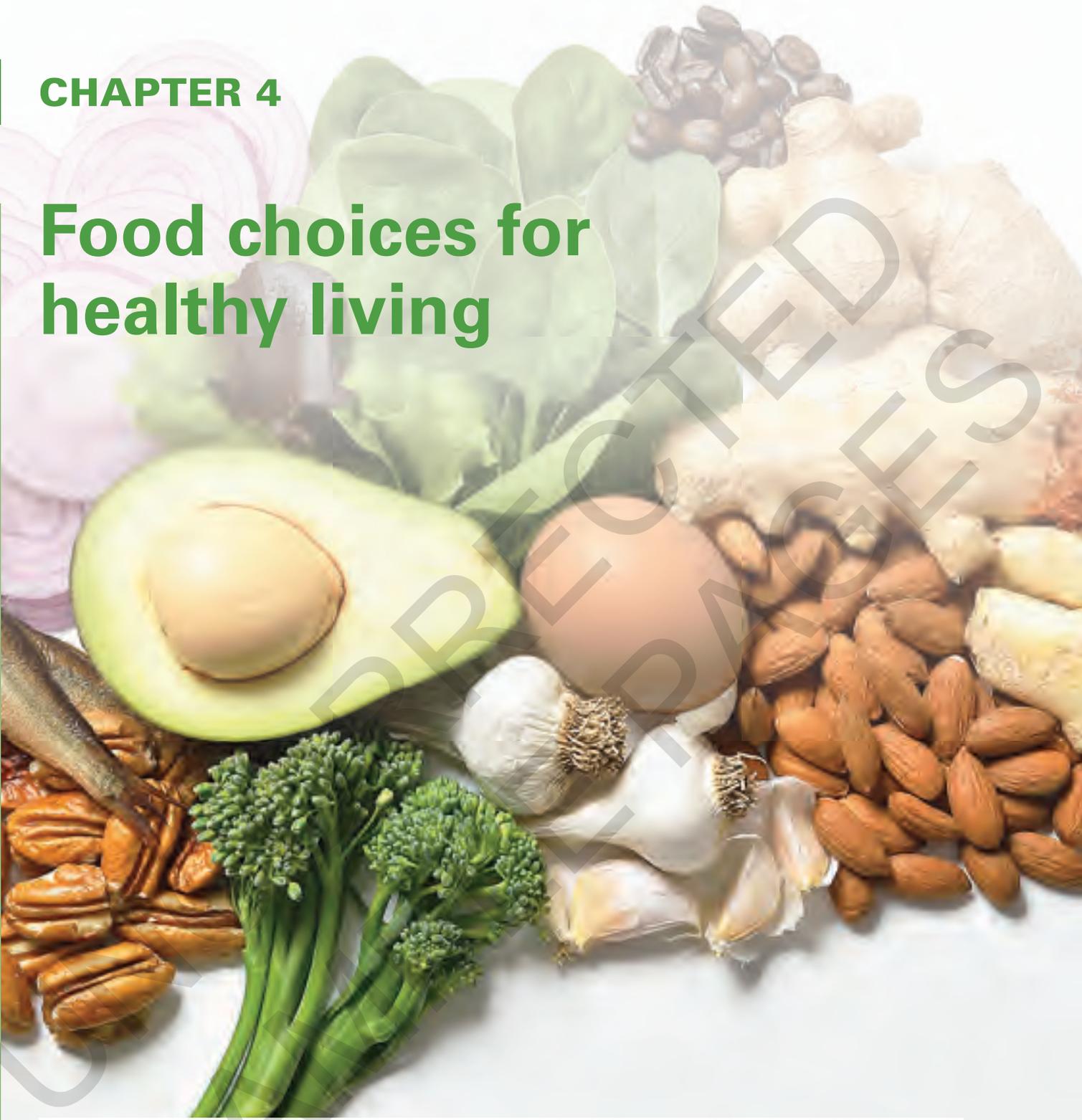


CHAPTER 4

Food choices for healthy living



ACCESS PRIOR KNOWLEDGE

- 1 Discuss this statement: 'Without nutritious food, our bodies do not function efficiently.'
- 2 List the key food groups.
- 3 Identify the six nutrient groups.
- 4 Explain the function of one of the key nutrient groups.
- 5 Name one food-selection model. Discuss how food-selection models help us to make healthy food choices.

4.1 Food: Its definition and purpose

food A substance, composed primarily of carbohydrates, fats, water and/or proteins, that is a source of nutrients consumed by humans and animals. Food is required for growth and energy.

nutrients The chemical compounds found in food that are used by the body to enable it to function and grow.

Food is any substance that we eat or drink. We eat food to nourish our bodies and to help reduce the risk of health problems. We also often eat for pleasure because of the taste of food and/or to enjoy the company of friends in a social setting. Food contains a number of **nutrients**:

- carbohydrates
- fats
- proteins
- vitamins
- minerals
- water.



Figure 4.1 We often eat not because we need to, but for pleasure.

4.1 LET'S COLLABORATE

What's your ...?

Conduct a survey of the class to find out the answers to the following questions:

- 1 What's your favourite food?
- 2 What's a food that you eat every day?
- 3 What's a food that you eat sometimes?
- 4 What's a food that you eat for pleasure?
- 5 What's a food that you eat just because you have to?
- 6 What's your least favourite food?

4.2 What does healthy eating mean?

Healthy eating provides nutritious foods in the correct quantities in order to ensure the **efficient** functioning of the body. If we don't choose healthy foods, our bodies do not work as well as they should. Choosing healthy foods ensures that our bodies have the necessary nutrients required for us to be fit and healthy.

efficient Performing in an organised and optimal manner.

Tasty Trivia

Eating three well-balanced, healthy meals every day gives your body a steady supply of vital nutrients for good health and efficient functioning.

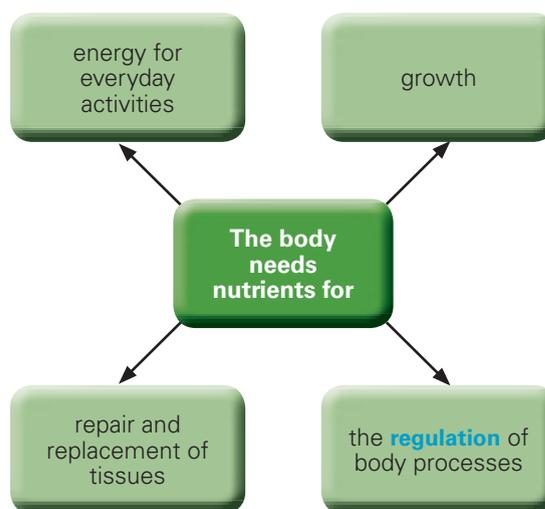


Figure 4.2 Food provides the nutrients we need to keep our bodies functioning efficiently.

regulation The control of a process to ensure that it functions correctly.

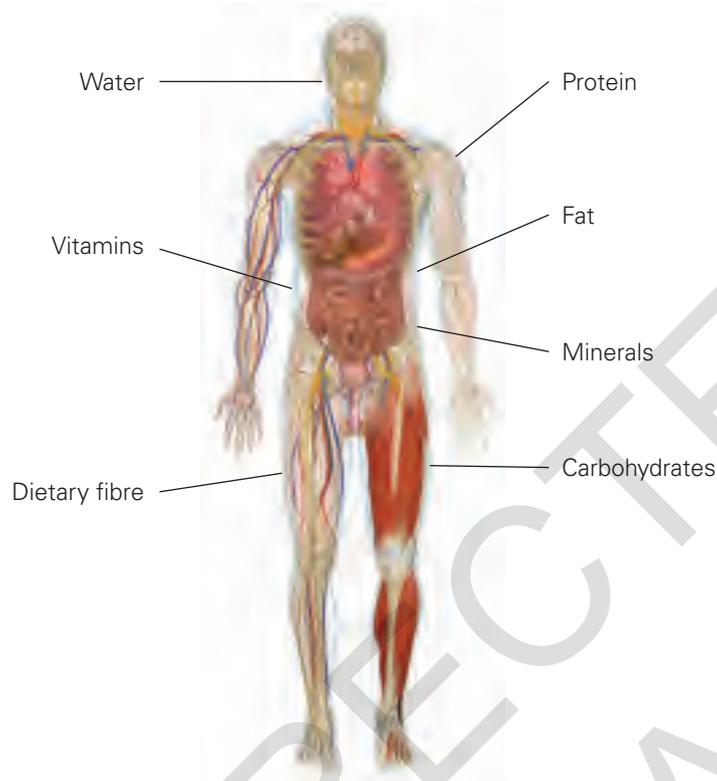


Figure 4.3 Nutrients are required for energy, growth and the repair, replacement and regulation of body processes.

The key food groups

In order to have a balanced diet we need to eat a wide variety of foods from each of the key food groups in the recommended amounts. The key food groups are:

- 1** vegetables and legumes/beans
- 2** fruits
- 3** grains (**cereals**), mostly wholegrain and/or high cereal fibre varieties



- 4** **lean meat** and poultry, fish, eggs, tofu, nuts and seeds, and legumes/beans



- 5** milk, yoghurt, cheese and/or alternatives, mostly reduced fat.



cereals Grains used for food, such as wheat and maize.

lean meat Meat with the least amount of fat possible.

Figure 4.4 A nutritionally balanced diet is crucial for a healthy body and mind.

A well-balanced and healthy diet

In a healthy diet, it is important to ensure that we consume enough foods from each group every day. It is also important to include a variety of different foods from each of the groups so that we supply our bodies

with all the nutrients they require to function, as well as to drink plenty of water and get sufficient exercise.



Exercise is essential for good health and wellbeing; it is very important to do some sort of physical activity every day.

4.2 LET'S COLLABORATE

As a class, discuss the following questions:

- 1 How much water do you drink every day?
- 2 If you don't drink water, what do you drink? Why is this not a healthy choice compared with water?
- 3 What about exercise – did you do any today or this week?
- 4 How much exercise should we do each day/week? What are some of the barriers you face in ensuring that you get enough exercise?



Figure 4.5 Water and exercise are essential for maintaining both physical and mental health.

4.3 INVESTIGATE IT

Visit the Australian Government's Eat for Health website. Analyse the information on the section of the website titled 'Eating Well' and answer the following questions:

- 1 Explain the reason why it is hard for Australians to choose nutritious foods.
- 2 Check out the 'tips for eating well'. List five of these tips and complete the table to apply them to your own life.

Tips for eating well	How can I apply this tip so that I eat well?
1	
2	
3	
4	
5	

- 3 Which of these tips are you not able to apply to your own eating? Explain why.
- 4 Go to the section titled 'Healthy eating throughout all of life'. Explain the special food needs of an adolescent.
- 5 Discuss the importance of activity or physical activity in the life of an adolescent.
- 6 Browse the Eat for Health website. List five other useful pieces of information on the website.
- 7 Outline the reasons why this website is a trusted source of information.

DESIGN BRIEF: PITA BREAD PIZZA

You are the coach of the Year 4 cross-country team from your local primary school. The members of the team will be at your school for lunch before they go to the interschool sports competition. They will be very hungry and will need a quick, healthy lunch that will help them to run fast.

Create a designed solution that could be eaten by the members of the team. When designing the quick lunch, think about the likes and dislike of primary school children, making sure to include at least one food from each of the key food groups.



Figure 4.6 Pita bread works well as a pizza base for a quick, healthy lunch item.

CREATE A SOLUTION

One of the members of the Year 4 cross-country team has just informed you that they are lactose intolerant. Research 'lactose intolerant' online and alter the healthy lunch item that you have designed to suit this dietary requirement.



4.4 ACTIVITY

A healthy choice SMS

Create reminder messages about healthy food choices that are quick and easy to follow. These messages are to be used by the Australian Government and will be sent to the general public via the SMS message service to mobile phones.

- 1 Unscramble the following healthy tips so the tips in the following sentences make sense:
 - a pasta cereals plenty Eat bread rice of and.
 - b foods each key food groups variety nutritional their values and of the for from Choose.
 - c amounts cheese fat alternatives best milk yoghurt low are Eat moderate of and.
 - d six eight water day per Drink to glasses of.
 - e amounts limited butter margarine and of Eat.
 - f per week One treat hurt you will not.
 - g life better exercise help build to a of and will for plenty body Remember nutrition good activity.
- 2 Using the tips that you have put into the correct order, develop three easy-to-read and effective SMSs using 'txt lingo' that could be used by the government to educate others about healthy eating.
- 3 Suggest what you could eat for lunch that includes at least one food from all the key food groups.

REFLECT ON LEARNING

- 1 Explain why healthy food is so important to the human body.
- 2 Food provides us with a number of different nutrients. Explain the term 'nutrients'.
- 3 List 10 of the foods that would be included in a healthy and nutritious diet. Explain why this is so important.
- 4 Suggest why children and adolescents need to consume different foods.
- 5 Designing healthy food choices and then preparing them can be difficult for some people. Explain why this might be so.



Figure 4.7 The amount of food our bodies require depends on our age and many other factors.

4.3 Linking healthy eating to good health

It is important to ensure that we have healthy eating habits. The total amount of food that a person eats will depend on their sex, age, level of physical activity, body size and additional factors, such as whether a woman is pregnant or breastfeeding.

Healthy eating helps to ensure that we are able to maintain our optimal weight by balancing the amount of energy in terms of the food and drink we consume and the energy that is being used for physical activity. Good eating habits also help to reduce the risk of **diet-related diseases** such as **cardiovascular disease**, cancer, obesity and diabetes.

diet-related diseases
Illnesses linked to quality of food consumption – for example, cardiovascular disease, colorectal cancer and constipation.

cardiovascular disease
A class of disease that affects the heart and blood vessels.

To help you determine your risk of developing some of these health problems, it is useful to

look at your family's medical history. This is called your biological determinant.

Tasty Trivia

According to a study by the Australian Institute of Health and Welfare into the effects of conditions that lead to bad health and premature death, diet-related issues are the leading risk factor.

Why is nutrition important?

Nutrition is the process of supplying the body with the requirements to sustain life.

Nutrition is the reason why we need to eat food; it is the 'everyday' components of food that help our bodies to work.

Food is made up of different types of nutrients that contribute to food being healthy for us to eat.

nutrition The science that studies the interaction between our bodies and food.

4.5 LET'S COLLABORATE

- 1 List the nutrients found in food.
- 2 State two foods that provide each of the nutrients listed above. Share your solution with a partner to develop a full list.
- 3 Do you take nutrient or vitamin tablets/supplements? With a partner, discuss the reasons why people take tablets/ supplements.

What are nutrients?

Eating healthy foods ensures that our bodies take in a range of nutrients, which play an important part in keeping our bodies healthy. Nutrients are chemical compounds that are needed for growth, energy and health. The nutrient groups found in food include carbohydrates, proteins, fat, water, vitamins and minerals. On the following pages are summaries of the ways in which each of the nutrients helps to keep our bodies healthy.



Figure 4.8 Foods providing carbohydrates

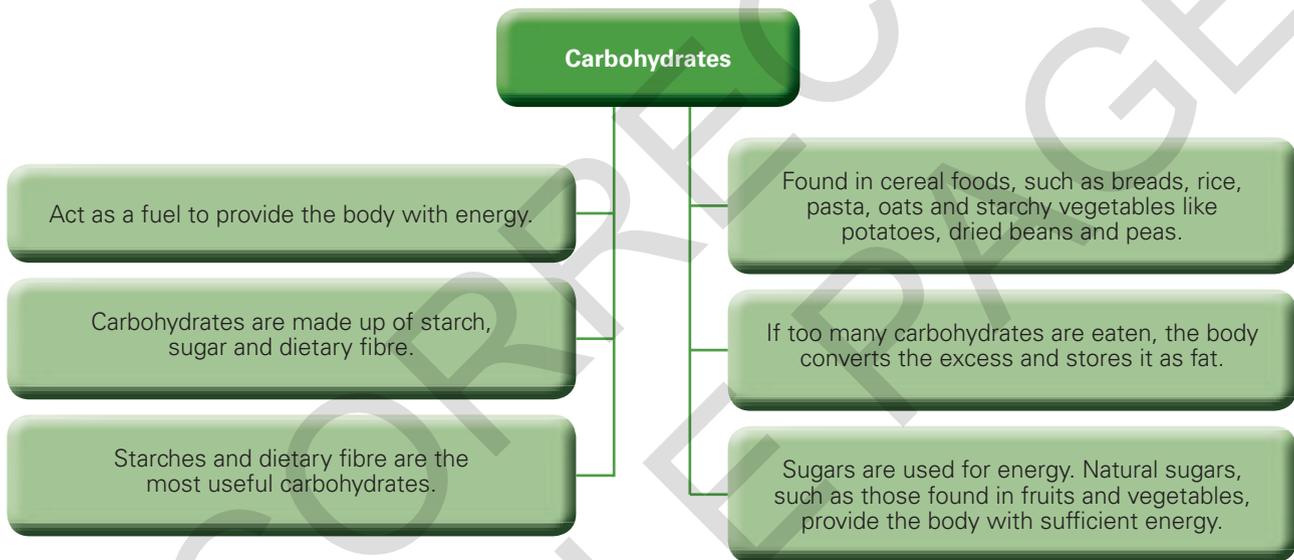


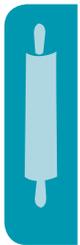
Figure 4.9 The function of carbohydrates

4.6 ACTIVITY

'Everyday' versus 'sometimes' carbohydrates

Copy and complete the table below to make a list of three 'everyday' carbohydrate foods and three 'sometimes' carbohydrate foods. Justify the reasons for your choices.

'Everyday' carbohydrate choices		'Sometimes' carbohydrate choices	
Choice 1		Choice 1	
Reason for choice		Reason for choice	
Choice 2		Choice 2	
Reason for choice		Reason for choice	
Choice 3		Choice 3	
Reason for choice		Reason for choice	



4.7 LET'S COLLABORATE

Discuss with a partner the ways in which energy is used by the body. Develop a list of activities that require a large amount of energy.



4.8 LET'S COLLABORATE

What are legumes? In groups, list some examples of legumes. For each of the legumes you have listed, name a recipe in which it could be used.



An adequate diet is one that provides all of the essential nutrients, allows growth and development of the body to proceed normally, maintains body weight and prevents diet-related diseases from occurring now and in the future.

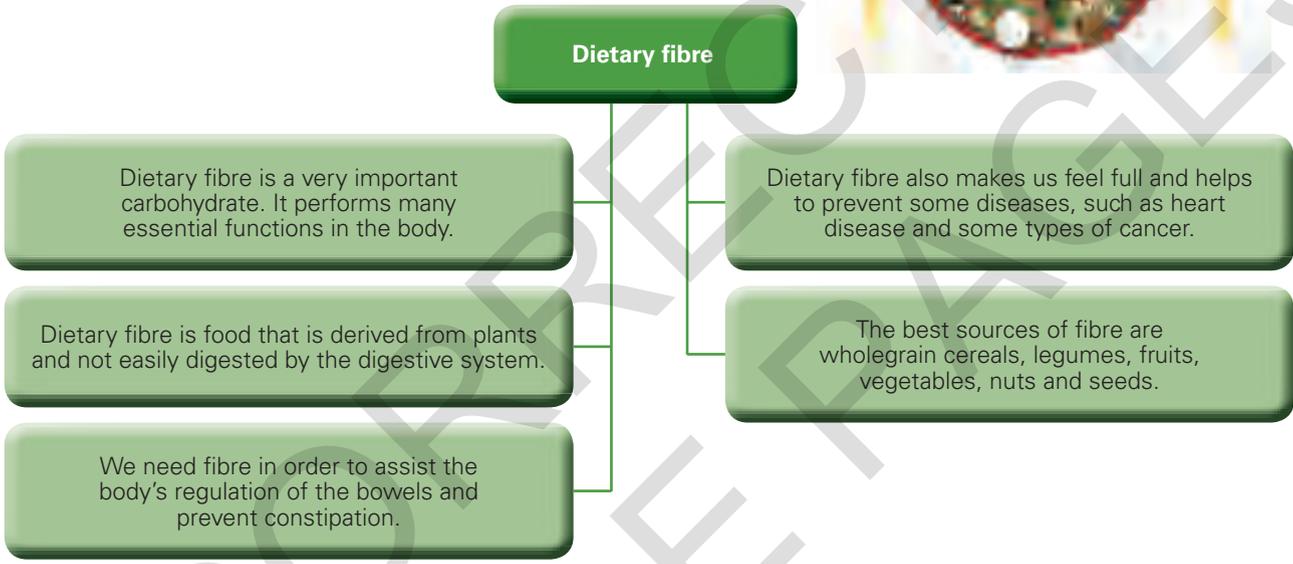


Figure 4.10 The function of dietary fibre

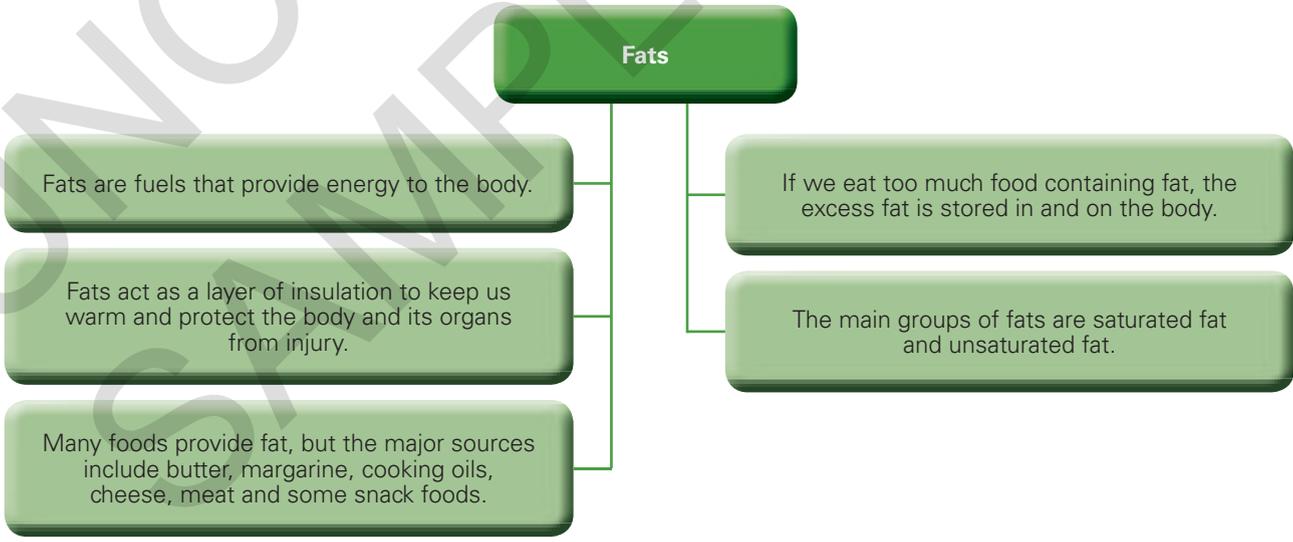
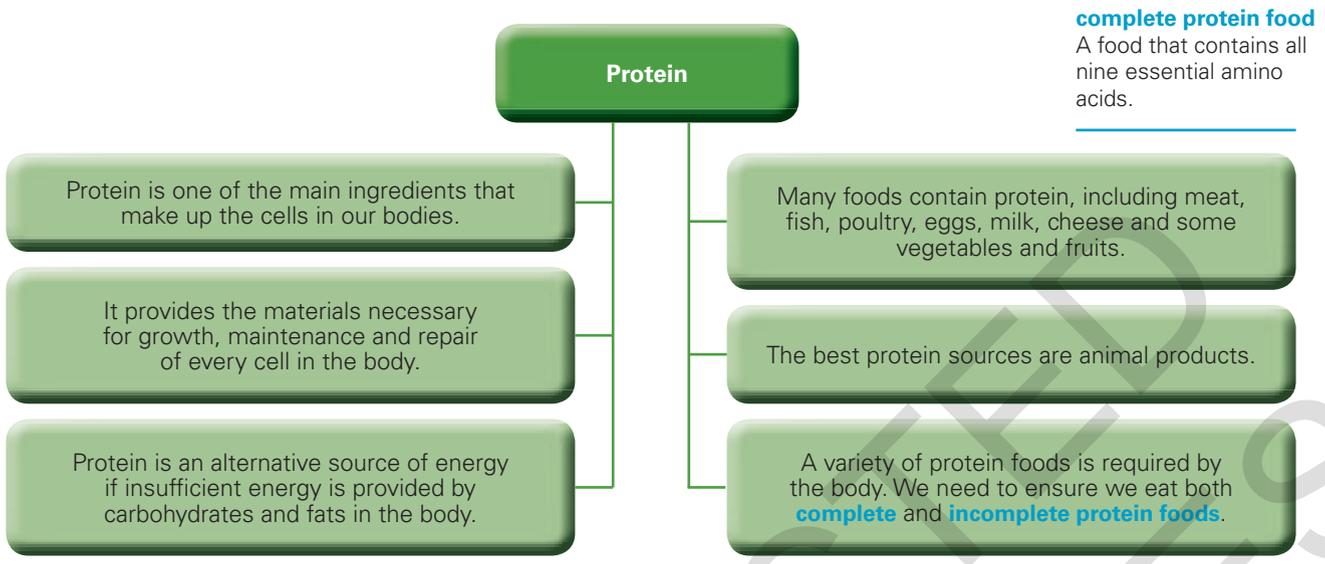


Figure 4.11 The function of fat



complete protein food
A food that contains all nine essential amino acids.

Figure 4.12 The function of protein



incomplete protein food Usually from plant sources that lack one or more essential amino acids.

Figure 4.13 Foods providing proteins

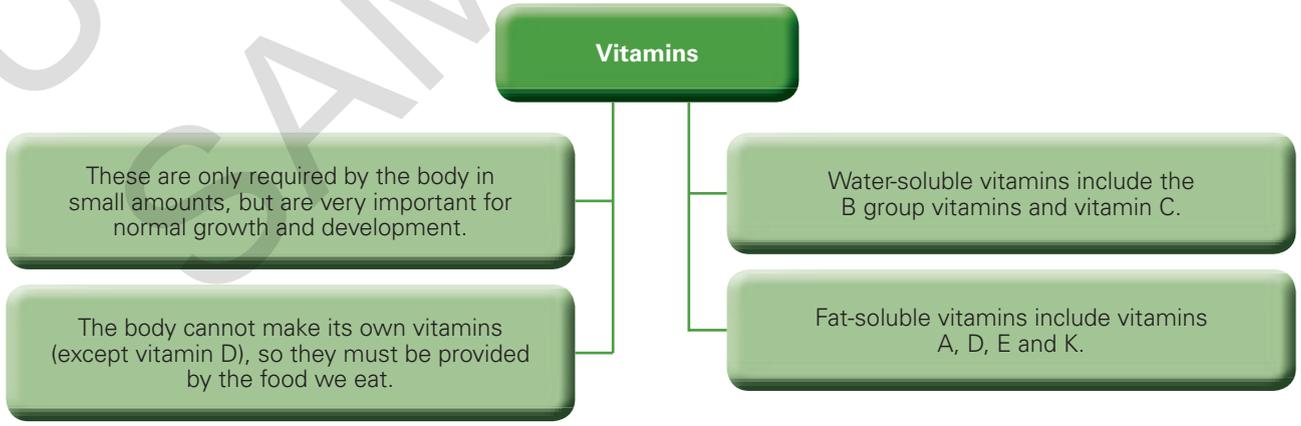


Figure 4.14 The function of vitamins

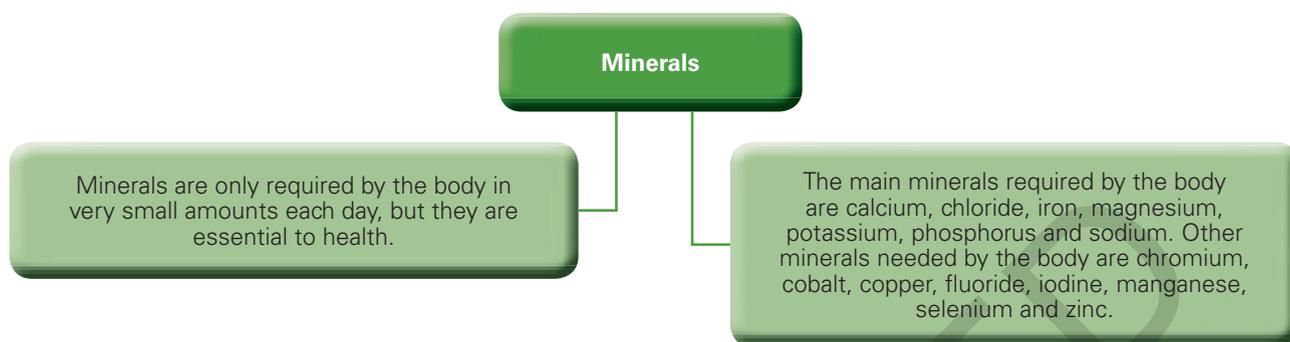


Figure 4.15 The function of minerals

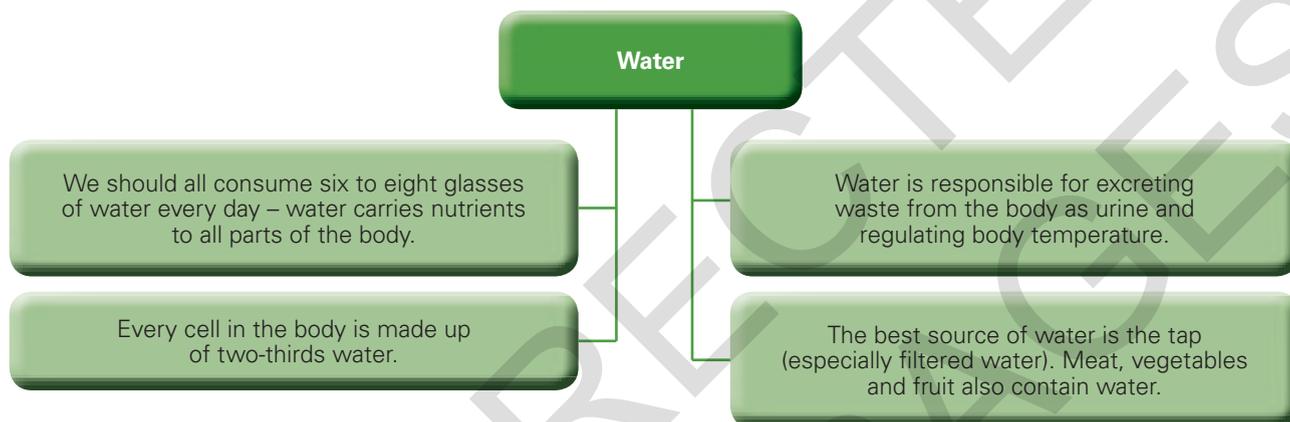


Figure 4.16 The function of water

Think ethically

What are some of the reasons why we should avoid purchasing bottled water?



Figure 4.17 Tap water in Australia is perfectly safe for drinking.

4.9 INVESTIGATE IT

Although it is really important to drink water, and the best water in Australia is tap water, drinking tap water in some countries can make people ill.

Access the Smart Traveller website to do the following:

- 1 Find five countries where it would not be safe to drink tap water. Explain the reasons why this is so for each country you select.
- 2 Outline the other information this site provides to assist travellers with healthy and safe eating while they are overseas.

DESIGN BRIEF: HEALTH BARS

There are many health bars available on the market. These are promoted as healthy snack options, but many are high in sugar and saturated fat, and low in dietary fibre. Some contain nuts, which can be a problem for allergy sufferers. The Crunchy Banana and Pineapple Bars recipe on p.96 aims to be a healthy snack choice. Design your own healthy bar.

Crunchy banana and pineapple bars

Main tools and equipment

Lamington tray, measuring spoon, measuring jug, saucepan, food processor, bowl, whisk, oven

Production skills

Chopping, blending, beating, sifting, greasing, weighing

Cooking processes

Simmering, baking

Ingredients

 Cooking spray	 175 g dried banana, chopped	 175 g dried pineapple, chopped	 125 ml apple juice
 225 g butter	 80 g brown sugar	 3 tablespoons wholemeal flour	 200 g rolled oats

Method

- 1 Preheat oven to 180°C.
- 2 Grease a lamington tray with cooking spray.
- 3 Place banana and pineapple into a saucepan with the apple juice and simmer for 10 minutes.
- 4 Allow the mixture to cool, then blend in the food processor (or you can use a potato masher or a sieve) until it is smooth.
- 5 In a bowl, beat together the butter and sugar until creamy, then gently stir in the flour and oats.
- 6 Spread half of the flour and oats mixture over the base of the lamington tray, then spread the banana and pineapple mix over the top. Spread the remaining flour and oat mixture on top and press down lightly.
- 7 Bake in the oven for approximately 20 minutes until the mixture is lightly golden.
- 8 Leave to cool, then cut into bars while still in the tray.

MAKES 6

-  Preparation time: 35 minutes
-  Cooking time: 10 minutes simmering, 20 minutes baking
-  Serving and presentation time: 5 minutes
-  Total time: 70 minutes





4.10 ACTIVITY

Puzzling proteins

- 1 Investigate the difference between complete and incomplete proteins, and essential and non-essential amino acids.
- 2 Present the information in a graphical manner. Include images of food items to help show the differences.



4.11 ACTIVITY

Protein only, carbohydrate free

Diets free of carbohydrates, protein-only diets, powders and supplements are some of the many different diet regimes that are promoted for healthy eating and weight reduction.

- 1 Use all types of media sources – TV, magazines, newspapers and the internet – to find out about 10 diet regimes or products.
- 2 For each one, provide a statement evaluating whether it should be included in a healthy diet.



4.12 ACTIVITY

Presenting vitamins and minerals

- 1 Choose one of the vitamins or minerals required by the body. Explain the functions and food sources of your chosen vitamin/mineral.
- 2 Prepare a PowerPoint presentation to present this information to the class.



4.13 ACTIVITY

Facts on fats



Figure 4.18 Foods providing unsaturated fats

Fats are often limited in the diet because of the effect they have on the body.

- 1 Investigate the effects the following fats have on the body:
 - a polyunsaturated fats
 - b monounsaturated fats
 - c trans fats
 - d omega-3 fatty acids.
- 2 Using a computer, construct a diagram that outlines the effects of each of these fats on the body.



REFLECT ON LEARNING

- 1 Compare the terms 'nutrition' and 'nutrients'. Explain the differences in your response.
- 2 Develop a list of the reasons why nutrients are so important for the body.
- 3 Explain, in your own words, why healthy eating is vital.
- 4 Discuss the reasons why the body needs energy.
- 5 List the nutrients that provide energy.
- 6 Explain what happens to carbohydrates, proteins and fats that are not used by the body as energy.

4.4 Foods for good health

When we choose foods to eat each day, a number of factors influence this selection. Most people do not choose foods just for their nutritional value. Our food selection is influenced by our family, peer group, **culture**, religion, personal likes and dislikes, types of foods available and the prices of different foods.

culture Beliefs, customs, traditions and social practices of a group of people.

A number of food-selection models have been developed in

Australia to influence our food choices and to provide us with knowledge about choosing healthy foods. These models aim to help people choose the best foods for good health.

4.14 LET'S COLLABORATE

- 1 Consider the sorts of foods you choose to eat when you are at school.
- 2 List the factors that have an influence on these food choices.
- 3 Compare your list with a partner.

4.15 ACTIVITY

Sugar in soft drinks

How much sugar is in a bottle of soft drink? The answer is 12–15 teaspoons! That's a lot of sugar!

The standard serving size for soft drink has increased. A decade ago, soft drink came in 375 ml cans, yet now it is commonly sold in 600 ml bottles. This means you would exceed the recommended energy intake from refined sugar with just one bottle of soft drink.

Go in to the kitchen and measure 15 teaspoons of sugar. Use the electronic scales to calculate the weight of the 15 teaspoons of sugar.

- 1 How many bottles of soft drink do you consume in:
 - a a day
 - b a week?
- 2 How many teaspoons of sugar do you consume from soft drink in:
 - a a day
 - b a week?
- 3 Think about how you could reduce your sugar content from soft drinks. Make a list of alternative drinks that you could consume.
- 4 Use Google to help you investigate the quantity of sugar in a variety of drinks. Make a list, ranking these drinks from lowest sugar content to highest sugar content.



Figure 4.19 Soft drinks – liquid sugar!





Over time, young people in Australia have become increasingly heavier – this is due to poor food choices, insufficient physical activity and/or the nutritional quality of the foods that are heavily promoted to them.



4.5 Food-selection models

Food-selection models are tools that people can use to help them select the types and sometimes the quantities of the various foods that the body needs to function properly.

There are a number of food-selection models available in Australia; they vary in terms of the amount and complexity of the information they provide. The different models have been developed for a different purpose and for a variety of different groups within the community. Two of the guides that will be discussed further here are the Healthy Eating Pyramid and the *Australian Guide to Healthy Eating*.

The Healthy Eating Pyramid

The Healthy Eating Pyramid is a simple visual guide to the types and proportion of the five core food groups that we should eat every day for good health.

This food-selection guide developed by Nutrition Australia contains five core food groups and healthy fats. These are included on the pyramid according to how much they contribute to a balanced diet. The Healthy Eating Pyramid is based on the 2013 *Australian Dietary Guidelines*.

Look at the picture of the pyramid in Figure 4.19 on p.100. You can see that it includes the following:

- vegetables, legumes, fruit and grains
- milk, yoghurt, cheese and alternatives, and the lean meat, poultry, fish, eggs, nuts, seeds, legumes food groups
- healthy fats.

The Healthy Eating Pyramid contains additional messages, including:

- enjoying herbs and spices
- selecting water as the drink of choice
- limiting salt and added sugar.

4.16 INVESTIGATE IT

Visit the Nutrition Australia website. Nutrition Australia provides fact sheets and resources that explain the ways in which young people can increase their intake of fruits and vegetables, eat healthy foods outside of the home and ensure that they eat healthily at breakfast time. Develop a dot point summary for each of these topics.

4.17 LET'S COLLABORATE

Discuss with a partner which diet-related diseases can be linked to foods high in salt and added sugar. Develop a list of these.

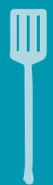


Figure 4.20 The Healthy Eating Pyramid

4.18 LET'S COLLABORATE

Discuss the following questions with a partner, in a group or as a class:

- 1 What 'different foods' or foods from other cultures are represented in the Healthy Eating Pyramid?
- 2 How are cultural food restrictions affected by the information provided in the Healthy Eating Pyramid?



4.19 ACTIVITY

Nutrition Australia

The Healthy Eating Pyramid in Figure 4.20 encourages Australians to enjoy a variety of foods from every food group, every day. Use the Nutrition Australia website to complete the following questions:

- 1 There are five core food groups in the Healthy Eating Pyramid. Identify and explain the foods that belong to each section.
- 2 Identify how the Healthy Eating Pyramid helps us to understand how a wide variety of foods can be included in the diet.
- 3 Thinking about nutrients, explain why food variety is so important.
- 4 'Be active every day' is one of the messages promoted by the Healthy Eating Pyramid. List the ways by which you could move more each day. Here is an example to get you started:
 - walk to school instead of being driven.
- 5 Water gets a big green tick. Discuss the reasons why water should be included in the diet for optimal health.
- 6 Salt and added sugar get a big red cross. Make a list of foods that contain added salt and sugar. If you need help to complete this task, look at the labels of food products in the school pantry.
- 7 Look at the section of the website titled 'A brief history of the pyramid'. Explain how the 'pyramid' has evolved. Discuss the reasons for this.
- 8 The Healthy Eating Pyramid was last reviewed in 2015. Explain what the review decided and what implications this had for the Healthy Eating Pyramid.

Australian Guide to Healthy Eating

The *Australian Guide to Healthy Eating* was first developed in 1998 by the Children's Health Development Foundation and Deakin University for the Commonwealth Department of Health and Family Services.

This guide has also evolved over time and takes into consideration changing trends and a variety of cultures. It aims to encourage the community to eat a variety of foods from each of the key food groups every day, in proportions that are consistent with the *Australian Dietary Guidelines*.



4.20 INVESTIGATE IT

Visit the *Australian Guide to Healthy Eating* website and explain what you could do to eat more healthily.

Look at the diagram of the *Australian Guide to Healthy Eating* in Figure 4.21 on p.102 and see whether you can make out the five different sections of the plate. The size of each of the segments of the plate is an indication of the amount of these foods that we should consume daily:

- Eighty per cent of the food we eat should come from plant foods: breads, cereals, rice, pasta, noodles, vegetables, legumes and fruit.
- Twenty per cent of the food we eat should come from animal foods (or non-animal substitutes): milk, yoghurt, cheese, meat, fish, poultry and eggs, and/or nuts and legumes.
- 'Sometimes' or 'in small amounts' foods are extra foods that should only be eaten occasionally or in very small amounts.

The *Australian Guide to Healthy Eating* also promotes the consumption of plenty of water.

The *Australian Guide to Healthy Eating* has been adapted to create a food-selection model for Aboriginal and Torres Strait Islander peoples – the *Aboriginal and Torres Strait Islander Guide to Healthy Eating*.

Eat different types of foods from the five food groups every day.

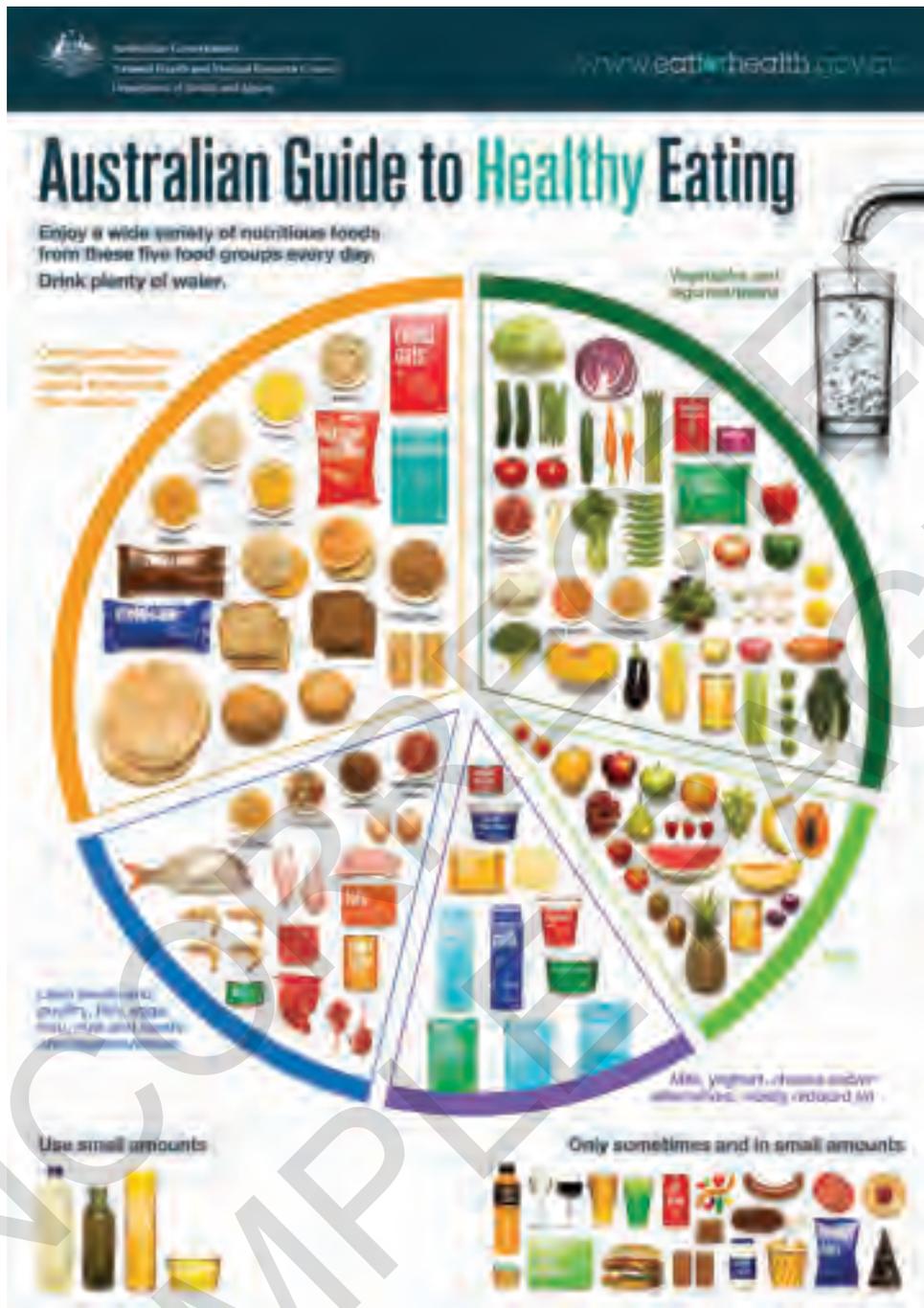


Figure 4.21 The Australian Guide to Healthy Eating

4.21 INVESTIGATE IT

Visit the Eat for Health website and view the *Aboriginal and Torres Strait Islander Guide to Healthy Eating*.

Compare this healthy eating guide with the *Australian Guide to Healthy Eating*. Explain the similarities and differences.

Explain the importance of recognising the difference in food consumption for Aboriginal and Torres Strait Islander peoples.

Discuss why the 'only sometimes' and 'in small amounts' categories exist in this food guide and why the items that appear here are so different from those in the *Australian Guide to Healthy Eating*.



4.22 ACTIVITY

Understanding the *Australian Dietary Guidelines*

Visit the National Health and Medical Research Council website to find out more about the *Australian Dietary Guidelines* and then complete this activity.

- 1 Each student is to investigate one of the dietary guidelines that relates to food consumption and then present their findings to the class in the form of an oral PowerPoint presentation. Your presentation should include the following information:
 - the name of your chosen guideline
 - an explanation of why this guideline is so important to Australians or children and adolescents
 - a list of the nutrients to which this guideline refers
 - a list of five tips that could be used to follow this guideline
 - a list of foods that need to be included in the daily diet if we are to follow this guideline properly
 - a recipe that promotes your guideline.
- 2 Compare the messages about food and nutrition provided by the *Australian Guide to Healthy Eating* with the messages provided in the *Australian Dietary Guidelines*.
- 3 Check out the *Australian Guide to Healthy Eating* fridge magnet. Develop your own magnet to encourage you to be a healthy eater.

CREATE A SOLUTION

- 1 Work in a group of three to find at least five recipes each that promote the healthy eating messages contained in one of the food-selection guides discussed in this chapter.
- 2 Spread the 15 recipes out on the table and rank the recipes from 1 to 15 (with 1 being the best recipe and 15 being the least appropriate recipe) according to their ability to promote the message of the food-selection guides.
- 3 Make a group decision about the best recipe – consensus must be reached.
- 4 Prepare a food order using the table below – be sure to include quantities.
- 5 Prepare the recipe in class time.
- 6 Reflect on your decision-making process once you have taste-tested your food item.
- 7 Describe your thoughts about the ability of the group to reach a consensus, the overall cooperation of all group members and the taste and suitability of your food item.

Food order

Butcher	Greengrocer	Supermarket

Spelt Pancakes

Main tools and equipment

Bowl, measuring cup, measuring spoons, saucepan, microwave-proof bowl, non-stick frying pan, spatula

Production skills

Combining, stirring

Cooking processes

Frying, warming

Ingredients

 ¾ cup spelt flour	 ¼ teaspoon cinnamon	 ¼ teaspoon nutmeg	 1 egg, beaten	 ½ tablespoon honey	 1 cup coconut milk
 1 teaspoon vegetable oil	 ¼ cup blueberries or mixed berries	 ½ teaspoon icing sugar for serving			

Method

- 1 Combine the flour and spices in a bowl.
- 2 Make a well in the middle. Add the egg and the honey to the hollow.
- 3 Warm the coconut milk in the microwave or in a saucepan.
- 4 Using a wooden spoon, gradually stir in the milk.
- 5 Allow to stand for 10 minutes (if possible) to soften the flour.
- 6 Heat vegetable oil in a non-stick frying pan over a medium to low heat. Using a large spoonful of batter for each pancake, cook the pancakes in batches, adding a little more oil to the pan as needed.
- 7 Fry the pancakes until golden brown, 1–2 minutes for each side. Keep the pancakes warm on a plate covered with a clean dry tea towel until you are ready to serve them.

MAKES 6

-  Preparation time: 35 minutes
-  Cooking time: 10 minutes
-  Serving and presentation: 5 minutes
-  Total time: 50 minutes

Evaluating

- 1 List the aspects of this task that you found difficult.
- 2 Explain how you could have improved on your recipe and your organisation if you were to repeat this task again.
- 3 Analyse the appearance, aroma, taste and texture of your spelt pancake
- 4 Investigate two other recipes suitable for breakfast. Prepare them at home and critically evaluate them in terms of suitability for breakfast before school.



4.23 ACTIVITY

Eat healthily and break the fast

Breakfast is the most important meal of the day – often we forget or just choose not to eat breakfast, even though it ‘breaks the fast’ after the body has gone for perhaps 10 to 12 hours without food. People who have a good, healthy breakfast work and concentrate better than those who do not. Figure 4.22 shows an example of a healthy breakfast.



Figure 4.22 A healthy breakfast

- 1 Copy and complete the table below to identify:
 - a the food group to which the food item belongs
 - b the section of the Healthy Eating Pyramid to which the food item belongs
 - c the section of the *Australian Guide to Healthy Eating* to which the food item belongs
 - d two nutrients found in that breakfast food item.

Healthy breakfast item	Food group	Section of the Healthy Eating Pyramid	Section of the <i>Australian Guide to Healthy Eating</i>	Two nutrients found in this breakfast item
Glass of skim milk				
Bowl of cornflakes with skim milk				
Poached egg				
Mushrooms				
Multigrain toast with low-fat margarine				
Glass of water				

- 2 Discuss how this breakfast provides a variety of foods.
- 3 Explain how this breakfast complies with the Healthy Eating Pyramid and includes foods in the correct proportions.
- 4 Look back at the *Australian Guide to Healthy Eating* and explain how this breakfast includes the proportions suggested by this food-selection model.



4.23 ACTIVITY – continued

- 5 Let's compare your own breakfast. Copy and complete the table below, this time writing down what you eat for breakfast.

Healthy breakfast item	Food group	Section of the Healthy Eating Pyramid	Section of the <i>Australian Guide to Healthy Eating</i>	Two nutrients found in this breakfast item

- 6 Complete the four analysis questions again, but this time analyse your own breakfast.
7 Make a list of suggested improvements or changes that you could make to your own breakfast.



4.24 ACTIVITY

Pack a lunch

Lunch is usually a light meal that needs to sustain us until dinnertime. Your lunch at school may be either bought at the canteen or prepacked at home.

- 1 Describe the lunch that you ate today.
- 2 Where did this lunch come from?
- 3 Use the knowledge that you have gained from this chapter to explain how healthy and balanced this meal was. Consider the food groups, the *Australian Guide to Healthy Eating* and the nutrients when completing your answer.
- 4 Use this information to plan a packed lunch that you could take to school.
- 5 Use this information again to write a letter to the school canteen explaining how and why it could change the food it serves.



REFLECT ON LEARNING

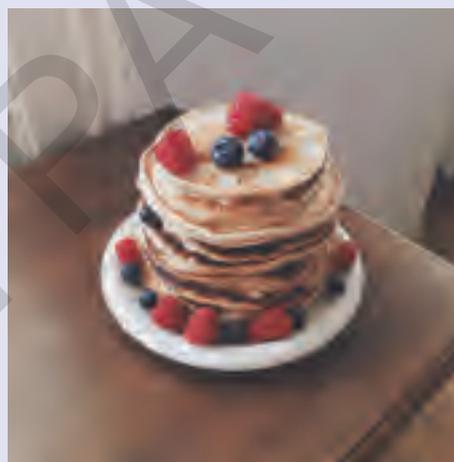
- 1 Identify the aim of the food-selection models.
- 2 List the five core food groups of the Healthy Eating Pyramid.
- 3 'Move more' promotes the importance of
- 4 Discuss how the *Australian Guide to Healthy Eating* encourages the consumption of a wide variety of foods.
- 5 Copy and complete the table below to list what the differences and similarities are between the Healthy Eating Pyramid and the *Australian Guide to Healthy Eating*.

Differences	Similarities

DESIGN BRIEF: PANCAKE STACK

Breakfast is a very important meal – it breaks the overnight fast and keeps us going until morning tea or lunchtime. The Pancake Stack is an ideal meal to do just that.

Develop your own breakfast pancake stack that is quick and easy to prepare. The pancake stack must contain at least three different fruits from different colours of the rainbow; it should be low in sugar and it should keep you going until morning tea time.



LOOKING BACK

- 1 Food nourishes our bodies and helps to reduce the risk of diet-related diseases and other health problems.
- 2 A balanced diet provides the body with carbohydrates, protein, fats, vitamins, minerals and water so it can function efficiently.
- 3 The key food groups are:
 - vegetables and legumes/beans
 - fruits
 - grain (cereal) foods, mostly wholegrain and/or high cereal fibre varieties
 - lean meats and poultry, fish, eggs, tofu, nuts and seeds, and legumes/beans
 - milk, yoghurt, cheese and/or alternatives, mostly reduced fat.

These are the basis of many food-selection models.

- 4 Each nutrient has a specific function in the body. We should therefore ensure that we consume a variety of foods in the recommended proportions.
- 5 Food-selection models are tools to help people choose the correct foods in the correct proportions. Two examples of these are the Healthy Eating Pyramid and the *Australian Guide to Healthy Eating*.

TEST YOUR KNOWLEDGE

Multiple choice

- 1 When eating a well-balanced diet, foods should be from the:
 - a nutritional food groups
 - b key food groups
 - c balanced food groups
 - d healthy eating groups of food.
- 2 There are a number of different nutrient groups found in food; these include:
 - a starches, dietary fibre, water and carbohydrates
 - b saturated fat, carbohydrates, protein and dietary materials
 - c vitamins, minerals and vanilla
 - d carbohydrates, protein, fats, water, vitamins and minerals.

True/false

- 1 Ill-health is best avoided by eating nutritious food.
- 2 The body does not need vitamins for good health.
- 3 Nutrition is the process of supplying the body with the requirements to sustain life.

Short answer

- 1 Look at the picture on the cover of the *Australian Guide to Healthy Eating* and describe the information that it provides using your own words.
- 2 Explain the purpose of the *Australian Guide to Healthy Eating*. In your explanation, discuss the area of health it is meant to improve.
- 3 Energy is required for everyday activities and for growth and development. Which nutrient provides energy? Describe a nutritious breakfast that would provide energy to begin the day.

Extended response

Read the passage about soft drinks and answer the questions that follow.

Summer soft drink health warning

The latest research is showing that consuming 340 ml of sugary drink a day (which equates to less than one can) increases your risk of type 2 diabetes by 22% when compared with drinking one can a month or less.

Sugary drinks, or sugar sweetened beverages, include all non-alcoholic water based beverages with added sugar such as non-diet soft drinks, energy drinks, fruit drinks, sports drinks and cordial.

Sugar sweetened beverages are high in kilojoules, leading to weight gain and obesity. Obesity has been shown to be a leading risk factor for type 2 diabetes, cardiovascular disease and some cancers (including endometrial, oesophageal, renal, gallbladder, bowel and postmenopausal breast cancers).

Young Australians are the highest consumers of sugar sweetened beverages, and sugar sweetened soft drinks in particular. The 2007 Australian National Children's Nutrition and Physical Activity Survey found that 47% of children (2 to 16 years of age) consumed sugar sweetened beverages (including energy drinks) every day.

The level of consumption peaked among 14 to 18 year-olds, with 51% of males and 38% of females in this age group consuming a soft drink on the day prior to interview.

In the 12 months to October 2012, Australians bought 1.28 billion litres of carbonated/still drinks with sugar, with regular cola drinks being the most popular (447 million litres).

American estimates show that consuming one can of soft drink per day could lead to a 6.75 kg weight gain in one year (if these calories are added to a typical US diet and not offset by reduction in other energy sources).

Many drinks contain acid that harms your teeth, including regular and diet soft drinks, sports/energy drinks and fruit juices. Acid weakens tooth enamel which can lead to tooth decay. Tooth decay is the most prevalent disease in Australia.

Sugar sweetened beverages produce more acid when the sugar combines with bacteria in the mouth. Try drinking natural spring water instead – it has no acid, no sugar, no kilojoules, as well as many other added health benefits.



Figure 4.22 Despite research proving that water is the best drink option, many households still allow children to consume sugary drinks.

Source: www.aussienatural.net.au/news/summer-soft-drink-health-warning.

- 1 Soft drinks are high in sugar. Discuss a better drink to quench your thirst. Justify your choice of drink.
- 2 Explain the health problems associated with the sugar found in soft drinks.
- 3 Discuss the population group in Australia that is most likely to be at risk. List the issues for these people.
- 4 List the reasons why health experts are calling for warnings to be printed on soft drink labels. Do you agree with this? Explain the reasons why or why not.
- 5 In many school canteens, lollies and foods high in fat have been banned. Suggest a list of foods that could replace lollies and fatty foods at school.
- 6 Suggest how the Healthy Eating Pyramid could be used by school canteens to promote healthy food consumption.