CHAPTER 9
Fitness choices

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OUTCOMES

On completion of this chapter, you will be able to:

• describe factors that contribute to effective health promotion (P5)
• propose actions that can improve and maintain an individual’s health (P6)
• plan for participation in physical activity to satisfy a range of individual needs (P10)
• form opinions about health-promoting actions based on critical examination of relevant information (P15)
• use a range of sources to draw conclusions about health and physical activity concepts (P16)
• analyse factors influencing movement and patterns of participation. (P17)
In our everyday lives we engage in a variety of physical activity, from washing the car and doing the housework to getting dressed for school or work. Completing these types of task requires a small amount of effort and often we use only our upper body to do them.

Although these activities require the expenditure of a certain amount of energy through the movement they involve, their contribution to overall health and fitness is minimal. In order to gain health and fitness benefits, it is necessary to engage in moderate to vigorous activity. Individuals who choose to lead an inactive lifestyle are at risk of developing many lifestyle diseases. Inactivity is a major risk factor of coronary heart disease and contributes to other risk factors, including obesity, high blood pressure, stroke and diabetes.

![Figure 9.1: People engage in a variety of physical activities. The impact these activities have on their health varies according to the intensity of the activity.](image)

**MEANINGS OF EXERCISE**

The reasons why people participate in exercise and what exercise means to them is varied. It may mean an enjoyable experience that aids in stress release and relaxation, or it may be an activity that is planned to achieve benefits such as weight loss and improved cardiovascular efficiency. Exercise may simply mean hard work. Regardless of what exercise means to different individuals, people generally take on exercise for the health and fitness benefits that result.
Meanings of exercise — survey

Conduct a survey of 10 or more people. Select people from a variety of age groups, both genders, different cultural backgrounds and a range of exercise experience. Ask them the question ‘What does exercise mean to you?’

Meanings of exercise — survey results

Answer the following questions using the results from the survey in the application above.

1. Suggest reasons for the wide range of opinions about exercise among people.
2. How does the meaning of exercise change with age? Suggest reasons for this change.
3. What does exercise mean to you?
4. What things have influenced your opinion about exercise?
5. Do you regard exercise as an important component of lifestyle? Explain.

Exercise as a form of physical activity

Physical activity is any movement that results in some expenditure of energy.

Exercise is planned, structured and repetitive bodily movement. It is performed to improve or maintain one or more components of physical fitness. Exercise is a subset of physical activity.

Light exercise is activity that requires approximately three to four times as much energy as rest.

Moderate exercise is activity that requires approximately five to six times as much energy as rest.

Vigorous exercise is activity that requires seven times or more energy as rest.

Physical activity in the form of exercise has always been considered positive lifestyle behaviour. Exercise itself is a special form of physical activity because it is planned, structured and consists of repetitive bodily movements. Performing a series of push-ups and sit-ups is considered exercise because movements are repeated with the intention of improving selected components of fitness, in this case, muscular strength and/or muscular endurance.

Exercise varies in intensity or the amount of effort we put into performing the movements. Intensity can be categorised as light, moderate or vigorous and is measured in a number of ways. Light exercise is activity that requires approximately three to four times as much energy as rest. It is equivalent to brisk walking. Needing more effort is moderate exercise, which is activity that requires approximately five to six times as much energy as rest. It is equivalent to jogging at a comfortable pace. The highest level of intensity is called vigorous exercise. It is activity that requires seven times or more energy as rest. It is equivalent to a fast jog or activity that makes the person ‘huff and puff’.

The easiest method of assessing the intensity of effort is to use the talk test, which measures intensity in terms of the subject’s ability to maintain conversation while exercising.

- Low intensity — at this level the person is able to sing while doing the activity.
- Moderate — normal conversation can be held while performing the activity.
- Vigorous — there is insufficient breath to carry on conversation while exercising.

However, athletes in training and those who are genuinely trying to monitor cardiorespiratory fitness improvement use the heart rate’s response to exercise as the basis of measurement. Exercise causes your heart rate to increase in proportion to your exercise intensity. In other words, the harder you work, the higher is your heart rate. This relationship continues until you approach exhaustion where maximal values are attained. At this point, your heart rate begins to level off.

Training at a level of intensity that is too close to your resting heart rate provides little, if any, benefit to fitness. Alternatively, training at near maximal
Target heart rate (THR) is a predetermined pulse rate to be obtained during exercise and is expressed as a percentage of maximum heart rate. Values quickly leads to exhaustion and subsequently is of little value. In between resting and maximal values is a zone called the target heart rate (THR), which can be used to help you train at a level of intensity where performance benefits are maximised.

To find your target heart rate, calculate your maximal heart rate, which is approximated by subtracting your age from 220. For example, a 20-year-old person would have a maximal heart rate of 200 beats per minute (220 minus age).

For exercise of moderate intensity, the target heart rate is 50 to 70 per cent of the maximal heart rate. For exercise of vigorous intensity, the target heart rate is 70 to 85 per cent of the maximal heart rate.

The target heart rate zones are illustrated in Figure 9.2. People beginning exercise programs should aim to hold their heart rate in the moderate intensity zone. As fitness improves, the target heart rate is increased to 70 to 85 per cent of maximal values (vigorous zone). Only well-trained athletes are able to work at the anaerobic threshold zone and then for only limited periods of time.

Examples of activity that are considered light, moderate or vigorous are illustrated in Table 9.1.

Table 9.1: Examples of intensity-related activities

<table>
<thead>
<tr>
<th>Physical activity intensity</th>
<th>Examples*</th>
</tr>
</thead>
</table>
| Light activity             | • Swimming for recreation  
                            | • Strolling around the shops  
                            | • Flying a kite  
                            | • Gardening (e.g. light weeding) |
| Moderate activity          | • Walking for pleasure  
                            | • Cycling on level ground  
                            | • Putting away groceries  
                            | • Handwashing a car  
                            | • Operating heavy power tools  
                            | • Horse riding |
| Vigorous activity          | • Jogging or running  
                            | • Step aerobics  
                            | • Playing an energetic sport (e.g. basketball, football or tennis)  
                            | • Carrying heavy loads (over 25 kg)  
                            | • Pushing a non-motorised lawnmower  
                            | • Loading a truck |

*Dependent upon age, ability and fitness.

Physical activity of moderate intensity benefits people of all ages, with greater benefits going to people who are able to partake in vigorous activity. This is illustrated in Figure 9.3.

There is increasing evidence that these benefits occur soon after adopting an active lifestyle. Physical activity should start as a lifelong habit in childhood. Its benefits are greatest if activity is maintained throughout life.

The National Physical Activity Guidelines (NPAG) suggests the following in terms of physical activity.

**Figure 9.2:** Target heart rate zone

**Figure 9.3:** Health benefits of physical activity
Child and youth recommendations (up to 15 years)

- **Frequency:** every day
- **Intensity:** moderate
- **Duration:** 60 minutes and up to several hours. This can be accumulated across the day.
- **Type:** a range of activities including some weight-bearing activities.

Adult recommendations

- **Frequency:** most if not all days per week
- **Intensity:** moderate
- **Duration:** 30 minutes. This can be accumulated; for example, three bouts of 10 minutes each.
- **Type:** a range of activities.

Figure 9.4 shows how the National Physical Activity Guidelines relate to frequency, intensity, duration and type of activity. Proportionally, we need more of level one type activity, progressively decreasing to lesser amounts of levels two and three and little of level four.

Exercise as a part of lifestyle

1. Examine your own lifestyle and determine your level of activity. Do you engage in sufficient moderate activity each day? Keep a record of the physical activity (type and frequency) you engage in over a two week period.
2. Are you meeting the recommended level of physical activity for your age group?
3. Identify ways in which you could increase the amount of activity you engage in each day. Include both planned exercise and opportunities for incidental activity.
4. To what extent should exercise be a part of lifestyle?

**Exercise and its relationship to fitness**

What does it mean to be fit? Fitness is a difficult concept to define as it means different things to different people. If we consulted the authorities we would discover a variety of definitions, including:

*the ability to carry out daily tasks with vigour and alertness, without undue fatigue and with enough reserve energy to enjoy leisure time pursuits and to meet unforeseen emergencies* (World Health Organization)

*the capability of the heart, blood vessels, lungs and muscles to function at optimal efficiency* (Getchell, 1979).

**Meanings of fitness — survey**

Design a survey to investigate the meanings of fitness. Survey a range of people from different age groups. An example of a fitness survey is shown below.

<table>
<thead>
<tr>
<th>Name</th>
<th>What does it mean to be fit?</th>
<th>What do you need to do to improve your fitness?</th>
<th>Do you consider yourself to be fit? Why?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Me</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friend</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Teacher</td>
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<td></td>
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<tr>
<td>Coach</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team-mate</td>
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<td></td>
</tr>
<tr>
<td>Mum</td>
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<td>Dad</td>
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<td></td>
<td></td>
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<tr>
<td>Uncle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neighbour</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Fitness survey**

Use the results from the survey in the application above to help you answer the following questions.

1. Is fitness important to people?
2. Do people know how to maintain or improve their fitness? How could they get this information?
3. What does it mean to be fit?
4. Identify your own fitness goals. What do you need to do to achieve these goals?

Consider the fitness levels of an Australian basketball player and an Australian marathon runner. Do they both satisfy the definitions in regard to individual fitness? Do these definitions give us an accurate determination of
each individual’s fitness level? Can we gain an accurate comparison of fitness levels between these athletes? As basketball and distance running are very different in their physical demands and skills, we need to look at fitness in regard to the components needed to perform physical activity.

Physical fitness refers to a set of attributes that people have or achieve and that relates to the ability to perform physical activity. These attributes can be divided into two sets of components.

1. Health-related components include
   - cardiorespiratory fitness
   - flexibility
   - muscular endurance
   - strength
   - body composition.

2. Skill-related components include
   - speed
   - power
   - coordination
   - balance
   - agility
   - reaction time.

For those people who wish to improve their general health and fitness, it is necessary to undertake a regular, moderate intensity exercise program that incorporates the health-related components. For those people who wish to improve their fitness levels in order to improve sports performance, exercising at a moderate intensity is not sufficient. A planned training program is needed. It should incorporate specific exercises to improve the fitness components required of the sport or performance. The intensity of exercise needs to be vigorous and can be measured by heart rate. Both the intensity and frequency of exercise increase as fitness gains are achieved.

Regardless of your fitness requirements, including exercise as a regular lifestyle behaviour is essential to improve and maintain health and fitness. The specific exercise program adopted must meet your specific needs.
In the past, people did not need to plan for physical activity. Work was much more labour intensive, so fitness was achieved through work. As technology was introduced in the workplace and home, and physical labour was replaced by mechanisation, the need for planned exercise to improve health and maintain fitness became apparent. As people's lifestyles became more sedentary, the incidence of lifestyle diseases increased. The fitness boom in the 1970s and 1980s resulted from an increase in community concern about the morbidity and mortality rates associated with lifestyle diseases, particularly coronary heart disease. Activities such as aerobics and fun-runs became popular as they led to improved cardiovascular functioning. Although the fitness boom and health promotion programs have led to an increased awareness about the importance of physical activity and fitness, statistics reveal that almost half of the adult population in New South Wales are still insufficiently active. Females are less active than males.

Changing attitudes to fitness

In January 2007, a report by the NSW Centre for Physical Activity and Health showed some recent improvements in people's levels of participation in physical activity, although participation levels are still of concern. Some of the findings are outlined below.

- Between 1998 and 2005, there has been a significant increase in the proportion of people aged 16 years and over in NSW undertaking sufficient physical activity (at least 150 minutes of walking, moderate and/or vigorous activity per week over at least five occasions) (see figure 9.7).
- The prevalence of sufficient physical activity was stable from 1998 (47.6%) to 2002 (46.5%), decreased in 2003 (44.7%), increased markedly in 2004 (50.5%) and remained steady in 2005 (51.3%).
- Walking was a major contributor to the change in prevalence of sufficient physical activity, with increased participation in walking since 2004. There were also some increases in moderate and vigorous activity.
- It is possible that increased media coverage of physical activity and obesity between 2001 and 2004 has helped to increase the salience of these issues and motivated people in NSW to participate in physical activity.
- Changes in active commuting behaviours, specifically growth in prevalence of walking to work, and rising petrol prices may have contributed to the increase in physical activity levels.
- It is possible that recent increases in physical activity participation are a result of intensive physical activity promotion work that occurred in the late 1990s in NSW, that led to greater awareness and understanding of the Active Australia moderate physical activity message in NSW compared with other states.
- Nonetheless, close to half the NSW population is still insufficiently active, indicating that physical activity promotion efforts need to continue in NSW for further and sustainable improvements.

People’s attitudes to fitness determine whether they participate in regular physical activity. Attitudes to fitness are influenced by a number of factors.

- **Age** — statistics show that people who are aged between 18–29 years are the most physically active of all age groups. Older age groups have lower levels of adequate activity and are more sedentary.
- **Gender** — males are more active than females. In New South Wales, statistics reveal that in 2005, 56 per cent of males reported achieving sufficient physical activity, compared with 47 per cent of females.
- **Family** — adolescents who have parents who are active or support them in their activity generally value fitness.
- **Peers** — the attitudes of a person’s peer group can put pressure on that person. If the peer group does not value exercise and is not active, others in the group can feel pressured into adopting the same values and behaviours.
- **Media** — the media are a powerful channel through which the fitness message is given. Awareness raising of the benefits of fitness and the types of activities and sports available can positively impact on the attitudes of individuals.
- **Past experience** — the physical activity that adolescents experience within the school setting or local community can directly affect the decisions of adolescents to continue to be active as they get older. Research shows that if children’s experiences with activity are fun and foster skill development, they are more likely to adopt physical activity as a lifelong behaviour.
- **Cultural** — women from non–English-speaking backgrounds (NESB) are more likely to be sedentary. They often do not receive the social support they need to be active. People from a NESB are significantly less likely to be adequately active (NSW Health).
• Socioeconomic status — people with a lower level of education are more likely to be sedentary. This could be attributed to a lack of knowledge about the benefits of fitness.

The degree to which an individual values fitness is determined by a combination of many factors. As a person grows older, the value they place on fitness may change many times. For example, a person who suffers from heart disease later in life and who has never engaged in exercise may now recognise the importance of regular exercise to improve their cardiovascular efficiency.

**Changing attitudes to fitness — survey**

Use the following survey to gain a range of opinions about the value people place on fitness. Survey at least 12 people from a variety of age groups.

**Survey: attitudes to fitness**

1. Name: ...................................................................................................................
2. Age: ......................................................................................................................
3. How often do you exercise? ..................................................................................
4. What intensity do you exercise at? .......................................................................
5. Why do/don’t you exercise? ................................................................................
6. Do you value fitness? ...........................................................................................
7. What factors have influenced your attitude to fitness? ........................................
8. Has your attitude to fitness changed over time? Why? ........................................

**Fitness and values**

1. From the people you surveyed in the application above, what value do people place on fitness?
2. Are there any similarities in attitudes and values?
3. What reasons are given that support the value of fitness?
4. What are the predominant factors that influence people's attitudes to fitness?

**Fitness as a commodity**

The commodification of exercise and fitness became increasingly apparent during the fitness boom of the 1970s. The individual, community, government and business sectors became aware of the need for everyone to participate in activities that improved their health. Companies recognised that fitness could be a profit-making commodity. The establishment of fitness centres, along with a renewed interest in many physical activities, became commonplace.

Fitness centres provide a range of activities designed to meet every exercise and fitness need. They promote a range of services, have fully trained
personnel and provide a wide range of exercise equipment based on the latest technology. Through advertising, the fitness industry aims to convince the consumer that the easiest and best way to get fit is by using their services. Advertising within the fitness industry can be presented in many forms. Advertisements often depict male and female bodies that mirror society’s perception of the perfect body. The use of special deals, a range of fitness activities, extended hours and child minding facilities further appeal to the consumers.

Commodification of fitness

Read the following snapshot from ‘The Future of Australian Sport’.
1. Suggest why fitness is becoming a growth industry.
2. Why are many people turning to gyms and personal trainers as their preferred form of exercise?
3. Should participation in gym programs be at the expense of participation in team sports?
4. To what extent are fashion and convenience driving the growth of the fitness industry?

INQUIRY

A perfect fit

Growth of the fitness industry
The Australian fitness industry provides products and services to improve people's fitness. Examples include gyms, personal trainers, pools, exercise equipment, sports clothing, running shoes and nutritional supplements. According to IBISWorld (MacGowan, 2011) in 2011–12, the fitness industry had revenue of $A2.9 billion and its 7281 individual businesses generated profits of $A229.6 million and wages of $A1.2 billion. The industry is forecast to grow revenue at the rate of 3.6 per cent per annum over the period 2012 to 2017. Future growth in the industry will be boosted by the government and societal focus on health and wellbeing.

Personalised gyms
Gyms have started to diversify to capitalise on the growing demand for fitness experiences. One such trend is the rise of 24-hour access gyms, such as ‘Anytime Fitness’, ‘Jetts’ and ‘Snap Fitness’. Another trend is to offer the customer a personalised experience. An example comes from ‘Virgin Active’. The company has over 170 clubs in the UK, Italy, Spain and South Africa, with over 900,000 members (Virgin Active, 2012). The company’s first Australian club opened in December 2008, followed by another four shortly after. The company differentiates itself from other fitness clubs by offering a tailored customer experience through its ‘Who are you?’ campaign.

Personal training
People are seeking personal trainers to meet their unique health and fitness needs. In 2011 personal training held 19.8 per cent of the market share in the fitness industry and is forecast to grow (MacGowan, 2011). This reveals consumer demand for personalised fitness solutions.

Rising sales of fitness equipment
The appetite for fitness training is also reflected in the sale of fitness equipment. The sale of fitness equipment outperformed all other commodities in the sports equipment market in 2004–09 in Australia, with total revenues of $A318.4 million, equivalent to 24 per cent of the market’s overall value (Datamonitor, 2010).

Rising sales of lycra
The fitness trend has spurred growth in sports fashion sales. An example of the rise in sports fashion comes from the Lorna Jane stores. Lorna Jane opened her first store in Brisbane CBD in 1990. By May 2011 she had opened 104 stores across Australia, generating $A90 million in 2010 (Mills, 2011). While providing new business opportunities, sportswear fashion may exclude those from lower socioeconomic areas or particular age demographics such as youth who cannot afford sports fashion merchandise.

Source: The future of Australian sport, Dr Stefan Hajkowicz, CSIRO, April 2013, p. 9.
Research your local fitness centre to find out the following information:

- services offered
- cost for each service
- payment plans
- special offers or package deals
- equipment available
- expertise of staff
- availability of staff for individual support
- facilities for the disabled
- child-care facilities.

Fitness commodity — local fitness centre

1. Would the fitness centre you examined in the application above meet your fitness needs? Explain.
2. Do you think this fitness centre is value for money? Explain.
3. Before paying to join this fitness centre, what could people do to determine if it is worthwhile?
4. Why has the fitness industry continued to be a viable, profitable industry?

People should recognise that gyms are not a quick fix to their health and fitness needs. To improve your fitness level takes effort and commitment to planned exercise. However, the fitness industry does provide a range of beneficial services and expertise. Fitness centres meet the fitness needs of a large number of people. For many people, they provide the expertise and environment they need to improve their fitness. It is important for people to determine their fitness needs and investigate the services, cost and expertise offered by fitness centres before they make a financial commitment and join a gym.

If you decide that the local fitness centre is not what you want, the fitness industry offers many other services and products to aid you in your goal of improved fitness and health. If you require motivation and expertise, employing a personal trainer may suit your needs. If you are not comfortable ‘sweating it out’ in the company of others, a wide range of exercise videos and DVDs is available. Fitness clothing, nutritional supplements, home gyms and exercise machines are other products on offer.

The fitness industry has incorporated the latest technology into many products, providing convenience and up-to-date information. For example, there are numerous CD-ROMs available that people who are interested in fitness can use at home for convenience. Topics cover areas such as fitness, Swiss ball, Pilates, Gymstick, fitball exercises and all-round workout. The availability of exercise heart rate monitors, computerised exercise equipment and body fat monitors/scales further supports the individual in their quest for improved fitness.

Figure 9.9: Fitness centres can provide a range of services and facilities including aerobics, yoga, power boxing, weight training, step class, personal trainers, nutritional advice, saunas, spas and solariums.
Commodification

Choose one of the following physical activities and investigate its commodification:

- aquarobics
- running
- swimming
- aerobics.

Consider the following questions in your investigation.

1. What equipment has been specifically designed and produced to aid performance in this activity?

2. How has the commodification of this activity influenced participation (consider cost, image, motivation and accessibility)?

3. Has the commodification of exercise and fitness had a positive or negative effect on the individual’s level of health and fitness?

INDIVIDUAL FITNESS ACTIVITIES

There is an incredible range of physical activities on offer, from the commercially driven activities that offer fun and challenge, such as indoor rock climbing, to the more traditional exercise types. The challenge for the individual is to find an exercise type that meets their fitness needs and that is enjoyable.
What type of exercise should you choose to improve your fitness? Do you prefer exercising by yourself or in a group? Have you got the time or the money to join a gym? Does working out at home best meet your needs? It is not always an easy choice to make. Having a good knowledge of the range and variety of fitness activities available definitely helps you make the correct choice.

In the past, jogging or swimming were the practical options to improve fitness for people who preferred to exercise by themselves. Today many individual fitness activities are available, some of which require specific knowledge and skills. Raised awareness of health has led to the revival of many fitness and recreational activities and the emergence of new ones. Activities such as indoor rock climbing, in-line skating, snowboarding and power boxing are examples of fun and challenging fitness activities that are now available.

### Power walking

One of the easiest low impact activities is power walking. Brisk walking for 30 minutes each day at a pace of around four to six kph improves fitness and overall health. It is just a matter of putting on a comfortable pair of shoes and heading out the door. One of the benefits of power walking is that you can do it anytime, such as in your lunch hour or before or after work. Power walking is safe, cheap and convenient.

Walking is an excellent exercise for heart health and for health in general. If you walk regularly you tend to:

- feel more confident, happy and relaxed
- control your weight better
- have lower blood pressure and lower cholesterol levels
- have stronger bones
- be less likely to have a heart attack and recover better in the event of one
- be less likely to have a stroke
- be less likely to develop diabetes in middle age (*Facts on Walking for Pleasure and Health*, Active Australia).

To have a greater impact on fitness, walking at a greater intensity, uphill or carrying a load is required. To maintain motivation when power walking, change your route, include regular bushwalks and walk in parks.

The benefits of walking are recognised by many people. It is a recommended form of exercise for people recovering from heart disease because it is low impact. It is one of the most popular forms of exercise for people across all age groups.

### Running

Running is an activity that can be done only at moderate or vigorous intensity. It is an effective aerobic activity because it involves movement of the whole body. Running is a convenient and time-efficient form of exercise. For those people who don’t have a lot of spare time, a 20 minute run could be a good fitness option. It is advisable to run on grassed surfaces rather than the road to reduce stress on the joints. Cross-country running is a great way to maintain motivation.

It is important to start slowly and increase intensity as your fitness level improves. This can be done by increasing the distance run, incorporating speed play, or running in more challenging environments such as hilly areas.
Swimming

Leisurely swimming is sufficient to gain health benefits. Swimming laps using various strokes improves cardiovascular efficiency. Swimming is an activity that can be enjoyed all year round for most people. Heated indoor pools cater for the need to have swimming facilities available all year. Swimming is relatively inexpensive and requires little equipment, making it a cheap and convenient form of exercise.

Swimming is not restricted to the local community pool. Pools can be found in leisure centres and resorts. The popularity of swimming as a fitness activity has led to the emergence of aquarobics. As one of Australia’s favourite physical activities, swimming is an effective conditioning activity that is low impact, but uses both the upper and lower body, giving a total body workout. It is often recommended as a form of exercise for asthmatics as it helps to build up lung capacity, and for people rehabilitating from injury, due to its buoyancy effect.

Swimming fitness

Use the Swimming — health benefits weblink in your eBookPLUS.

1. Read the information about the benefits of swimming.
2. Use the information to evaluate swimming as an individual fitness activity.

Cycling

Cycling is an activity that most people enjoy in their youth but stop doing as they get older. Like running, cycling provides a good cardiovascular workout. Cycling at a vigorous intensity (more than 16 kph) has beneficial effects on fitness.

Your decision to start cycling may be influenced by the cost of a bike or the area you live in. Busy city roads are not the ideal place to exercise. Some communities have recognised this and built cycle paths through their suburbs in an effort to encourage people to cycle and to improve the safety of cyclists.

The introduction of the mountain bike has broadened the choice of terrains people can ride over. People can now ride on rugged surfaces through the bush. For those people who don’t like road riding, this is a great option.

The benefits of cycling to health and fitness are well recognised. The fitness industry has endeavoured to make cycling accessible to everyone by producing stationary bicycles. These are available in most gyms or can be bought for home use. The introduction of indoor cycling classes, known as ‘spinning’, at fitness centres has become a popular fitness option. It is particularly appealing to those people who are not confident road riding or cannot afford their own bike. It is also a great option in bad weather.
Get on your bike and go indoors

As the winter months set in, taking advantage of the outdoors for exercise is no longer a viable option. This has prompted inventive individuals to come up with alternatives — such as bringing outdoor activities indoors!

By Chris Rabba BAppSc(PI)

Traditional outdoor activities such as rock climbing, abseiling, tennis and running can now be pursued away from the elements by way of indoor rock climbing centres, indoor tennis stadiums and indoor running tracks. The newest addition to this list is indoor cycling.

Take some specifically designed stationary bikes, set them up in a room, add an instructor and music for inspiration and there you have it — the latest outdoor activity to be brought indoors — indoor cycling! Indoor cycling has quickly secured its place in the health club industry both here and overseas.

The concept is a little deeper than just riding a stationary bike indoors. The bikes have been especially designed to mimic an outdoor ride. Imagery and visualisation play an intricate role in the execution of a class. Imaginary hills are climbed, head winds confronted as the terrain changes by a simple turn of the resistance knob on the bike. The music in the class sets the scene acting as a road map for the journey ahead. The instructor acts as a leader, coach and motivator as he/she urges you on your journey.

The original indoor cycling program was SPINNING® established in the USA in 1995. Developed by ultra marathon cyclist Johnny G, the SPINNING® program and bikes have been welcomed with open arms by the fitness industry worldwide. Since then, various versions of the original indoor cycling program SPINNING® have emerged, highlighting the demand for this new concept. You may have come across Cycle Reebok, Revolution, RPM and Studio Cycle in your travels to various health clubs. Be aware that there is a distinct difference in quality of bike, instructor and program, so do your homework before committing to a class.

The original intention of indoor cycling was to incorporate mind/body facets in the class, thus taking a holistic approach to exercise. As you lose yourself in the cyclical rhythm of each pedal stroke and the accompanying music, you find yourself in a state of flow, experiencing a natural high.

From a physical perspective, indoor cycling has proven to be an excellent cardiovascular workout. The exercise is aerobic in nature with anaerobic components, depending on the class structure. It has been suggested that you can burn up to 800 calories [3300 kilojoules] in a single class.

Indoor cycling has attracted people from all walks of life. It allows the individual to work at their own level, with no obligation to keep to a certain pace. It requires no real coordination — it’s as simple as riding a bike! Indoor cycling has proven to be beneficial for those who cannot endure impact of the knees, as there is no direct impact involved in cycling.

All in all, indoor cycling has become accepted as an alternative to exercise to music type classes such as Aerobic, Circuit and PUMP. Indoor cycling is extremely accessible with most established health clubs providing a version of it as part of their overall program.

Things to consider before taking part in a class

1. Let the instructor know that it’s your first time in an indoor cycling class.
2. Make sure the instructor sets the bike up to suit your particular height.
3. Bring with you a water bottle and workout towel.
4. Indoor cycling can be addictive, so make sure you pace yourself during the class.
5. A good stretch after the class can assist in avoiding muscle soreness the following day.

Individual fitness activities

Read the snapshot ‘Get on your bike and go indoors’, then answer the following questions.

1. What is indoor cycling?
2. How are people motivated to cycle indoors?
3. Why has indoor cycling become a popular fitness option?
4. Evaluate cycling as a fitness option.

Weight training programs

Weight training programs can be undertaken at home or in a gym that has the appropriate equipment. Programs can be isometric, isotonic or isokinetic. Weight training is a good option for people who want to improve the specific fitness components of strength and muscle endurance.

In isometric training, muscles develop tension but do not change in length. A typical isometric exercise would be pushing or pulling against an immovable object. By devising a series of exercises that are isometric in nature the individual can do their training program in a variety of places. They do not need a specific environment in which to exercise. The best gains in fitness are made in isometric training programs using six to eight repetitions of exercises, each lasting six seconds.

Isotonic weight training programs involve lifting weights through a full range of movement. This type of training requires the use of free weights and can incorporate weight machines. It is usually done at a fitness centre or gym, but can be done at home if the equipment is available. This is the traditional type of weight training and is the most popular.

Isokinetic weight training involves the use of elaborate machines that allow maximum muscle tension through the full range of movement. Isokinetic machines are designed so that the muscular force exerted by the body is equalled by the resistance of the machine. This type of training equipment is available in some fitness centres. The major advantage of this type of training is that strength gains will be constant throughout the full range of movement because the level of resistance is constant.
Weight training can be used to add muscle bulk, increase strength, improve power or develop endurance.

Weight training requires specific skills and knowledge, so it would be beneficial to seek expert advice on the correct use of equipment, the number of repetitions and sets to be undertaken and the types of exercises for each major muscle group. A weight training program can be designed to meet individual fitness requirements.

Weight training

Participate in a weight training session at your local gym or in your weights room at school that incorporates the three types of weight training, then complete the following.

1. Identify the exercises that were isotonic, isometric and isokinetic.
2. Identify the muscle(s) each exercise was designed to work.
3. How many sets and repetitions did you do of each exercise?
4. Identify safety guidelines for weight training.
5. What are the benefits of each type of weight training?

Tai chi

Tai chi is one of the martial arts systems. It is enjoyed by many people and, due to its slow controlled movements, is popular with all age groups. It involves slow, even, circular and coordinated movements. Tai chi is an exercise incorporating movements in coordination with your mind and respiration.

Tai chi is a series of exercises combined into a routine. Instruction with a master over a period of time is necessary to become proficient. Practising some simple tai chi forms repeatedly improves physical well-being.

In the tai chi practice, the principles of balance, which include joint involvement (ankle, knee, hip), lower body awareness and posture, are explored. The benefits from this type of exercise are particularly applicable to older people, although the benefits can be enjoyed by all. Due to its focus on controlled, correct movement and balance, tai chi can benefit people who suffer from arthritis, lower back pain and stress. Tai chi is a great exercise option, particularly for people seeking a holistic approach to improved health and fitness.

The health benefits of tai chi

Use the Tai chi weblink in your eBookPLUS to read about the health benefits of Tai Chi.

1. What is tai chi?
2. Use the web diagram at right to help you identify the potential benefits of tai chi.
3. List the disorders that tai chi may be able to improve.
4. What special considerations need to be taken into account before beginning tai chi?

Repetitions are the number of times an exercise is repeated without rest.

A set is the number of repetitions done in succession; for example, one set may equal 12 repetitions.
Pilates

Pilates is a program that focuses on the development of core muscles, resulting in improved body balance, posture and alignment. Added strength and flexibility to the large torso muscles enables better control of the back and limbs, leading to improved coordination and balance.

In recent years, Pilates has become popular with people from all sports including golfers, footballers and gymnasts as well as dancers. In activities where core strength is important to stabilise the spine and enable safer, more forceful movements to be made, Pilates is an ideal fitness choice.

To gain a better insight into Pilates, watch some exercises being performed using the Pilates weblink in your eBookPlus.

Yoga

Yoga originated in India. Today, many different types of yoga exist. Yoga is holistic in nature, emphasising the body’s energy flow. It focuses on breathing exercises, known as pranayama, and physical postures called asanas. The specific breathing exercises address poor breathing habits and better utilise the muscles used in breathing. The physical postures and exercises improve muscular tone, strength and flexibility allowing energy to flow more freely throughout the body.

Yoga is beneficial because it: re-energises the body, giving a feeling of being more powerful; reduces stress; induces calmness; improves flexibility and muscle tone; and improves immunity.

As yoga ranges from gentle to demanding, it is suitable for everyone. It is important to choose a teacher and a class that suit your specific needs. Yoga is a popular form of exercise with people of all age groups and fitness levels.

The benefits of yoga have been recognised by the fitness industry. As a result, many commercial fitness centres offer classes in yoga. An example is the ‘yoga/stretch’ class available at some centres. This class involves traditional yoga postures and stretching exercises. It is designed to be a total mind and body experience where you improve your flexibility, increase your strength and relax your mind while learning proper breathing techniques.

Emerging individual fitness activities

While activities such as swimming, running and cycling represent traditional ways of improving fitness, alternative methods are constantly being promoted, many with considerable appeal. Fitness facilities and home gyms offer an array of equipment and activities that challenge our physical demands, often with the lure of burning fat or expending kilojoules.
Treadmills, rowing machines and cross-trainers can be used in the privacy of your home to provide challenging cardiovascular workouts. These are also available in fitness centres, along with elaborate weight training machines, free weights, sport-specific training equipment, step machines, and warm-up and stretch rooms. Many fitness establishments promote fitness activities that combine aspects of self-defence with gruelling fitness workouts that challenge our highest levels of fitness. Individuals can do martial arts, shadow boxing and, with the help of personal trainers, individual circuits.

There has been a rapid growth in the personal training industry in recent years. With expansion of the fitness industry, many people engage personal trainers, to provide individual assessment, develop an appropriate program, instruct on equipment usage and act as a motivating partner.

Individual fitness activities

Investigate the range of individual fitness activities available in your local area. Determine two activities that would suit your ability and fitness needs and participate in them.

Assessment of fitness activities

1. List the benefits of each activity you located in the above application.
2. Who would these activities suit?
3. How much does each activity cost?
4. What is the time commitment involved for each?
5. Where could you get further information about each activity?
6. Evaluate each activity in terms of your personal needs.

Ranking fitness activities

The section of work just completed focused on individual fitness activities, namely power walking, running, swimming, cycling, weight training, tai chi, pilates and yoga. Use the following ranking chart to prioritise the activities in terms of interest to you as part of an individual fitness program. Justify your ranking. In the final column, insert a ‘yes’ or ‘no’ regarding whether you have access to these facilities in your area. Use the information for a class discussion about fitness activity preferences.

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<th>Ranking</th>
<th>Justification</th>
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For those people who seek the company of others in their quest for fitness, there are numerous group fitness activities to choose from. Fitness and leisure centres provide a range of fitness classes including step, pump, flex, power boxing and dance.

Many communities have the facilities to offer a range of team sports such as netball, soccer and hockey. Indoor facilities provide the opportunity to participate in indoor sports such as indoor cricket and basketball. Tennis and squash courts can also be found in most communities. They provide the individual with the opportunity to join a friend for a social game without being part of a formal competition.

Group fitness activities provide the opportunity to meet new people and establish friendships. They allow the individual to feel part of a group. Group activities are an appealing fitness option for many people.

**Aerobics**

Aerobics classes incorporate various conditioning exercises performed to music. A typical aerobics routine involves a warm-up phase, conditioning phase and cool-down phase. Aerobics can cater for a variety of ability and fitness levels. Classes can be designed to be low impact or high impact. Individuals within the class can change the intensity of the exercise being performed to meet their needs. Aerobics improves cardiovascular efficiency, strength, flexibility and agility. The use of energetic music and the instructions and encouragement of the instructor help to increase motivation.

A variation on the traditional aerobics class is the 'fat burner', which is a combination high and low impact class. The exercises are designed to increase participants’ heart rate to between 130 and 140 beats per minute to promote greater kilojoule expenditure. Benefits include improved cardiovascular endurance, strength and muscle tone. This class is suitable for everyone, but is specifically for those people who want to improve cardiorespiratory fitness and lose weight. 'Blitz tech' is a combination of high and low impact aerobics with very little choreography. It includes easy movements and equipment keeping the intensity high. This type of class is suitable for everyone as you can work at your own fitness level.

**Aquarobics**

Aquarobics or water aerobics evolved from aerobics. It involves doing conditioning exercises similar to those performed in an aerobics class in water. As water is much more resistant than air, aquarobics provides a good whole body workout. Participants move in the water following an instructor.

Aquarobics is an excellent fitness option for people who have back or joint problems, the elderly and the overweight due to the cushioning effect of the water. The use of hand weights can increase the intensity of exercise.
Aquarobics

Aquarobics classes have proved popular with people who may not have otherwise been involved in exercise.

Aquarobics is an extremely enjoyable class from which many benefits such as rehabilitation, fitness and social integration can be gained.

Benefits
- Exercise in water is easier as it supports body weight
- Reduces stress on joints
- More comfortable environment to exercise in
- Allows a full range of movement without excessive strain
- Increases circulation and promotes relaxation
- Reduces stress levels
- Potential weight loss through caloric expenditure and increased muscle tissue

Class descriptions

Power
A high energy workout for overall fitness and toning guaranteed to increase the heart rate.

Tone
A toning and firming class using weights and water as a resistance. Suitable for all fitness levels.

Deep water
Using buoyancy belts there is no impact on joints.

Gentle
Designed for seniors. Beneficial for those with blood pressure, arthritis, joint problems or injury rehabilitation.

Seniors
Designed for the more active seniors.

Special needs
Designed for people suffering from MS, stroke, Parkinson’s and arthritis, back, hip, knee injury, pre- and post-operation.

What to bring
Swimwear and towels are required.

Who can participate
Aquarobics is for all levels. The program offers a variety of options so that you can work out at your own level. It is essential that each participant is able to swim.

Source: Sutherland Shire Council, brochure for Sutherland Leisure Centre, New South Wales.

Inquiry

Read the snapshot about aquarobics, then use the PMI chart below to list points that you consider to be favourable, unfavourable and worthy of further consideration. Summarise the points considered ‘interesting’ from the group and use them as the basis of a class discussion in evaluating aquarobics as a group fitness activity.

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<th>Plus</th>
<th>Minus</th>
<th>Interesting</th>
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Pump classes

Pump classes are non-aerobic fitness classes that use barbells to improve muscle tone, strength and endurance. The instructor leads participants in working out the major muscle groups of the body to music. The weights are adjustable to suit all fitness levels. This type of class is suited to people
who would like an introduction to weight training and who wish to improve muscle tone and body shape.

Another non-cardiovascular fitness class is the ABT or abdominal, butt and thigh class. Participants use hand weights to direct the workload to specific areas such as the abdominals, buttocks and upper legs. The movements are slow and lead to improved muscle tone, strength and muscular endurance.

**Step classes**

This class incorporates aerobic moves to music using a stepped platform. The platform is adjustable to suit the individual’s fitness level. Step classes improve cardiovascular fitness and muscular endurance. As the moves are choreographed to music, classes are divided into advanced and beginners, depending on the complexity of the moves. Step classes provide a further challenge for people who want a variation to the standard aerobics class. This class is suitable to all levels of fitness. Variations on the step class include easy step, which is designed for beginners as it has less choreography, and step moves, which is for advanced participants. Step moves is highly choreographed, incorporating high intensity and dynamic movements.

**Spin classes**

Spin is also known as cycle classes or RPM. In this demanding fitness activity, participants or ‘spinners’ perform routines on stationary exercise bicycles that simulate outdoor cycle training. Music is often used to enhance the atmosphere while the instructor leads the group through a range of cycling speeds designed to engage both the aerobic and anaerobic energy systems.

A typical session consists of a warm-up followed by instructor-led routines that imitate hill climbs, sprints and interval training. How hard you exercise is up to you, but it is important for spinners to set their own goals for each session. Should you wish to focus on your aerobic fitness, your level of intensity will be moderate, interspersed with infrequent bursts of speed. If you wish to focus on both anaerobic and aerobic fitness, there will be frequent periods of high intensity combined with periods of moderate effort. Intensity is raised by both increasing the speed at which you cycle and/or increasing the cycling resistance using the dial on the cross-bar of the bike.

Spin is excellent for improving cardiorespiratory fitness. It is also beneficial as a form of exercise for people who experience joint injuries or tendonitis. To watch a typical spin class, use the Spin class weblink in your eBookPLUS (seven minutes).

**Circuit training**

Circuit training can be used to improve both fitness components and skill level. It involves the progressive use of a circuit of different types of exercise. Each exercise is performed for a specified number of repetitions or for a prescribed time period before moving to the next exercise. The exercises are
separated by a brief timed rest interval. Each circuit is separated by a longer rest period. The total number of circuits performed during a training session may vary from two to six.

Circuits can be anaerobic or aerobic in nature, depending on the type of exercise, the time spent on each exercise and the number of circuits performed. Circuits can be designed to focus on strength and muscular endurance or cardiovascular fitness and flexibility.

**Figure 9.19:** A typical conditioning circuit

### Team games

Participating in team games is one of the most popular types of exercise available. Team games provide the opportunity to participate at various levels from social to high level competition. The social aspect of exercising with others is very appealing to some people. Team games provide the opportunity to develop new friendships and be a part of a team. Often people are more motivated to exercise if they know other team members are reliant on them.

A vast range of team games is available in most communities. Netball, soccer, basketball, rugby league and rugby union are examples of team games that are played by a range of people with varying ability levels. Indoor sports such as European handball, indoor soccer, indoor cricket and indoor netball offer the benefit of being able to play all year round regardless of weather conditions.
Participating in a team game requires people to participate at set times and usually involves a cost to cover affiliation fees and uniform. Depending on the level of competition, the individual may be required to devote a lot of time to training. Before joining a team, it is important to be clear about the commitment required. For many people who decide to participate in team games, the social and physical benefits provide the motivation to continue playing.

![Figure 9.20: People enjoy team games for the competition and the social benefits they provide.](image)

**Participation in team games**

Investigate the range of team games available in your community and interview people who participate in them. The interview questions should include the following:

- Why do you participate in this team game?
- What are the benefits of participating for you?
- How did you first get involved in this team game?
- How often do you play and train?
- How much does it cost to participate?

**Exercise for specific groups**

The exercise and fitness needs of people change over time. Young children and the aged are limited by their physical capacities. Pregnant women need to alter their exercise regime to accommodate their changing body. The competitive athlete needs to exercise at a much higher intensity to achieve a competitive fitness level. These groups need to modify their exercise type and intensity to meet their specific needs. Regardless of the capabilities of people, exercise should be encouraged and made available to ensure everyone has the opportunity to improve their health and well-being.
Pregnant women
Exercise during pregnancy used to be considered dangerous. New research shows that exercise is not only safe, it should be undertaken. Research has found that there is no substantial difference in the pattern of delivery of the baby between non-exercising women and women who exercised at a moderate level during pregnancy. Women who exercised heavily during pregnancy are more likely to give birth at full-term. Like everyone else, pregnant women benefit from regular physical activity.

An exercise program can benefit pregnant women in many ways. The maintenance of healthy heart and blood vessels and improved muscular strength (particularly upper body and abdominal strength) can aid in posture and carrying the baby. Common disorders associated with pregnancy, such as lower back pain and leg cramps, can be eased. Exercise can help prevent varicose veins by improving circulation. By maintaining or improving fitness, pregnant women are able to control unnecessary weight gain, feel better about themselves and cope with the demands of labour.

Following are guidelines for maintaining fitness during pregnancy.

• Consult your doctor about your exercise program.
• Listen to the messages your body gives you.
• Work on good posture.
• Exercise gently.
• Exercise for fun.
• Realise that slowing down is normal.
• Do not overextend your joints beyond their normal range of movement.
• Always warm up and cool down.
• Strengthen your abdominal and pelvic floor muscles.
• Exercise carefully if you are lying on your back.
• Drink plenty of water.
• Modify your exercise program. (Mum’s the Word. Exercising During Pregnancy, NSW Sport & Recreation.)

Children
The age of children impacts on their:
• capacity to learn skills
• level of motivation to be active
• physiological capabilities
• susceptibility to injury.

Children have lower levels of motor control and are unable to process much information at one time. For young children, the focus should be on fun, skill development and activity, not competition and ‘win at all costs’. If children enjoy activity when they are young and are taught how to perform fundamental movement skills correctly, they are more likely to continue exercising as they get older.
People training for fitness

For athletes whose primary goal is to maintain a high level of fitness so that they can be competitive, it is essential that a specific training program be followed. This program includes fitness activities that reflect the energy system being utilised in competition and needs to be of high intensity. Following the FITT framework (see chapter 5) for program design is necessary. The principles of progressive overload and specificity need to be applied in the design of a program. People who train for fitness need to be constantly challenged so that they continue to improve as they train towards their peak.

The aged

Regular physical activity can be very beneficial for older people. As we age there is a gradual decline in our physiological capabilities, such as reduced heart/lung capacity, bone density and muscular strength. However, if people remain active as they age the rate of decline can decrease or be delayed.

The reasons why older people exercise need to be considered when designing exercises specific to this group. Most older people exercise to be with others, make new friends and have some fun in addition to the health benefits gained. This has implications for fitness service providers when designing exercise classes for older people. A general exercise class (for example, super circuit, aerobics, aquarobics) requires a longer warm-up and cool down together with a reduced aerobic segment. A specific relaxation component will also be popular. Without doubt, the principal focus of such classes should be the pursuit of fun and enjoyment.

Modified low to moderate exercise can be beneficial to older people. The physical, social and psychological benefits lead to improved well-being. Older people will be encouraged to exercise if they are able to participate in gentle exercises designed specifically for their needs.

Figure 9.22: Modified low to moderate exercise can be beneficial to older people.
Emerging group fitness activities

Motivation to improve and maintain fitness often requires the support of activities that are different, interesting and challenging. Traditional fitness activities such as circuits and team games are popular with most, but may be inconvenient, time consuming or may not have personal appeal. Group fitness activities such as boot camps have an emphasis on fun, challenge and opportunity for maximal workout and are becoming popular because classes are conducted over a short period, usually four weeks, and offer quick results. Within fitness centres, classes such as dance and core are also popular, the latter due to its focus on strengthening the abdominal and back regions of the body through controlled exercises such as pushing, pulling and rotating.

Other popular group fitness activities offered by fitness centres include classes where many of the essential moves can be learned well before attending. The instructor then incorporates the moves with music, making the session interesting and challenging. Examples of these classes are listed opposite. Using the weblinks for each of the following classes, you can see a video of what happens in a typical class and even learn the moves before attending.

- Body attack
- Body combat
- Body pump
- Body step

Many emerging group fitness activities are supported by child-care facilities, massage, sauna, spa and perhaps a physiotherapist and nutritionist. In addition, sessions are conducted by qualified instructors who not only motivate the group, but ensure that participants work within their fitness level. Fitness gyms for women are also becoming popular and attract clientele who may feel intimidated in some gyms that may be male dominated.

APPLICATION

**Group fitness activities**

1. Identify the types of fitness class available in your local area.
2. On separate days, participate in two of these classes.
3. Write a report comparing the two types of fitness class. Include the following in your report:
   - the benefits of each class
   - the availability and cost
   - the nature and difficulty of each
   - who it would suit
   - time commitment required
   - sources of further information for each
   - your personal reflections on participation.

**APPLICATION**

**SETTINGS FOR EXERCISE**

The environments in which people exercise vary according to their fitness needs, facilities available and cost of activities. People who do not have the time or desire to go to a fitness centre to exercise may prefer to exercise at home. In addition to fitness centres, many communities offer other sporting and recreational facilities. Tennis courts, squash centres, leisure centres, golf
courses, indoor sports centres and bicycle tracks are just some of the facilities that may be available.

For people who prefer to exercise in a group, exercise clubs and cultural groups provide a range of physical activities. It is important that the setting chosen to exercise in is an enjoyable and convenient environment that meets the individual’s needs. If not, the likelihood of the person continuing exercise is reduced.

Exercise at home
It is often difficult to find time to go out and exercise. For people with children or those who work long hours, exercising at home may be the most practical option. Many people who can afford the equipment have set up home gyms. Weights and weight machines are available at most sports stores. Aerobic exercise machines such as treadmills, steppers and stationary bicycles can also be purchased. If exercising at home is the only option available, weights combined with an aerobic machine provides a better workout.

Not everyone who wants to exercise at home can afford expensive exercise equipment. A range of exercises can be done with relatively little equipment. Another option is an exercise video or DVD. There are many exercise video and DVDs on the market that provide exercise instruction. Aerobics, step and pump classes can be done in the home by following the instructor on the video or DVD.

One of the downsides to exercising at home is maintaining the motivation to regularly exercise. It is easy to be distracted so it is important to plan a set time in the day that is devoted to exercise.

Community facilities
Availability of and access to community exercise facilities vary. In larger communities the existence of a wide range of facilities provides the individual with greater exercise choice. The likelihood of finding a fitness activity that suits your needs is greater for people who live in large towns and cities.

Fitness centres and personal trainers
Fitness centres are a popular choice for many people who exercise to improve fitness. Most fitness centres provide a range of fitness classes and weight training facilities. Classes can include aerobics, step, pump, flex, body sculpt, yoga, tai chi, cycle and power boxing. Each class varies in intensity of exercise and level of choreography and there is generally a class suitable to every ability level. For people who prefer resistance training, most fitness centres have a range of weights and weight training machines. Treadmills, steppers and stationary bicycles can be used to improve aerobic fitness. Fitness centres provide the convenience of being able to combine an aerobic workout with resistance training to achieve a good whole body workout.

Commercially run fitness centres provide many services designed to aid customers in their efforts to improve their fitness. The inclusion of
Exercise guru labels outdoor fitness groups ‘embarrassing’

By Nicole Hasham

Outdoor personal training is a ‘middle class’ indulgence that can embarrass onlookers and deter others from exercising, one of Australia’s leading fitness experts says.

Garry Egger, who has advised the federal government on exercise and weight control, said councils should crack down on trainers who monopolise areas such as beaches.

‘There are obviously people who do it because it does send a statement and make them look good,’ he said. ‘We need better programs to appeal to the majority of the population who are inactive, rather than visible high-cost programs to a small minority who can afford it.’

Dr Egger’s comments came as Waverley Council met on Tuesday night to discuss a crackdown on exercise groups that flout rules. Several councils have established policies limiting group sizes and imposing exclusion zones.

He said councils needed to stringently enforce their rules ‘where trainers are interfering with other people’s right to common recreational services’.

Egger wrote Australia’s physical activity guidelines in 1999 and developed the Gutbusters weight-loss program. He now says personal training is an ‘elite approach’ to fitness, describing it as a very middle class, indulgent thing to do.

Outdoor fitness groups could be ‘embarrassing’ for people to watch and could turn others off exercise, he said.

Waverley councillor Paula Masselos said exercise groups were training on children’s play equipment, used benches for step routines, hung ropes from trees or allowed class sizes to blow out.

Libby Babet, who owns Bottoms Up! Fitness, a women-only group with a permit to train on Bondi Beach, said most trainers complied with council regulations. She said group training was affordable — less than $10 a session for regular clients — and while personal training was more expensive, it helped people reach specific goals, such as getting in shape for a wedding.

Trainer Scott Gooding, who operates legal ‘boot camp’ training at Bondi Park, said his clients did not come to show off but to lose weight and get fit.

Source: Sydney Morning Herald, 13 March 2013.

Outdoor fitness training

1. Do you think fitness trainers should be allowed to conduct group programs using equipment on public facilities such as beaches?
2. Do you agree that outside fitness groups may be ‘embarrassing’ and possibly turn people off exercise?
3. What is your preferred setting for exercise? Why?

Community leisure centres provide the convenience of a large number of activities at one venue. These centres cater to a range of needs by providing a variety of activities such as aerobic classes, step and pump classes, weight training, swimming, boxing, yoga, martial arts and circuit training. Centres can include pools, indoor courts that cater for basketball, badminton, volleyball and gymnastics. Some open out to running tracks.

The popularity of team sports for both player and spectator has ensured that playing fields and sporting facilities exist in many communities. Running tracks, golf courses, tennis courts and squash courts are other facilities that may be available. Most communities recognise the importance of regular exercise and encourage participation by providing facilities and keeping costs relatively low compared to commercial facilities.
child-minding facilities is an appealing service to many parents. Fitness centre personnel can provide information on training, technique and nutrition.

Personal trainers are available either as a centre employee or a self-employed trainer. For people who have little knowledge of resistance training and general exercise principles, personal trainers are an excellent resource. Not only do they have the expert knowledge, they are great motivators for many people. It is important to check the credentials and experience of personal trainers before employing them. There are a number of qualified organisations that teach fitness professionals. You can contact the Fitness Industry Association for verification of qualifications. As with any service provider, there are good and bad personal trainers. It is important to choose one that meets your needs.

Figure 9.23: Personal trainers provide exercise, fitness and diet expertise, as well as being motivators for many.

SNAPSHOT

Why PTs are your best choice

By Pete Tansley

What do Novak Djokovic, Michael Phelps and Stephanie Gilmour have in common?

Apart from being No.1 in their sport, they all have a team of personal trainers to help them stay on top.

If the world’s best athletes have a personal trainer, then you, too, could benefit from one. Having a personal trainer used to be reserved for the elite and mega-rich. Today, they’re a necessity rather than a luxury.

Here are six reasons why you should invest in a personal trainer:

1. A personal trainer will offer an objective eye.

Personal trainers are not paid to make you feel good. No tennis player hires a coach to commend them on their swing and shout ‘well done old, chap!’ as they mis-hit another serve.

A personal trainer will offer technique corrections and constructive criticism to improve your workouts and meal plan. When you’re not on the right track, they won’t go easy on you, and nor should they. They will tell you where you’re going wrong, offer positive encouragement, suggest improvements and keep you accountable for your actions.

2. A personal trainer will help you master your technique.

While a training partner (or even a mirror) can help you with form correction, nothing beats live coaching from a trainer.

A recent client of mine, who has been lifting weights longer than I have been alive, managed to increase his personal best on his deadlift by 10% after just one personal training session. Sure, that might not be the case for every single session with a trainer, however, it proves a point; there is nothing quite as powerful as coaching during a session. A training partner or a mirror will often not pick up on the intricacies of some exercises.

3. A personal trainer will prevent a plateau.

Two months have gone by and you have made fantastic progress. You’ve improved your aerobic capacity, doubled your strength, and friends are asking what your secret is.

Then it strikes; the dreaded plateau. No matter how hard you exercise or how closely you adhere to your meal plan, nothing changes. A personal trainer is your best defence against reaching a plateau.

(continued)
plateau and will employ two key techniques to prevent it: variety and assessment.
Variety is used to shock your body, both physically and mentally, as workouts can become stale after some time. A personal trainer will change your program when necessary to ensure progress.
Ongoing assessments can also prevent a plateau.
Don’t worry; it’s not HSC maths. The assessment may include body fat percentage, weigh-ins and strength or fitness tests to track progress. If progress slows, your personal trainer can use this feedback to design the next phase of training.

4. A personal trainer will create a customised plan.
Anybody can download a workout and meal plan from the internet and get started. The problem with these cookie-cutter plans, however, is they do not take your requirements into account.
What injuries do you have? How many times per week can you work out? Are you able to access a commercial gym, or are you confined to training in the park or living room? Are you a total beginner in the kitchen, or a budding Masterchef? All of these questions need to be answered before a plan can be devised.
I even ask the relationship status of my clients before creating their plan. This is not for my benefit; I am happily married! However, a client’s relationship status can have an impact on eating habits. Somebody who is single tends to eat out more often than somebody who enjoys meals at home with their partner.
All of these angles need to be considered for both training and nutrition, which is why customisation is the key.

5. A personal trainer has been there before.
It amazes me how often people select personal trainers without looking at their experience. Think about it; would you hire a skydiving instructor who had never jumped before? I doubt it.

You want someone with plenty of skydiving experience before you put your life in their hands. A personal trainer is no different. They should be in good shape themselves and have a list of clients they have helped.

6. A personal trainer will create more than just workouts.
As you can see, hiring a personal trainer is much more than just a workout. They will cover all angles of your lifestyle, from training and nutrition through to supplements and lifestyle management.

Choosing a Personal Trainer
There is no obvious place to find a trainer. Here are some pointers so you do not get stuck at this stage:
Firstly, tap into your network. Ask your friends, family and co-workers if they have someone they are happy to recommend. You can also look around your gym or park. Watch to see who looks approachable and who seems to be offering workouts that suit your level.
Do they seem present in the session? Does it look like they actually care about their client? If they are looking around or checking their mobile phone during the session, keep searching. If the trainer seems to have the same repeat clients week after week, that is a good sign.
Online can also be an effective search tool.
Secondly, it’s about finding the right price, personality fit and location that suits your needs. Most trainers will provide an initial consultation to begin with. Don’t feel pressured; if they are the right fit for you then get started right away to reap the rewards. If not, do not feel obliged to begin. Keep looking until the right trainer comes along.
Education and qualifications are also important, and so is their track record. Ask to see some recent testimonials of clients they have worked with. A trainer is always going to tell you how fantastic they are but a current or former client will give honest, transparent feedback without any sales jargon.


APPLICATION

Personal trainers
Investigate the services and expertise of two personal trainers in your local area.
Use the profile of a personal trainer (in the following case study) as a guide, then complete the questions in the following inquiry.
SELECTING A PERSONAL TRAINER

1. What qualifications has each trainer achieved? Do you think there is a need for standardisation of qualifications for personal trainers?
2. Do they have any particular areas of expertise; for example, rehabilitation?
3. What are the benefits of using a personal trainer?
4. Identify the different methods of the trainers being investigated.
5. Which personal trainer would you select as the best to meet your fitness needs? What factors led you to this decision?

EXERCISE CLUBS

Exercise clubs have grown in popularity as they are an excellent way to enjoy exercise on a regular basis in the company of friends. They provide organised activity and the opportunity to meet others with the same exercise interests. There are many clubs in New South Wales that cater to both the social exerciser and the competitive athlete. Running, walking and cycling clubs can be found in most communities.

The focus on walking as a form of exercise to improve health and fitness is apparent in New South Wales. The establishment of walking for pleasure clubs by the New South Wales Department of Sport and Recreation promotes walking as a good health and fitness exercise option. These clubs plan weekly
or fortnightly walks in settings such as national parks, beaches and other places of interest. Exercise clubs are a great way to get into exercise on a regular basis.

Cultural groups

Multiculturalism is a part of Australian society. The establishment of a variety of cultural groups provides many benefits not only to people of that culture but to every Australian. Cultural groups keep alive many different aspects of the culture. Included in this is the opportunity to participate in culturally based forms of physical activity and exercise. The formation of cultural dance groups is a good example of the activities that cultural groups offer.

A variety of factors influence people’s choices of fitness activities. People participating in the same sport or activity may have totally different reasons for participating, such as physical abilities, cost, availability, health benefits and friendships.

Evaluating the appropriateness of my fitness program

Using the information you have read in the section ‘Settings for exercise’, complete a draft of the type of fitness activities that are available in your area and that you like. Use the following questions to evaluate the appropriateness of your choices. You might find it helpful to use the Start exercise weblink in your eBookPLUS, which raises issues about starting an exercise program. These could relate to your activity choices.

1. Does this fitness activity suit my fitness needs?
2. Could I continue to participate in this fitness activity? Why or why not?
3. Are other fitness activities more suitable for me?

Advertising and Promotion

Advertising is a powerful tool. A good advertisement can be very persuasive in influencing people to buy a particular product. Advertisements for fitness and exercise services can be found in or on magazines, newspapers, television home shopping channels, commercials, radio and the internet. Commercial fitness centres do letterbox drops of flyers promoting their facilities.

Promotions aimed at enticing the consumer to buy a product or service can often sound too good to be true. It is important that consumers take the time to investigate the product or service they wish to buy before committing time and money to it.

Figure 9.24: Advertisement for a personal trainer
How do you know who to believe?
The first step in finding out who to believe is by checking to see if the product or service is endorsed by a recognised fitness or health institution. Does the person offering the service have any qualifications? What is the basis of their expertise? These are things you should investigate when determining the reliability of the source of information. Generally, well-recognised brands and products endorsed by Australian fitness industry or health organisations such as the Heart Foundation are reliable.

Fitness and exercise services
Examine figure 9.24 and use the Personal trainers — how to choose one weblink in your eBookPLUS, then answer the following questions.
1. What information is provided about the personal trainer in figure 9.24?
2. Who is the advertisement targeting?
3. What does the advertisement offer?
4. Using the website information, list other information that you require to make an informed decision about the use of a personal trainer.
5. What do you think would be the benefits of the service?
6. How would you establish if the claims are believable?

Promotional techniques
Promotional techniques are often used to attract customers to products and services. Targeting specific groups and offering limited offers are some promotional techniques used. Don’t be fooled by the slick advertising of products. Take the time to:
• compare products
• seek advice from people in the fitness industry
• investigate the quality of the product or service advertised.

Accuracy of information
One technique used in advertising is to promote products through glossy, attractive advertisements that appeal to the senses of the consumer, but really give little information about the product. Compare advertisements of similar products or services to determine the amount of information given. It is wise to talk to the service providers and ask questions regarding their expertise and qualifications before using that service. It is illegal to give false information in advertising, although information can often be misleading. If you have concerns about the accuracy of information, investigate the information supplied by asking people with more knowledge or experience in that area.

Advertising and promotion of fitness products
Collect a number of advertisements of fitness equipment, fitness centres and fitness services from print media, or compile a video collection from television. Analyse the advertisements, considering the following points.
• What is being promoted? How does it help to improve health and fitness?
• What promotional techniques are used?
• How accurate do you think the information is?
Present your information to the class.
Ethics of advertising

As with any commercial industry, the fitness industry uses many advertising techniques to attract customers and make money. There are many genuine fitness products and service providers available. It is important that people understand that there is a range in the quality of service and product available. The claims made in advertising can be misleading and may even be false.

Advertising and promotion

Critically analyse the advertisement in figure 9.25.
1. What information is provided?
2. Who is the advertisement targeting?
3. What does the advertisement offer?
4. What promotional techniques are used?
5. What are the benefits of this fitness centre?
6. How can you determine if the information is believable?
7. From the information provided, do you think this gym would suit your fitness needs? Explain your answer. What other information would you require?

Figure 9.25: Online advertisement for a fitness centre
For some people regular exercise is a difficult task. There are many barriers that exist that prevent or deter people from participating in regular physical activity. Figure 9.26 summarises recent findings concerning people’s reasons for low or non-participation in physical activity in Australia.

The major barriers to participation among inactive people are a lack of time, lack of interest, injury or disability and beliefs about being too old to exercise.

**Figure 9.26**: Constraints on participation in sports and physical recreation, as reported by non-participants and low-level participants, by sex (Source: Australian Bureau of Statistics, ‘Participation in Sports and Physical Recreation’, cat. no. 4177.0, 2005–06, p. 11.)

**What are your barriers to participation in physical activity?**

Use the [Barriers to exercise](#) weblink your eBookPLUS to access an online quiz. Print the sheet and answer each of the questions by selecting and circling a response. Complete the score chart at the end.

1. How many barriers do you need to overcome?
2. How do you think you might overcome these barriers?

**Access to facilities**

The availability of and access to exercise facilities impacts on participation in exercise. Physical isolation and financial circumstances can limit access to facilities. For people who live in isolated communities, the facilities available are limited or even non-existent.

**Convenience of use**

The issue of time can affect people’s ability to exercise. People are more likely to participate in exercise, join a team or use a gym if it is convenient to do...
so. This may mean it is close to home or on the way home from work. For adolescents, it may mean that they can get there easily by public transport. If it is difficult to get to and from facilities, people are more likely to opt out of exercising.

**Cost**

The ability to afford to join a fitness centre, and buy fitness products or exercise clothing and shoes can be a barrier to people exercising. Lack of money can restrict the range and type of activities available. Many physical activities are very costly. Playing in a social competition, using a fitness centre or a swimming pool means a financial commitment. Some people are not able to make this commitment. The limited range of exercise choices that are left may not be appealing, so participation in regular exercise decreases.

**Feelings about fitness and exercise**

The exercise experiences people have when they are young can affect their attitudes to exercise. When these experiences are unpleasant, negative feelings about fitness and exercise develop and can form a barrier to exercise for adults. It is important that exercise is fun and not intimidating to young people, so that they develop positive attitudes to exercise.

**Exercise as a priority**

In people’s busy lifestyles today exercise is not a priority. Some people work long hours at stressful jobs. They do not perceive exercise as a priority, as they have more important deadlines to meet and work to do. For some people who do not recognise the important health benefits of regular exercise, exercise is not important. The challenge is to educate people about the benefits of regular physical activity and to introduce them to enjoyable activities that suit their fitness needs.

**Influence of other responsibilities**

For many parents, particularly mothers, the commitment of raising children can be a barrier to exercise. Lack of personal time is especially an issue when caring for small children. In some cases, parents do not get time to themselves until early evening. By then they are often too tired to exercise. It is not uncommon for parents to become spectators as their children grow and begin to participate in activity and sport.

Parents need to manage their time to include some activity in their lifestyle. They can become active by increasing their incidental activity; for example, doing the housework more vigorously, walking the children to the shops or getting involved in their children’s sport in some capacity. Sharing family responsibilities between the two parents allows each time to engage in exercise.

**Overcoming barriers to exercise**

Some of the common barriers to exercise we hear are:
- ‘I don’t have enough time’
- ‘Exercise is boring’
- ‘I don’t know how to be active’
- ‘I’m too tired’
• ‘It’s too hot’, ‘It’s too cold’, ‘It’s raining’
• ‘I don’t feel like it’.

Use the **Physical activity barriers** weblink in your eBookPLUS to prepare a positive response to each of the barriers listed above.

**SUMMARY**

• Children and youth up to 15 years of age should exercise for 60 minutes per day, every day. The time can be accumulated.
• Adults should exercise for 30 minutes on most or all days of the week.
• Regular moderate to vigorous physical activity and exercise should be a lifelong behaviour that starts in childhood and is carried on throughout life.
• Regular physical activity has many positive health benefits. Improved fitness is linked with reduced risk of all-cause morbidity and mortality.
• The value that people place on exercise and fitness varies across the population and may result from a combination of many factors.
• A significant section of the Australian population does not value fitness and exercise. This is reflected in statistics that reveal a large group of people fail to meet the recommended levels of physical activity.
• People of all ages gain health benefits from regular, moderate physical activity.
• The commodification of fitness has led to the availability of a much wider range of fitness products and services.
• There are many ways in which the individual can choose to exercise for fitness. They include a wide variety of individual and group fitness activities that can be done in a variety of settings.
• Individuals need to determine their fitness needs and investigate the range of exercise types on offer so that they choose an activity that meets their needs, is enjoyable and that they will be likely to continue.
• The fitness industry advertises and promotes many fitness products and services. Quality and value for money is something consumers should consider before making a financial commitment. Consumers need to investigate the accuracy of the information being provided, the qualifications and expertise of people providing the service and the quality and reliability of products being offered.
• There are a number of barriers to people’s participation in fitness activities, many of which can be overcome.

**QUESTIONS**

<table>
<thead>
<tr>
<th>Revision</th>
<th>1. <strong>Explain</strong> how we can improve our health through physical activity. (P6) (3 marks)</th>
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<td>2. Briefly <strong>explain</strong> the extent to which exercise should be a part of lifestyle. (P15) (3 marks)</td>
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<td>3. <strong>Discuss</strong> what it means to be fit. (P15) (1 mark)</td>
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<td>4. ‘Australians value exercise and fitness.’ <strong>Discuss</strong> this statement. (P17) (5 marks)</td>
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<td>5. Has the commodification of fitness been beneficial in improving people’s attitudes to fitness? <strong>Discuss.</strong> (P17) (5 marks)</td>
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<td>6. <strong>Identify</strong> and <strong>discuss</strong> four factors influencing people’s attitudes to fitness. (P17) (4 marks)</td>
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<td>7. How has your attitude to fitness been formed? <strong>Discuss</strong> the factors that have influenced your attitude. (P17) (5 marks)</td>
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(continued)
8. **Identify** two individual and two group fitness activities and **outline** the benefits of each. (P15) (4 marks)

9. **Identify** the important considerations of designing exercise for the aged, children and pregnant women. (P5) (3 marks)

10. **Explain** the exercise needs of a person intent on improving their fitness. (P5) (3 marks)

11. **Investigate** your local fitness centre. What services does it provide? Does it meet your fitness needs? **Explain**. (P15) (5 marks)

12. **Describe** the role of a personal trainer. (P15) (1 mark)

13. **Identify** one cultural group in your community. **Investigate** the activities it offers. (P16) (3 marks)

14. What benefits does regular physical activity provide? (P15) (3 marks)

15. **Outline** the things you should consider before believing an advertisement for a fitness service or product. (P16) (2 marks)

16. **Identify** and **describe** three barriers to participation in regular exercise. **Explain** how these might be overcome. (P17) (6 marks)

**Extension**

1. **Describe** your main motivations for exercising. How do these compare to people of different age groups and activity levels? (P17) (5 marks)

2. **Investigate** methods by which aerobic fitness can be improved within a fitness centre. (P5) (5 marks)

3. **Determine** why it might be necessary to be critical of advertisements for fitness products and services. (P15) (3 marks)

*Note:* For an explanation of the key words used in the revision questions above, see Appendix 2, page 384.