Figure 5.9 A magnified section of your skin



Activity 5.8



What do you know about skin cancer?

- 1 Complete the true/false quiz on page 265.
- 2 When you have finished, test someone else in your family.
- 3 Keep both sets of answers until later in this chapter, when you can check the results.

	True	False	Not sure
1 Skin cancers only occur in older people.			
2 Only fair-skinned people are at risk of developing skin cancer.			
3 It is possible to tan safely.			
4 Two out of three Australians will develop skin cancer at some time in their lives.			
5 Skin cancer is easily cured if detected early.			
6 Sunlight causes skin cancer.			
7 Everyone should use 30+ broad spectrum sunscreen.			
8 You can't get sunburned on cloudy days.			
9 As long as you keep reapplying sunscreen, it will protect you all day.			
10 A suntan is healthy.			
Your total			
Other person's total			

Types of skin cancer

There are three main forms of skin cancer:

- ➔ basal cell carcinoma
- ➔ squamous cell carcinoma
- ➔ melanoma.

Basal cell and squamous cell carcinomas are the two most common, although least dangerous, forms of skin cancer. The risk of developing these types of cancer is high—approximately every two out of three people. These cancers can cause disfigurement, although they rarely result in death.

Melanomas are less common, with one in every 35 people developing them. They can be fatal if they are not detected and treated early. Once it develops, a melanoma may spread throughout the body.

Watch out for these signs and symptoms

- ➔ A crusty, non-healing sore.
- ➔ A small lump that is red, pale or pearly in colour.
- ➔ A new spot, freckle or mole that changes colour, thickness or shape over a period of several weeks or months—particularly spots that are dark brown to black, red or blue-black.



Figure 5.10 The various forms of skin cancer



Figure 5.11 With blonde hair, fair skin and no visible sun protection, this girl is at a high risk of getting burnt

What causes skin cancer?

The main cause of skin cancer is over-exposure to the sun's ultraviolet rays. When the sun damages your skin it forms a 'tan'. This goes against the popular myth that a tan protects you and that if you have dark skin you cannot get skin cancer. Research has shown that six doses of sunburn between the ages of 12 and 25 doubles your chances of developing a melanoma. How at risk are you of skin cancer?

High-risk people

Everyone is at risk of skin cancer but the following people are most at risk:

- ➔ People with fair skin who burn easily.
- ➔ People with fair or red hair who live in a hot climate.
- ➔ People who live in a hot climate such as Queensland.
- ➔ People who spend a lot of time outdoors, either as part of their job or recreation.
- ➔ People with a lot of moles.
- ➔ People who do not protect their skin.



Figure 5.12 Relaxing by the pool is great—but what about slip, slop, slap?

Activity 5.9



Sunsmart, suncool or sunstupid?

- 1 Look at the statements in the table on page 267. Read each of them, then tick the column that sums up how you feel.
- 2 Write down the reasons for your answer to each item.
- 3 Hold a class discussion so you can share your reasons for your answers and hear other opinions.
- 4 Are there any statements about which everyone in the class agrees?
- 5 Are there any issues about which you have changed your mind because of the discussion? Why?

- 6** Have you ever been pressured into being either sunsmart or sunstupid? What did you do then and what would you do now? Share your experiences and solutions in a class discussion.

	I disagree	I'm not sure	I agree
People with tanned skin are healthier.			
Tanning increases your popularity.			
Skin cancer has got nothing to do with teenagers.			
People with olive skin are completely sunsafe.			
I can't be bothered with sunburn creams.			
Being pale in summer is not fashionable.			
It is not up to me to look after my health.			
Bathers don't look as good if your skin is pale.			
Pale is cool; brown is dumb.			
I need to spend as much time as possible getting a suntan.			

Risky business

- Draw up a table similar to that shown below.
 - In the first column, list as many outdoor activities—work, sport or leisure activities—done by either city or country people as you can.
 - In the second column, list the types of people who usually perform each activity.
 - In the third column, list the risk of sunburn for each activity as either 'high', 'medium', or 'low'.
 - For each medium-risk or high-risk activity, use the fourth column to suggest ways to minimise the risk. An example is shown in the table.
- Which skin cancer risk factors do you currently have in your lifestyle?
- How can you modify your lifestyle to minimise your risk of getting skin cancer?



Activity 5.10

Activity	People affected	Sunburn risk	Ways to minimise risk
Golf	Both sexes. Adolescents and adults.	High risk.	Play early in the morning or late in the afternoon. Cover all exposed skin.

Being sunsmart

To reduce the risk of skin cancer, the Anti-Cancer Council suggests that you follow these sun smart guidelines:

- ➔ Avoid the sun in the middle of the day (10.00 am–2.00 pm)
- ➔ Seek shade wherever and whenever you can.
- ➔ Wear protective clothing, such as a wide-brimmed hat, a long-sleeved shirt and sunglasses.
- ➔ Use maximum protection sunscreen (30+ broad spectrum). Apply 30 minutes before going out into the sun and reapply after exercise, swimming or long periods in the sun.
- ➔ Protect yourself all year round.

Remember: slip slop slap!

Protect your eyes

Unfortunately, sun damage is not limited to your skin. Experts are now starting to show us that too much exposure to sunlight can cause eye damage as well. Wearing sunglasses can protect your eyes from damaging ultraviolet light from both direct sunlight and reflected light.



Figure 5.13 Sunscreen, a hat and a shirt help reduce the risk of being burnt



Figure 5.14 Wearing sunglasses can help protect your eyes from damaging UV rays

Be SunSmart with Sid



SLIP on a shirt.
SLOP on some sunscreen.
SLAP on a hat.

SUNSMART

Cancer Prevention and Early Detection

The generosity of Queenslanders makes this program possible

The Queensland Cancer Fund is an independent, community-based charity and is not government funded

For information and support contact our Cancer Helpline on 13 11 20, Monday to Friday 8am to 8pm

Queensland Cancer Fund

Figure 5.15 An example of harm minimisation information put out by the Queensland Cancer Fund to encourage people to slip, slop, slap

Deadly perception of a 'healthy tan'

Half of all Australians still believe a tan is healthy, despite the deadly threat of melanoma, research has revealed.

The Queensland Cancer Fund said the research from the National Sun Survey, released today for the start of National Skin Cancer Action Week, raised fears of increasing rates of skin cancer for generations to come.

More than 2300 Queenslanders a year are diagnosed with melanomas, and more than 200 die.

Yet 56 per cent of young males aged 18 to 24 believed a suntanned person looked healthier, compared with 43 per cent of females in the same age group.

Associate Professor Joanne Aitken, of the Queensland Cancer Fund, said while sun protection programs had made an impact there was still a widespread lack of understanding about the dangers of sun exposure.

'We would have expected a larger number of people recognising the damage tanning is doing to their bodies now and for decades to come,' Dr Aitken, the director of the Viertel Centre for Research in Cancer Control, said.

'We had previously hoped that skin cancers had peaked with the baby boomer generation, because younger people are much more sun-aware.

'But these findings indicate we need a continuing strong national campaign, particularly targeting youth.'

The National Sun Survey is the first nationwide study of Australians' knowledge, attitudes and behaviour related to sun protection.

Lee Hemming, 18, knows first hand the dangers of skin cancer, after being diagnosed with a melanoma earlier this year.

'I just want all young people to know that tanning is not cool, it's not healthy, it's potentially deadly.'

Dermatologist Jenny Byth said she saw the devastating impact of a lifetime of tanning every day in her surgery.

'Young people need to know that the tan they think looks good now, is going to be far outweighed by the premature ageing and skin cancer which will develop later,' Dr Byth said.

Media release, The Queensland Cancer Fund,
14 November 2004

Activity 5.11



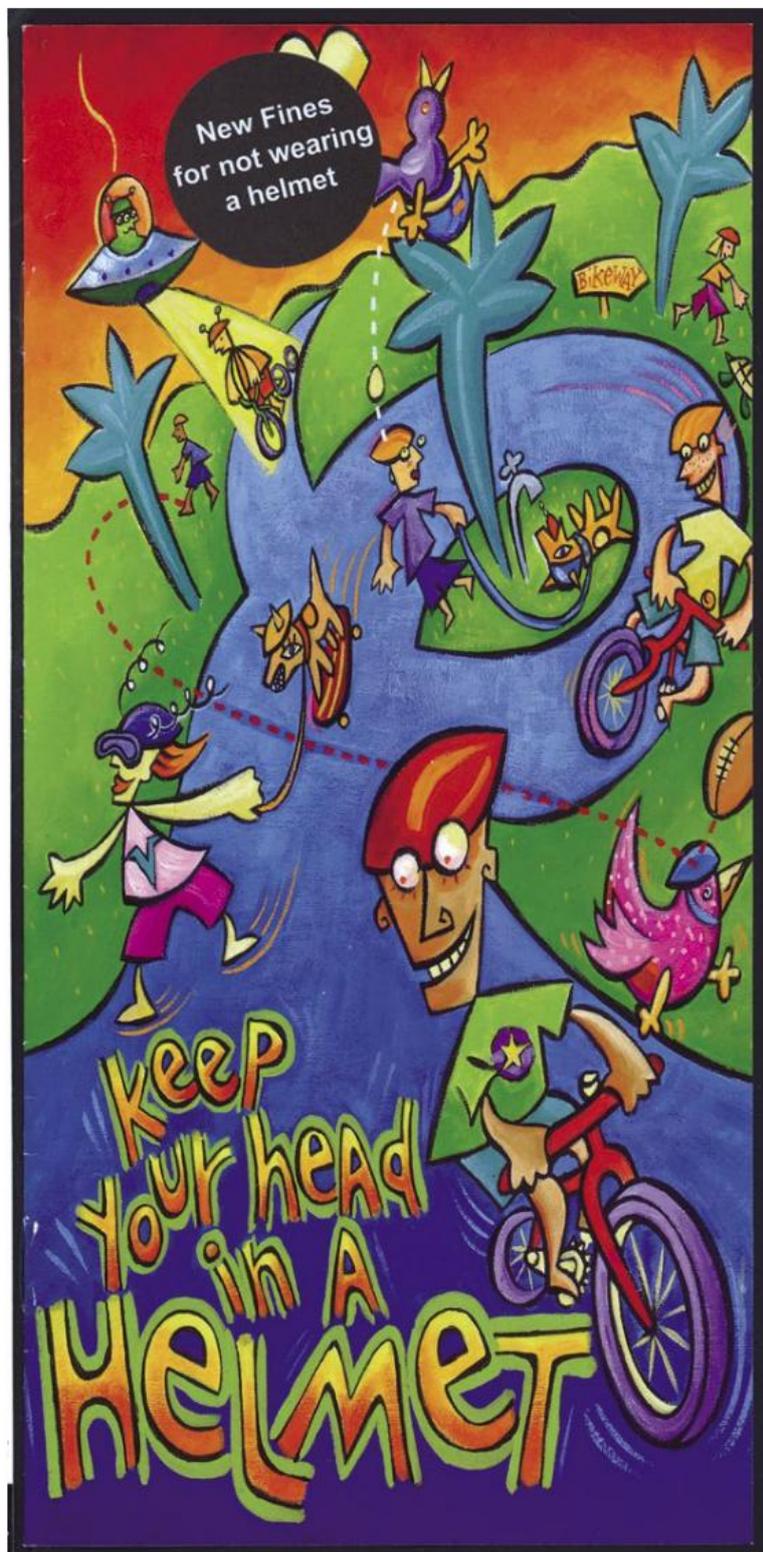
Sun smart sports

- 1 Read the article 'Deadly perceptions of a "healthy tan"' and complete the following activities.
 - a What reasons can you give for why the majority of Australians would believe that a tan looks healthy?
 - b What could be done to encourage teenagers to use sun-smart practices?
 - c How does fashion encourage or discourage responsible sun safety?
- 2
 - a Design sun-smart sports gear for your two favourite sports. Aim to create garments that are fashionable, practical and sun safe.
 - b Describe the improvements you have made, giving reasons for your design choices.
- 3 Now go back to Activity 5.8 on pages 264–5 and check your answers. Change any if you need to because of the new knowledge you have gained from this section. When you have finished, use the answers below to correct your test and the test for your family member. Give them their results and explain where they went wrong.

Answers—what do you know about skin cancer? (page 265)

- 1 **False:** Skin cancer is mainly a disease of adults, but melanoma, the most dangerous form of skin cancer, can sometimes affect teenagers. Research has also shown that over-exposure to the sun during childhood and adolescence is an influential factor in the development of skin cancer later in life.
- 2 **False:** While it's not a cheery prospect, everyone is at risk of developing skin cancer. The fairer your skin, the higher your risk, but skin cancer occurs in people with olive skin and even in dark-skinned people (although this is rare).
- 3 **False:** Sorry to disappoint you, but there is no such thing as a safe tan unless it's a fake tan! Sunbaking over a period of years can result in skin damage and skin cancer, even without burning. A tan is just your skin's way of trying to protect itself from the sun. Every time you tan, your skin becomes thicker and gradually loses elasticity, resulting in wrinkles and early ageing. Your skin doesn't forget, so treat it right.
- 4 **True:** This is because Australia has a population of mainly light-skinned people, in a climate suited to dark-skinned people. Many people also think tanning is fashionable.
- 5 **True:** The one good thing about skin cancer, compared to other cancers, is that you can see it. You should go to the doctor as soon as you notice a change in a freckle or a mole or the appearance of a new spot. If the spot turns out to be cancer, you have a very good chance of cure.
- 6 **True:** Sunlight is a major factor in the development of skin cancer. Because we don't know exactly how much sunlight is needed to cause skin cancer, we recommend that you cut down exposure to the sun, particularly around the middle of the day (10.00 am–2.00 pm) when the sun is strongest and can do most damage. Plan to hold your activities in the shade. Don't forget to SLIP, SLOP, SLAP!
- 7 **True:** Even if your skin tans easily, it's a good idea to use 30+ sunscreen, and reapply it every few hours or after swimming.
- 8 **False:** Have you ever spent the day outside when it's overcast and wondered why you turned red afterwards? This is because there is still plenty of sun around, even if you can't see it. Clouds absorb some ultraviolet radiation, but there is a lot of reflected radiation from clouds, making it still possible to burn. In fact, you may burn more than on a sunny day, because you tend to stay outside longer.
- 9 **False:** Sunscreen only protects for a limited time. Sunbaking is like roasting a chicken. After a certain period of time, the chicken is cooked. If it isn't removed from the oven, it burns. The same goes for your skin.
- 10 **False:** You may feel healthier with a tan because we have been taught by advertising and fashion to see a tan as a sign of health. In fact, a tan is a sign that you have received enough sunlight to cause skin damage. The deeper the tan, the greater the chance that damage has occurred. Happily, the fashion is moving away from tanning. Now, advertisements feature models who have light tans or no tans at all. Protecting your skin makes fashion sense as well as health sense.

Bicycle safety



Riding a bike is a quick and efficient way to get around and also to exercise. Riding, however, can be risky—many people have been injured on their bikes.

‘Keep your head in a helmet’

In Queensland, it is law that all bicycle riders must wear a helmet. ‘Keep your head in a helmet’ is an initiative introduced by the Queensland Government to educate people about safe and responsible bike riding. It includes information about relevant laws, responsibilities of riders and outcomes of risky behaviour.

Causes of bike accidents

- ➔ Poor cycling—showing off and doubling.
- ➔ Ignoring road rules.
- ➔ Poor bike skills.
- ➔ Faulty equipment, such as lights or brakes.
- ➔ Poor road conditions, such as pot holes, broken glass or wetness.
- ➔ Other people.

Figure 5.16 The ‘Keep your head in a helmet’ campaign is an initiative to educate people about bicycle safety

Safe or unsafe?

This activity is designed to get you thinking about safe and unsafe bicycle riding.

- 1 Divide your page in half.
 - a On the left side make a list of what you think are unsafe cycling behaviours.
 - b On the right side, write 'yes' if each behaviour applies to you and 'no' if it doesn't.
- 2 In each case, explain why you ride safely or unsafely.
- 3 Share your answers in a class discussion.
- 4 Make a list of all the hazards in your local environment that could make cycling unsafe. For each, suggest a way to minimise the risk of accident.



Activity 5.12

Bike maintenance

If you own a bike you will want it to last, therefore you will need to look after it. Keeping your bike maintained is not only a great hobby but will also decrease the risk of you having an accident. Figure 5.17 provides some hints about how to look after your bike.

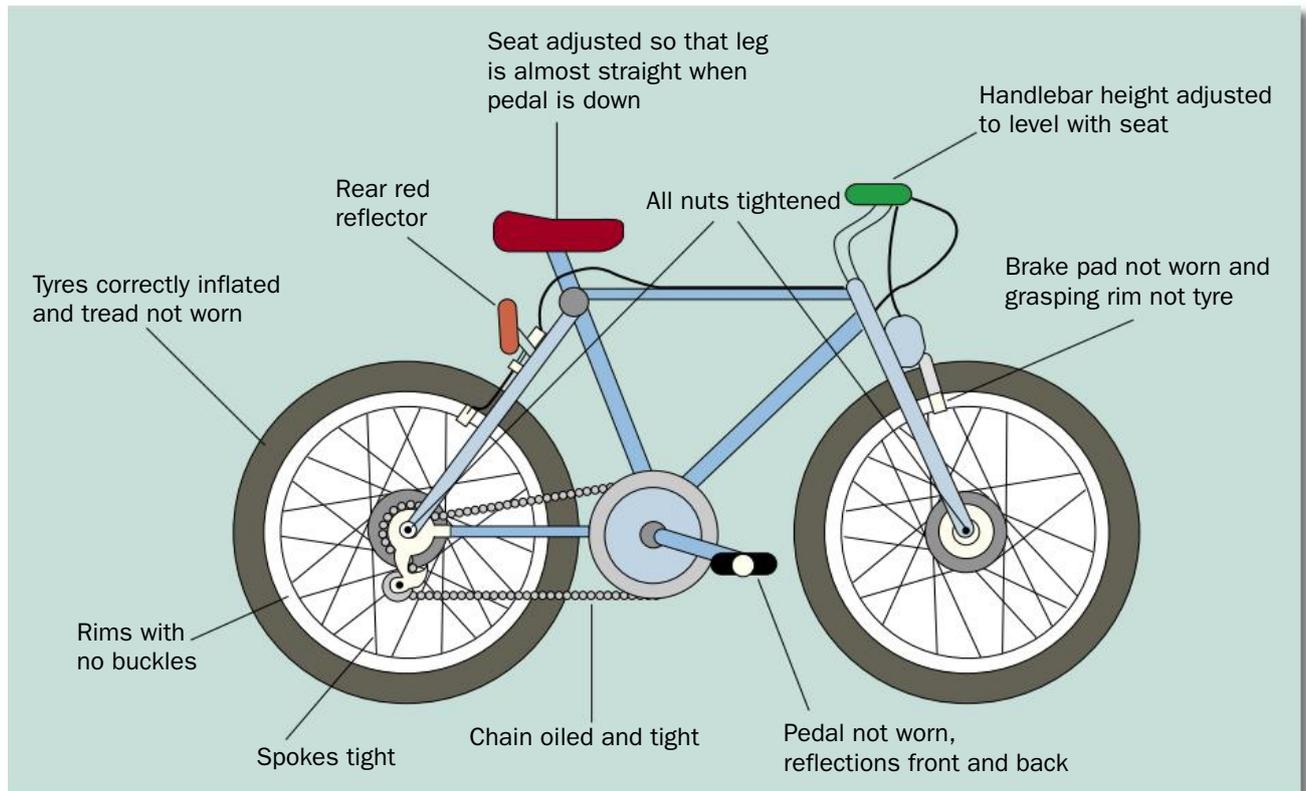


Figure 5.17 Bicycle maintenance

Figure 5.18 Where is the safety gear?



Cycling safety tips

- Wear your helmet—in Queensland it is the law that you must wear a helmet if you wish to ride on the road.
- Always ride on the left-hand side of the road.
- Avoid busy areas.
- Ride on bike paths wherever possible.
- Do not ride on footpaths.
- Follow road rules, traffic signs and traffic lights.
- Maintain your bike.
- Check parked cars for people on the driver's side to avoid a door being swung into you.
- Try to think about what cars will do next by watching for blinkers or brake lights.
- Constantly scan the road for pot holes, gratings, broken glass or stones.

Activity 5.13



Why can't I?

- 1** For each of the 'Why can't I?' statements in the table on page 275, write down a reason why you can't.
- 2** Share your answers in a class discussion. Change or add to your reasons after the discussion.
- 3** Write a report on a bike accident you have experienced, seen or heard about. Include in your report:
 - a** the incident
 - b** the cause
 - c** the injuries (if any)
 - d** how it could have been prevented.

Why can't I ...?	Reason
Ride on the footpath?	
Double my friend?	
Ignore traffic lights?	
Ride no hands?	
Hitch a ride on a slow truck?	
Ride three abreast with my friends?	
Ride without lights at night?	
Ignore 'Give way' or 'Stop' signs?	

Water safety

Australia is surrounded by water, and Queensland's climate encourages many aquatic activities. As a result, we have a very high rate of water-related accidents and injuries. We need to be able to reduce the risk of being a victim.

Every aquatic environment is potentially dangerous. If you can spot and understand the risks, you can make decisions about minimising harm.

Pools

With our warm climate it is no wonder that the number of private pools being built is increasing. As a result, the risk of pool-related accidents and injuries has also increased.

Every pool must be suitably fenced to comply with legislation regarding pool safety. In addition, pool owners and swimmers should be aware of the dangers of owning a pool and how to reduce potential risks and cope in emergency situations.

Enjoy your pool

- Swim with someone.
- Learn to swim competently in all depths of water.
- Do not swim if you have been drinking alcohol.
- Wait an hour after eating.
- Don't act foolishly—do not dunk or bomb people.
- Don't run around pools.



Figure 5.19 Developing water confidence is the first step to pool safety

Water deaths report shock

By Simon Atkinson

One Queensland toddler drowns or is rescued from the water every three days ...

Swimming pools remain the biggest risk, accounting for three in five drownings among children aged under four.

Seventeen per cent drown in the bath and the remainder in places such as ponds—even buckets ...

Pool drownings are at their lowest level for 20 years, thanks to improved fencing requirements.

But Royal Life Saving Society Queensland executive director Andrew Clements called for uniform statewide pool legislation.

'There have been improvements but 10 deaths is 10 deaths too many,' he said ...

Mr Clements also urged parents to watch youngsters near water. He said parents often became blasé when they saw a lifeguard, wrongly thinking he was responsible for their child.

The injury surveillance unit uses 1998–2003 data from 14 hospitals around the state. About 5000 people each year went to hospital emergency departments with injuries associated with water-related activity, with males outnumbering females by five to two.

Children aged 10–14 were most likely to be injured (18 per cent), followed by those aged 5–9 (13 per cent).

Most injuries happened on weekends, peaking between 3 pm and 4 pm.

Half the water-related injuries occurred in a river, creek, lake, sea, ocean or on the beach.

The Sunday Mail 19 December 2004

Activity 5.14



Sink or swim

Read the article 'Water deaths report shock' and answer these questions.

- 1 Why do you believe most injuries would occur on weekends?
- 2 What health campaigns have been introduced in an attempt to reduce the number of water-related accidents? Discuss your responses as a class.
- 3
 - a Using the statistics provided in the article, make a list of people who are most at risk of being injured.
 - b In pairs choose one of these 'risk groups' and discuss the reasons why people who fit into this category may be at a greater risk of being injured.
 - c What type of campaign could be introduced to educate these people and as a result reduce the statistics?

Lakes, rivers and dams

Many dangers arise when you are swimming in lakes, rivers and dams. These include strong currents, snags, rocks, varying depths of water, sudden temperature changes, steep drops and, in some cases, quicksand.

By following safety guidelines and by being aware of the environment you are in, you should be able to safely enjoy a day out at a river, lake or dam.

The beach

The movement of the sea and its conditions are constantly changing and you need to be able to read the water to reduce your risk of injury (see Figure 5.20).

Types of waves

Plunging waves

These are known as dumpers and occur when large waves break into shallow water. Dumpers are dangerous and swimmers can find themselves being pushed around by these waves. If you find yourself in this situation hold your breath, assume a tuck position and wait until the wave has passed.

Surging waves

These occur at steep, sloping beaches where the water becomes deep quickly. They don't break, but can force you out of your depth quite quickly.

Spilling waves

These are also known as breakers. These are ideal for swimmers and board riders as they peak in one place, then break gradually in either direction from the peak.

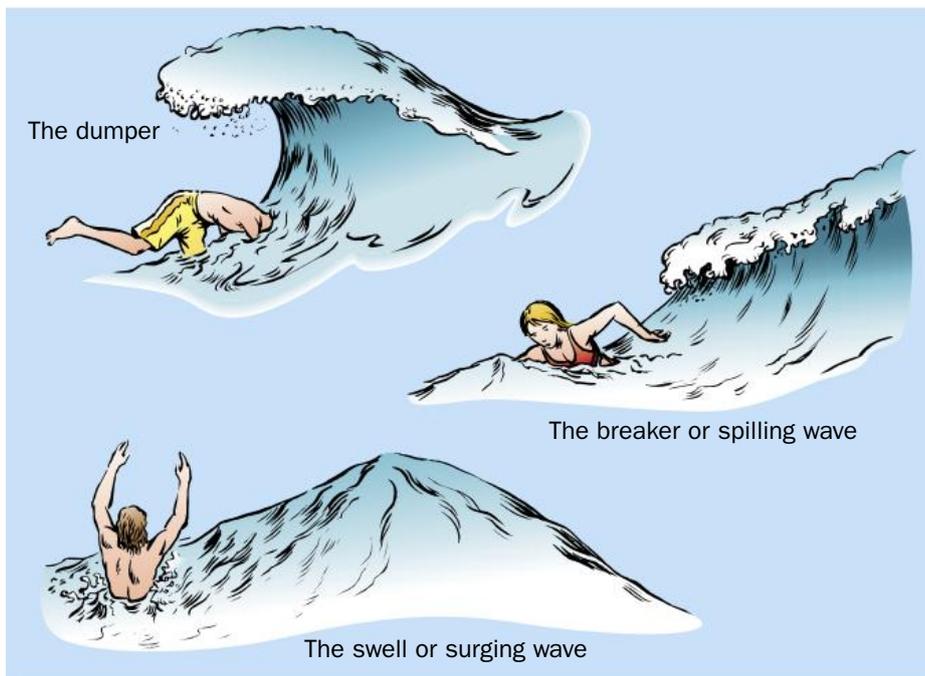


Figure 5.20 Types of waves

What is a rip?

A **rip current** is the major cause of beach distress and beach rescues. They are fast-flowing currents that move out to sea (see Figure 5.21 on page 278). You can see rips by looking for:

- ➔ sandy or darker water between two spots where waves are breaking
- ➔ foam or rippling water moving out to sea.

Rips are very dangerous because they can carry you out 200 or 300 metres very rapidly. Rips are usually fed by side currents called **sweeps** that can drag you along the beach and into the rip.

Figure 5.21 Escape paths from a rip

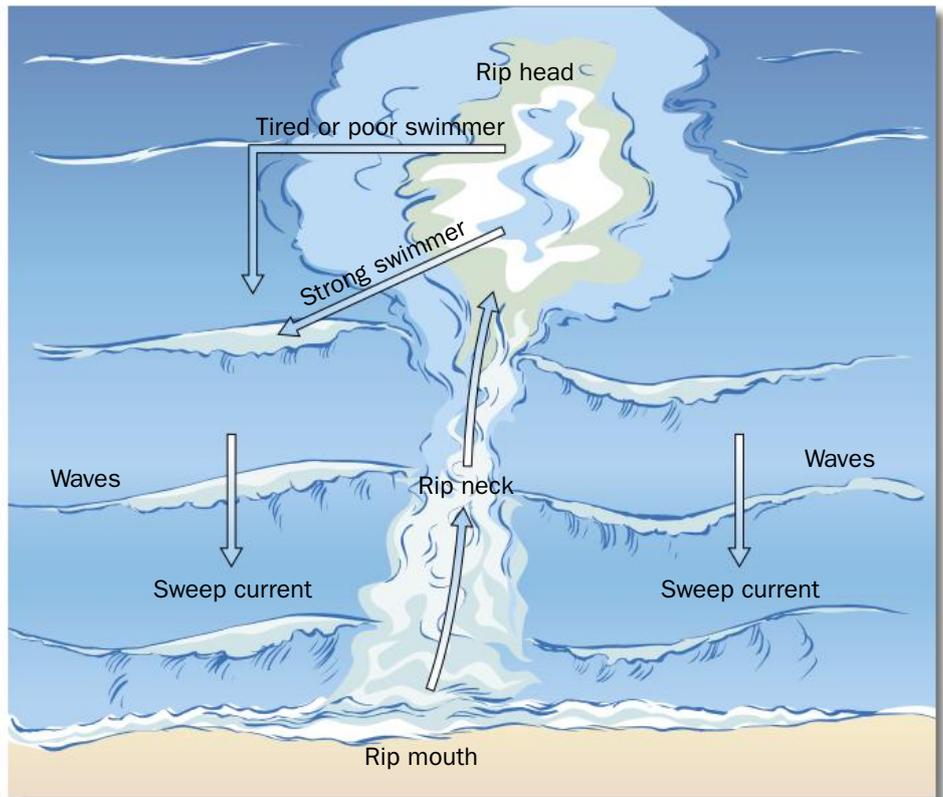


Figure 5.22 Read the signs

Safety at the beach

- Swim between the red and yellow flags—the patrolled area.
- Swim parallel to the shore.
- If using surf or boogie boards, stay in designated areas.
- Read warning signs and take note of other flags, then act accordingly.

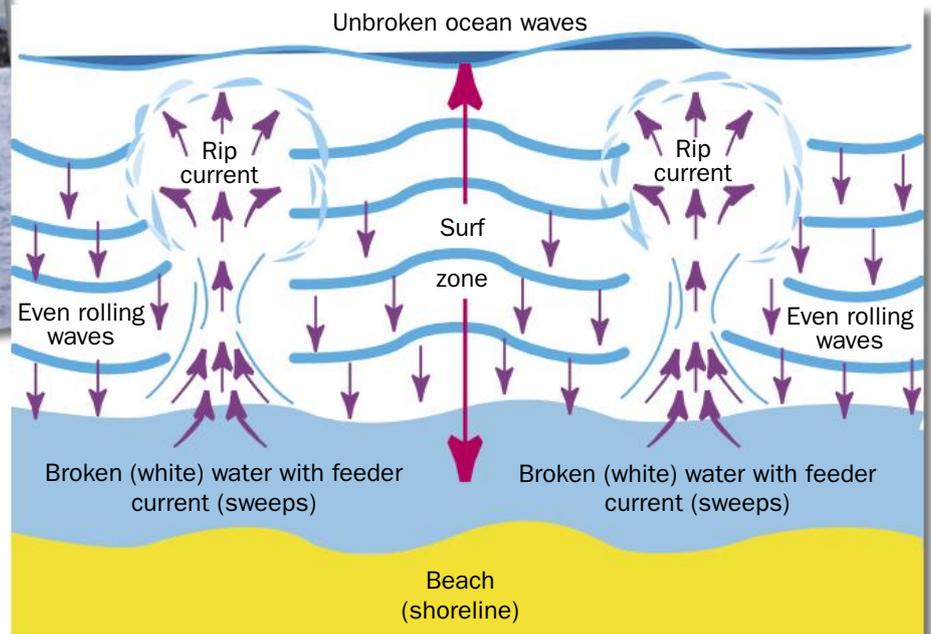


Figure 5.23 Reading a beach

Water safety tips

- Always take note of the environment.
- Look for and read any signs.
- Always swim with a partner.
- If in trouble stay afloat and raise your hand.



Figure 5.24 How many of these signs do you know?

Activity 5.15



Swim between the flags

- 1 Read the articles 'Record number of surf lifesavers to reduce coastal drowning this summer' and 'Fines for "outside the flags"' and answer the questions below.
 - a What is the main message behind both articles?
 - b What are the statistics regarding drownings and where they occur?
 - c How effective do you think shock tactics and fines would be in deterring people from swimming outside of the flags?
 - d What other means could be incorporated to get people swimming between the flags and as a result reduce drowning statistics? Discuss your ideas with the class.
- 2 Develop a list of safety guidelines for people going to the beach.
- 3 Do some research to find out what the different coloured flags indicate to swimmers.
- 4 Construct a sign that would help beachgoers understand the flags. To test its effectiveness, show it to your classmates and ask for their feedback.
- 5 As a class, discuss how you would feel if you were a lifeguard and you had to risk your life to save someone who was swimming outside of the flags.

Record number of surf lifesavers to reduce coastal drowning this summer

A record number of trained surf lifesavers will be patrolling beaches this summer, in a concerted effort to keep our beaches safe and reduce coastal drowning and injury, according to new figures from the country's major water safety and rescue authority, Surf Life Saving Australia (SLSA).

SLSA CEO, Greg Nance, said that 57 people drowned around the Australian coastline during 2004–05, a 42.5 per cent increase on the previous season, but below the five-year average of 58.

'Our surf lifesavers and lifeguards were involved in significantly more rescues and preventative actions last season (14 601 and 544 789 respectively), suggesting that the prevailing conditions were rougher, which is one explanation for the increase in the coastal drowning rate,' he said.

'With the support of government and partners such as DHL and Telstra, surf lifesaving services are constantly being expanded around the country to meet the organisation's goal of zero preventable drowning deaths.

'This season we will have more than 34 000 surf lifesavers on patrol around the country, the highest number in nearly 100 years. However, if beachgoers

continue to ignore basic safety messages by not swimming between the flags, people will still drown on our beaches,' he said.

The National Surf Safety Report, released to coincide with the first day of summer, found:

- Over 80 per cent of coastal drowning deaths were male.
- Just under half (44 per cent) of all drowning victims were people aged from 20 to 39 years.
- The majority (65 per cent) of people who drowned on the coast resided within 10 km of the coastline.
- Six international tourists drowned during 2004–05.
- One-third of coastal drowning deaths occurred in the month of January, while the daily rate of drowning was more than twice as high on a weekend when compared to a weekday.
- For deaths where the exact drowning location was recorded, just over half occurred within 1 km of patrolled locations.
- Coastal drowning was more frequent in fair and relatively benign weather and sea conditions.

National Surf Safety Surf Life Saving Australia,
1 December 2005

Fines for 'outside the flags'

By Lou Robson

Three in five survey respondents want beachgoers to be fined for swimming in unpatrolled areas.

Queenslanders have given the fines the green light but beach patrol authorities say they would need extra resources to police the law.

Sunshine Coast lifeguards said fines could reduce the number of people needing to be rescued but would turn lifeguards into beach police.

Maroochydore chief lifeguard Heath Collie said guards needed to focus on swimmers in patrolled areas rather than punishing those outside flagged areas.

'It's a fact that 95 per cent of rescues occur outside flagged areas,' he said.

'That means we already spend plenty of time watching over those swimming in unpatrolled areas.'

Noosa chief lifeguard Clint Irwin said swimmers should be responsible for their actions.

'I'd like to see people taking responsibility for their actions and simply swimming in a safe environment,' he said.

Surf Life Saving Queensland spokesman Peter Dawes said he would prefer 'education not regulation'.

16 January 2005

Help! I'm drowning!

It is essential that you are comfortable with emergency procedures that can be used in a crisis. When rescuing someone you need to act quickly and assess the situation to decide on the appropriate action to be taken.

- ➔ Be aware of your skill level.
- ➔ Look at the conditions and familiarise yourself with the type of danger the victim is in.
- ➔ Be aware of, and competent with, correct rescue procedures.

There are six choices you have when making a rescue, each depending on the degree of danger:

- | | |
|---------|---------|
| ➔ reach | ➔ throw |
| ➔ wade | ➔ row |
| ➔ swim | ➔ tow. |

The environmental conditions and the condition of the victim determine many factors of a rescue.

Swim rescues

You are not always able to reach a distressed person with a stick or rope, and if the water is too deep to wade, or you do not have a flotation device handy, you may have to make a swim rescue.

Swim rescues are dangerous and should only be attempted by good swimmers. The best idea is to swim out with some sort of aid such as a kickboard to throw to the victim.

Follow this sequence:

- ➔ Assess the danger of the situation and if help is nearby wait and keep an eye on the victim.
- ➔ If you have no help, swim out to the victim with your towing aid in front of you.
- ➔ Stop when you are approximately five metres from the victim. Take up a defensive position ready to push the victim away if they act dangerously.
- ➔ Talk to and reassure the victim. Explain what you are going to do and what you want them to do. Pass the aid to the victim.
- ➔ Tell the victim to assist by kicking. Tow them to safety, being careful to stay out of reach.

Figure 5.25 When towing a victim, ask them to assist you



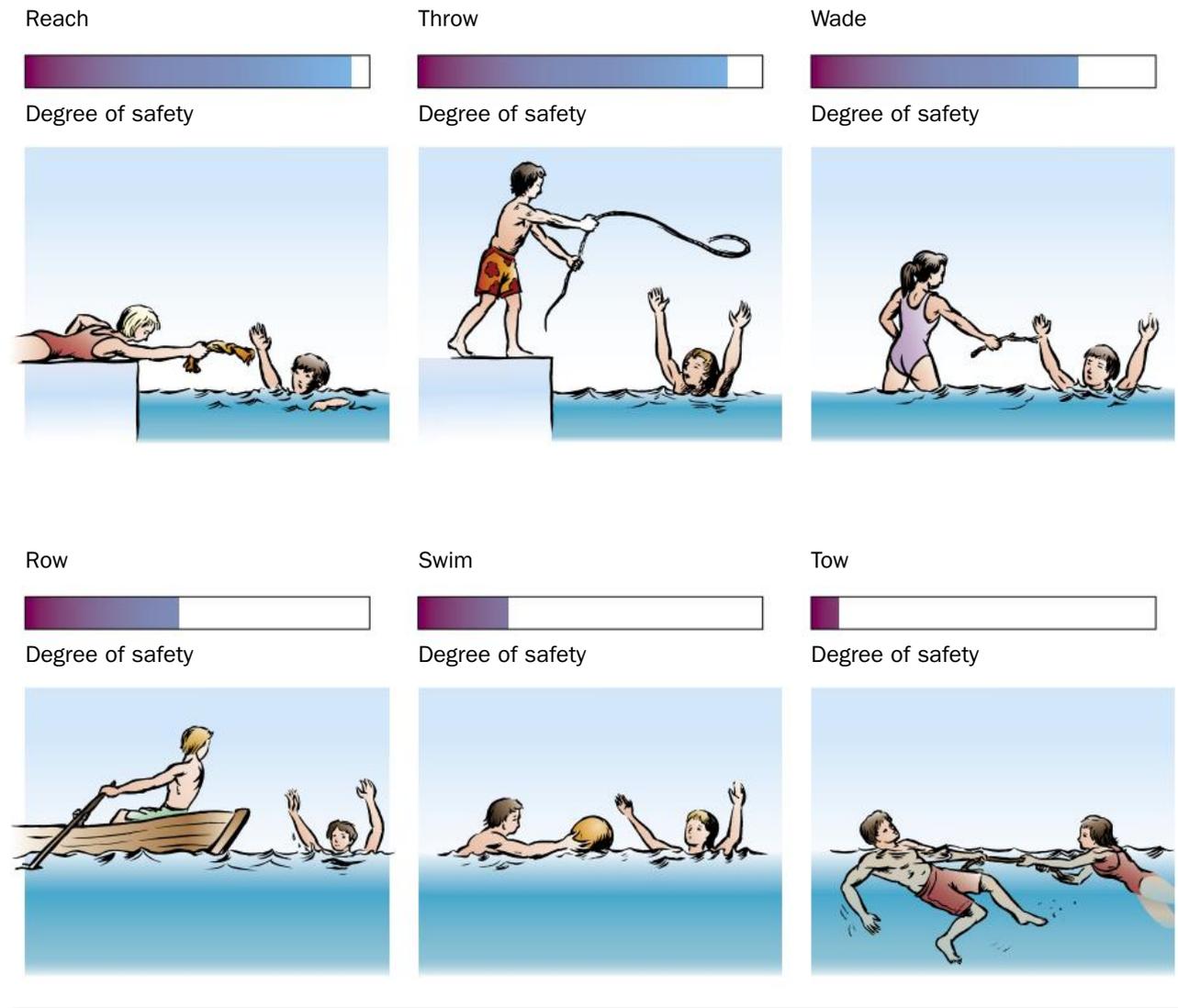
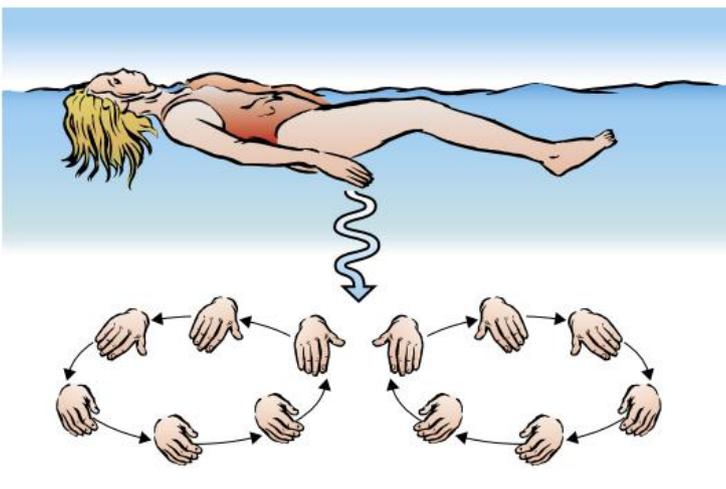


Figure 5.26 Rescue techniques

Water safety and survival skills

This section will give you the necessary information to practise your swimming and survival skills.



Sculling

Sculling is a minimum-energy hand movement used to help keep you afloat or move you about slowly while floating (see Figure 5.27). To scull:

- ➔ angle your hands at 45 degrees and push them away from your body as if you were pushing sand apart
- ➔ gradually flatten your palms, then bring your hands back to yourself as if you were pushing sand into a mound.

Figure 5.27 Sculling

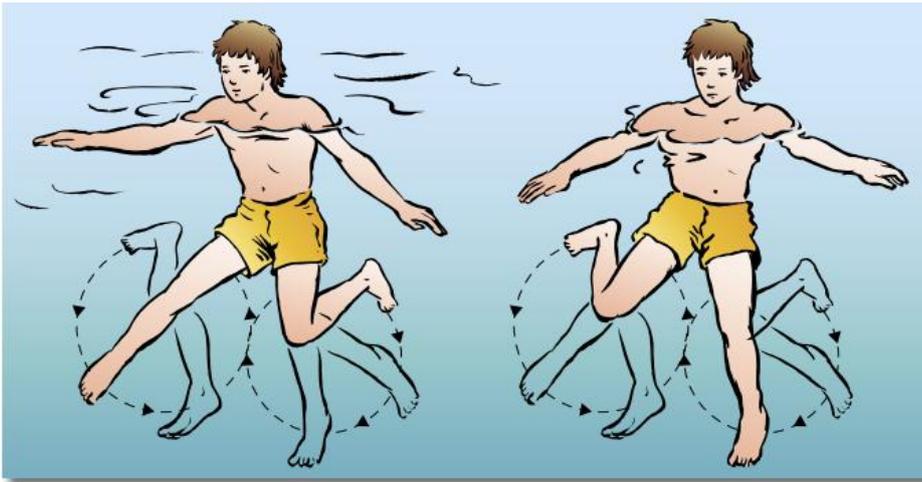


Figure 5.28 Treading water

Treading water

Being able to tread water allows you to stay in one position while you conserve energy and wait for help (see Figure 5.28).

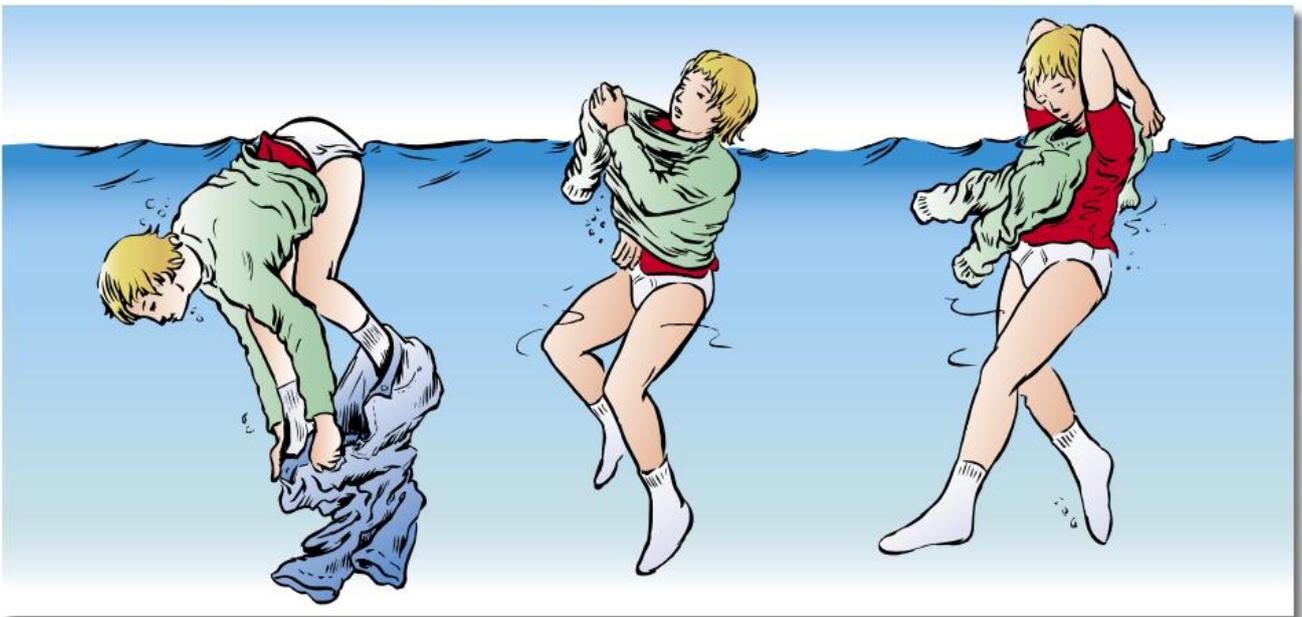
- ➔ Keep your body upright and scull with your hands.
- ➔ Use an 'eggbeater' kick to keep you afloat.

Removing clothing

Do not remove heavy or constricting clothes unless you need to swim a long way. In cold weather, keep on at least one layer of clothes to retain body heat. Clothing should be removed from the feet up.

- ➔ To remove your shoes, bring your knee to your chest and undo the laces. Then kick off the shoes as you tread water.
- ➔ Undo your pants or skirt at the waist. Take a deep breath, tuck up and slowly pull them off (see Figure 5.29)
- ➔ For upper garments, remove one arm at a time. Then with both arms roll it over your head (see Figure 5.29).

Figure 5.29 Follow these steps when removing clothing



Water entry

Slide-in entry

This is used when the water is dirty and you are unaware of the depth and condition of the water (see Figure 5.30).

- Sit down with your feet in the water. Slowly lower yourself into the water, feeling for objects with your feet.

Compact jump

This is used in deep water, especially if debris is floating on the surface (see Figure 5.31).

- Hold your nose.
- Wrap your other arm firmly over the top. Drop down vertically and tuck once you are under the water. This will stop you going too deep.

Standing dive

This is only done when you are certain of the depth and state of the water.

- Look at your desired entry point.
- Bend forward and bend your knees.
- Swing both your arms forward, straighten your legs and push off.
- Tuck your head between your arms and enter in a straight line (see Figure 5.32).

Surface dives

Surface dives can be used to escape danger quickly—especially threats such as an oncoming boat or surfboard—and to search for a person or object under the water.

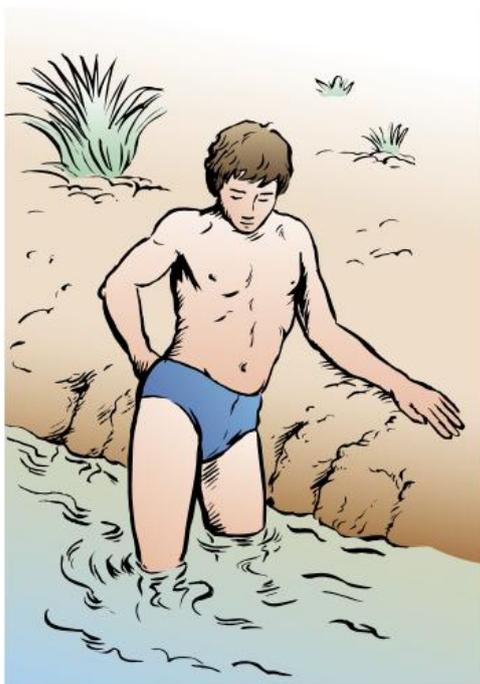


Figure 5.30 Slide-in entry

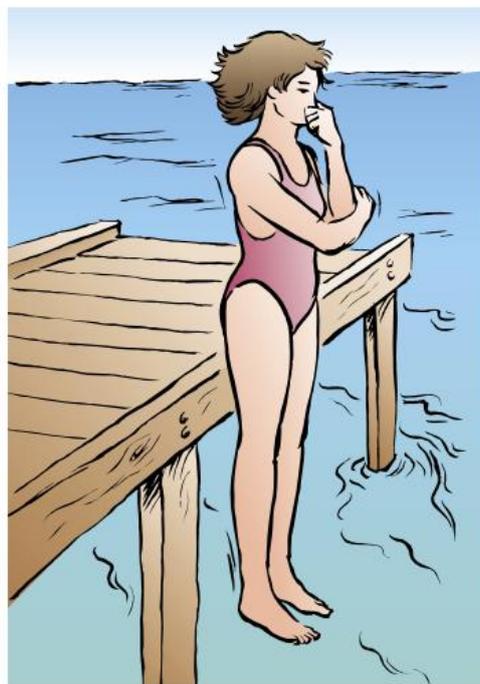


Figure 5.31 Compact jump

To duck dive:

- ➔ Pike at the waist and spear your arms straight down.
- ➔ Straighten both legs vertically, and spear down to the bottom (see Figure 5.33).

To feet-first dive:

- ➔ Raise yourself high in the water and push up hard with both arms.
- ➔ Keep your body straight. Continue to push up by bending at your elbows (see Figure 5.34 on page 286).



Figure 5.32 Standing dive

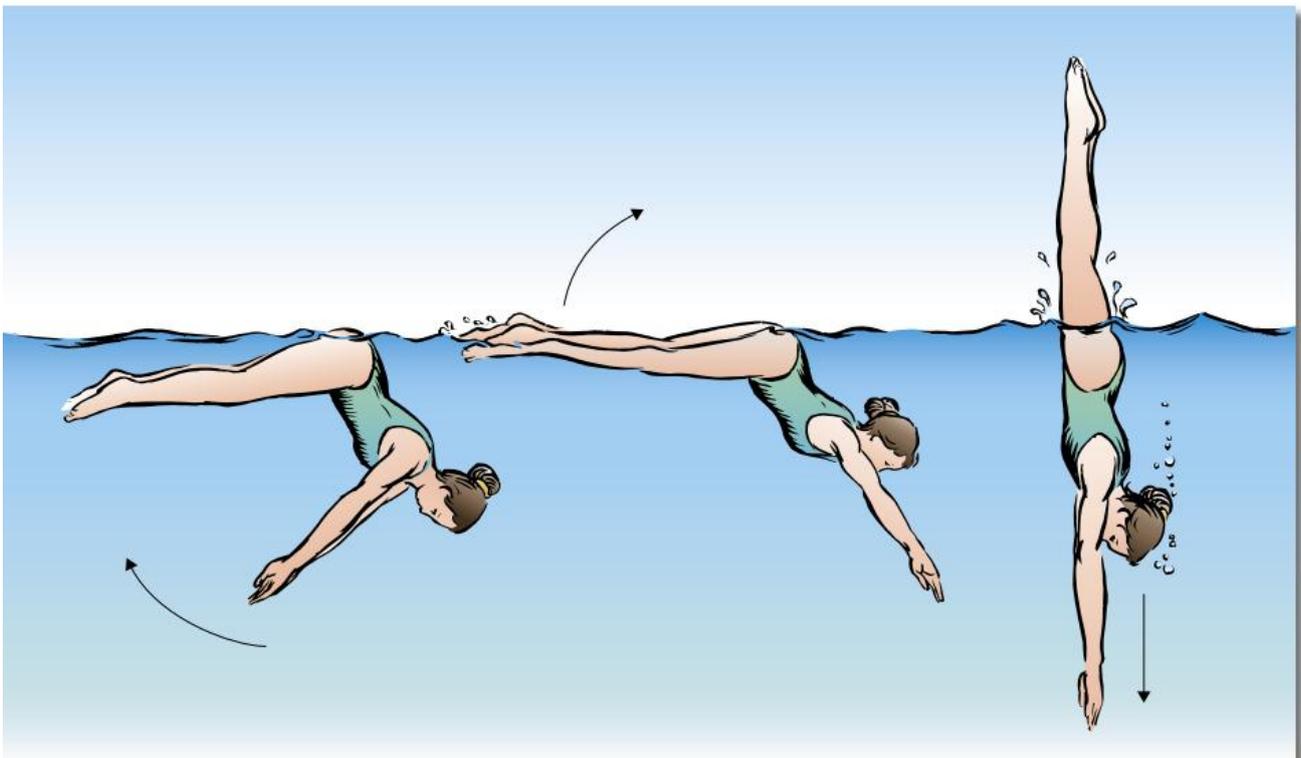


Figure 5.33 Duck dive

Figure 5.34 Feet-first dive

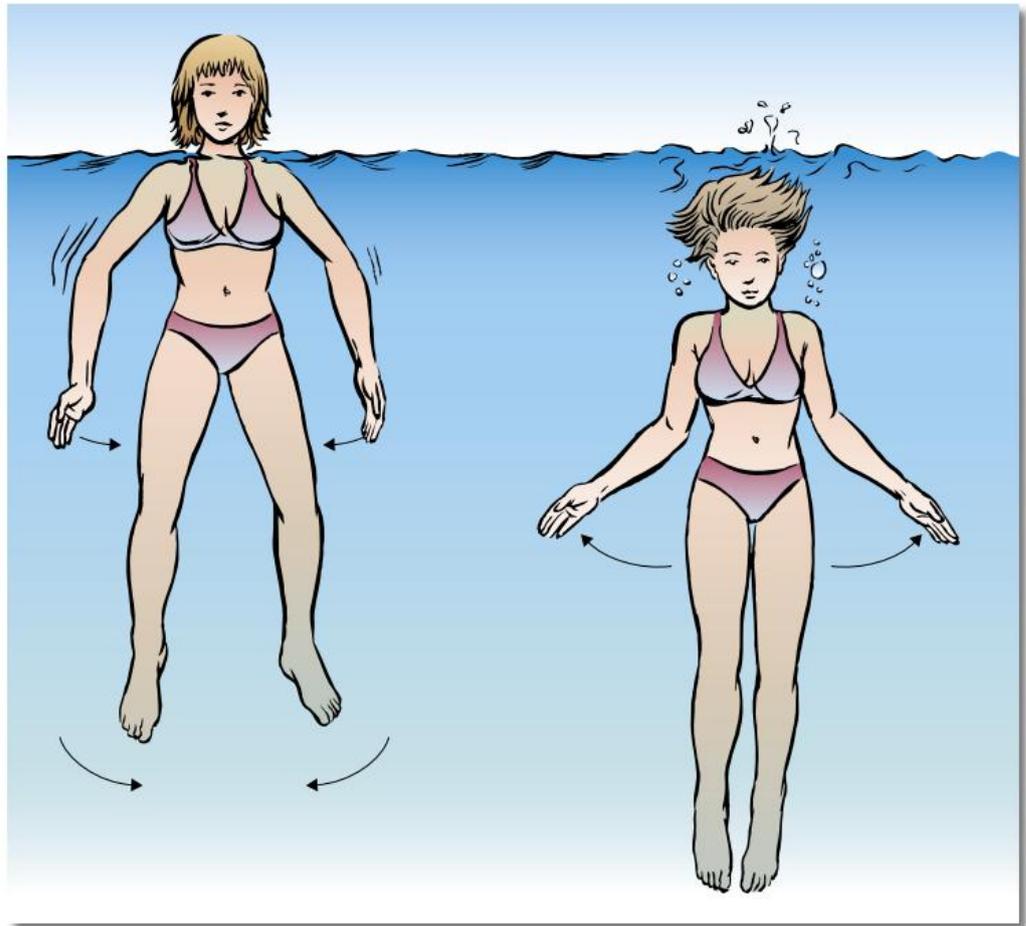


Figure 5.35 Leg block

Leg block

Sometimes, despite your safety precautions, the victim will lunge at you in panic and try to grab onto you. To stop him or her, push the victim away with your legs or submerge, swim backwards underwater, and pop up out of reach (see Figure 5.35).

Escape

If the victim succeeds in grabbing you, you will need to escape. The easiest way to do this is to submerge. A drowning person will let go quickly if they are pulled underwater (see Figure 5.36).

Cross-chest tow

If you have to tow a victim but you do not have a buoyancy aid, you will have to use the cross-chest tow:

- ➔ approach the victim from behind
- ➔ pass one arm over the shoulder and chest of the victim

- ➔ grip under the victim's armpit and using your elbow clamp them onto your side
- ➔ using sidestroke technique, tow the victim to safety.

Figure 5.36 An escape

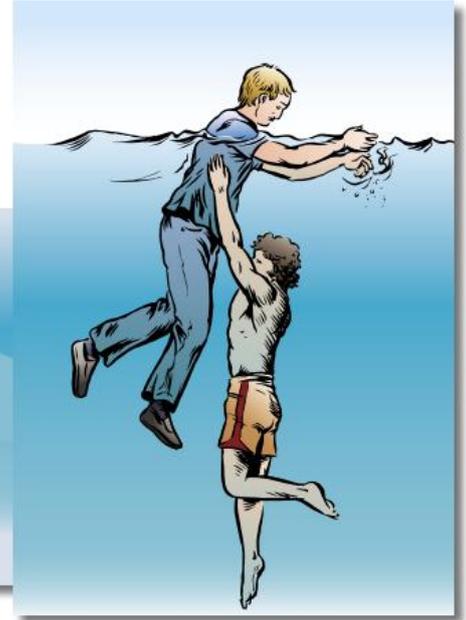


Figure 5.37 Cross-chest tow

Rescue action plans

Describe a rescue action plan, with diagrams where necessary, that clearly explains how you would act in each of these case studies.

Case study 1

You are caught in a strong rip with a friend at an unpatrolled beach. Your friend is a weak swimmer and you are both being swept out to sea. Some people are sunbaking on the beach.

Case study 2

You are having a picnic with a group of friends at a local dam. While enjoying your lunch under the shade of some trees, you notice an adult jumping into the dam for a swim. The adult finds the water too deep to stand in and begins to panic.

Case study 3

You are at a public swimming pool patrolled by pool attendants. While sitting on the side of the diving pool you see a girl pushed into the pool. As she falls into the water, she knocks her head against the concrete edge. The girl is unconscious as she sinks to the bottom of the pool.

Case study 4

You and your friend are in a canoe on a fast-moving river that has very steep banks. While you are passing through some white water, your canoe capsizes. The canoe has filled with water. Your belongings float out of the canoe and down river. Your friend has badly gashed an arm on a rock as he fell out of the canoe.



Activity 5.16



Figure 5.38 Never fish alone

Safety when fishing

- Never fish alone.
- Avoid slippery rocks.
- Check for hidden rocks, holes or ledges when wading.
- Watch for weather, tide or wave changes.
- Do not turn your back to the water.

Safety when boating

- Never boat alone.
- Do not over-load your boat.
- Check water and weather conditions.
- Tell someone where you are going and what time you expect to be back.
- Wear a personal flotation device (life-jacket).
- If the boat capsizes, stay with it. It will help you keep afloat and the rescuer will find you more easily.

Activity 5.17



Aquatic safety

- 1 Choose a water environment. Design a poster to show the most important safety tips. The messages should be clear, easy to read and illustrated with diagrams or sketches.
- 2
 - a How would you feel if you were a volunteer lifesaver giving up your free time to patrol a beach but people ignored your advice?
 - b How could people be encouraged to only swim between the flags?
 - c Apart from broken glass, what other sharp, highly dangerous objects can often be found on local beaches?

A final note

At no time should you put yourself in a position of danger. If you do not feel confident rescuing someone, get someone who can. The aim is to minimise harm—a dangerous situation does not need to be worsened by adding another victim.

Bush safety

Australia is a wonderful country with abundant forests and parks. To make sure your outdoor experiences are enjoyable as well as memorable follow this advice:

- ➔ Plan your trip and let someone know where you are going and when you will be back.
- ➔ Be prepared—take enough suitable clothing and footwear to get you through any weather conditions and emergencies.

- ➔ Always travel with friends or family.
- ➔ Ensure you have enough food, water and equipment to prepare meals.
- ➔ If camping out, ensure you have suitable gear.

Exposure problems

Exposure to the outdoors can bring with it several problems that could jeopardise your safety.

Hypothermia

Hypothermia occurs when your core (inner) body temperature drops, usually as a result of prolonged exposure to cold weather in wet clothes.

Symptoms

- ➔ uncontrollable shivering
- ➔ loss of coordination
- ➔ vague, uncooperative behaviour
- ➔ slow pulse and slow, shallow breathing
- ➔ unconsciousness and possible death

Treatment

- ➔ Follow the DRABCD action plan (see pages 296 and 298).
- ➔ Move the patient into a sheltered, warm, dry area immediately.
- ➔ Lay the patient on their back and keep them still.
- ➔ Keep the patient awake and wrapped in blankets or a sleeping bag.
- ➔ Give the patient warm drinks.
- ➔ If necessary, remove any wet clothing and put the patient into a sleeping bag with a companion stripped to their underwear.
- ➔ Under no circumstances should you attempt to speed up the warming process—this can do more harm than good.

Heat stroke

Heat injuries occur when you are exposed to humid and hot conditions, particularly if you are exercising. Excessive sweating and loss of body fluids occur which causes your core body temperature to increase. As this is a gradual process you may be unaware that it is occurring. This can have disastrous effects and can result in death if not treated.



Figure 5.39 Camping can be great fun as long as you are prepared

Preparation is the key—enjoy!

Figure 5.40 Excessive exposure to the sun can cause heat stroke



Symptoms

- ➔ feeling hot, exhausted and weak
- ➔ headache which may persist for hours
- ➔ thirst
- ➔ fatigue
- ➔ giddiness and fainting
- ➔ lack of coordination
- ➔ rapid breathing and pulse
- ➔ muscle cramps
- ➔ sweating initially but eventually failure of the sweating mechanism
- ➔ unconsciousness, blurred vision or irrational behaviour.

Treatment

- ➔ Follow the DRABCD action plan (see page 296).
- ➔ Move the patient to a shaded area.
- ➔ Undress the patient and apply cold packs to the neck, groin and armpits.
- ➔ Douse the patient with cold water by covering them with a wet towel.
- ➔ Get the patient to drink cool water at regular intervals until the sweating mechanism begins to function and their urine is clear.

Activity 5.18



Poor planning spoils your fun

- 1 Which factors should you take into account when planning the route for your next hike?
- 2 A contact person is someone that you contact if you have queries or problems. What part should a 'contact person' play? Who should this person be?
- 3 Read the following case studies. Describe the preventative measures you could take to make sure your fun is not spoilt by an exposure problem.

Case study 1

You and four friends decide to go on a mountain bike trip for four days over the summer holidays. The day before you leave, you check the predicted weather patterns and find that the temperature is expected to reach 35–40°C each day.

Case study 2

Over the spring holidays, you and six school friends decide to go on a three-day trip in the high country. The forecast is good, but the high country can be unpredictable.

Case study 3

You are on the first day of a four-day hike in a national park, which you and two friends have planned carefully. The weather is colder than expected and the going is tough. In the late afternoon, you reach a hut that is five kilometres short of your objective. Do you go on or camp there?

- 4 What should you keep in mind before lighting a fire during a backpacking trip?

Sports injuries

Sport is a popular activity within Australia where the climate and environment are conducive to participation. With this popularity comes an increase in injuries such as cuts, abrasions, soft tissue injuries, breaks and fractures.

Causes of injuries

- ➔ inappropriate training or technique
- ➔ inappropriate safety equipment
- ➔ disobeying rules and safety regulations
- ➔ not warming up or cooling down appropriately
- ➔ over-estimating ability
- ➔ accidental injury caused by environment or another person
- ➔ fatigue
- ➔ taking uncalculated risks.

Your history of injury

- 1 Using a table similar to the one below, make a list of all the sporting or recreational activities that you have participated in over the last 12 months.
- 2 List any injuries you have experienced as a result of the activities.
- 3 List the causes of each injury.
- 4 Suggest a way in which each injury might have been prevented.



Activity 5.19

Activity or sport	Injuries	Causes	First aid	Prevention
Surfing	Deep bruise	Landed on sharp nose of the board	None	Glue a rubber cone on the board nose

Preventing sports injuries

Prevention is better than the cure. You can do a lot to minimise the chance of becoming injured while playing sport. Do you follow the directions below?

- ➔ Always attend training.
- ➔ Always warm up and cool down.
- ➔ Wear correct safety equipment, clothing and shoes.
- ➔ Strap or tape vulnerable joints.
- ➔ Assess the environment (playing area and weather conditions).
- ➔ Take in fluids before, during and after the game.
- ➔ Follow a balanced diet.
- ➔ Obey the umpire and the rules.
- ➔ Do not over-train.



Figure 5.41 Stretching during a warm-up or cool-down reduces your chances of being injured

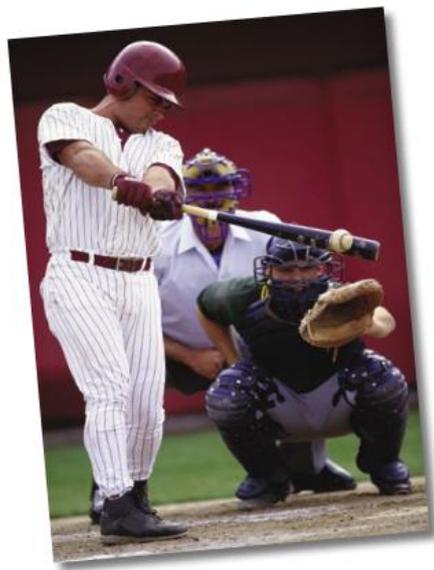


Figure 5.42 Headgear, mouth guards and gloves are worn to reduce the chance of injury

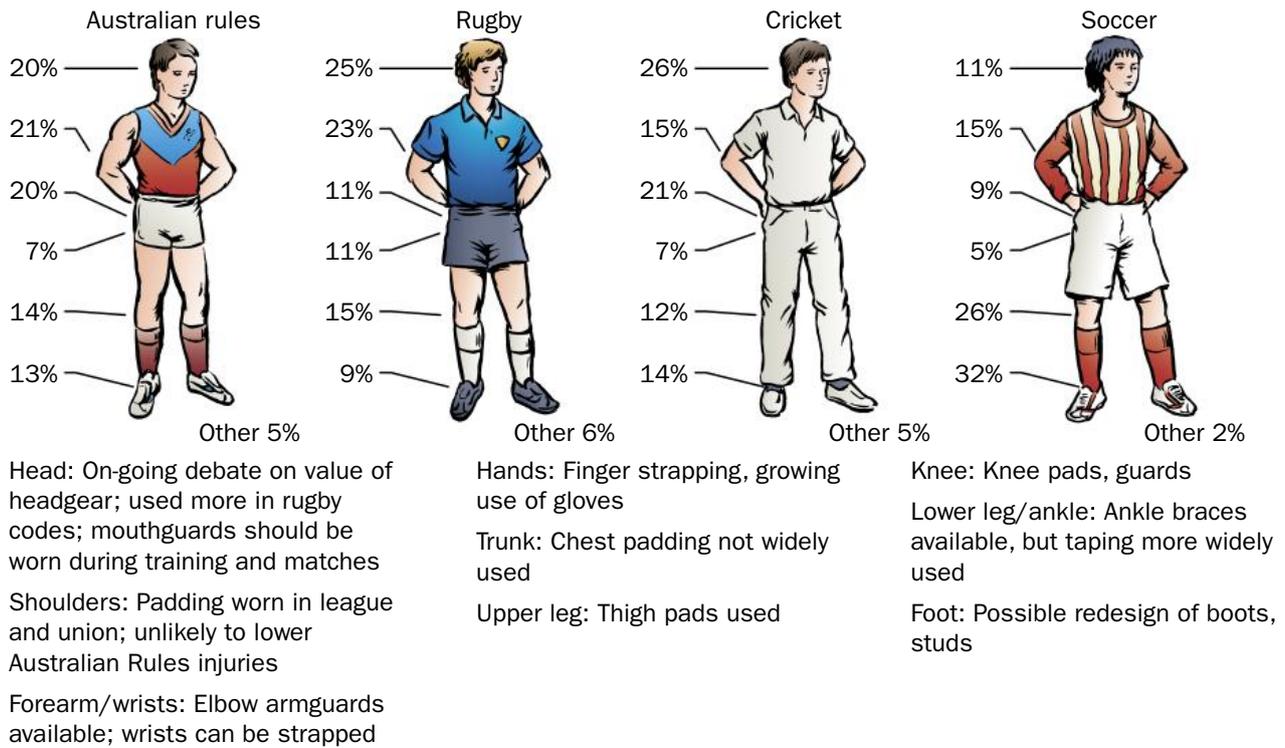


Figure 5.43 Sports injuries and possible prevention

Activity 5.20



Pad up

- 1 List at least two sports that require the safety equipment described in the table on page 293.
- 2 Why should protective equipment be worn during training?
- 3 Which body parts are most likely to be injured? Why?
- 4 Why do you think some people choose not to wear protective equipment?

- 5 How can people be encouraged to wear protective equipment?
- 6 Do you believe there should be laws or sports rules to make it compulsory for people to wear the necessary protective equipment? Why or why not?
- 7 What measures will you take in future to prevent injuries?

Protective equipment	Sports requiring this equipment
Head guards and helmets	
Mouth guards	
Sunscreen	
Shoulder pads or knee pads	
Elbow pads or wrist guards	
Gloves	
Chest pads	
Groin protectors	
Shin pads	
Boots and toe caps	

Injury rates peak with footy

By Vanessa De Groot

Crackin' up

45452	Sports injuries requiring hospital
22652	Fractures (most common injury)
12600	Football injuries (most common—all codes)
14218	Hospital visits by 0 to 14-year-olds (biggest age groups)

Severe sporting injuries are most likely to be in the form of a fracture sustained from playing a type of football, according to a recent report.

The Australian Institute of Health and Welfare (AIHW) report found that between 2002 and 2003, football codes including Australian rules (4000), soccer (3200) and rugby league (1600), were responsible for 12 600 (27.7 per cent) of hospital admissions from sport injuries.

NSW Injury Risk Management Research Centre director, Professor Caroline Finch, said the AIHW

report's information was worthwhile because it was first, but it was problematic in that it only dealt with the most severe injuries.

'Previous studies have shown fewer than 30 per cent of all sports injuries end up getting treated at hospital', she said.

'Fractures are the most common severe injury that led to hospitalisation, but in emergency departments there would be injuries like bruising and sprains.

'Some football codes might rank highly in severe injury, but overall injuries might get a different ranking.'

Sports physician Dr Peter Larkins said true community figures for sporting injuries were different from those in the AIHW report.

He said in terms of participation rates, the highest injury rate occurred in motorsports.

'You could say the most dangerous are motorsports, equestrian riding and ice and snow sport,' he said.

But at a community level, he said people were more likely to be injured playing Australian rules, netball, basketball and aerobics.

Other sports in the AIHW report that resulted in a high number of hospital admissions were water sports (2799), cycling (2725) and roller sports (2265).

Brisbane sports physiotherapist Scott Mackay said that in his experience touch football and netball were the two main sports that resulted in injuries. 'Even at a professional level, netball has the highest level of injuries that you get,' he said.

'The rules of netball are to accelerate and stop in two steps, which is not meant to sustain ankle and knee ligaments.'

He said 99 per cent of the time, netball injuries were to the ankles and knees but touch football injuries were varied.

The Courier-Mail

20–21 May 2006

Activity 5.21



Cutting out the risk

Read the article 'Injury rates peak with footy' and answer the following questions.

- 1 What reasons could be given for the high incidence of hospital visits for children between the ages of 0 and 14?
- 2 The article suggests that the most dangerous sports are motorsports, equestrian riding and ice and snow sports. What aspects of these sports make them dangerous?
- 3 In pairs, formulate a list of the reasons why injuries may occur in sport.
- 4 What can you do as either a player or official to ensure that the risk of injury is minimised when playing sport?
- 5
 - a Using the table below identify three sports and list the injuries that you believe would be common for each.
 - b Using your knowledge of these sports, identify rule changes that could be incorporated to minimise the incidence of these injuries occurring.

Sport	Possible injuries	Rule changes

First aid

First aid is the emergency care of yourself or someone else when an accident occurs. Your aim as the first aider is to make the patient safe and to begin treatment so the injury will not get worse. It is important to remember that your safety as a first aider is most important. Always keep in mind the question: who would be there to help if something happened to you?

Injury examination

No matter how hard you try to reduce risks, some accidents will still occur. You must be prepared to act in a situation where an emergency arises. For example, what would you do if you were walking through a local park and saw a small girl on the ground, crying, holding her hand over her left eye?

Examination precedes treatment

When dealing with injuries, you can follow a sequence to ensure you provide the appropriate treatment and support where necessary. All you have to do is remember the following sequence.

SALTAPS

- ➔ **Stop**—stop what you are doing as soon as an injury occurs. This may mean stopping a game.
- ➔ **Ask**—ask the patient questions to find out about the injury. What happened? Where does it hurt? Did you hear a noise when you hurt it? It may also be appropriate to ask other people who saw the accident what happened.
- ➔ **Look**—look at the environment to see if there are any clues as to how the injury occurred. Look at the injured area to see if there is any bleeding, bruising or swelling. Look at the patient to see how stressed they are.
- ➔ **Touch**—carefully touch around the injured area to assess what area is harmed and how bad it is.
- ➔ **Active movement**—ask the patient to move the injured limb. If they cannot, do not perform the next step. If they can, test for full range of movement in the limb as a whole and the joints above and below the injury. Feel the injured area during movement for any clicking, grating or creaking.
- ➔ **Passive movement**—when you are certain of the full range of possible movement, you can gently move the part through its range of movement without forcing it. This will give you the final information before proceeding to the next step.
- ➔ **Stand up**—can the injured person stand? Can they bear weight on the injured leg or hold an arm against pressure? Can the patient walk? Can they run? In cases of head injury or suspected concussion, check that the patient knows what is going on. By using this guide, you may one day save yourself or someone else a lot of pain and damage.

Remember

- ➔ If you cannot do any step **do not** continue to the next step—seek help immediately.
- ➔ If the patient is bleeding, control bleeding before using these steps.
- ➔ If the person is unconscious, you must use the DRABCD formula (see page 296).



Figure 5.44 When a person is injured ask them questions to find out what happened

First aid treatment

If you see an unconscious person, follow the DRABCD formula:

- **Danger.** Look to see if the environment is safe for the patient, bystanders and yourself. Wear gloves if available.
- **Response.** Check for signs of life: talk to the patient, shake their shoulders and squeeze their hands to see if they respond.
- **Airways.** If possible, place the patient into the recovery position and check to make sure their airway is clear and open.
- **Breathing.** Look to see if the patient's chest is moving, listen and feel to see if the patient is breathing. If not, give two breaths.
- **Compressions.** If the patient is not breathing properly and is unconscious, begin cardiopulmonary resuscitation (CPR). Resuscitation should be performed at a ratio of two breaths and 30 heart compressions on a cycle of 100 compressions per minute.
- **Defibrillator.** Attach a defibrillator. Only qualified people are allowed to use defibrillators. As a first aider you are responsible for carrying out CPR until help arrives.

New kiss of life comes to the rescue

By Peter Hall

Surf lifesavers have been told to forget the 'kiss of life' they have used for 20 years.

More than 90 000 beach rescue volunteers—20 000 in Queensland—will be retrained as part of a resuscitation revolution sparked by radical new international research.

In a dramatic break from tradition, latest evidence shows it is better to give patients less oxygen by mouth to mouth and use more rapid heart compressions.

The long-standing method has been five quick breaths, followed by two breaths and 15 compressions every 15 seconds.

This has been changed to two breaths and 30 compressions, with the goal being to manually pump the heart 100 times in a minute.

The new guidelines have been set by the Australian Resuscitation Council, which represents major groups involved in the teaching and practice of resuscitation.

Spokeswoman Carol Carey said surf lifesavers were not the only ones reacting to the findings.

Doctors, hospital staff, paramedics, Royal Life Saving, Australian Red Cross and St John Ambulance also have embraced the recommendations, to be incorporated into all first aid courses for the public.

'Resuscitation is now easier to learn, easier to teach and much more effective,' Ms Carey said.

Surf Life Saving Australia national lifesaving coordinator Tim Ryder said the changes did not mean previous techniques were wrong or harmful, just that they could be improved.

Mr Ryder said the biggest benefit was that cardiopulmonary resuscitation (CPR) had been made much simpler for everyone.

...

'The hardest aspect will be the increase in the number of chest compressions, which will be really exhausting.'

Another major change is the removal of pulse checks in favour of looking for 'signs of life' in a victim.

This means rescuers can start CPR sooner and not have to interrupt treatment.

It was previously thought doing chest compressions on someone whose heart was still beating could harm them. This is no longer a key concern.

The resuscitation research, conducted by the International Liaison Committee on Resuscitation, included findings from Britain, South Africa, Australia, the US, South Africa and Canada.

The changes

- Patients should only be given two quick breaths, not five as previously taught.
- Don't look for a pulse, look for 'signs of life' i.e. any response to noise, having hands squeezed, or shoulders shaken.
- Resuscitation should now be performed at a ratio of two breaths and 30 heart compressions on a cycle of 100 compressions per minute.
- If there are two operators, they should change every two minutes to avoid fatigue due to the dramatic increase in the number of compressions.
- The most important advice for novices is to call 000, or 122 from mobiles, and do some CPR even if you are not exactly sure of the ratios.
- Resuscitation courses are available from organisations including St John Ambulance, the Heart Foundation, Surf Life Saving and Royal Life Saving.

The Australian Resuscitation Council (www.resus.org.au)

The Sunday Mail 13 August 2006

Figure 5.45 CPR



a Pistol grip and head tilt

b Seal and blow

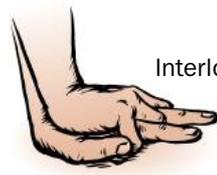
c Watch the chest fall
or look for signs of
air being expelled



Locating the heart

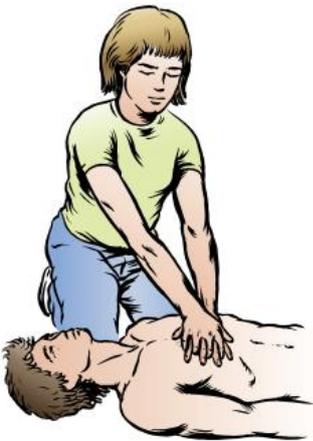


Positioning the hands



Interlocked fingers

Hand position



1 operator



2 operators

Basic life support flow chart

D

Check for **DANGER**



Hazards/risks/safety?

R

RESPONSIVE? (Unconscious?)



**If not, call for help
Call 000/resuscitation team**

A

Open **AIRWAY** Look for signs of life



B

Give 2 initial **BREATHS** if not breathing normally



C

Give 30 chest **COMPRESSIONS** (almost 2 compressions per second) followed by 2 breaths



D

Attach **AED** as soon as available and follow its prompts



Continue **CPR** until qualified personnel arrive or signs of life return

**NO SIGNS OF LIFE = Unconscious, unresponsive,
not breathing normally, not moving**
AED = Automated external defibrillator

© Australian Resuscitation Council 2006

Figure 5.46 In an emergency follow the DRABCD action plan

Treating injuries

When treating injuries, always begin by following the DRABCD action plan.

Shock

Patients may suffer shock following an accident. **Shock** means that the body is in a state of collapse. It can be caused by severe fright, injury or a strong electric current passing through the body.

Symptoms

- ➔ pale skin
- ➔ weak pulse
- ➔ shallow rapid breathing
- ➔ dizziness or fainting
- ➔ nausea.

Treatment

Place the patient in recovery position, keep them warm with a blanket, and keep checking their condition. Seek medical advice.

Life or death

- 1 Divide the class into two groups: first aiders and patients. The first aiders should leave the room while the patients use seats and benches to set up a bus crash scene. On returning to the scene, the first aiders must treat the following:
 - a one patient with a suspected fractured arm
 - b one patient needing CPR
 - c one unconscious patient only just breathing
 - d one person suffering from shock
 - e four patients with minor cuts and bruises (but are moaning a lot).
- 2
 - a You are leaving a party accompanied by a friend. Your friend trips and falls, knocking himself unconscious. What do you do?
 - b When your friend regains consciousness, he tells you he can't move his ankle. What do you do?
- 3 You find a team-mate writhing on the ground in pain. What should you do?



Activity 5.22

Concussion

Concussion is having your brain shaken badly as a result of a blow to the head. You may experience loss of consciousness, memory loss, double or blurred vision, or feel sick or dizzy and unsteady. Concussion is a serious condition and if unconsciousness does occur, it is essential that the patient visit the doctor.

Treatment

- ➔ If there is no other head injury, place patient in recovery position.
- ➔ Keep a check on breathing and general condition.
- ➔ Seek medical help.
- ➔ Under no circumstances should an injured sports person return to play.

Soft tissue injuries

Soft tissue injuries include bruising, sprains to joints and strained or torn muscles. These are very common injuries and the quicker the treatment, the quicker the recovery time.

When you damage your soft tissues, bleeding occurs, resulting in swelling. The more swelling there is, the longer the healing process.

Treatment

RICES

- ➔ **Rest**—if you remain active while injured, your recovery time increases and more damage may occur.
- ➔ **Ice**—do not apply heat. Apply an ice pack wrapped in a thin towel and hold ice on the injury for 15 minutes every hour for 48 hours. The ice constricts capillaries, therefore reducing swelling. The numbing effect also alleviates pain and discomfort.
- ➔ **Compression**—apply pressure around the injury with tape or a bandage. This inhibits internal bleeding resulting in swelling reduction.
- ➔ **Elevation**—raise the injured body part above the level of your heart. Blood flow is reduced as the blood has to go up hill.
- ➔ **Seek**—medical attention.

Figure 5.47 Apply an ice pack wrapped in a thin towel to the injured area



Muscle soreness

When you exercise, your muscles produce a waste product called **lactic acid**. If you do not cool down appropriately, the lactic acid will remain in your muscles and, as a result, cause discomfort.

Treatment

- ➔ Perform light exercise.
- ➔ Gently stretch the area.
- ➔ Apply heat and massage.

Fractures

There are three main fractures (see Figure 5.48):

- ➔ greenstick, when break is incomplete (most common fracture)
- ➔ simple fracture, when the bone is broken right through
- ➔ compound fracture, when the broken bone pierces the skin.

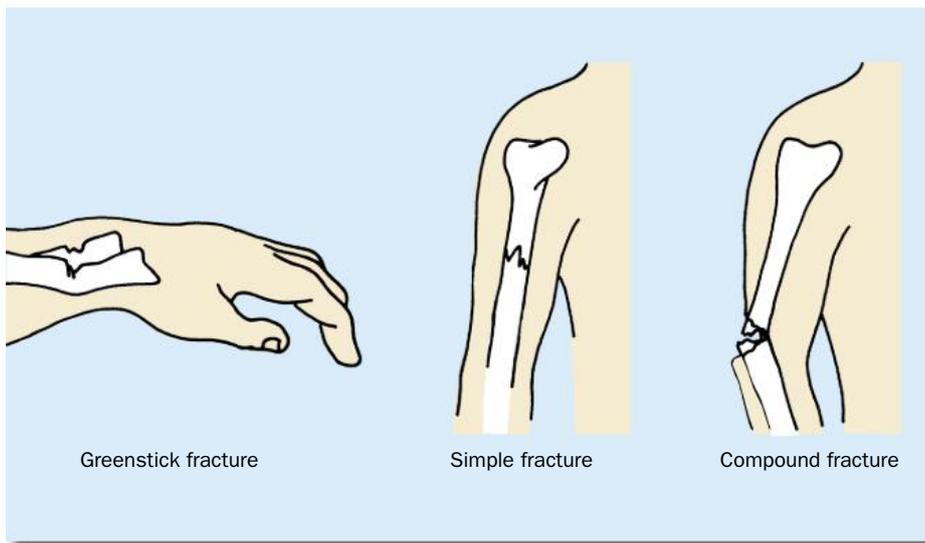


Figure 5.48 Types of fractures

Signs and symptoms

- ➔ severe pain
- ➔ loss of joint movement
- ➔ deformity
- ➔ tenderness
- ➔ rapid swelling
- ➔ nausea or loss of consciousness.

Treatment

If you suspect a fracture:

- ➔ Apply ice carefully to the area.
- ➔ Elevate the part in a sling or splint (for example, a doubled-over newspaper or towel).
- ➔ Monitor the circulation to the area.
- ➔ Seek medical attention immediately.

Spinal injuries

Spinal injuries are very dangerous as they can result in permanent damage.

Symptoms

- acute back pain
- tingling or loss of movement in arms or legs
- numbness in limbs.

Treatment

- Do not move the patient.
- Clear the area and ring for the ambulance immediately.
- Keep the patient calm until help arrives.

Cuts (bleeding)

Treatment

- Apply direct pressure to the wound with a clean bandage or piece of material to stop blood loss.
- Elevate cut to reduce blood flow to the area.
- Secure the affected area with a bandage.
- If bleeding continues, apply another dressing over the top of the initial dressing. Do not remove the first dressing.

To treat a badly gashed arm:

- Lay patient down.
- Apply pressure and firmly bandage the wound.
- Raise the patient's arm and monitor circulation (see Figure 5.49).



Figure 5.49 Elevate and apply pressure

Burns

Burns can be caused by fire, contact with hot objects, electric currents, steam or friction.

Treatment

Hold the injured area under cold running water for at least ten minutes, then cover it with a sterile, non-stick dressing. If possible, remove clothing around the affected area. If serious, keep the patient calm and seek medical attention immediately.

Bites and stings

In Queensland, you can be bitten by many different poisonous fish, spiders, animals, reptiles and insects.

Treatment

Pressure immobilisation is the best way to treat:

- ➔ bites or stings from box jellyfish, funnel web spiders, snakes or blue ringed octopi
- ➔ allergic reactions to bee, wasps, ticks or venomous fish.

To apply pressure immobilisation (see Figure 5.50):

- ➔ Use a bandage or piece of pantyhose or other material to apply pressure over the bite area.
- ➔ Make a bandage that stretches from the bite to the fingers or toes, then up to the armpit or groin.
- ➔ Bandage as much of the limb as possible, then urgently seek medical treatment.

Treatment for a red back spider bite:

- ➔ Apply ice.
- ➔ Seek medical attention.

Note: It is important not to wipe the area, especially in the case of venomous bites. Doctors use the venom still on the wound to diagnose treatment.



Figure 5.50 Pressure immobilisation

Contacting emergency services

If you have an emergency and need help quickly, either send someone for help or dial 000 (122 from a mobile). When the operator answers, calmly but quickly tell them what you need. This includes:

- the service you require (police, fire or ambulance)
- the problem
- your name, location and phone number
- the estimated time of arrival of help.

Activity 5.23



It's in your hands

- 1** Join up with a partner to practise your emergency treatment of an unconscious person. Take it in turns to practise the following:
 - a** Check for dangers; shake and shout; turn on side; and clear and open the airway.
 - b** Look, listen, feel; then turn the patient onto their back and place your hands ready for CPR.
 - c** Simulate giving two initial breaths by breathing out next to your partner's face.
- 2** Using the table below, make a list of all the injuries you have had in the last two years.
 - a** For each injury, write down the first aid treatment you received.
 - b** Given what you know now, what treatment would you administer? An example is shown in the table.

Injury	First aid given then	First aid you would give now
Sprained ankle	Hot bath	RICES

Rehabilitation—recovery from injuries

Rehabilitation is the process of strengthening your body during recovery from an injury, so that it functions properly again. In the event of a serious injury, you may need to visit a doctor or paramedic to receive specialist treatment. These people will help you on the road to recovery by explaining what you need to do to strengthen any weak limbs.

What can you do?

If you decide that your injury does not need medical attention, there are still a few things you can do.

Soft tissue injuries

- Apply RICES for the first 48 hours.
- Between 48 and 72 hours after your injury, alternately apply hot and cold to the area, that is, a hot towel for five minutes followed by an ice pack for five minutes.
- From 72 hours onwards, apply heat only in the form of massage, baths and ultrasound. If at any time swelling returns, go back to RICES.

All sports injuries

- Increase activity within pain limits. Begin with stretching and move on from there.
- Increase strength and endurance by taking up weight and resistance training.

- ➔ Maintain aerobic fitness by performing an alternative, appropriate activity, for example, swimming.
- ➔ A skateboard or wobble board is excellent for regaining flexibility and balance after joint injury.

Aches and pains

- 1 You are playing basketball at lunchtime. As you land after making a great rebound, you stand on a friend's foot and sprain your ankle badly. Describe how you would:
 - a treat
 - b rehabilitate
 this injury so that it is unlikely to happen again.
- 2 You have physical education tomorrow in period 2. Your calves are sore from aerobics yesterday. You could:
 - Get a note from your parents saying you cannot do PE.
 - Get a note explaining the situation and that you will do your best in PE.
 - Go to PE without a note or gear.
 - Go to PE without a note and put up with the pain.
 - a Which action would be best for your health?
 - b Could you have done anything else?
 - c Share your thoughts in a class discussion.
- 3 You are playing in a netball team. A team-mate goes to catch a pass but drops the ball, then clutches her hand to her abdomen. You go to assist.
 - a How do you examine the injury?
 - b It turns out to be a sprained finger. Describe how you would treat the injury over the next three days.
 - c What could you recommend to your friend to rehabilitate the injury?
- 4 Your friend must play netball four days later. She is worried that she will aggravate the injury. How could she prevent further damage?
- 5 For the following injuries, write a list of services you could access for help.

Injury	Service
Suspected fracture	
Torn hamstring muscle	
Concussion	
Sunburn	
Shock	



Activity 5.24

Drugs

The National Drug Strategy defines harm minimisation as ‘a range of approaches to prevent and reduce drug-related harm, including prevention, early intervention, specialist treatment, supply control, safer drug use and abstinence’.

This is done by educating people about drugs through health promotion, providing information about alternatives, laws and regulations, and informing people about safety precautions related to drug taking. For example, the QUIT smoking campaign publicises the effects of cigarettes on the body, provides information on how to quit smoking and offers support when you give up.

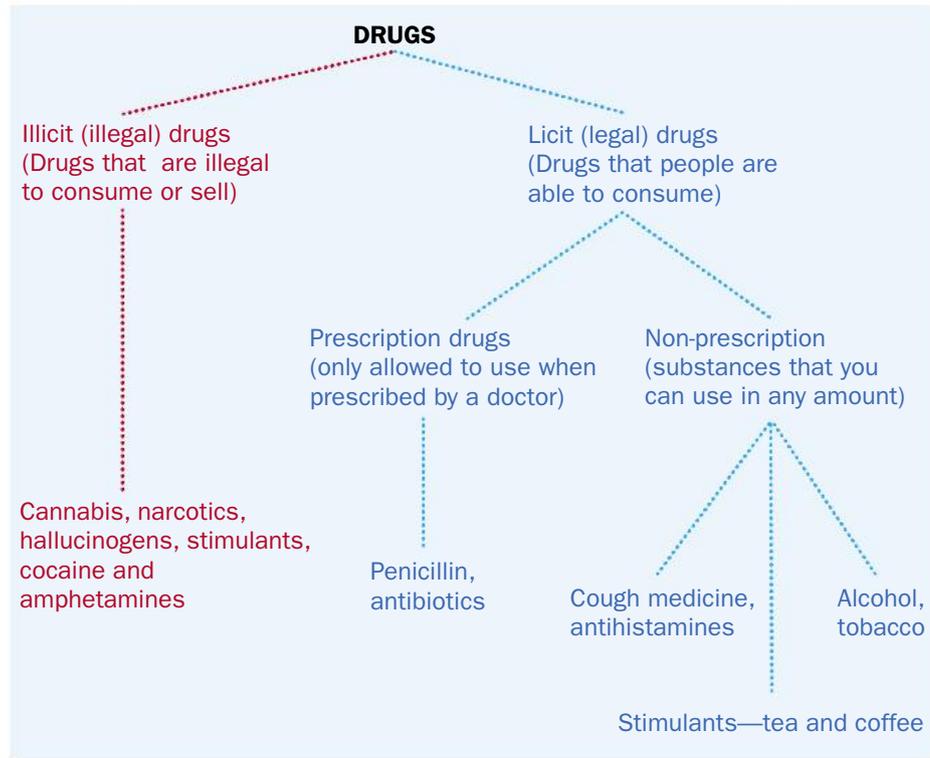
Harm minimisation does not condone drug use but it is a positive means of preventing or reducing risks.

What is a drug?

A drug is any chemical substance that changes the physical, mental or emotional state of the body. Drugs can be separated into two main categories—illicit (illegal) and licit (legal) drugs (see Figure 5.51).

All drugs affect you in a variety of ways and they should only be used to benefit your health. It is important to note that if used incorrectly or in excess, drugs may, and in many cases do, cause harm.

Figure 5.51 Drugs



Why do people take drugs?

Drugs are taken for various purposes and to bring about a variety of responses.

- ➔ **Stimulants** have the capacity to temporarily speed up your body processes and as a result give a feeling of a burst of energy.
- ➔ **Depressants** have the capacity to slow down vital activities and calm a person down.
- ➔ **Hallucinogens** are drugs or chemicals capable of making you hallucinate or alter your perception of what is happening around you, for example, you may see visions or hear voices.
- ➔ **Inhalants** are drugs that are taken by breathing or inhaling them into your system.

Many adolescents use drugs on a weekly basis and, like adults, take drugs for a variety of reasons:

- ➔ to prevent illness
- ➔ to cure diseases
- ➔ to feel better
- ➔ to improve sporting performance
- ➔ to escape reality
- ➔ to cover up poor communication skills
- ➔ to join the peer group
- ➔ to satisfy curiosity
- ➔ to seek thrills
- ➔ to escape boredom, loneliness, poverty or insecurity
- ➔ because advertisers tell them to
- ➔ because their mum or dad take drugs
- ➔ because they want attention from the people around them.

Legal drugs—prescription and non-prescription drugs

Legal drugs are used when you are ill or injured. It is important that you always read and follow the directions and safety instructions on the bottles or packets.

Analgesics

Analgesics are painkillers. Over-the-counter analgesics are available at chemists, supermarkets and convenience stores. If they are taken correctly, they are beneficial to your health. For example, analgesics can be used to reduce fever or relieve mild pain such as headaches. The most common analgesics are Aspirin®, Disprin®, Panadol® and Panadeine®.

As with all drugs, if they are abused they cause health problems. Analgesics are only meant to be used for a very short period of time. When people use them too frequently analgesics can cause:

- ➔ internal bleeding
- ➔ stomach ulcers
- ➔ kidney disease.



Figure 5.52 Prescription and non-prescription drugs are used when you are sick or injured

Australia has one of the highest rates of kidney disease in the world, largely due to analgesic abuse. The problem is that many Australians, including teenagers, use analgesics or other drugs as the first alternative to solve a problem. At the same time, people ignore the instructions and warnings on the packets containing these drugs.

Responsible use of analgesics

To use analgesics responsibly means to use them only for temporary relief of genuine pain. They will not take away the cause of the pain or prevent it from recurring.

Activity 5.25



What a pain in the neck!

- 1 What advice is always given at the end of advertisements for analgesics and on their packets? Why is this advice given?
- 2 For each of the following case studies, answer these questions:
 - a Should analgesics have been used?
 - b Was there a better alternative to analgesics?

Case study 1 At Sunday lunch, Jackie had a headache. She knew at the back of her mind she must finish her assignment, which was due on Monday, but she couldn't be bothered. She took two Panadol and read some magazines. About three hours later the headache was back. She still hadn't done her work, despite feeling guilty, so she took two more Panadol.

Case study 2 Rick sprained his ankle at basketball. The next day it was really aching so he took two Aspirin.

Case study 3 Kerry and Brian had just split up. Brian was feeling particularly hurt, so he took some Panadeine to ease the pain.

Anabolic steroids

Anabolic steroids have received enormous amounts of publicity in recent years because top athletes in many sports have been using them to cheat their way to winning.

However, a much more serious problem has become evident—there is now a trend towards adolescent abuse of steroids as a result of media pressure, hero-worshipping of stars such as Schwarzenegger and Van Damme, and increased availability. Unfortunately, Australia follows the United States in many social trends and steroid abuse by teenagers seems to be one of them. With your class, discuss examples of how the Australian media encourage youths to do things that may not necessarily be healthy.

How to terminate yourself

- 1 Draw an outline of a human body. Through research label on your diagram the different effects and side-effects of steroids.
- 2 Adolescents of which sex are most likely to use steroids? Where does the pressure to use steroids come from?
- 3 Where do adolescent users obtain steroids? Are they legal? What do people mean when they talk about a 'user subculture'?
- 4 Drugs that are sold legally in shops must be labelled carefully and there is strict control over the ingredients. What is the situation for drugs that are sold illegally? If you bought a bad batch of illegal drugs, how could you tell, and what could you do about it?



Activity 5.26

Social drugs

Caffeine

Caffeine is one of our most socially accepted drugs. It is a powerful stimulant found in coffee, tea, cola drinks, chocolate and stimulant tablets such as No Doz®. As a stimulant, caffeine has rapid short-term effects such as:

- ➔ greater alertness
- ➔ improved concentration
- ➔ energy release in your muscles
- ➔ shaking or trembling hands
- ➔ increased body temperature and urine production
- ➔ delayed and shortened sleep.

Large doses of caffeine can cause headaches, shakiness, nervousness, delirium and death.

People who have six or more cups of coffee each day or three cans of cola, two chocolate bars and one coffee tend to suffer from:

- ➔ chronic insomnia
- ➔ persistent anxiety
- ➔ depression
- ➔ upset stomach.

A regular intake of about five cups of coffee per day can lead to physical dependence on caffeine. People who are physically dependent show classic withdrawal symptoms (severe headache, irritability and tiredness) if they halt their caffeine intake.



Figure 5.53 Caffeine—one of Australia's most socially acceptable drugs

Activity 5.27



A real 'pick-me-up'

- 1 Why do people call a cup of coffee or strong tea a 'pick-me-up'?
- 2 If a cup of weak coffee, a can of cola and a chocolate block all have the same amount of caffeine, how much chocolate and cola would you have to take daily to become physically dependent?
- 3 Why do most experts agree that if caffeine was discovered today, it would only be sold on prescription?
- 4 High levels of caffeine are banned in sport. Find out:
 - a the reasons why some sportspeople believe that caffeine can improve their performance
 - b the reasons why sports authorities have banned caffeine from competitive sports
 - c some examples of sportspeople who have been caught 'caffeine cheating' during recent years.

Tobacco

The World Health Organization (WHO) describes smoking as the 'single greatest cause of disease in the developed world'. Smoking is on the decrease, however it is still the major cause of drug-related deaths and illnesses in Australia. Even though approximately 80 per cent of Australians are non-smokers, one in five teenagers still smokes. Why?

What's in a cigarette?

When a smoker takes a puff of a cigarette, the contents are converted into over 4000 chemicals that are breathed in and absorbed directly into the smoker's bloodstream. These chemicals include arsenic, nicotine, tar and carbon monoxide.

Pressures to smoke

- ➔ **Peer pressure**—at this stage of your life, the biggest pressure to smoke will come from your friends. If you are offered a cigarette by a friend, do not feel as though you have to take it—refuse politely.
- ➔ **Parents**—without realising it, your parents can encourage you to smoke by allowing you or your siblings to smoke or by smoking themselves. If your parents or other members of your family smoke, you are four times more likely to begin smoking.
- ➔ **Significant other people**—people you really admire, such as your coach, a teacher, an older friend or a rock star, are significant other people in your life. Often you may be tempted to follow their lead, even if they smoke. Ask yourself whether you admire their personal qualities or the fact that they smoke?
- ➔ **Advertising**—the purpose of advertising is to encourage you to purchase a product. Advertisements can provide truthful and accurate information about the product or create an image or a fantasy that is offered to the buyer when they buy the product, for example, instead of telling you anything about the product, the advertiser offers you toughness, sexiness, sophistication or wealth. Obviously, truthful information about cigarettes would only discourage you from smoking, so cigarette companies rely on fantasy or image advertisements. Activity 5.28 on page 311 shows you how this works.

Cigarette display ads unjustified

The Queensland Cancer Fund has called on tobacco retailers to justify the continuation of any level of cigarette displays in shops when the product kills one-half to two-thirds of all its lifelong consumers.

The call follows a newspaper ad by tobacco retailers trying to push the Government to quadruple the allowable size of the display area for cigarettes.

Executive Director of the Queensland Cancer Fund Dr Jeff Dunn said there is no justification for advertising or promoting tobacco products.

'Tobacco companies have turned shop displays of cigarettes into advertising billboards to get round the ban on other forms of advertising for their potentially lethal product,' Dr Dunn said.

'That's why the tobacco companies spend millions

of dollars in incentives to tobacco retailers to use their displays.

'This is to promote a product that kills one-half to two-thirds of its lifelong consumers when used exactly as the manufacturer intended.

'Realistically we have to tolerate the legal status of tobacco because 22 per cent of Queenslanders are addicted to nicotine. But that tolerated legal status does not confer a right to promote the product and hook another generation.

'A ban on all advertising and display of cigarettes would eliminate the promotion of smoking, while addicted smokers would still be able to buy their cigarettes legally from retailers.'

Media release, Queensland Cancer Fund, 4 November 2004

Cigarettes and advertising

Tobacco companies want you to start smoking. They spend millions of dollars every year trying to get you to do just that. If they could just get you to start, they would have a brand new customer—and you would end up paying them money every day for the rest of your life.

A lot of cigarette ads show pictures of people apparently enjoying cigarettes. The actors and models who appear in these ads (many of whom are really non-smokers) are supposed to look like the sort of people you would admire and want to imitate.

- 1 **a** Through research, locate several cigarette advertisements.
- b** Take a good look at each advertisement. Select two ads and complete the table on page 312.
- 2 Why don't you see older people or unfit people in cigarette advertisements?
- 3 Why do most cigarette advertisements rarely show anyone smoking a lit cigarette?
- 4 Why do certain cigarette companies advertise only in magazines aimed at particular audiences, for example, women's magazines or sporting magazines?
- 5 Look at your list of things that should have been shown in the advertisement if people were smoking. Why weren't they shown in the advertisement?
- 6 Organise a class debate. The topic is: 'All cigarette advertising should be banned.'



Activity 5.28

continued ...

	Ad 1	Ad 2
What is the type of advertisement (social, product display or developing an image)?		
Where was the advertisement found (magazines, shop, etc.)?		
What is the advertisement's main theme or message?		
How many smokers are there in the advertisement?		
What is the advertisement saying about people who smoke this brand of cigarette?		
What sort of person is this advertisement aimed at?		
List three things you don't see in the picture but you know would be there in real life if people were smoking, for example, ash trays.		
Could the picture in this advertisement also be used to sell non-smoking? If so, how?		

Short-term effects of smoking

- ➔ hair smells
- ➔ lung capacity decreases
- ➔ breath smells
- ➔ blood carries less oxygen
- ➔ clothes smell
- ➔ pulse rate goes up
- ➔ teeth stain yellow
- ➔ hands shake
- ➔ fingers stain yellow
- ➔ brain activity speeds up
- ➔ sense of taste and smell are decreased
- ➔ blood flow to skin is restricted, dulled or disappears
- ➔ fitness decreases
- ➔ skin temperature drops.

Long-term effects of smoking

- ➔ emphysema (lung disease)
- ➔ lungs coated by tar
- ➔ chronic bronchitis
- ➔ smoker's cough
- ➔ cancers
- ➔ damaged lining of respiratory tubes
- ➔ heart disease.

Cigarettes and your body

- 1 In Figure 5.54, fill in the labels on the diagram for both long-term and short-term effects of smoking.
- 2 Smoking has been recognised as a dangerous, life-threatening activity. Therefore governments have placed restrictions on smoking. One such restriction is the printing of warning messages on cigarette packets.
 - a Research cigarette packaging. Write down all the warning messages you can find (for example: 'Smoking reduces your fitness').
 - b As a class, discuss the effectiveness of these warning messages.
- 3 Discuss the recent addition to cigarette packets of graphic photos of diseases caused by smoking. How effective do you think this will be?

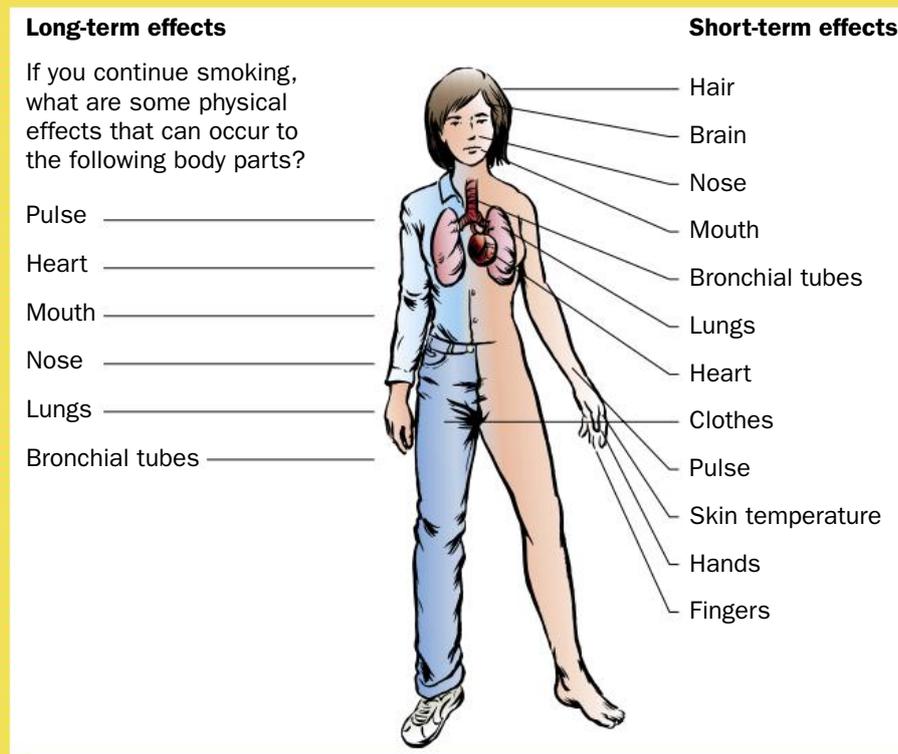


Figure 5.54 Long-term and short-term effects of smoking

Passive smoking

Passive smoking occurs when you breathe in other people's cigarette smoke. It includes smoke burning off the cigarette (side stream), and that breathed out by the smoker (main stream). That doesn't sound too healthy! Passive smoking can lead to:

- ➔ asthma attacks
- ➔ eye, throat and nose irritations
- ➔ headaches
- ➔ smelly clothes and hair
- ➔ in severe cases, lung cancer and emphysema.

Activity 5.30



Cigarettes as a cosmetic

- 1 A cosmetic is any artificial method that is used to alter your appearance or odour. In this activity you will examine the cosmetic effects of cigarettes. Complete the table below.
- 2 Do you think cigarette smoking has any cosmetic value?
- 3 What do you say to someone who says smoking makes you look 'cool'?

Body part	Popular cosmetics that improve appearance or odour	Effects of cigarette on appearance or odour
Whole body	Perfume, aftershave, deodorant	Pale greyish skin, poor circulation, body odour
Eyes		
Teeth		
Breath		
Hair		
Fingers or hands		
Face		

Smoking and the law

- ➔ It is illegal to sell cigarettes to a person under the age of 18.
- ➔ Advertising cigarettes on television and radio is also illegal.
In an attempt to decrease smoking-related deaths and illnesses, the Queensland Government has introduced additional laws, which came into effect in January 2005.
- ➔ No smoking within 10 metres of a children's playground.
- ➔ No smoking when standing within four metres of the entrance to a commercial building (banks, offices, shopping centres, etc.). Exemptions are licensed premises and premises facing pedestrian malls.
- ➔ No smoking between the flags at patrolled beaches.
- ➔ No smoking at artificial beaches, such as at South Bank.
- ➔ No smoking in any of the major sports stadiums.
- ➔ No smoking in at least one-third of the indoor area of liquor licensed premises (pubs, clubs, restaurants and casinos), including the area covering one-third of all poker machines.

Smoking alternatives

- ➔ Use nicotine skin patches or chewing gum.
- ➔ Exercise—if you are feeling good about yourself, you will be more likely to resist temptation.
- ➔ Get busy—work out the times of the day that you smoke and make sure you have something to do at these times or if you smoke with a particular group after school, see them at lunch and walk home with another friend.

Queenslanders congratulated for new tobacco laws

New tobacco laws starting today (1 January) will be only the first phase of major reforms to reduce cancer and other smoking-related deaths.

In welcoming the changes, Queensland Cancer Fund Manager of Prevention and Early Detection, Susan Greenbank, said when all the reforms are implemented they would have a huge impact on the health of Queenslanders.

'Smoking is the largest preventable cause of death and disease in the state, with 3400 Queenslanders dying each year from tobacco-related disease,' Ms Greenbank said.

'The changes will help protect people from exposure to passive smoking.

'They will also help the 80 per cent of smokers who want to quit but find it particularly difficult when they socialise and others are smoking around them.

'Finally the fewer smokers and places for smoking in public will make it easier for children to resist the temptation to start.'

... The final phase of the reforms will come into effect 18 months later when pubs, clubs, and restaurants will have to be 100 per cent smoke-free except in limited outdoor areas.

Casinos will be smoke free in all areas other than high-roller rooms.

Media release, Queensland Cancer Fund,
1 January 2005

Who helps smokers to stop smoking?

- Using the telephone book, reference books from the library, or information from your teacher or doctor, find out about the agencies that help people to stop smoking. As you find out about each agency, fill in the table below.

Agency	Phone number	Ways they help stop smoking
Queensland Cancer Fund	(07) 3258 2200	Provides information, courses, counselling, etc.

- Make contact with each agency and find out what methods they use to help people stop smoking.



Activity 5.31

No thanks!

- After basketball practice, Tom offers Emma a cigarette. Emma has been training hard for next week's grand final.
 - Write down what Tom says when he offers the cigarette.
 - Now write a response for Emma to use when refusing the cigarette.
- Divide into groups of five. Together work out a script for a five-minute role-play that includes:
 - one or two smokers who exert pressure on a non-smoker to have a cigarette
 - one or two non-smokers who come up with clever answers or reasons why they do not want a cigarette.
 Act out your role-play for the rest of the class.



Activity 5.32

Activity 5.33



Take the OK out of smoking

- 1 The advertising of cigarettes is illegal, although cigarette companies still manage to promote their products. In what ways do they do this? Do you think this is okay? Discuss your response as a class.
- 2 With a partner, devise a survey on smoking within your school to find out the following information:
 - a In what age groups is smoking most popular?
 - b Do people smoke at school?
 - c Where do people smoke while they are at school?
 - d Do people smoke alone at school?
- 3 From the information you have gathered, do you think smoking is a problem within your school?
- 4 Does the number of people smoking affect other people who do not wish to smoke?
- 5 Find out the policies and rules about smoking that are implemented within your school.
 - a Who designed these rules?
 - b Are there any regulations that are impractical or ineffective? Why?
 - c What strategies can be promoted within your school to educate students about smoking and its effects?
 - d How will the new tobacco laws affect these rules and the people who break them?
- 6 Design a poster to educate students about the dangers of smoking.

Alcohol

Alcohol is the second major cause of drug-related deaths in Australia. A 2004 National Drug Survey found that 60 per cent of teenagers drink alcohol, with females being more likely to drink at levels that may lead to long-term health problems. Why is alcohol consumption so prominent within our society?

What is it?

Alcohol is a colourless liquid that is produced when sugars in fruits (grapes) or grain (barley) ferment. Even though it has no nutritional value, the high number of kilojoules (calories) suggest that it is more a food than a drink.

There are a large number of alcoholic drinks available in Australia. These drinks vary greatly in alcohol content (see Figure 5.55). This is why strong drinks such as port and liqueur are served in small glasses, and spirits are served in small 'nips', then mixers added.

Type of drink	Alcohol content alcohol/volume (per cent)
Heavy beer	4–6
Light beer	2.5–3.5
Wine	9–15
Fortified wine (sherry/port)	18–20
Spirits	37–43
Coolers	3.5

Figure 5.55 A standard drink of alcohol

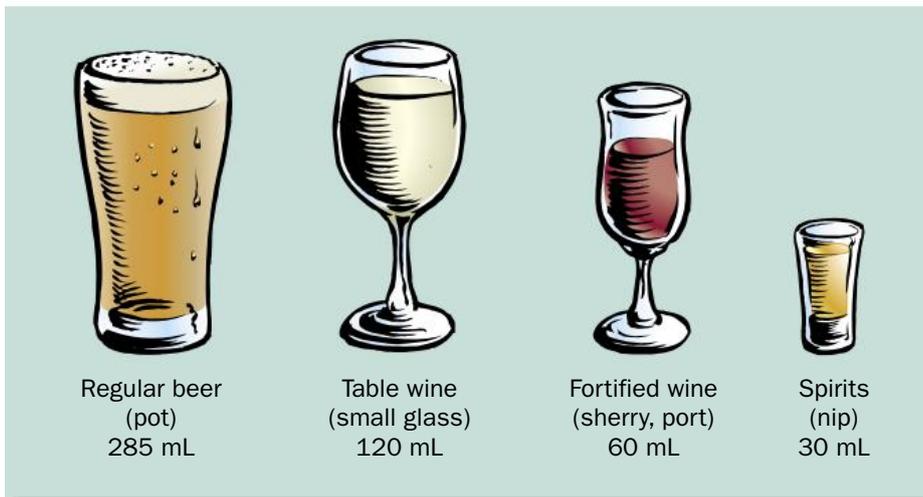


Figure 5.56 Standard drink size

Drunk and disorderly

1 Figure 5.57 depicts some of the ways in which alcohol can affect you. Can you think of other effects?



Figure 5.57 The effects of alcohol

Activity 5.34



continued ...

2 There are four stages of intoxication, depending on the amount of alcohol you have consumed. Write the effects from Figure 5.57, as well as any others, into the table below.

	Effects
Tipsy	
Drunk	
Very drunk	
Hung over	

Possible long-term effects of drinking

- ➔ alcoholism
- ➔ cancer
- ➔ cirrhosis of the liver
- ➔ malnutrition
- ➔ violence
- ➔ job loss
- ➔ brain damage and memory failure.

Alcohol abuse

Alcohol abuse can be a key factor in:

- ➔ drownings
- ➔ suicides
- ➔ child abuse and incest
- ➔ marriage breakdowns
- ➔ domestic violence
- ➔ fatal road accidents
- ➔ violent crime (including robbery and rape).

Figure 5.58 What is more irresponsible—encouraging someone to drink or giving in to peer pressure?



This is why alcohol is often called the Jekyll and Hyde drug. In this famous Robert Louis Stevenson story, Dr Jekyll is mild-mannered during the day but turns into murderous Mr Hyde at night. The same thing can happen to a person who depends on alcohol. One minute they can be calm and relaxed but if they have a bit too much to drink, the same person can be out of control, aggressive, sick, over-confident or willing to take stupid risks.

Binge drinking

Binge drinking occurs when more than four drinks are consumed in one sitting. This is very dangerous as the liver has to work extra hard in order to get rid of the alcohol, and there can be many unpleasant side effects the day after.

Another night on the town

By Edmund Burke

A comotose reveller is taken away on a stretcher shortly before midnight on New Year's Eve while her drunken friends abuse the paramedics.

It would be pathetic enough if the victim and her friends were adults, but the schoolgirls are only 14 or 15.

A paramedic at the scene in Brisbane's Fortitude Valley said the girl had suspected alcohol poisoning.

'We were drinking together and she just collapsed,' one of her friends said.

Ambulance area director for central Brisbane, Chris Broomfield, said the holiday period traditionally meant a big increase in the number of drunken teenagers they were called to treat.

The paramedic, who has been in the job for 24 years, had a chilling message this week for health

officials desperate to deal with the binge-drinking problem.

'We regularly deal with teenagers who are intoxicated and we expect it over the holiday period because it has been happening for years,' he said.

'There was no sign of any change. On any given weekend we can expect to deal with a teenager in trouble.'

... Drug Arm spokeswoman Caroline Salom said parents were not aware of the extent of the teen drink problem.

'A lot of these are kids from what people would think of as respectable families with parents who think they are just going into the city to go to the movies.'

... The latest Queensland Injury Surveillance Unit study showed the peak age for 'non-medicinal' poisoning was 13.

The study used data from 14 city and country hospitals' emergency

departments between 1998 and 2004. In that time 68 children aged 10 to 16 had been poisoned by alcohol.

Paediatric emergency doctor Ruth Barker said that figure was 'the tip of the iceberg'.

'These were the children who became so sick that they had to be taken and admitted to hospital. We do not know how many never reach that point,' she said.

Dr Rosa Alati, a research fellow from the University of Queensland's School of Population Health, said studies she had conducted showed a high percentage of Queensland's youth had alcohol problems.

'We studied 2551 youths from 14 to 21 in Queensland and around 600 of them had developed excessive alcohol abuse or dependence by the time they were 21,' she said.

The Sunday Mail
8 January 2006

Binge girls lead Schoolie strife

By Paul Weston

Drunken teenage girls have been blamed for setting the standard in bad behaviour at Schoolies.

As authorities prepare for thousands of school-leavers to hit the Gold Coast on Friday for the start of this year's festival, latest research shows girls not boys are the 'barometer' for trouble.

Surveys taken at the past six Schoolies confirm a trend where the behaviour of girls who get 'drunk, fight and flirt' encourage boys to get more drunk and engage in risky stunts.

Drug Arm Australasia director Caroline Salom told *The Sunday Mail*: 'It's often the behaviour of the girls that can determine things. If they get laddish or loutish, things can get out of control.'

Volunteers who worked at last year's event warned girls were making themselves easy targets for predators by getting extremely drunk.

The warning comes after *The Sunday Mail* last month revealed young women were binge drinking more than men, with 12.3 per cent of girls aged 14-19 drinking at levels likely to cause chronic damage, compared with 7.7 per cent of males.

... Police said they were concerned by the girls' increasingly shocking behaviour. A female officer told *The Sunday Mail*: 'We get girls from decent homes who have never been drunk before. They don't know when to stop.'

'The girls always dictate the terms. We've always said that if we

can get to the girls first, get the message across about not drinking too much, then we're half-way there.'

The research by Drug Arm Australasia shows binge drinking and not drugs was the biggest problem at Schoolies.

About 15 per cent of Schoolies will use cannabis—half the number of six years ago—and fewer than six per cent will try dangerous party drugs, down a third on 1999.

But alcohol, much of it bought by parents, continues to be drunk to shocking excess.

The survey shows 84 per cent of boys and 71 per cent of girls will get drunk.

The Sunday Mail
13 November 2005

Activity 5.35



How much is too much?

Read the articles 'Another night on the town' and 'Binge girls lead Schoolie strife' on page 319 then complete the following activities.

- 1 What reasons can you give for why teenagers drink alcohol?
- 2 The article 'Another night on the town' mentions concerning cases of teenagers suffering from alcohol poisoning. Research, using the internet, to find out the signs, symptoms and treatment for alcohol poisoning.
- 3 What risk factors become more prevalent once you begin drinking heavily?
- 4 In the article 'Binge girls lead Schoolie strife', it is suggested that girls are the 'barometer' for trouble. What do you think is meant by this and what reasons can you give for why this might be so?
- 5 Discuss the topic of 'responsible drinking' with three other people in order to develop an opinion of your own. Share this with a classmate.
- 6 Participate in a class debate, led by your teacher, which addresses the statement: 'Teenagers should be allowed to drink alcohol as long as it is done responsibly'.
- 7 Give your own definition of responsible drinking.
- 8 For each of the following case studies:
 - a Describe the possible consequences of alcohol use.
 - b Is it responsible drinking?

Case study 1

Jamie was furious with his girlfriend. He rushed out of the door and headed for the pub where he intended to get drunk and forget his problems.

Case study 2

Sam, Jenny, Nikki and Tom met at the beach. It was a hot summer night, so they each brought some alcohol. After drinking the wine and beer, they all felt a little 'under the weather', so they decided to go for a swim to sober up.

Case study 3

It was Nerilee's eighteenth birthday. She had arranged to meet her friends in the city to go to a restaurant and then a nightclub afterwards. They all agreed that because they would be drinking alcohol they would leave their cars at home and share a taxi.

Case study 4

Greg took a bottle of spirits and a bottle of cola to a party. Soon after he got there the cola ran out, so he just skolloed the spirits from the bottle.

Alcohol and the law

- In Queensland, it is illegal to be drunk in a public place.
- It is illegal for anyone to sell alcohol to any person under 18.
- It is illegal for anyone under the age of 18 to drink in a public place.

Drink driving—what do you know?

Before finding out more about drinking and driving, attempt the quiz below to test your current knowledge. The answers are contained in the following pages.



Activity 5.36

	True	False
1 Three 200 mL glasses of mixed drinks have the same alcohol content as three 200 mL glasses of beer.		
2 Drinking alcohol keeps out the cold and maintains body heat at a high level.		
3 Mixing your drinks will tend to make you drunk faster.		
4 Blood Alcohol Concentration (BAC) measures the weight in grams of alcohol in a 100-millilitre sample of blood. It can be measured by analysing a blood sample or by using a breath analysis instrument to measure the amount of alcohol in the breath.		
5 Pedestrians and cyclists who have consumed any alcohol find it difficult to handle more than one task at a time.		
6 In general, males and females who drink exactly the same amount of alcohol over the same period of time will reach the same BAC reading.		
7 Alcohol consumed by a pregnant woman may affect the unborn child.		
8 Similar-sized glasses of different alcoholic drinks raise a person's BAC by the same amount.		
9 It is easy to tell when a driver's ability to drive safely is affected by alcohol.		
10 Alcohol is absorbed into the bloodstream, commencing as soon as drinking begins.		
11 People's driving skills improve after they have had a few drinks.		
12 P-plate drivers should not eat liqueur chocolates before driving, as the alcohol in the chocolates could register on a breath analysis instrument.		
13 As soon as people stop drinking, their BAC level begins to fall.		
14 It is legal for a 16 year old to buy alcohol in a supermarket but not in a hotel.		
15 A number of factors may affect a person's BAC reading, including weight, muscle-fat content, gender, age and emotional state.		
16 On average, you are four times more likely to have an accident when you have a BAC reading of 0.05 than when you 'Go With the .00'.		

continued ...

	True	False
17 Chewing gum, eating mints, smoking a cigarette or using a breath freshener will disguise the amount of alcohol in your blood if you are breath tested.		
18 Each of the following will help a person who has been drinking to sober up more quickly: a Exercise. b A cold shower or a swim. c Vomiting. d Fresh air and deep breathing. e Strong, black coffee. f A brief nap.		

Drink driving

In Queensland, it is illegal to drive under the influence of alcohol. This means that you will be penalised if you have a blood alcohol concentration (BAC) greater than the ones indicated below.

Driver Classification	Legal BAC
People with either a learner or provisional licence, under the age of 25 years of age	Zero BAC
People with a learner or provisional licence, over 25 years of age	Below 0.05 per cent BAC
People with an open licence	Below 0.05 per cent BAC
People in charge of public transport vehicles, large vehicles such as tow trucks or road trains and vehicles carrying dangerous goods	Zero BAC
A licence holder instructing a learner driver	Zero BAC

Figure 5.59 Legal blood alcohol concentrations

Your BAC can be measured by taking a breath test and a blood test. The more you drink, the more likely you are to have an accident (see Figure 5.60).

How to get alcohol out of your system

Your body is the only thing that can get rid of the alcohol that you have consumed and it needs time to do it (see Figure 5.61). It takes approximately one hour to break down three-quarters of a standard drink and nothing, including water, coffee, cold showers or aspirin, can increase this rate.

How much is safe to drink?

The average person can drink the following and still remain under the legal limit:

- ➔ men—two drinks in the first hour and one drink every hour after that
- ➔ women—one drink each hour.

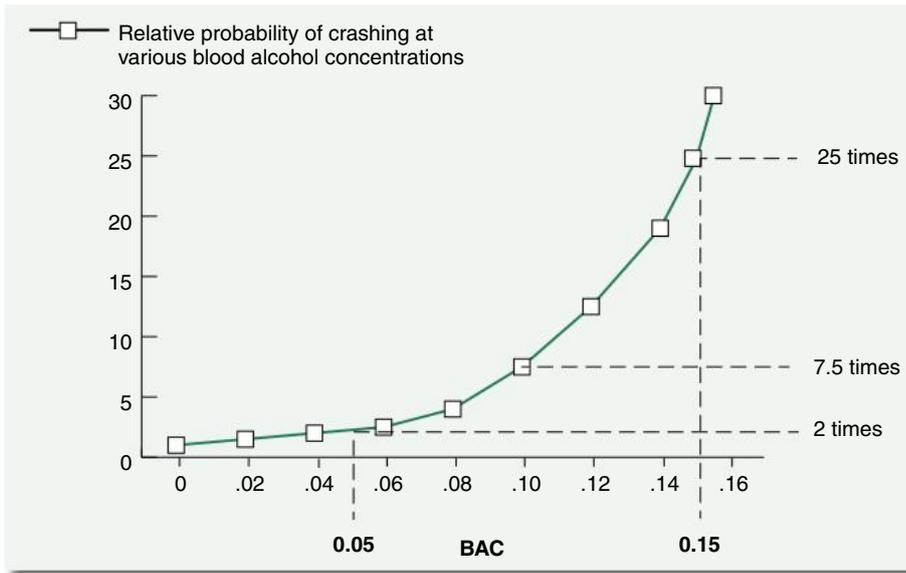


Figure 5.60 Relative probability of crashing at various blood alcohol concentrations

Federal Office of Road Safety

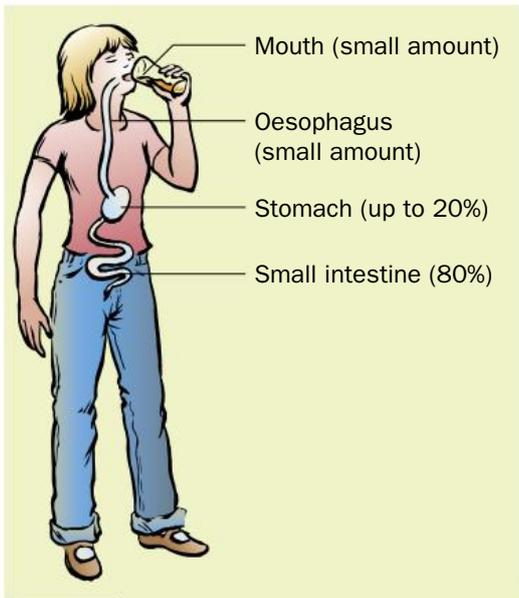


Figure 5.61 The means by which alcohol enters and leaves the body

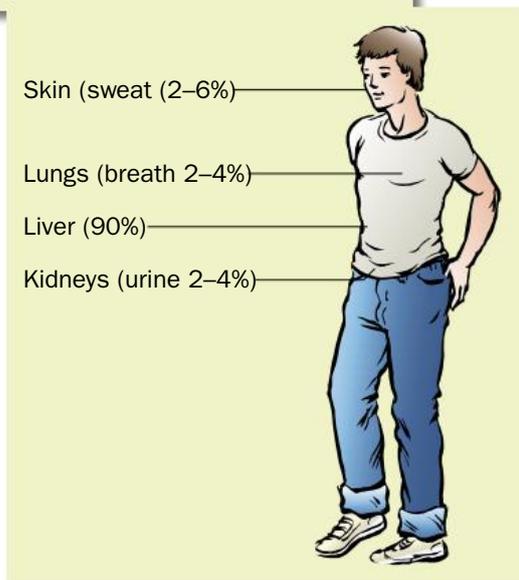


Figure 5.62 Many people enjoy having a few drinks with their friends

Drinking tips

- Don't let people top up your drinks—you might lose count.
- Separate each drink with a glass of water or juice.
- Be aware that most people drink mixers fairly quickly—don't lose count.
- Pour your own drinks—a standard drink for you may not be the same as for your friends.
- Avoid getting into a shout or round.
- Don't drink if you are on medication.
- If you are not sure how much you have drunk, do not drive.
- If you're going to drink, organise a taxi or go home with someone who is not drinking.
- Wait two hours for every alcoholic beverage you consume before driving.
- If you don't want to drink, just say no.

Activity 5.37



Rethink your second drink

- 1 For each of the cases studies, answer the questions that follow, then join in a class discussion of the issues concerned.

Case study 1 Davo drives three of his mates to watch a footy match. During the game all four guys drink several cans of beer. Davo has only had his driver's licence for three months. At the end of the game, Davo wants to drive them home.

- a Should you try to stop him driving home? Why?
- b Should you let him drive and hope that he isn't caught?
- c How could you avoid this situation?

Case study 2 Your friend has agreed to drive and not drink for the night. It is a Grand Final party for your sports club and you drink several glasses of champagne. At the end of the party as you walk to the car, your friend appears to be slightly drunk.

- d What are the signs that a person has been drinking?
- e What would you do in this situation?

Case study 3 You are out with a group of friends, most of whom have been drinking. One member of the group decides to spike someone else's drink. However, you know that this person has been avoiding alcohol in order to drive everybody else home.

- f What might be the results of spiking the drink?
- g What would you do in this situation?

Case study**4**

You and a friend go to see a band at a pub. Your friend is not drinking because she is the driver but you have had several mixed drinks. You look over and see that a guy she really likes has bought her an expensive cocktail and is trying to get her to drink it.

- h** How could this problem be prevented?
- i** What would you do?
- 2** Queensland Transport has run a very successful advertising campaign in an effort to reduce the road toll, particularly among people aged 25 and under.
 - a** Write down as many Queensland Transport advertisements as you can remember.
 - b** For each advertisement, give its major message.
- 3** Imagine you are elected to a position of community responsibility. The community wants you to solve the biggest problem facing them: too many young people are having road crashes. How would you attack the problem?
- 4** Peter turned 19 yesterday. He celebrated with his mates last night and got wasted. While he was driving his sister home, it started to rain. Peter's car spun out of control, jumped the gutter, hit a pedestrian and slammed into a pole. Today Peter is hung over, facing manslaughter charges, fined for drink driving, has no car and his sister is in intensive care.
 - a** What could Peter, his sister and his mates have done to prevent this accident?
 - b** What has the accident done to Peter's emotional and financial state?
 - c** Why do you think Peter drove his car when drunk?

Illegal drugs

Most drugs can be issued legally and illegally, for example, alcohol is legal if you are an adult but illegal if you are under 18. Many medical drugs, including heroin, are legal when prescribed by a doctor for medical purposes but are illegal if they are obtained for non-medicinal purposes.

Although more people use legal drugs than illegal drugs, the effects of the latter can be very devastating and rapid. This is why the government has banned these substances.

Cannabis

Cannabis is possibly the most well-known illegal drug, due to its accessibility and recent debate over legalising it.

There are three main forms of cannabis as a drug:

- ➔ marijuana—from dried leaves and flowers from the plant
- ➔ hashish—from the plant's resin
- ➔ hashish oil—a liquid extract taken from the plant.

Immediate effects

- ➔ feeling happy and relaxed
- ➔ paranoia
- ➔ vomiting
- ➔ loss of concentration/coordination
- ➔ bloodshot eyes
- ➔ anxiety
- ➔ hallucinations.

Possible long-term effects

- ➔ increased risk of bronchitis, lung cancer and respiratory diseases
- ➔ boredom
- ➔ loss of energy
- ➔ loss of concentration
- ➔ decreased sex drive
- ➔ psychotic behaviour.

When smoked, cannabis has almost twice as much tar as a cigarette, therefore a regular cannabis smoker has more chance of contracting lung cancer.

Dependence

Research has found that the more you smoke marijuana, the more you need to smoke to have the same effect. This is referred to as **dependence**.

Law

- ➔ In Queensland, it is illegal to use or traffic (sell) any illicit drugs.
- ➔ If you are found guilty of the above, you will be penalised accordingly and given a criminal record.

Beware cannabis smokescreen: it's a not-so-soft drug, says report

By Sally Grover

Cannabis is usually referred to as the soft drug, worse than tobacco but not as dangerous as heroin or cocaine.

Often exploited because of its ability to relax the mind and body, its users can frequently be found lying on a couch in front of a TV surrounded by snack food, sometimes for days at a time.

Most people are aware of the consequences of smoking marijuana, such as laziness, weight gain and the inability to make positive decisions.

In a recent report issued by the NSW health department, new

dangerous and long-term effects relating to cannabis use have been found.

Damage to cardiovascular, respiratory and immune systems, short-term memory loss and slow brain development have been reported when the drug is used from a young age.

Professor Wayne Hall, from the School of Population Health at UQ, confirms that new risks are constantly being discovered to attack all users.

'Cardiovascular problems are more of an issue for adults, people who have started smoking cannabis in their 20s and are now in their 40s and 50s,' he said.

Like smoking tobacco, cannabis is lethal to the lungs and the harm can vary depending on the instrument employed.

The most common form of inhaling cannabis is through rolling a joint. Like cigarettes, this directly affects the lungs and causes the same problems by limiting the air supply.

Using a bong, usually a homemade device made by habitual smokers, creates cold smoke which goes further into the lungs, thus causing more destruction on the respiratory system than the warmer smoke from filters.

While these problems take

continued ...

time to occur and are sometimes treatable, Professor Hall says that there are more negative side effects that are often forgotten.

‘The under-appreciated risk is depression,’ he said. ‘The evidence is getting reasonably strong that people susceptible to mental problems are developing disorders.’

Professor Hall also lists poor concentration as a direct setback from cannabis use and its effects on young people at school.

‘Teenagers losing interest at school because they have been using marijuana is the quickest problem to develop from use,’ he said.

Mark Brow, manager at the Logan House drug rehabilitation centre, agrees that memory loss is a major concern.

‘Short-term memory can be devastated by marijuana,’ he said.

‘Long-time use of the drug can also affect your long-term memory.’

Mr Brown works with 30 people

who have become addicted to the drug.

He says that the reasons why each of them chose cannabis is different, but the general attitude of people initially is that it is not as dangerous as Class-A drugs such as heroin.

‘A lot of people perceive marijuana as a harmless, social drug. But in reality it is not like that at all.’

The Courier-Mail
19–20 August 2006

Smokescreen

Read the article ‘Beware cannabis smokescreen: it’s a not-so-soft drug, says report’ and answer the following.

- 1 Why do you think people believe that cannabis is not as harmful as heroin?
- 2 Draw up a table with two columns. In the first column list the side effects of taking marijuana. In the second column suggest warning signs of how this could affect someone’s life.

Effects	Warning signs
e.g. Lack of motivation	School results dropping

- 3 As a class discuss what is meant by: ‘The under-appreciated risk is depression ... The evidence is getting reasonably strong that people susceptible to mental problems are developing disorders.’



Activity 5.38

Drugs—making an informed choice

Throughout your life, you will have to make many choices about drugs. It is up to you if you decide to take drugs, however, you must be prepared for the consequences. The fact remains that if you cannot have a good time without taking drugs, you have a problem and need to seek help.

Agencies that can help

- Alcohol, tobacco and other drug services
- National Heart Foundation
- Queensland Cancer Fund
- Alcoholics Anonymous
- Lifeline

Activity 5.39



Alternatives

- 1** For each of the following situations, write down an alternative action that the person could choose:
 - a** You have had a hectic day, and you have a mild headache. When you get home you could take a Panadol or ...
 - b** You are going to a party where you know people are going to drink alcohol. You don't like alcohol but you know there will be pressure to drink it. You could drink it when it is offered or ...
 - c** You feel aggro and stressed. It's been a bad day and you need to calm down. You could hit the medicine or grog cabinet or ...
- 2** Discuss your alternatives with the rest of the class. Add new ideas to your list.

Remember: For any information on drugs, help with drug problems or advice, you can phone 24 hours a day: (07) 3236 3414

Generally the effect of a drug depends on the characteristics of the particular drug taken, the circumstances of use, characteristics of the individual user, and the simultaneous use of other drugs.

The drug	The person	The environment
The drug's chemicals	Lack of self-esteem	Availability and cost of the drug
The drug's addictive quality	Poor decision-making skills	Peer group pressure
The strength of the chemicals	Poor assertiveness skills	Media and advertising pressure
The quantity consumed	Poor stress-management skills	Bad example from significant others
The frequency of consumption	Inability to resolve conflicts	Neighbourhood influence
	Poor communication skills	
	Lack of fitness	
	Few recreational hobbies	

Figure 5.63 Causes of drug abuse

Drug type	Description and effects
Stimulants	
Amphetamines	Tablets or capsules, sometimes referred to as 'speed' or 'uppers'; cause increase in pulse and breathing rate and can increase blood pressure.
Cocaine	White powder derived from the coca plant; the effects of cocaine are very similar to those of amphetamines; 'crack' is a form of cocaine.
Caffeine	A substance found in coffee, tea, cola and chocolate, as well as in some medicines; causes increased alertness and inability to sleep when taken in large doses.
Nicotine (cigarettes)	A drug found in tobacco which increases heart rate and breathing rate; tobacco use is the leading cause of preventable death in Australia; smoking is a major contributor to heart disease, lung cancer and cancers of the mouth, emphysema and other diseases of the lungs and respiratory system.
Depressants	
Alcohol	Produced by the fermentation of plants; slows body functions and affects coordination; with increased amounts can lead to dizziness and nausea, and long-term regular use can lead to dependence, and damage to the liver, kidneys and brain; chronic alcoholics may develop delirium tremens (DTs); alcohol may also cause social problems; overdose may cause death.
Analgesics (Panadol, Aspirin)	Tablets or powders used for pain relief, reduction of swelling in muscles and joints and decrease in body temperature; regular use can result in damage to the kidneys and bleeding in the stomach.
Barbiturates	Tablets or capsules which relax the central nervous system, producing effects similar to those of alcohol; overdose may cause death: dangerous when combined with use of alcohol or other drugs.
Narcotics (including heroin)	Manufactured from the opium poppy; causes decreased awareness of surroundings, drowsiness and nausea; overdose can cause unconsciousness and death; often taken into the body by the use of a needle and syringe; sharing of unsterilised needles and syringes can transmit hepatitis B and HIV (the virus that causes AIDS).
Tranquillisers (Valium, Serepax)	Tablets or capsules used to induce sleep or reduce anxiety; large doses can result in sleepiness and lack of coordination; overdose may cause death.
Hallucinogens	
LSD, mescaline	Powders that induce a change in mental state and hallucinations; depression and harmful behaviour may result.
Cannabis (marijuana)	Drugs such as marijuana and hashish are found in the Cannabis sativa (or indica) plant; these drugs are depressants and mild hallucinogens; cannabis use induces relaxation and decreased coordination and affects concentration, memory and decision-making; the high level of tar can cause lung disease; other terms for cannabis include pot, joint, reefer, weed, hash.
Inhalants	
Glues, fuels, solvents	Substances which when inhaled can cause feelings of drowsiness and relaxation; use can cause nausea or illness, and in some cases sudden death.

Figure 5.64 Common drugs

Road safety

Car accidents cause a lot of trauma for all people involved, and in many cases the accident could have been avoided. Soon you will be old enough to get your learner's permit, therefore you need to be aware of road safety and the factors that contribute to Australia's road accident problem.

Road accidents are the leading cause of injury in Australia. The 15 to 24-year-old age group accounts for over 30 per cent of all road casualties. This is despite the fact that this age group only makes up about 15 per cent of the total population.

Statistics show that one person in 20 will be killed or hospitalised because of a road crash before they turn 25—that's one or two people in your class.

Many injuries caused by road crashes are horrific and disfiguring, resulting in permanent disabilities, such as spinal damage, facial disfigurement and crushed bones or organs.

The cost of road accidents

Road accidents cost the community millions of dollars each year. Queensland Transport has reported that approximately 70 per cent of crashes occur within local residential areas and this costs Queenslanders millions of dollars per year. These costs include:

- ➔ property damage
- ➔ emergency and health care services
- ➔ legal and court proceedings
- ➔ insurance claims
- ➔ police investigations
- ➔ lost earnings by injured victims.

Add to this the emotional trauma caused to victims and their families and friends, and the damage becomes even greater, especially when the reality is that a majority of accidents are preventable.

Causes of road accidents

The Queensland Government has been campaigning to highlight three main causes of road crashes through promotion and advertising. These are:

- ➔ alcohol
- ➔ speed
- ➔ fatigue.

One of the main causes of injury in car accidents is failure to wear a seat belt.

Alcohol

Campaigns such as 'Drink drive—you're a loser' and billboards such as 'Drink drivers—you can't get much lower' are forms of harm minimisation promoted by the government and police to deter drink driving.

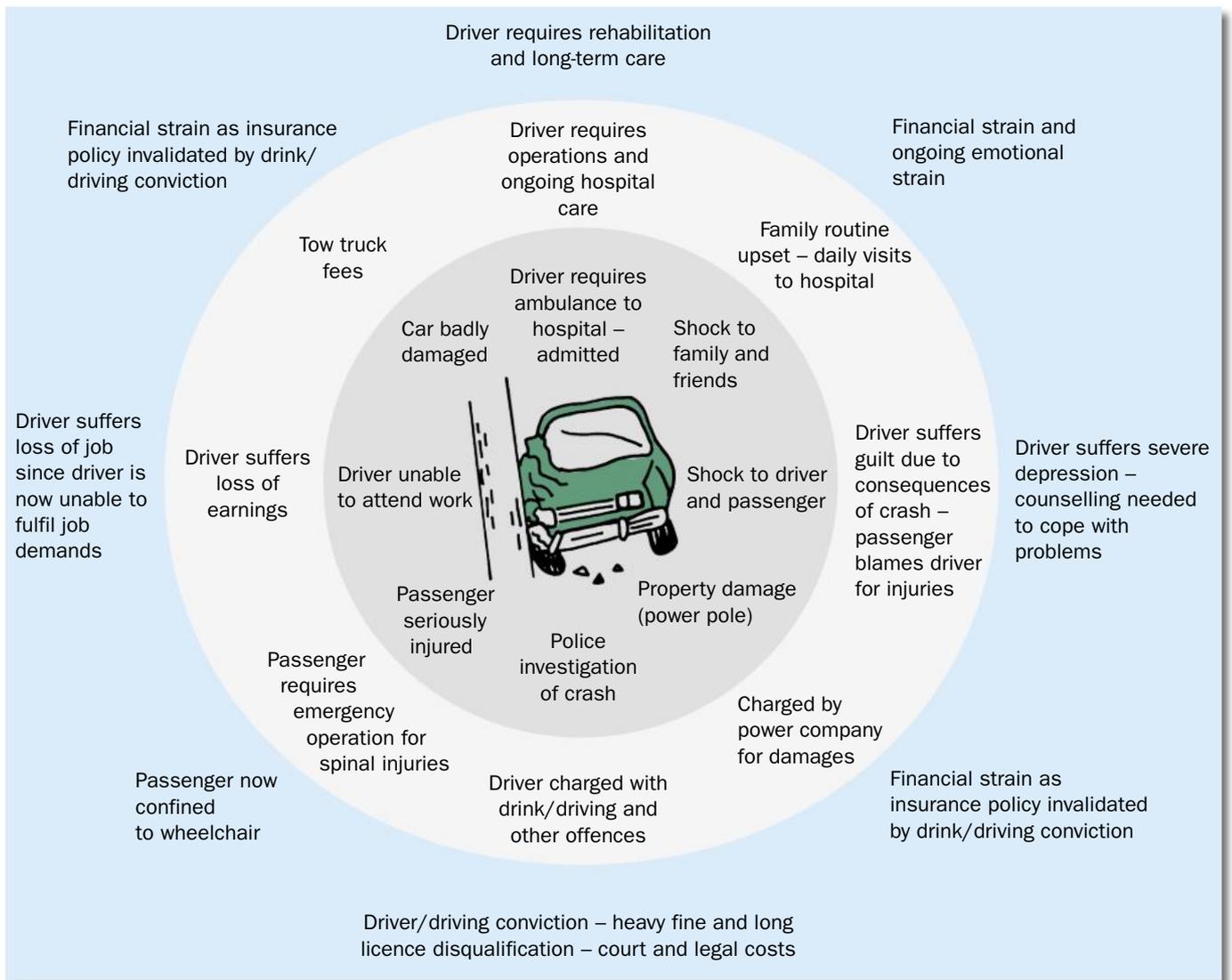


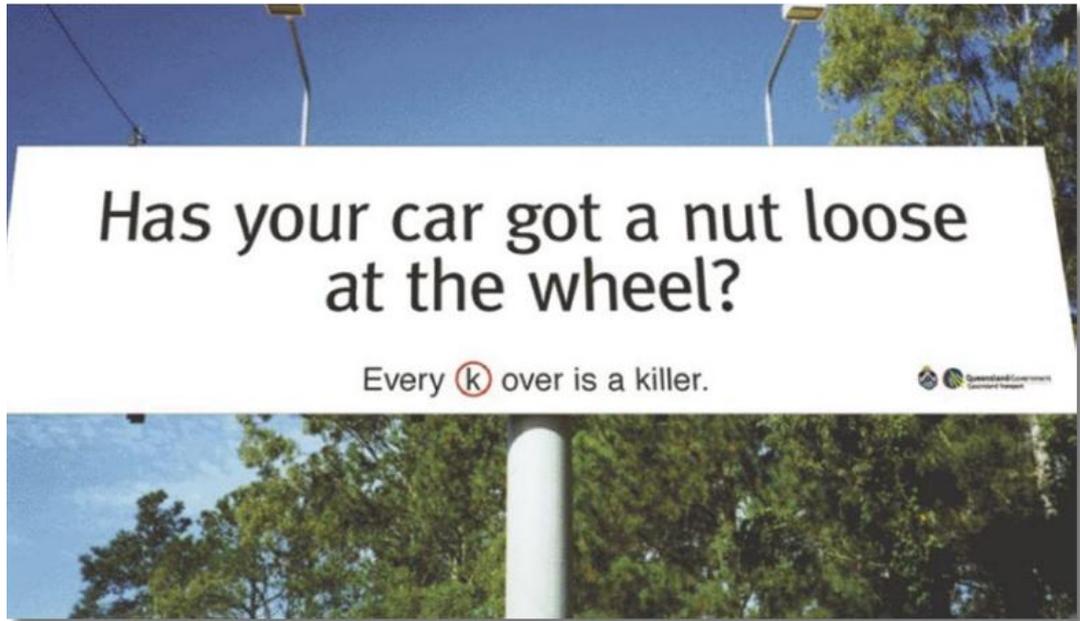
Figure 5.65 Immediate, short-term and long-term costs of accidents

Alcohol can be quite relaxing in a social setting, however, when you mix it with driving you can have disastrous results. Even in small doses alcohol can:

- ➔ alter your judgment of speed and distance
- ➔ interfere with your coordination
- ➔ inhibit your reaction time
- ➔ make you so confident that you do not believe any of the above is occurring.

Speed

‘Speed kills’ is one slogan with a powerful message that is literally true. The faster you drive, the less time you have to react in a dangerous situation and the harder it is to control your car. Speed cameras were introduced in Queensland in 1997 to deter people from speeding. Now the police can catch you anywhere and at anytime, in some cases without you even being aware of it.



© The State of Queensland (Queensland Transport) 2001

Figure 5.66 Speed is one of the biggest causes of road accidents in Queensland



© The State of Queensland (Queensland Transport) 2003

Figure 5.67 Fatigue—the hidden killer

Fatigue

Fatigue, like alcohol, can alter your reaction time and judgment and ultimately may cause you to fall asleep at the wheel. Signs such as 'Stop Revive Survive' were introduced in conjunction with 'Driver Reviver' stops to encourage people to take regular breaks from driving in order to reduce the effect of fatigue.

If you are on a long journey, make sure the driver has a 15-minute break every two hours to ensure you all make it safely to your destination.

Seat belts and general road safety

Failing to buckle up is a major factor influencing the risk of injury associated with car accidents.

Failing to follow road rules, carelessness, overloading and inexperience are other factors that may affect people's ability to drive safely.

Once you start to drive a car, play it safe and remember you are the driver and you are the one responsible for everyone in your car. Obey the road rules and do the right thing. Drive to stay alive!

Road wise

- 1** Statistics show that the majority of car accidents experienced by teenagers involve males. What reasons could you give for this?
- 2** Design a billboard to help reduce road accidents among your age group.
- 3** Most car accidents occur between Friday and Sunday. Give reasons why you believe this is so.
- 4** Find a newspaper article that describes a road crash. Cut it out and glue it to a sheet of paper.
 - a** List the source of the article.
 - b** Write down the factors that caused the crash.
 - c** Could the accident have been prevented? If so, list the possible ways.
 - d** List ways in which similar crashes could be prevented from happening in the future.
- 5** In an attempt to minimise the number of road accidents and deaths each year, the Queensland Government has introduced new young driver initiatives. Research these initiatives and discuss the effect they will have on road safety with your class.



Activity 5.40

Figure 5.68 Buckling up may save your life



Work safety



Figure 5.69 Wearing safety gear in the workplace will help protect you from injury

You either currently have a part-time or casual job or will soon be applying for one. Therefore, learning to minimise harm for yourself and others at work will become increasingly important.

Work accident statistics

- ➔ Two Australians die each day as a result of work accidents.
- ➔ 200 000 cases of work injury and disease are diagnosed each year.
- ➔ Injuries are caused by falls, machinery or falling objects.
- ➔ Nearly 500 000 Australians a year suffer a back injury, usually due to poor lifting techniques.
- ➔ Injuries and disease cost approximately \$6 billion each year.

The National Occupational Health and Safety Commission, Worksafe Australia, has found that most work accidents and industrial disease can be prevented through planning, promotion, education and sensible behaviour.

Types of hazards

Physical hazards

- ➔ lifting
- ➔ noise
- ➔ jarring vibrations
- ➔ dusts and fibres
- ➔ extreme heat and cold
- ➔ lighting
- ➔ gases and fumes
- ➔ radiation
- ➔ explosions and fires.

Biological hazards

- ➔ exposure to viruses, bacteria and fungi.

Chemical hazards

- ➔ flammable materials
- ➔ poisons
- ➔ irritants or toxins.

Figure 5.70 Radiation is a hazard in some work places



Psychological hazards

- stress-causing factors, for example, boredom, time pressure and shift work
- sexual harassment.

Bad luck or bad safety?

- 1 For each of the work hazards listed on page 334, write down a job that would expose you to the particular hazard.
- 2 For each of the following careers, list all the work hazards to which you would be exposed if you worked in that career:

a electrician c computer operator e cook g welder i waiter or waitress k painter m hairdresser o musician	b plumber d dentist f police officer h banker j check-out operator l fast-food worker n taxi-driver p garbage collector.
--	---
- 3 List two jobs that you already have tried or would like to try. For each job write:
 - a** the potential hazards
 - b** prevention strategies you could take
 - c** the prevention strategies your employer could take.



Activity 5.41

Preventing work accidents

Preventing accidents is a shared responsibility between you, your employer, governments and trade unions.

Five ways of controlling hazards

- **Eliminate the hazard**—for example, eliminate risk of electrical shock by using cordless power tools.
- **Control the hazard**—training programs to teach employees how to use equipment appropriately.
- **Isolate the hazard**—noisy equipment can be isolated in a sound-proof room.
- **Change work systems**—redesign work systems by rotating tasks among workers and providing regular breaks for employees.
- **Personal protective devices**—safety equipment such as helmets, respirators and safety glasses should be used as the final safety measure.



What are you going to do about it?

For each of the following case studies write:

- 1 the factors that caused the accident or injury
- 2 the reasons why the victim acted the way he or she did
- 3 actions that could be taken to prevent it occurring again.

Case study

1

Andrew had just landed a great holiday job working on the production line at the local factory. On his second day, he met some mates at lunch to celebrate. After five quick schooners, he raced back to work feeling a little spun out. Late in the afternoon, he felt bored and sleepy. Suddenly he found his hand slipping into the machine he was using.

Case study

2

Julie worked part-time with Vicki three nights a week in a warehouse. The work wasn't bad, but the forklift driver was constantly harassing her. He'd come up behind her and rub himself on her, saying suggestive things. One night he molested her behind a row of cartons. Julie was frightened and didn't know what to do, as she didn't want to lose her job.

Case study

3

Nick hated wearing safety goggles and ear muffs. They made him sweat and look like a nerd. Whenever the supervisor was around he'd put them on, but he would take them off when he had gone. One morning a metal shaving flew into Nick's eye.

Case study

4

Pauline likes to party on Thursday nights. She often gets home around 4 am, has a couple of hours' sleep, then goes to work. Friday is usually a busy day at the department store where she works. By Friday afternoon all she wants to do is sleep. Pauline is exhausted this Friday. Going down the escalator, she slips and falls, breaking her arm.

Case study

5

Helena works as a receptionist in a small dingy office for a local business. Helena's boss puts heaps of pressure on her to work faster, particularly on the computer. By the end of most days Helena aches at the base of her neck and in both wrists. Lately this has been worse.

Literacy

In pairs develop a list of five areas or activities within your community where teenagers are most at risk of injury. This may require you to do some research using the internet or by contacting local health-promoting organisations by email or phone.

Draw a cartoon, including captions, to encourage people to take calculated risks when participating in these identified 'risky' activities or areas.

Once complete, download your work onto your school's intranet so it can be accessed by younger students studying this topic.

Numeracy

You are organising a track and field carnival for the local primary school.

Draw a plan of how you will set up the activities for the day, ensuring that each event can be performed safely.

Your diagram must include the activities, a plan of the sports ground showing the measurements of the distance between events and a list of any other safety precautions to be taken.

Also prepare a schedule outlining when each event will be run.

Lifeskills

In pairs make a list of 10 issues, topics or skills that every teenager should be taught in order for them to be suitably prepared for life beyond school.

For each point, highlight at least one reason why it is important for survival within society and who should be responsible for teaching it to students. This could be the school, parents or a health agency.

Future perspectives

This activity is aimed at promoting awareness about the incidence of a particular health concern that affects your age group.

As a class negotiate a topic to study and complete research to collect the most recent data relating to the incidence of your chosen health concern.

Using the statistics gathered, calculate the number of students within your school that could be affected throughout their lives.

Once the number of possible 'sufferers' has been calculated have them dress in a yellow shirt for one day. For example if the incidence within your school is 20 people then have 20 people dress in a yellow shirt for one day.

Each person in the class is to survey five people and collect the following information.

- How many times did they see someone wearing a yellow shirt?
- Explain to them what these people represented and record their responses.
- Question them regarding their knowledge or experience of this topic.

Collate all of the class results in order to determine what impact the activity made on the school community.

Discuss as a class whether more should be done within school to promote awareness of your health issue.

Where do I go from here?

www.oxygen.org.au

www.lifesaving.com.au

www.RoadSafety.qld.gov.au

Australia's health

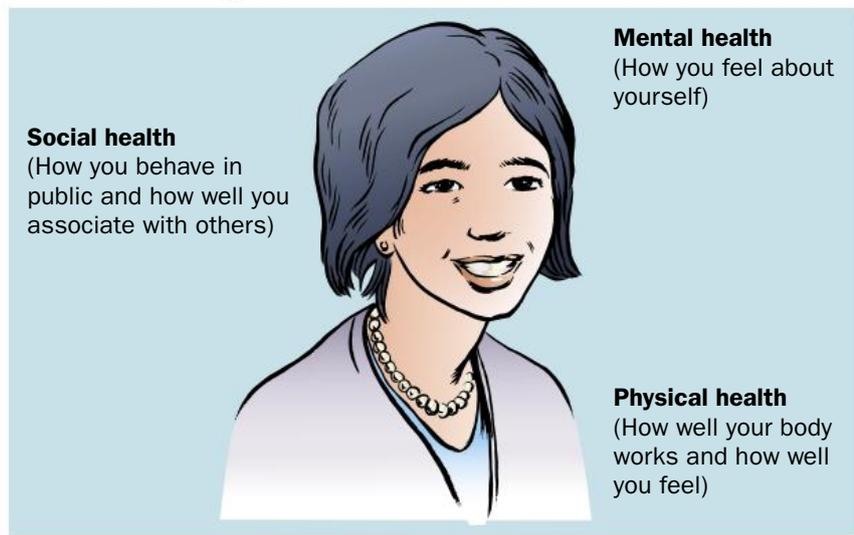
Chapter 6



At the completion of this chapter, and after undertaking a range of practical activities, you should have an understanding and appreciation of:

- Australia's overall health
- the cost of our ill health
- you as a health consumer
- sources of health advice
- environmental health
- lifestyle diseases
- Australia's health care system
- health promotion strategies.

Health



Think about the term 'health'. You are probably thinking of many different things rather than one thing in particular. Health is a very broad term and the World Health Organization (WHO) defines it as a 'state of complete physical, mental and social wellbeing, not merely the absence of disease or infirmity'. In other words, if you are healthy, you are not just disease free, you have optimum social, physical and mental wellbeing—you feel great (see Figure 6.1)!

Figure 6.1 The three types of health

Despite around 87 per cent of people aged 15 and over reporting some recent illness or long-term health conditions, 82 per cent assess their health as good, very good or excellent (Australian Bureau of Statistics). What does this statement tell us about what people believe health is?

Activity 6.1



What influences your health?

- 1 There are many factors that influence your health. Using the table below, list at what age you would expect each influence to affect your health and whether this is a positive or negative influence. Give an example of each influence on your health.

Factor affecting health	Age	Type of influence	Example
Peer pressure			
Skin cancer			
Religion			
Exercise			
Injury			
Family			
Smoking			
Advertising			
Alcohol			
Drugs			
Hospitals and doctors			
Asthma			
Health products			
Health campaigns			

- 2 Draw a cartoon depicting the three types of health—mental, physical and social. Share your work with the class.

Lifestyle diseases

The overall health of Australians is improving, resulting in a decreasing **mortality rate** (death rate). With this change in health also comes a shift in what is causing our health problems. The development of technology, antibiotics, immunisation and improved sanitation facilities has seen a drop in **communicable diseases** (diseases spread from one person to another) such as whooping cough, diphtheria and polio.

In today's society, the way we choose to live is proving to be the cause of the majority of deaths. Our actions result in lifestyle diseases that can be minimised by altering our behaviour.

As of 2004, the average life expectancy for females is approximately 83 years of age and the average expectancy for males is 78 years of age (Australian Institute of Health and Welfare). Knowing about lifestyle diseases will enable you to make some very important decisions—to take control of your actions and in return live a long and healthy life.

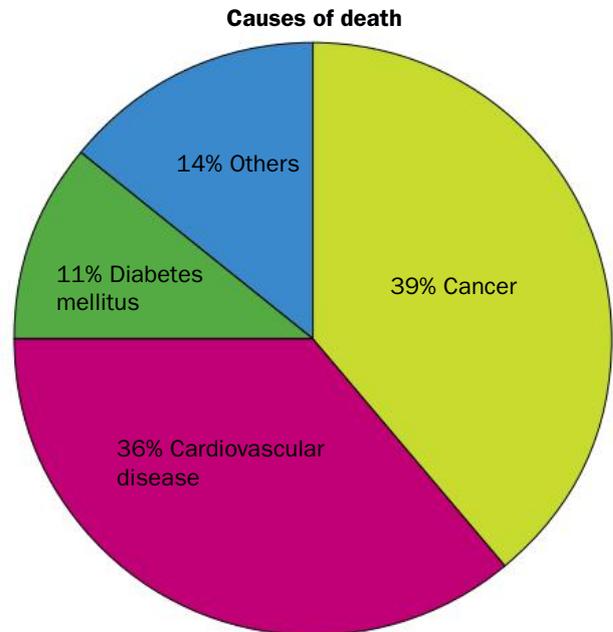


Figure 6.2 All of the major causes of death could be reduced if people merely changed their lifestyles

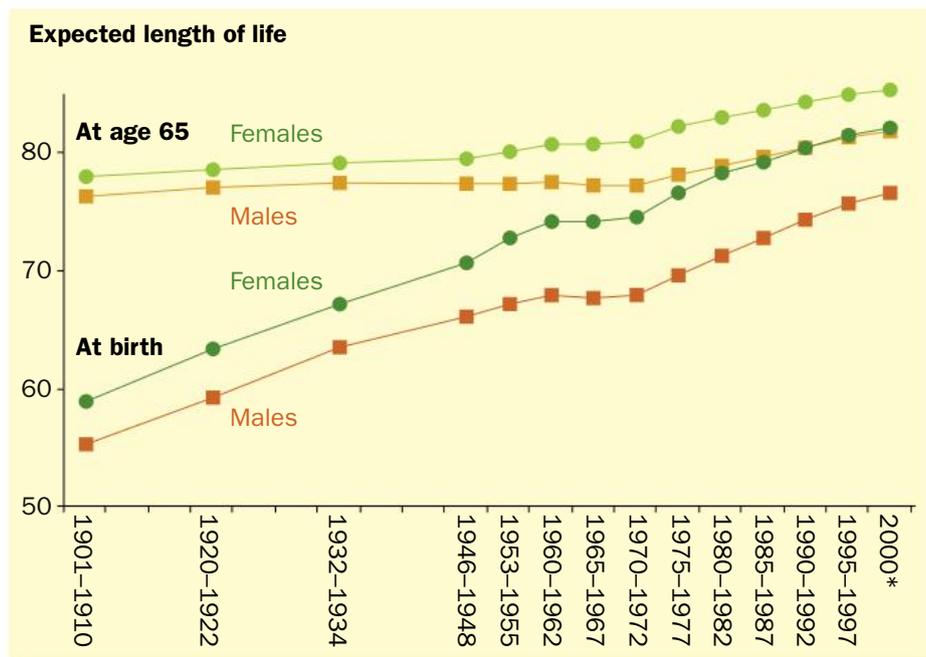


Figure 6.3 Expected length of life at birth and at 65 years, by sex, Australia, 1901–1910 to 2000

Sources: Australian Government Actuary 1999, World Health Organization 2002
View the latest figures (2000–2004) at www.aihw.gov.au. Search for 'life expectancy'.

Activity 6.2



How long will I live?

Look at the graph in Figure 6.3 on page 341 and answer these questions.

- 1 Copy and complete the table below.

Subject	Average life expectancy	Factors which may influence life expectancy
Me		
Mum/dad		
Grandmother/grandfather		
Greatgrandmother/greatgrandfather		

- 2 Look at your average life expectancy. What changes could you make to your lifestyle to ensure you reach or exceed this age?

Activity 6.3



Lifestyle diseases and their risk factors

- 1 The lifestyle diseases that are listed in the table below have a number of causes called risk factors (lifestyle factors that will probably cause the disease in a particular person). For each disease, write down as many risk factors as possible in the column headed 'Risk factors I think cause this disease'.

Lifestyle disease	Risk factors I think cause this disease	Risk factors I know cause this disease
Cardiovascular disease		
Skin cancer		
Asthma		
Injuries/poisonings		

- 2 When you have finished studying this chapter, return to the table to complete the column headed 'Risk factors I know cause this disease'.
- 3 Compare the two columns to see how much your knowledge about health has changed while studying this chapter.

Major lifestyle diseases

Your genetic make-up and the lifestyle decisions you make will determine whether you suffer from any common lifestyle diseases. It is true that at your age some lifestyle diseases, such as heart disease and cancers, are not common but your actions now will have a significant effect in the future.

Cardiovascular disease

Cardiovascular disease includes all diseases of the heart and circulatory system. It is the most common cause of death in Australia, however, due to health promotion and lifestyle changes, it is on the decrease.

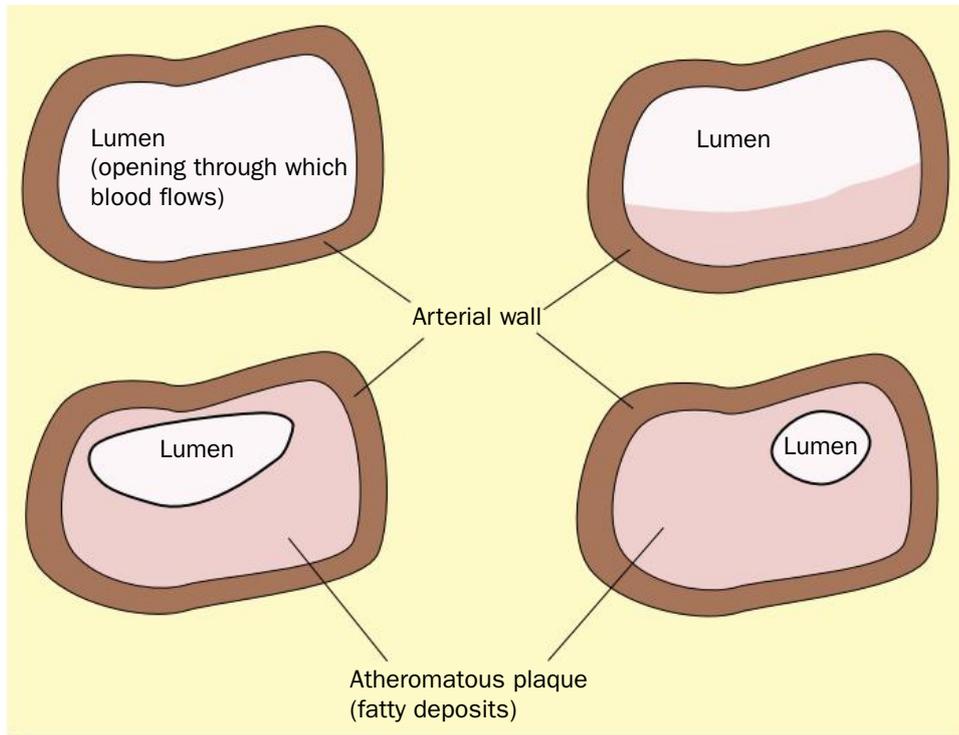


Figure 6.4 Progressive narrowing of a normal coronary artery. During this degeneration process, fatty deposits accumulate on the arterial wall. The wall becomes roughened and loses its elasticity, and the size of the opening becomes smaller. If the opening becomes too narrow, blood flows so slowly that it coagulates, thus delivering insufficient blood and oxygen to the heart itself. This blockage can cause a heart attack.

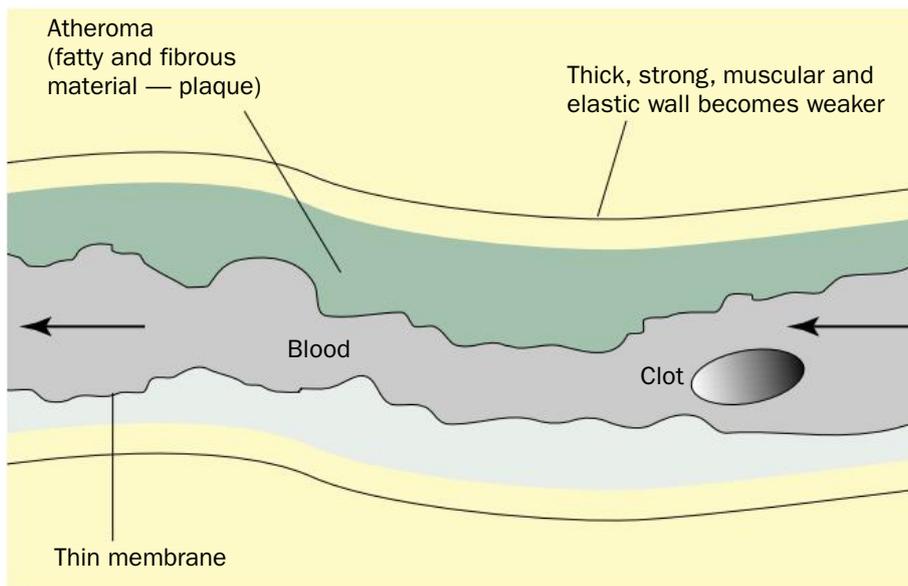


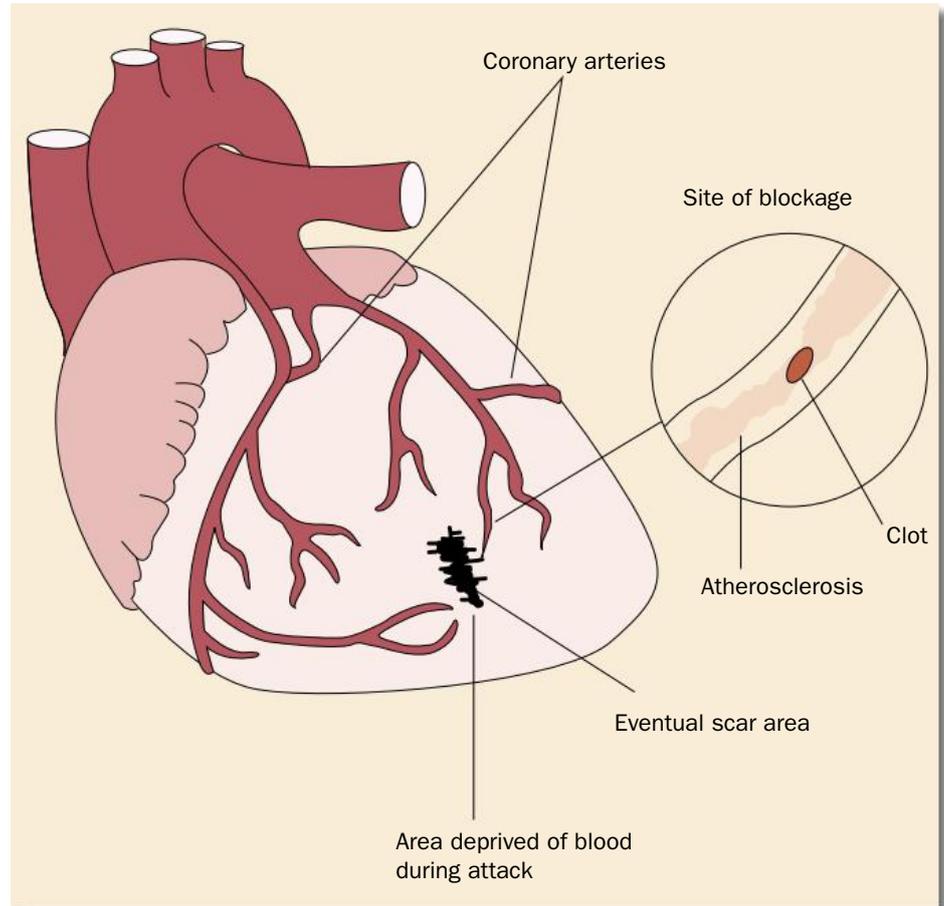
Figure 6.5 As the artery narrows because of the fatty deposits on the inside of walls, it becomes more difficult for blood to pass through, and a clot may form

Heart disease

Atherosclerosis is the most common of the cardiovascular diseases. This occurs when fatty deposits build up on the inside of your arteries. This 'plaque' sticks to the artery wall restricting the blood flow.

When this condition develops inside the arteries that feed your heart muscle (coronary arteries), you are in real trouble. A heart attack may occur if the plaque stops the blood flow and as a result stops the heart from pumping. People who experience a heart attack will feel a tightness in the chest and acute pain. This may result in death. Heart diseases are caused by many risk factors (see Figures 6.6 and 6.7).

Figure 6.6 A heart attack may result in death



Heart disease risk factors

If you could eliminate the following six lifestyle risk factors, you would reduce your chance of getting heart disease. The risk factors are:

- ➔ physical inactivity
- ➔ being overweight
- ➔ high levels of fats and cholesterol in your blood
- ➔ high blood pressure
- ➔ smoking
- ➔ high stress levels.

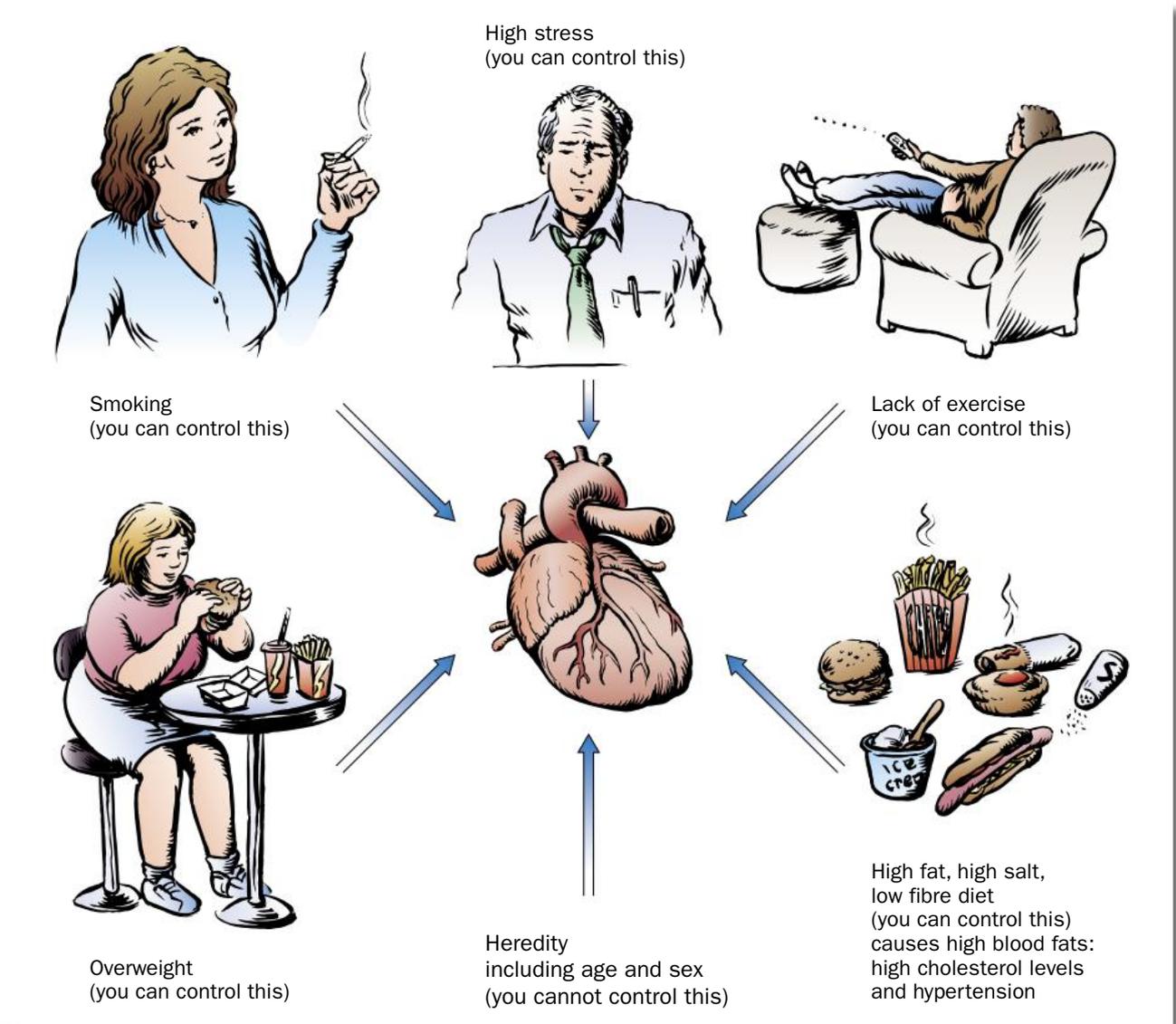


Figure 6.7 Multifactorial influences on heart disease

Risk factor 1: Physical inactivity

For many years, researchers around the world have been looking at active, aerobically fit groups of people and comparing them with inactive, sedentary groups of people. One of the many differences between the two groups is that aerobically fit people have larger, stronger hearts and clearer, more elastic arteries than sedentary, inactive people.

Large hearts do not need as many beats to deliver the same amount of blood as that delivered by smaller hearts. For example, aerobically fit people have resting heart rates of around 60 beats per minute, whilst sedentary people usually require 72-plus beats per minute. This means that aerobically fit people, apart from having stronger hearts, save their hearts 121 000 beats per week, or over 6 million beats per year. That's a lot of wear and tear on your heart—it's no wonder that researchers also find that aerobically fit people are much less likely to get heart disease.

You can eliminate one risk factor if you follow the aerobic fitness formula (FITT) and exercise:

- ➔ three times a week
- ➔ 20 minutes continuous jogging, cycling, swimming or aerobics classes
- ➔ heart rate between 140 and 160 beats per minute.

If you don't do any aerobic training, add one risk factor.

Risk factor 2: Being overweight

Approximately 16 per cent of Australia's population are obese and 34 per cent are overweight. This is very scary when you realise how much strain being overweight puts on your heart. The heart of an obese person has to work extra hard to pump blood to all of the fat tissue around their body. In fact, if you are only five kilograms overweight, your heart has to pump blood through 14 kilometres of extra blood vessels.

Is being overweight worth the heart strain? Statistics say it isn't. People who are nine kilograms or more overweight are three times more likely to get heart disease than people of normal weight. The key to controlling your weight is to balance your kilojoule intake and expenditure (see Chapter 7). To find out if you are overweight, measure your body mass index (see Chapter 7). If you are overweight, begin some aerobic exercise. If your weight is normal, strike off another risk factor.

Risk factor 3: High levels of fat and cholesterol

When you eat a lot of fatty and high-cholesterol foods such as full-fat dairy products, red meat and greasy takeaway foods, the fat and cholesterol are absorbed into your blood. When you have a lot of cholesterol in your blood, it tends to stick to the inside of your arteries, causing disease. However, regular aerobic exercise reduces your blood fat and cholesterol levels, so that the plaque either does not develop or is 'burned' away. So if you do not eat many fatty, high-cholesterol foods and you exercise aerobically three times a week, cross off another risk factor. For you others—the risk factors are starting to mount up.



Figure 6.8 Eating foods with high fat and cholesterol levels increases your chances of getting cardiovascular disease

Risk factor 4: High blood pressure

We learnt in Chapter 3 that **blood pressure** is a measure of the pressure in your arteries when blood is pumped from your heart into your arteries. High blood pressure occurs when your arteries become hardened by atherosclerosis, increasing the likelihood of a heart attack or stroke.

High blood pressure is not likely to be a problem for people of your age, but how you live now can affect you later in life.

If you follow the FITT formula (see page 100), are not overweight, do not add salt to your food, and eat only small amounts of junk food, you can avoid high blood pressure.

Risk factor 5: Smoking

Smokers are three to five times more likely than non-smokers to develop heart disease as well as cancer and bronchitis. People involved in regular aerobic exercise tend not to smoke or smoke at reduced levels. If you do not smoke, cross off another risk factor.

Risk factor 6: High stress levels

Stress can be caused by examinations, assignment deadlines, peer pressure or your parents' rules. Everyone experiences some stress, but if you constantly feel under pressure and cannot cope with it, it can contribute to heart disease.

Getting organised and following the FITT formula will give you a chance to plan what you are doing and to decrease the effects of stress by working off your frustrations, while at the same time strengthening your heart. If you have your stress under control, cross off one more risk factor.

Summary

Avoiding heart disease is largely in your hands. Cardiovascular disease should not be a lifestyle disease you have to worry about if you:

- ➔ have an active lifestyle following the FITT formula
- ➔ control your kilojoule intake
- ➔ reduce your fat, salt and sugar intake
- ➔ plan your life so that you are not under stress.

If you find that you already have some risk factors, look out for programs such as the Anti-Cancer Council's QUIT program, the Queensland Government's Get Active initiative, the National Heart Foundation's Heart Health program and Life. Be In It's Come'n Try program. These programs can help you adjust your lifestyle to reduce cardiovascular disease risks. You just need to make an informed decision and take the first step to a healthier life!

Don't pressure your heart

- 1 Read each of the scenarios below and plan the advice you would give to each person. Begin your piece of advice with 'Do yourself a favour ...'
 - a Sally is 13. In the last few months she has really stacked on the weight. Yesterday she had an aerobic fitness test and her result was poor.

continued ...



Activity 6.4

- b** Jim eats anything. He is not really fat but he eats takeaway food constantly, and he loves full-fat dairy products such as cheese and ice-cream.
 - c** Paul has been smoking on the sly for about 12 months. He is sick of sneaking around behind sheds and trees having a puff, and he is constantly broke.
 - d** Renee is a fairly uptight person. Recently, she heard that high blood levels of fat and cholesterol can happen at any age. She wants to know how much cholesterol in her blood is okay and where to have it measured.
- 2** Now that you have gone through the risk factors, how at risk of heart disease are you? Decide what choices you can make about your lifestyle, what would happen if you make those choices and what you are going to do.

Cancer

Cancer is the second most common cause of death in Australia, accounting for about 39 per cent of deaths. If current rates continue, about one in three males and one in four females in your classroom will develop some form of cancer during their lifetimes. These figures are worse if non-melanoma skin cancers are included.

Cancer is the only major cause of death that is still increasing in both sexes. The most common types are cancer of the lung, skin, breast, colon, prostate and cervix. Many factors that contribute to these cancers are preventable. On a worldwide basis, Australia, like all developed nations, has a high incidence of all cancers, but Australia leads the world in skin cancer rates.

Types of cancer

Cancer occurs when normal cells in one part of your body mutate (change). These mutated cells, which perform no useful bodily function, multiply very rapidly becoming out of control. These cells form lumps or tumours, and look and behave differently from healthy cells.

Benign tumours

Some lumps of cells have a definite boundary and do not spread beyond it. These are **benign tumours** and are not cancerous.

Malignant tumours

If the tumour has no definite boundary and its peculiar cells push between the surrounding ones, it is a **malignant tumour**—in other words, a cancer.

As a group of cancer cells divide and grow, branches of cancer cells force their way between the surrounding normal ones. This process is called **infiltration**.

After a time, groups of cells from a cancer can enter a blood vessel or the lymphatic system. They break off and are carried by the blood or lymph around a person's body until they settle in other parts and form **secondary tumours** (secondary cancers). This process is called **metastasis**.

Varieties of cancer

Leukemia, which is a cancer of the blood cells, does not form a lump. It is still cancer, as the blood cells grow abnormally and do not perform their designated function.

There are many different kinds of cells in the body. For example, skin cancers are not the same as lung cancers. There are even different types of skin cancer and lung cancer, depending on which type of cell in these organs malfunctions and produces the cancer. It is important to know this, because different types of cancer have different causes and different treatments.

Therefore, 'cancer' is not really one disease but many, with many features in common (described above).

Cancer risk factors

Many cancers are known to be caused by lifestyle factors that you can control. You can choose to avoid unhealthy behaviours and reduce your risk.

Lung cancer

The vast majority of lung cancers are caused by cigarette smoking. Air pollution and job exposure to carcinogens such as asbestos are also risk factors.

Skin cancers

A major risk factor of skin cancer is exposure to the sun's ultraviolet rays over many years, with repeated sunburn, particularly during childhood and adolescence. People with fair skin, fair hair, red hair, outdoor jobs, many skin moles or who live in a hot climate are most at risk (see Chapter 5 for more information).

Bowel cancers

Your risk of developing bowel cancer is largely related to your diet. A diet high in fat and low in complex carbohydrates and fibre is the major risk factor. Drinking excessive alcohol and being overweight are also lifestyle risk factors.

Cervical cancer

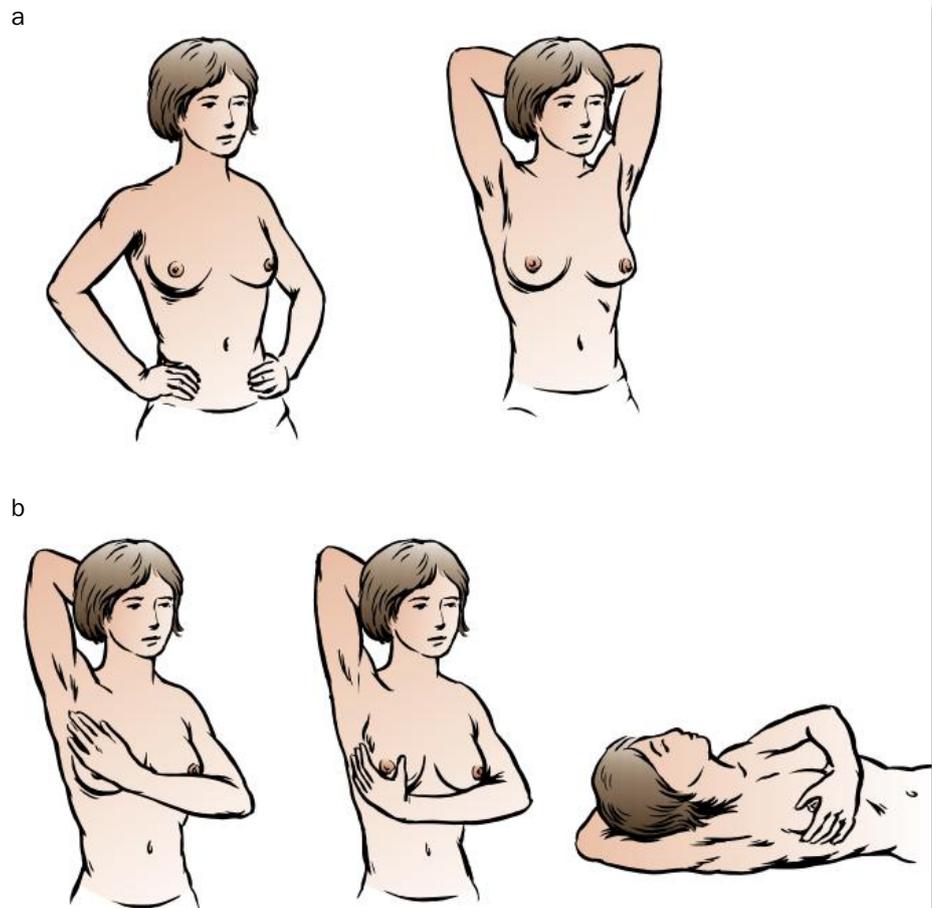
The lifestyle risk factors that increase a female's chances of developing cervical cancer are sexual intercourse at a young age, sexual intercourse with many partners, and catching a viral STD such as human papilloma virus or HPV (the virus that causes genital warts). Females who have had sexual intercourse should have a pap smear test every two years. This involves taking a smear of cells from the cervix to check if cancer is present.

Many advancements have been made in the study of cervical cancer resulting in the development of a vaccine to prevent the disease. Researchers hope that this vaccine may be available to women in the near future. Making appropriate lifestyle choices still remains the most effective means of preventing this disease.

Breast cancer

Breast cancer is the most common cause of death in women aged between 25 and 44, and it kills about 2500 Australian women each year. The cure rate is extremely high if the cancer is found and treated early.

Females most at risk of breast cancer as a result of their lifestyle are those who are overweight or who give birth later in life. Breast cancer is best prevented by regular breast self-examination for suspicious lumps, followed immediately by a trip to the doctor if a lump is found (see Figure 6.9).



a Inspect your breasts by looking at them in the mirror. Look for dimpling, distortion in shape, or anything unusual about the nipple, such as a discharge

b The next stage can be done while in the shower, standing, sitting or lying down. With one hand behind the head, work the opposite hand over the breast in a clockwise direction, examining each section of the breast from the outer edge to the nipple. Repeat on the other side

Figure 6.9 Breast cancer self-examination

Testicular cancer

It is possible that a poor diet may be a lifestyle risk factor in developing testicular cancer. Since we do not know the exact risk factors, it is vital for males to self-examine their testicles regularly for lumps or abnormalities.

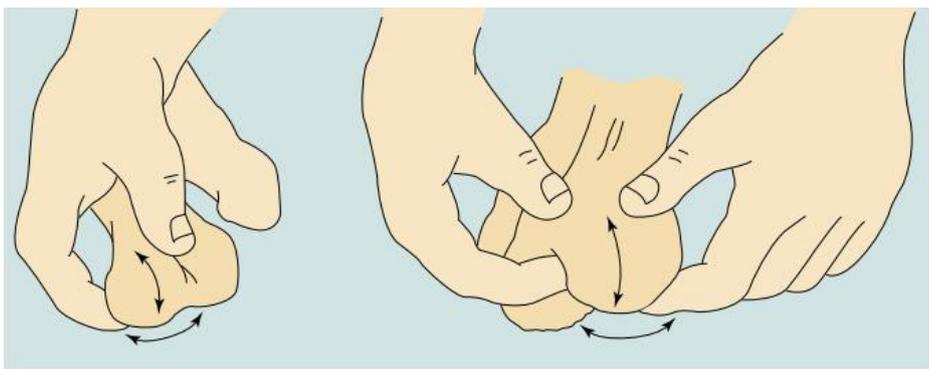


Figure 6.10 Testicular examination

Cancer survival hope

By Jessica Lawrence

Cancer survival rates have soared in the past 20 years with some sufferers now more than twice as likely to beat the life-threatening disease.

A new report reveals the survival rate for all cancers has increased by more than 25 per cent thanks to earlier detection rates and better treatments.

More than 94 per cent of melanoma sufferers, 86 per cent of people with breast cancer and 95 per cent of testicular cancer patients are now likely to survive.

The report—Cancer Survival in Queensland 2002—reveals the average rate of survival after five years has jumped from just over 50

per cent between 1982 and 1985 to more than 63 per cent between 1996 and 2000.

One out of every three Queenslanders will be diagnosed with cancer before age 75. About 6500 people die from cancer every year.

Queensland Cancer Fund executive director Dr Jeff Dunn said the report 'shows there are things we can do about cancer and that we are making ground'.

'There is still a lot to be done ... but if we make a sensible investment in prevention, early detection and management of cancer we can make a profound difference in survival rates,' Dr Dunn said.

He said the report, compiled by

the Queensland Cancer Fund and Queensland Health, also highlighted the importance of encouraging men to 'take care with their health'.

'This is why anti-tobacco and anti-smoking campaigns are so important because with lung cancer sadly, by the time we find it, it's an advanced cancer,' he said.

The report revealed the biggest jump in survival rates during the past 20 years had been from melanoma, breast, prostate, testis, thyroid gland and childhood leukemia.

... Men are more likely to die from cancer within five years than women.

The Sunday Mail
28 August 2005

Don't put it off!

Read the article 'Cancer survival hope' and complete the following activities.

- 1** List the reasons given for why cancer statistics are improving.
- 2** Why do you think men are more likely to die sooner after being diagnosed than women?
- 3** Self-examinations are essential in early detection of cancers, however, many people feel uncomfortable about doing this. Why do you think this is so?
- 4** In pairs, discuss various ways people can be encouraged to examine themselves and have regular check-ups.
- 5** As a class, discuss all of the campaigns that have been introduced to reduce the incidence of cancer among Australians.



Activity 6.5

Activity 6.6



The onus is on you

- 1** Make a list of the dietary risk factors common to both heart disease and cancers.
- 2** What changes would you need to make to your diet to eliminate these risk factors?
- 3** The table below shows a list of cancer warning signs. Tick any warning sign that you can monitor yourself. Write the cancer that may be the cause of these signs.

Sign	Can monitor yourself	Type of cancer
Unusual bleeding or discharge from the vagina.		
Any persistent change in your normal bowel habit.		
Persistent cough or continuing hoarseness.		
Persistent indigestion or difficulty swallowing.		
A lump or thickening in the breast or elsewhere (even men can develop cancer of the breast).		
A change in a wart or a mole.		
A sore that does not heal.		
A hard lump, soreness, or abnormality in the shape of the testicles.		

- 4** What would you do if you detected one of the warning signs:
 - a** on yourself
 - b** on a friend or family member?
- 5** Fear and ignorance are two common reasons for people developing risky behaviour and not seeking medical help if they notice a warning sign. Write an assertive counter argument to each of the ignorant statements in the table below.

Statement	Counter argument
'Why should I bother finding out if I have cancer? I would rather die happy and not know about it!'	
'Some people eat well, exercise regularly and they die anyway—so what's the point of a healthy lifestyle?'	
'My grandfather lived to be 98 years old and he never had a doctor check him for cancer, so why should I? I come from good stock.'	
'I just don't want to examine my own breasts/testicles—what would people think?'	
'I have an olive complexion, so I don't need to worry about wearing sunscreen. Besides, it's not natural to put all those chemicals on your body.'	
'I don't want to have an examination for cancer. What would I do if the doctor found something?'	

Asthma

Asthma is a lifestyle disease epidemic that has significantly worsened within recent years. Since 1980, there has been a rapid increase in the number of people suffering from, and dying of, asthma.

Symptoms

When a person has asthma, the bronchial tubes become narrow and filled with extra mucus. The person breathes in normally but has difficulty when breathing out. As a result, the sufferer feels a shortness of breath, wheezes and coughs. The person gasps to take in fresh air but the stale air within the lungs becomes trapped. This creates a feeling of suffocation, which must be relieved quickly with medication. Attacks can last from a few minutes to hours and in extreme cases can result in death by suffocation.

Causes of asthma

Asthma can be initiated by a number of factors. These triggers are listed below.

Family history

Some families are prone to having asthma. The members of the family most likely have similar respiratory systems that are sensitive to substances that trigger attacks. However, just because one family member has asthma does not mean that others will also.

Sudden changes in climate

Rapid changes in temperature and humidity, particularly 'cold snaps', can trigger asthma.

Nervous tension

Excitement, fear and anxiety can all trigger sudden attacks.

Environmental pollution

Dust, smog, fumes and cigarette smoke are allergens that when inhaled can irritate your respiratory tubes and trigger an asthma attack. Air pollution has been blamed for the dramatic increase in asthma attacks since 1980.

Other allergens

Pollen, animal hair, insecticide sprays, food additives and cosmetics can all trigger asthma.

Very strenuous exercise

High-intensity exercise can trigger attacks, particularly in those people who are unfit.



Figure 6.11 Animal hair has been linked to triggering asthma attacks

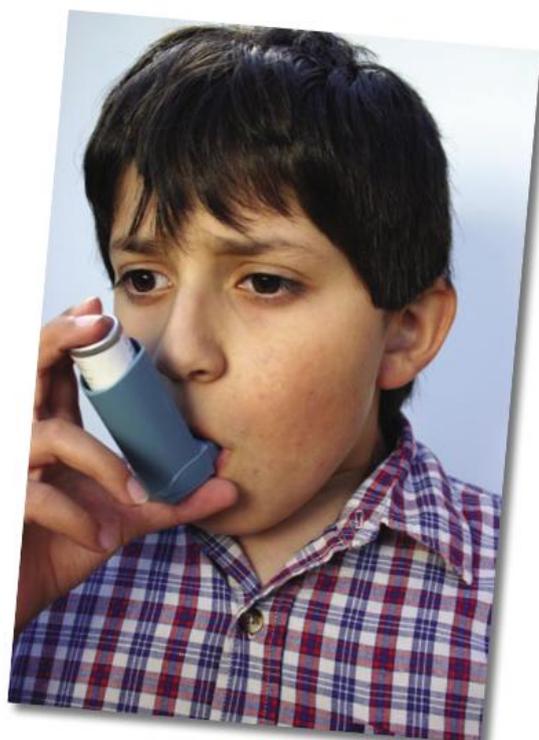


Figure 6.12 A ventolin inhaler is used to relieve an asthma attack

Lack of aerobic exercise

Aerobic exercise helps keep your respiratory system functioning efficiently while at the same time boosting your immune system so you are resistant to infections. When you do not do enough aerobic exercise, your system tends to fall victim to infection and asthma attacks. For asthma sufferers, swimming is the best aerobic activity.

Treatment

It is very important that asthma be treated seriously and consistently. Asthma sufferers can take medication such as:

- ➔ antihistamines to reduce their sensitivity to certain allergens
- ➔ drugs such as ventolin (puffers) to widen the bronchial tubes.

Figure 6.13 People with asthma should avoid foods with artificial flavours and colours



Activity 6.7



Asthma investigation

- 1 Survey the class to identify how many people suffer from asthma.
- 2 If possible, interview an asthmatic from your class, and record the following information:
 - a When did you first suffer from asthma?
 - b Where do you receive treatment?
 - c What medication do you take to reduce the effects of asthma?
 - d What difference has asthma made to your life?
 - e What regular activity do you perform to help handle asthma?
- 3 There are many myths that relate to the cause and treatment of asthma. As a class, develop a list of all of the information that you have heard about asthma. Do some research to identify which are facts and which are fiction.

Minimising risks

Whether you are an asthma sufferer or a potential sufferer, there are steps you can take to reduce your chances of having an asthma attack.

- ➔ Keep aerobically fit and if possible swim regularly, warming-up and cooling-down for each session.
- ➔ Avoid allergens such as smog, smoke and fumes.
- ➔ Seek treatment quickly if an attack occurs.
- ➔ Avoid food and drinks containing artificial additives. Try to eat natural foods.
- ➔ Take prescribed asthma medication.
- ➔ Always carry your reliever medication.
- ➔ Monitor your asthma by being able to identify signs of an attack and having regular check-ups. Your doctor will be able to educate you about the 3+ Plan.
- ➔ Develop an asthma action plan.

Quit now—for sake of kids

By Leanne Edmestone

Parents who smoke cause about 10 per cent of childhood asthma cases, making it one of the most preventable causes of the disease that affects more than a quarter of Queensland children.

Asthma Foundation of Queensland medical research chairman Simon Bowler and colleague Anne Chang yesterday urged smokers to make quitting their New Year's Eve resolution—if not for their own health, then for their children's.

Dr Bowler, a respiratory specialist at Brisbane's Mater Hospital, said parental smoking was one of the most preventable causes of asthma, which affects about one in eight Australians, and accounts for about 10 per cent of asthma cases.

Research has shown mothers who smoked were twice as likely to have children who wheezed, children of smoking parents were twice as likely to have a severe respiratory infection requiring medical treatment, and the more people in the child's home

who smoked, the greater the risk of wheeze and respiratory illness.

Dr Chang's research found that maternal smoking habits also affected the fetus, making babies less likely to rouse easily from sleep and putting them at risk of Sudden Infant Death Syndrome.

Dr Bowler said the incidence of asthma, which affects more than two million people nationally, had increased over the past 20 years but was starting to plateau.

The Courier-Mail
23 December 2004

Asthma needn't take your breath away

Read the Article 'Quit now—for sake of kids' and complete the following activities.

- 1 It is suggested that smoking is one of the most preventable causes of asthma. Make a list of what you think are the five most preventable causes of this disease. Collate your results as a class and follow up with research to see if you are correct.
- 2 In pairs develop a poster that is aimed at educating people about the top five risk factors.
- 3 What reasons can be given for the increased incidence of asthma over the past 20 years?
- 4 What can be done to ensure that asthma statistics plateau and eventually drop?



Activity 6.8

The cost of our ill health

Health insurance

Medicare

Accidents and illnesses cost Australians enormous amounts of money every year. For this reason, the federal government provides every Australian with a basic health insurance called Medicare. Medicare provides full or part payment of medical expenses and allows you to have free public hospital accommodation and treatment, and part payment for private hospital care and doctors. Medicare is funded through taxes.

Private health insurance

Some people also pay for private health cover through schemes such as MBF and NIB. As an incentive for people to take out private health insurance, the government contributes 30 per cent of the premium. This extra insurance covers private hospital care and may also cover dental care, optometry, physiotherapy and other health services, depending on your policy.

While you are a dependent student you are covered by your parents' health insurance. However, as soon as you earn enough money or leave home you will need to arrange your own.

Activity 6.9



Are you covered?

- 1 Find out if your parents have private health insurance. Ask them their reasons for either joining or not joining a scheme.
- 2 As a class, investigate the claims of some of the better-known private health insurance companies and their radio and television advertisements. Collect their brochures. Compare their benefits with their costs. Which appears to suit your needs best?
- 3 You are going to take out some private health insurance. Make a list of the questions you would ask the private health insurance company. Plan how you would make your final decision.

Figure 6.14 Medicare offices can be found in most major towns



The Australian health care system

Australia has an extensive health care system. It consists of health agencies that provide you with health services. A health agency is any organisation that provides health care, information, education and treatment to the public. Health agencies include government health departments, voluntary organisations such as the Salvation Army, non-government organisations such as the National Heart Foundation, and community health centres.

Figure 6.15 Educational pamphlets provide Australians with information about many aspects of their health



These agencies provide you with a huge range of services, such as immunisation; educational pamphlets; safe houses; consumer protection and laws to control shop cleanliness, sewage disposal, food additives and so on. All of this costs millions of dollars per year.

Until recently, most of the Australian health care system has been geared towards the treatment of ill health rather than the prevention of ill health and the maintenance of good health. Many recent health care schemes now aim at health promotion. You can make decisions that will help you keep your good health and avoid lifestyle diseases via a means of harm minimisation.

There are many federal, state and territory government programs designed to improve the health of Australians, and these programs tend to focus on five priority areas:

- ➔ improved nutrition
- ➔ prevention and control of high blood pressure
- ➔ prevention of cancer (lung, skin, breast and cervical)
- ➔ prevention of injury
- ➔ improved health for older people.

You can help these programs achieve their goals by taking charge of your own personal health.

Activity 6.10



Who helps keep you healthy?

- 1** Draw a simple map showing the major roads within a two-kilometre radius of your house.
- 2**
 - a** Make a list of all the health agencies within this area.
 - b** Next to each agency, write down the services it provides.
 - c** Put an asterisk (*) next to each one that you use.
 - d** Next to the services provided by each agency, write down whether the services are for health prevention or treatment or both.
- 3** As a class, develop a directory of health agencies that you may access. Include details of their services, phone numbers and addresses.

You as a health consumer

When a person buys a product or uses a service they are known as a **consumer**, therefore when you use a health service you are a **health consumer**.

Whatever service you are using or product you are buying, you want it to be appropriate to your needs. In order to achieve this, you need to consider the following:

- ➔ What do I need?
- ➔ Why do I need it?
- ➔ Where can I go for help?

Remember that the best decision is an informed decision. At the moment, your parents would be very influential in your decision making, however as you become more independent, this will change.

Your rights as a consumer

Have you ever bought an item that you do not really need or want? If you are like most other people you will answer 'yes'!

When using a service, you have a number of rights, irrespective of your age, race or socioeconomic status—everyone has the same rights. They are:

- ➔ the right to be informed—to know about the product you are purchasing
- ➔ the right to be safe when buying or using a product
- ➔ the right to be heard—to ensure you get what you want
- ➔ the right to complain if the product or service is inadequate.

Figure 6.16 Good customer service is a right not a privilege





Figure 6.17 Exercise your rights

Consumer assertiveness

Being assertive is a way of communicating without being rude. In order to be assertive you need to:

- ➔ be comfortable with asking questions
- ➔ keep looking until you are satisfied that you have what you want
- ➔ be aware of what it is you want.

Being assertive

- 1** Before you choose a service or product, it is a good idea to outline some questions that will be useful so you can find out about the product. Imagine you are going to the doctor because you want his or her advice on what form of contraception you should use. Jot down a list of questions you would need to ask.
- 2 a** In pairs look at the following case studies and come up with various answers to each problem.
 - b** Convert your findings into role-plays and present them to your class.
 - c** In each case, what would be the easiest thing to do? Why?

Case study 1 Your aunty has bought you a dress for your birthday but you do not like it. What do you do?

Case study 2 You have been waiting at the counter of the chemist for 15 minutes, however, the shop assistant keeps ignoring you and serving the adults who arrive after you. What do you do?

Case study 3 You are at a fancy restaurant with your date. When your food comes you realise your steak is raw. What do you do?

Case study 4 As soon as you walk into a clothes shop, you are hounded by the sales assistant. You just want to browse, however, she won't leave you alone. What do you do?



Activity 6.11

Activity 6.12



How to ask for help

- 1 There are many people and organisations where you can gain information about every aspect of your health. You need to get advice from someone with whom you feel comfortable. Copy out the table below, and fill in the columns:
 - a Health problem—a health problem that you may have experienced within the last year or so.
 - b Who to ask—the person or organisation who could give you the information you need.
 - c What to ask—work out exactly what kind of product or service you need from that person and how to ask for it.
- 2 Share your information in a class discussion.

Health problem	Who to ask	How to ask
Pimples	Chemist	'I need something to help me get rid of my pimples.'

Responsible consuming

Think about what you had for breakfast this morning. What did you eat, how much did you have and what ingredients did your food contain?

Australian law ensures that all packaged food and drink must be labelled with the following information:

- ➔ product name
- ➔ net weight
- ➔ ingredients (decreasing in order of weight)
- ➔ address of manufacturer or packer
- ➔ price
- ➔ nutritional label.

Why is it important to have this kind of information on a food label? In order to be responsible for the food you eat, you need to be aware of what you are eating. People who are watching their fat or salt intake need to check the labels of food to ensure it is healthy for them to eat. Next time you go to eat something, check the label first and make the responsible choice.

Figure 6.18 All products must have information on their labels

NUTRITION INFORMATION		
SERVINGS PER PACKAGE: ABOUT 5		
SERVING SIZE: 35g	PER SERVE*	PER 100g*
	(approx. 19 biscuits)	
ENERGY	690kJ	1970kJ
PROTEIN	2.7g	7.6g
FAT, total	7.5g	21.3g
- saturated	3.4g	9.6g
CARBOHYDRATE, total	21.2g	60.5g
- sugars	2.3g	6.6g
DIETARY FIBRE	1.0g	2.8g
SODIUM	618mg	1760mg
*Average quantities		


Activity 6.13

Check your labels

- 1 Collect ten labels or empty food/drink containers.
- 2 Study each label, then answer the following questions:
 - a What ingredients are usually listed at the start of an ingredients list?
 - b What are additive numbers?
 - c What are additives used for?
 - d When you look at the ingredients list and nutrition information label on each product, do they match the advertising claims for that product?
 - e If four grams of sugar equals one teaspoonful of sugar, how many teaspoonfuls are in each product?
 - f If four grams of fat equals one teaspoonful of fat, how many teaspoonfuls are in each product?
 - g If you wish to complain about a product or seek more information about it, who can you turn to for advice?
- 3 Share your answers in a class discussion.

Why we start the day on sugar and salt

By Kate Patterson

Alarming amounts of sugar and salt are being added to breakfast cereals, new tests reveal.

Food experts have found five popular cereals contain more than 30 per cent sugar, while some were saltier than a packet of potato chips.

Even cereals that appear to be nutritious are laced with sugar and salt, according to Australian Consumers' Association food policy officer Clare Hughes.

ACA experts examined 150 brands of cereal and found just 40 of those would make a healthy everyday breakfast.

'It was quite disappointing to see that a lot of cereals targeted at children weren't the type of things we should be giving kids every day,' Ms Hughes said.

'Many consumers don't think about the salt content of their

breakfast cereal because they may not taste overly salty.'

Ms Hughes said any cereal that had more than 27 g of sugar per 100 g was considered high in sugar.

'Eight of the kids' cereals have very high levels of sugar (more than 40 g),' she said.

A suitable cereal would have more than 3 g of fibre, less than 27 g of sugar per 100 g, and less than 600 mg of sodium per 100 g.

The Sunday Mail found popular breakfast cereal Honey Os contained 42.2 g of sugar per 100 g—a higher proportion of sugar than a Cadbury Picnic Bar (36.1 g).

Kellogg's Crunchy Nut, Nutri-Grain, Coco Pops and Uncle Toby's Plus Sultanas'n'Bran were more than 30 per cent sugar.

Kellogg's Corn Flakes scored a red light for salt. A 100 g portion contains 820 mg—more than Smith's Original chips.

Dietitian Fiona Pelly said many people were not aware of the high salt and sugar counts in the cereals.

'It is difficult for consumers to choose the most appropriate breakfast cereal. That's why now it's mandatory to have that nutrition panel on there,' she said.

Ms Pelly, a University of the Sunshine Coast sports nutrition lecturer, said many highly processed cereals had a high sodium content.

'The problem with salt is that we get a taste for it at quite a young age, and we almost have to wean ourselves off it,' she said.

Ms Pelly said the best cereals were those made from whole grains.

'If you have a lot of added sugar it adds additional calories,' she said.

'Some are almost like a confectionary, a treat eaten occasionally.'

The Sunday Mail
20 August 2006

Influences on the consumer

Think about the cereal you eat. Is this your choice? If so, what made you begin eating it? In many cases, advertising is the reason for our choices. In ads we see people having fun and enjoying a product, and as a result, we think ‘I want to try it’.

Advertising is important as it informs us of what is available, but unfortunately it does not always provide a balanced, honest or unbiased view of a product or service. This is why we must look at all of our options in order to be responsible consumers and make good decisions about what we buy. Sometimes this can be very difficult.

Advertising techniques

Advertisers use a number of techniques to attract your attention and sell you their product. If you are aware of these techniques, you can see through the sneaky ones.

- **Image creation**—the product is associated with an image that you think is cool, for example, a chocolate bar commercial with beautiful men and women devouring it seductively.
- **Give-aways and prizes**—the kind of advertisement that says ‘Buy one, get one free’ or ‘Buy this cereal and get this cool toy inside the packet’.
- **Use of famous people**—advertisements that say ‘If person Y uses it, it must be good’.
- **The promise to take away your problems**—‘Tired of work? Eat Pep-Me-Up’.
- **The promise to make you a social success**—‘Share a can of Burpo with friends. They’ll love you for it’.
- **Appeal to parents**—‘You’ll be the best dad on the block’.
- **The claim to be endorsed by scientists**—the advertisement that promises a ‘new scientifically formulated face cream’.
- **The promise of extra quantity for the same price**—‘25% bigger bar’ or advertisers who say ‘But wait! There’s more!’
- **The promise to give you class**—‘Only the best is good enough for you’.
- **Scare tactics**—‘Buy now or you’ll miss out’, ‘Once in a lifetime chance ...’.

Activity 6.14



It looks good and it sounds good but ...

- 1
 - a Look through magazines, newspapers and junk mail, watch television advertisements and listen to radio advertisements to find one example of each advertising technique listed above.
 - b Describe each product and where you found the advertisement.
 - c Explain how the technique is being used.
- 2 What techniques do you think are the most effective in influencing people your age?
- 3 Think of three advertisements that are aimed at teenagers. Write down each advertisement and then describe the technique it uses.

Sources of health advice

There are many health services that you can access should the need arise, and some of these are shown in Figure 6.19.

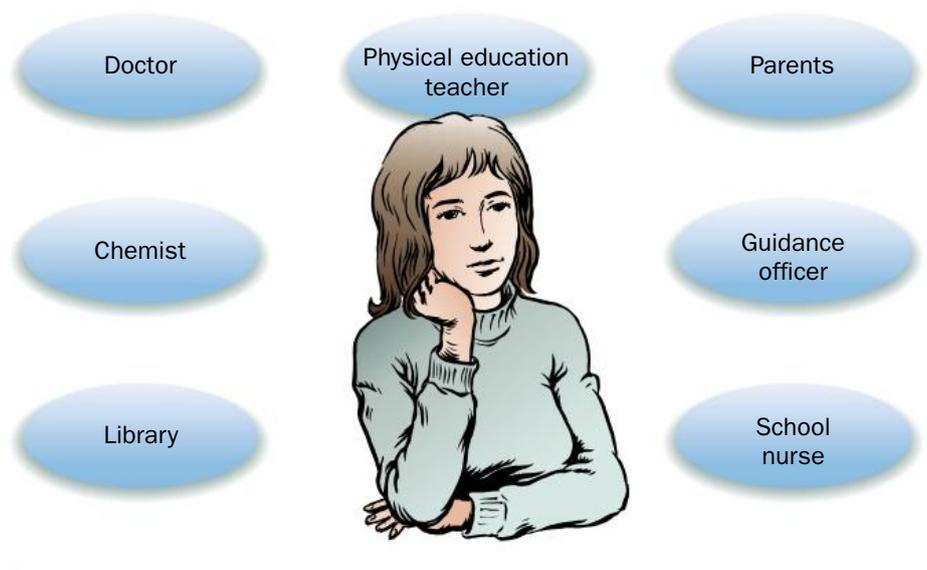


Figure 6.19 Sources of help that you can access when you have a health concern

Health services available to you

Commonwealth (federal government) health services

The Commonwealth government deals with health matters that concern all Australians, for example:

- ➔ the supply of vaccines to state and local authorities
- ➔ the setting up and funding of government and non-government health organisations, such as the National Heart Foundation and the National Health and Medical Research Council
- ➔ the operation of a quarantine service to prevent diseases from entering Australia
- ➔ the operation of Medicare.

State government health services

Each state government has a ministry or department of health. The role of this department is to improve the health of all members of the state by providing services such as:

- ➔ a public hospital system
- ➔ a statewide immunisation program
- ➔ guidance and advice to local health authorities
- ➔ investigation and control of pollution
- ➔ educational programs on all aspects of community health.

Local authority health services

Every local town or shire council is responsible for controlling the spread of disease as a means of improving the health of the local community. To do this, local authorities:

- organise immunisation campaigns
- organise the collection and disposal of garbage
- provide a clean water supply
- control rodent and vermin infestation
- ensure the cleanliness of food storage and preparation areas in factories, shops and restaurants
- maintain clean conditions in public parks, public swimming pools and public camping grounds.

Activity 6.15



Here's to your good health

- 1 Make a list of all the health services you have used in the past year. Next to each, write why you used them. Compare your list with that of another classmate. Add any you remember.
- 2 From your teacher or your parent, find out approximately how much each health service costs. Add up all the costs to find out how much your health has cost your family in the last year.
- 3 Look at the list of health services that your local council is responsible for providing. Do you think it is doing its job well? Give examples to back up your argument.
- 4 How could you assist you local council to carry out its health role?

Figure 6.20 Public hospitals are funded by federal and state governments and to provide medical treatment to people free of charge

Hospitals

Hospitals provide specialist treatment and care for the sick or injured. General hospitals are divided into wards or floors for specific conditions, for example, burns wards, children's wards and maternity wards. Specialist hospitals deal with patients with certain conditions, such as an eye and ear hospital.

Public or private?

In Australia we have the choice of going to either a private hospital or a public hospital. Public hospitals are funded and operated by the federal and state governments. Private hospitals are owned and run by individuals, for example, a group of doctors or a community group.

If classified as a public patient, you will be put into a public ward and the hospital will choose your doctor and provide you with a bed free of charge.

A private patient may choose to visit a public or private hospital and will choose their own doctor. However, they must pay for the doctor and the accommodation. Most of this will be refunded by Medicare and private health insurance, if they have it.



Hospital services

- General surgery
- Emergency medicine
- Paediatrics
- Obstetrics and gynaecology
- Oral health services
- Internal medicine
- Haemodialysis
- Orthopaedics
- Mental health services
- Associated clinical services

Doctors and specialists

The most popular health service in Australia is general practitioners or GPs. GPs work in medical centres, hospitals and private surgeries, and they diagnose and treat minor illnesses.

If a GP does not have the facilities or expertise to treat a patient's particular condition, they will refer them to a specialist. These are doctors who have studied in a particular field of medicine.

Nurses

Nurses are concerned with caring for the sick and injured, the prevention of disease and the promotion of health. Nurses work in hospitals, private homes, retirement homes and homes for disabled people. They assist doctors when performing operations, they bandage wounds, make patients comfortable, administer medicines and educate patients in their own health care after leaving hospital.

Health care centres and clinics

You can choose from a wide range of health care centres and clinics depending on your needs. Health care centres include rape crisis centres, incest centres, crisis counselling centres and drug rehabilitation centres. Clinics include family planning clinics, STD clinics and mental health clinics. At all of these locations, specialist workers will give you advice, treatment and preventative information.

Paramedical specialists

Paramedical specialists are people who provide health care by either complementing the work done by doctors or by providing treatment in areas not covered by the medical profession. Paramedical specialists include:

- ➔ **Physiotherapists**—treat injuries and diseases through a combination of exercise, massage and medical equipment.
- ➔ **Optometrists**—treat vision problems with spectacles and contact lenses.
- ➔ **Occupational therapists**—treat disabled and elderly people by helping them carry out daily activities at home or work.
- ➔ **Pharmacists (chemists)**—supply prescription drugs and medicine, and over-the-counter drugs and medication.

Figure 6.21 An optometrist is a paramedical specialist



Activity 6.16



You are in safe hands

- 1 Look at the list of health care providers and job descriptions in the table below and match the correct person with each job description.
- 2 Who is WHO? Find out what WHO is and how it can affect your health.
- 3 Who provides health care at your school? Make up a table with the following headings:
 - a teacher's name
 - b teacher's health job
 - c job description.

_____	diagnoses and treats damaged hearing	a pharmacist
_____	gives first aid to accident victims and the sick and injured, as well as providing transport	b dietitian
_____	performs hearing tests	c speech therapist
_____	provides dental care to children while they are attending school	d audiologist
_____	is concerned with the prevention and treatment of diseases of the teeth and gums	e pathologist
_____	is concerned with all aspects of nutrition	f dentist
_____	cares for sick and injured people	g radiographer
_____	helps people use and develop their existing or potential abilities after illness or accident	h ambulance officer
_____	helps people who have problems with their vision	i nurse
_____	a dentist who specialises in correcting badly formed teeth	j orthodontist
_____	deals with the nature of disease and investigates its causes and effects	k prosthetist
_____	advises customers and sells medication and drugs	l podiatrist
_____	aids the recovery of patients from injury or illness by giving them different types of exercises to do	m audiometrist
_____	performs operations	n physiotherapist
_____	is employed by local authorities to check on food preparation and storage in shops and restaurants	o optometrist
_____	helps people with problems and assists them to take control of their lives	p dental therapist
_____	looks after the health of the feet	q occupational therapist
_____	is responsible for making and fitting artificial limbs	r health inspector
_____	operates x-ray apparatus	s social worker
_____	diagnoses and treats communication disorders in people of all ages	t geriatrist
_____	specialises in the treatment of elderly people	u surgeon
_____	specialises in the treatment of children	v paediatrician

Health-related organisations

There are many health-related organisations in Australia concerned with your health and the health of your community. Some of these organisations are government controlled, some are semi-government controlled and some are private organisations.

These organisations are often staffed by volunteers and even though they may cover different areas, they all have a common goal—to improve your health by producing educational material, running courses, conducting research or providing life's essentials. These organisations include:

- ➔ Australian Red Cross
- ➔ Anti-Cancer Council
- ➔ Australian Nutrition Foundation
- ➔ Salvation Army
- ➔ Alcoholics Anonymous
- ➔ St John Ambulance
- ➔ Royal Life Saving Society
- ➔ Surf Life Saving Association
- ➔ Lifeline
- ➔ Smith Family
- ➔ Quit Campaign
- ➔ Life. Be in it.

Figure 6.22 St John Ambulance is a non-government agency that provides valuable services to the community



Where do I go for help?

- 1 Look up the telephone book and list the telephone numbers of the agencies listed above.
- 2 Ring the organisations to find out what services they provide to the community.
- 3 Compile a book or develop a home page on your school computer that students can access when they need help.



Activity 6.17

Alternative medicine

Alternative medicine is becoming increasingly popular in Australia as many people look for options other than traditional medicine and its drug therapy and surgery. Alternative medicine focuses on treating the whole person, not just the symptoms of the problem.

Training institutions and facilities have developed for many alternative medicine disciplines, and graduates are both well qualified and skilled. Popular alternative medicine specialists include:

- ➔ **Chiropractors**—rectify problems by manipulating the skeletal system, particularly the spine.
- ➔ **Naturopaths**—use herbs and other plant-based substances to fight and prevent disease.
- ➔ **Acupuncturists**—insert small needles into the body to prevent or treat illness by balancing or directing energy flow to specific body areas.

Activity 6.18



Who would you turn to if ...?

- 1** Look at the list of health-related organisations on page 369. Write down any more you can think of. For each organisation, write down its major health function and nearest location to you.
- 2** Choose five of these health-related organisations. Contact your local branch of each to find out:
 - a** the services that are available
 - b** the cost of each service
 - c** the people who are eligible to use these services.
- 3** For each of the situations below write down:
 - a** who you would turn to if it happened to you
 - b** the phone number and address of the nearest health professional you would turn to. You may need to use the Yellow Pages or discuss your answers in a group.

Case study 1 You are at home by yourself. While cutting a piece of wood with a saw you nearly sever your finger.

Case study 2 You have had lower back pain for several weeks, and it appears to be getting worse.

Case study 3 You have bad acne. You want some real treatment, not just superficial face lotions.

Case study 4 You sprain your ankle playing basketball. You want to make a rapid recovery so you can play in the finals.

Case study 5 You cannot see the blackboard properly from the back of your classroom and you have been getting headaches after studying.

Health promotion

In Chapter 5 we learnt about harm minimisation and its message of prevention rather than cure. In the past our health system has concentrated on treatment of existing illnesses, however, with the increase of lifestyle diseases has come the need for promoting prevention and good health within the community.

In order to promote good health, there has to be support systems or agencies that we can access. We have discussed some agencies earlier in this chapter and Figure 6.23 shows the support systems whose aim is health promotion.

National Health Promotion

The Australian Institute of Health and Welfare is a government organization developed to review and report on the health and welfare of Australians.

This agency looks at lifestyle risk factors that are evident within society in order to develop areas of focus. The following list outlines the current National Health Priorities:

- ➔ cancer
- ➔ cardiovascular disease
- ➔ asthma
- ➔ diabetes
- ➔ injury prevention
- ➔ mental health
- ➔ arthritis and musculoskeletal conditions.

Can you think of campaigns or initiatives that have been introduced to try to reduce the incidence of each of these health problems in the community?

State and community health promotion

Queensland has adopted a health promotion approach in areas that affect lifestyle conditions such as heart disease, immunisation, cancer and nutrition. The state government works in conjunction with local authorities to establish and implement necessary support systems.

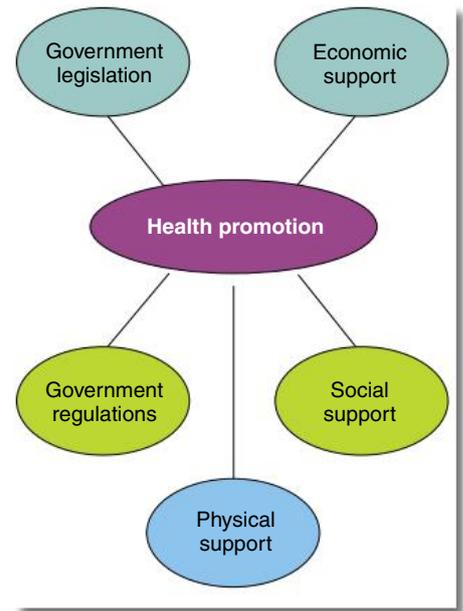


Figure 6.23 Support systems for you to access

Personal health promotion

Many of your parents and grandparents are still unaware of safe personal health behaviour. For example, many rarely exercise, others eat large quantities of high-fat food, some smoke and some do nothing positive to reduce their high stress levels.

However, unlike you, most of your parents and grandparents can legitimately claim that no one told them when they were young about good health practices or the problems connected to certain lifestyle factors.

For many of your parents and grandparents:

- ➔ there was no information about the dangers of smoking
- ➔ there was little encouragement for adults to exercise
- ➔ they ate what they wanted or could afford.

For previous generations, goal-setting or making the right personal health decisions was the result of good advice, good role models or good luck, whereas your decisions can be based on all that you have learnt about living a healthy lifestyle.

It's up to you

You are the first generation of Australians to be given the facts about health. At the same time it has become easy for you to make decisions and set goals that will affect your health now and in the future. Throughout this chapter you have been given the knowledge you need to make informed decisions and set realistic health goals. How you use this information is up to you. You can choose to:

- ➔ ignore the information you have been given and float along, letting friends, parents or advertising companies decide your health behaviours for you; or
- ➔ ignore the information and deliberately adopt unsafe personal health practices such as smoking, drug abuse, inactivity or eating junkfood; or
- ➔ listen to the information, set yourself some realistic long-term and short-term goals, then make the necessary decisions to meet your personal health goals.

Activity 6.19



It's your choice

- 1 What choices are you going to make to look after your own health?
- 2 Who or what has influenced your decisions?
- 3 In pairs, develop a poster promoting a particular area of health to the students of your school.
- 4 How could your school become a health-promoting school? List all the things your school does or could do to promote health. Share your ideas with the class.
- 5 Write down as many examples as you can of health promotion in the media. How could the media be better used to promote health? Discuss your ideas with a partner.
- 6 Through research, gather enough information to discuss the following topic in a 500-word essay: 'The health status and health problems of people tend to vary depending on their age group, cultural background and socio-economic status.'

Environmental health

With the development of technology comes waste. Waste has an unhealthy effect on us and our natural environment. Federal, state and local governments set laws to reduce the effect of pollution, and the Environmental Protection Agency (EPA) monitors pollution levels while issuing and enforcing environmental standards.

These laws are a start, however, they are not going to win the pollution war on their own. Everyone, including you and your friends, needs to band together to make a difference. If you decide to take up the fight against pollution and take an active interest in the environmental issues in your local community, you can influence council decisions and policies, and the health of your environment.

Air pollution and your health

You have probably experienced very hazy days in which the air smelled stale. Your eyes may have been irritated and your throat felt unusually dry. These are the immediate consequences of air pollution.

Air pollution occurs when gases are released in large quantities into the atmosphere. These gases come from various sources:

- ➔ cars
- ➔ household and industrial release of chlorofluorocarbons
- ➔ manufacturing and processing industries
- ➔ burning of waste in open dumps and incinerators.

Air pollution can bring about many negative health effects such as:

- ➔ increasing your chance of developing lung and skin cancer
- ➔ accelerating the development of asthma, bronchitis and emphysema



Figure 6.24 Cars are one source of air pollution—try to walk, car pool or take a bus

- ➔ irritating existing respiratory illness such as asthma
- ➔ increasing the number of colds and upper respiratory infections that you contract
- ➔ irritating your eyes and contributing to infections such as conjunctivitis.

Water pollution and your health

We cannot exist without water. We need clean water to drink, cook food, wash and grow plants. Polluted water is a problem that affects everyone. Pollution of beaches from litter and storm water drains is one example.

Water pollution can damage your health by causing eye, ear and throat infections, vomiting, diarrhoea and a number of skin or blood infections.

Visual pollution and your health

Visual pollution is probably the pollution you are most aware of—it is the pollution you can see. This form of pollution is made by humans and includes littering and other forms of debris such as broken down houses or buildings.

Clean Up Australia Day is a promotion that has been running for several years. This day has not only opened people's eyes to the amount of pollution within our country, it also gives them the opportunity to actively do something about it.

If not cleaned up, this rubbish and debris will infect our waterways and air, thus causing more health concerns.

Figure 6.26 A quick and easy way to decrease pollution is to put your rubbish in the bin

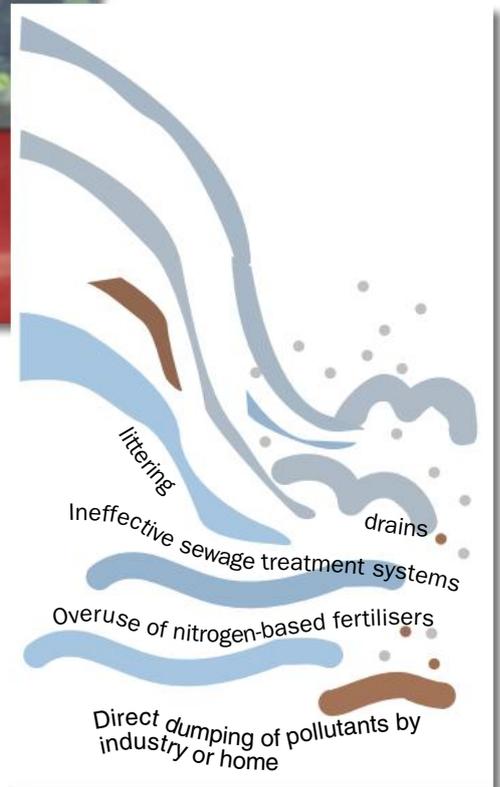
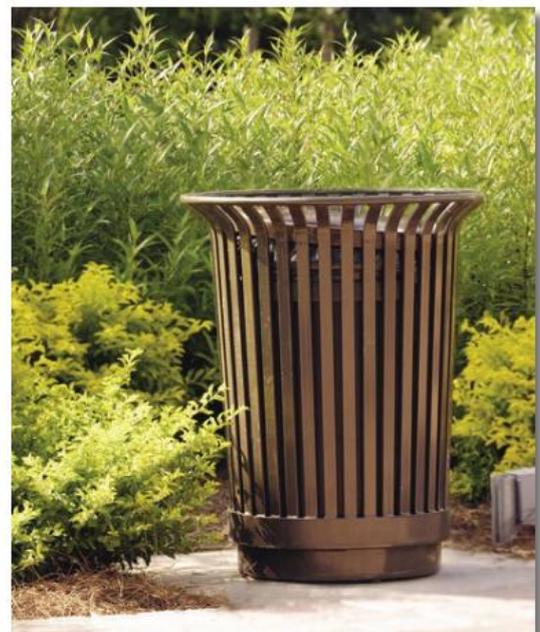


Figure 6.25 Major sources of water pollution

Filthy habit

By Elissa Lawrence

Evidence of how lazy Queenslanders are is everywhere.

Look no further than the littering hotspots of cinemas, sports stadiums, public transport and festivals where mountains of litter can be found.

The 'do the right thing' message falls on deaf ears as armies of cleaners are called in to pick up tonnes of rubbish.

Queensland Rail employs a 24-hour cleaning unit of 39 full-time staff who pick up an average of one garbage bag of litter for every three train carriages every day.

The most common items are bottles and newspapers, with chewing gum the greatest irritant for cleaning staff. 'It's just laziness,' a QR spokeswoman said.

Brisbane Cricket Ground venue manager Chris Cochrane said a one-day international match typically generated about seven tonnes of recyclable waste and five tonnes of general waste, about a quarter of which was left in the stands or on the ground as litter.

Up to 30 cleaners take a full day to clean the Gabba.

'It's a massive amount of rubbish,' Mr Cochrane said. 'People want to watch their sport, so to get in and out of seats to put rubbish in bins can cause issues for other patrons.'

Like all movie cinemas, Eldorado 8 cinema at Indooroopilly, in Brisbane's inner west, is a common littering ground.

General manager Paul Roobottom said few patrons picked up their rubbish, with up to five garbage

bags full of rubbish collected from each cinema after each screening.

'If you went to a BYO restaurant and afterwards scraped your bones on to the floor and put your boots up on the table it would be seen as outrageous, but in the cinema it's just the way it is,' he said.

Youth music festival Livid spokesman Mike Hall said it took five days to remove about 18 tonnes of rubbish.

Keep Australia Beautiful executive Kylie Johnston urged people to do better.

'There is an attitude, particularly at movie theatres and sports stadiums, that people are keeping someone in a job because someone has to pick up the rubbish.'

The Sunday Mail
23 January 2005

Activity 6.20



Who is responsible?

Read the article 'Filthy habit' and answer the following questions.

- 1 What strategies could be introduced to reduce the amount of litter at major sporting events?
- 2 Read these scenarios. How would you react in each situation?
 - a You are with a group of friends at McDonalds. When it is time to go everyone gets up and leaves without putting their rubbish in the bin.
 - b You are at the cricket with your mate Roger. He is upset with one of the referee's calls so he starts throwing rubbish onto the field.
 - c You are at the movies with your boyfriend or girlfriend. At the end of the show you go to collect your rubbish but they tell you not to worry, saying, 'People get paid to do that.'
- 3 In pairs discuss your responses. How would your responses change if each of these scenarios was played out in a five-star restaurant?

Noise pollution and your health

Noise pollution is any unwanted sound that is excessively loud or continuous. This type of pollution is normally caused by buses, trains, trucks, cars and machines. It can damage our health by causing:

- ➔ hearing loss
- ➔ stress
- ➔ fatigue
- ➔ irritability.

Disposing of your waste

The amount of waste being produced is increasing, even with the introduction of recycling. The reason for this is that some waste is non-biodegradable, which means that it is virtually impossible to break down. Therefore another problem arises—what do we do with this kind of waste?

Land fill tips or dumps are used for waste disposal, although this causes other problems.

- ➔ Hazardous wastes leave the ground permanently polluted.
- ➔ Toxic wastes can leak from the land fill through the soil and into the water systems.
- ➔ Wind blows uncovered waste into waterways and stormwater drains.

Recycling

Recycling is yet another means of controlling our waste. Recycling is the process of reusing waste material, and it can be used for paper, bottles, aluminium, organic wastes (composting) and some plastics.

In Queensland, recycling is encouraged. Each house and workplace is provided with a recycling bin. Do you use it?

Recycling tips

- Buy a composting bin—not only will you be getting rid of waste, you will have a healthy garden.
- Use your recycling bin properly—only put recyclable materials in it.
- Keep your plastic bags and use them for bin liners.
- Buy goods that are in recyclable packages.
- Try not to use disposable products—use a glass instead of a foam cup or a handkerchief instead of a tissue.
- Take your own bags when you go shopping.



Figure 6.27 Many local governments encourage people to recycle by providing a bin especially for this purpose

Protectors of the environment

Choose one environmental organisation. Using newspapers, magazines, books from the library, the internet or information gained from the organisation itself, answer these questions.

- 1 When did the organisation start?
- 2 Why did the organisation start? What were its aims at the beginning?
- 3 What does the organisation do to protect the environment?
- 4 How is the organisation set up? What percentage of its workers are paid? What percentage are unpaid volunteers?
- 5 What are the aims and objectives of the organisation? From your reading, try to work out if these aims and objectives are being carried out.



Activity 6.21

Activity 6.22



Do the right thing

- 1 What recycling methods do you use?
- 2 What other actions can you take to protect the environment? As a class devise a list of what you can do as a group to make a difference.
- 3 Examine your school for areas that are not environmentally friendly. What can you do about them?
- 4 For each of the following case studies, make a list of how each person could modify their behaviour to reduce pollution.

Case study 1

Kerry is a Year 10 student. She lives about two kilometres from her school, but because she is always running late, her mum drives her to school. At lunch, Kerry always eats with her friends next to the oval. When they move back to class, they usually leave behind a pile of cans and wrappers. At the end of the day, if Kerry can't be bothered walking home she rings her mum to pick her up.

Case study 2

Ross is 16. He loves working on cars. He already has a car that he is doing up ready for when he gets his licence. Ross thinks bicycles are for nerds, so he gets his mum to drive him the two kilometres to school and back each day. Ross works on his car until all hours of the night, hammering, sanding, welding, drilling and spray-painting. When he is finished, he sweeps the metal or paint scrapings out of the garage into the gutter. Any leftover paint or oil he pours down the storm water drain.

Case study 3

Gordy has a daily after-school routine. He takes his dog for a 30 minute walk. On the way he buys a burger, fries and coke. On the way home, he always stands on the canal bridge and tries to hit passing boats with his empty can or burger container. His dog always excretes in the same spot on the footpath.

Literacy

Choose a particular health service provided by the Commonwealth, state or local government that you believe should have more money and time allocated to it.

Develop a two-minute talk expressing your point of view and justification of your opinions.

Each student will have the opportunity to present their talk to the class, answering questions where necessary.

Numeracy

Complete a survey investigating the incidence of litter within your school grounds.

Collect and collate data using a table and graph in order to identify problem areas within the school.

Analyse this data and develop a proposal on what can be done to reduce the incidence of litter in particular areas of the school grounds and as a result improve the school environment.

Lifeskills

Use the internet to research a variety of private health insurance companies in order to determine which company has the policy most suitable for you and your family.

Discuss your results with you class.

Future perspectives

Imagine that you are able to develop a vaccine to cure a particular lifestyle disease. Which one would you choose to cure and why?

What implications would your choice have on both you and society as a whole?

Where do I go from here?

www.asthmaqld.org.au

www.keepaustraliabeautiful.org.au

www.consumer.qld.gov.au

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every sale, purchase, and payment must be properly documented to ensure the integrity of the financial statements. This includes recording the date, amount, and nature of each transaction.

The second part of the document details the various methods used to collect and analyze financial data. It describes how data is gathered from different sources and how it is processed to identify trends and patterns. This section also covers the use of statistical techniques to interpret the data and make informed decisions.

The third part of the document focuses on the application of financial analysis in decision-making. It provides examples of how the data is used to evaluate investment opportunities, assess risks, and optimize resource allocation. This part highlights the practical implications of the analysis and how it can be used to improve organizational performance.

The final part of the document concludes with a summary of the key findings and recommendations. It reiterates the importance of continuous monitoring and analysis of financial data to stay ahead of market changes and ensure long-term success. The document also provides a list of references and a glossary of terms used throughout the text.

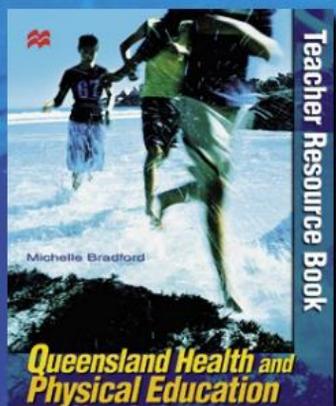
Queensland Health and Physical Education second edition has been comprehensively revised and updated in light of the Queensland Curriculum, Assessment and Reporting (QCAR) Framework. By using this book, students in Years 8 to 10 will acquire the knowledge and understanding required for state-wide and school-based assessment. The depth and diversity of content will engage and cater for students of all abilities.

Key features

- The material comprehensively covers the current Health and Physical Education syllabus, as well as essential content outlined in the Queensland Curriculum, Assessment and Reporting (QCAR) Framework.
- The presentation of the material is lively, colourful and highly illustrated.
- The most up-to-date health and physical education information is provided.
- Activities are diverse and engaging, drawing on a range of learning processes.
- Each chapter provides opportunities for students to achieve at different levels.
- Literacy and numeracy activities help to ‘make connections’ across the curriculum.
- The Macmillan Education website contains the complete text of the book in PDF format.

Queensland Health and Physical Education Teacher Resource Book

This teacher resource book contains photocopiable materials to assist in the implementation of Queensland’s Essential Learnings and Standards. A full work program is included in this resource.



ISBN: 978 1 4202 2472 6



ISBN 978-1-4202-0482-7

