

Practical Ways to Apply Healthy Eating Recommendations

Key Knowledge 4.1.6

Practical ways to apply healthy eating recommendations of the *Australian Dietary Guidelines* and the *Australian Guide to Healthy Eating* to everyday food behaviours and habits, with particular attention to maintaining a healthy weight.

Key Skills 4.1.6

Demonstrate understanding of the healthy eating recommendations of the *Australian Guide to Healthy Eating* by applying them to food selection, planning and preparation.

Key Skills 4.1.7

Participate in practical activities to assess and reflect on issues related to navigating food information.

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Terms and Definitions

The Australian Dietary Guidelines provide evidence based recommendations on the types and amounts of foods Australians should eat to meet nutritional requirements.

The Australian Guide to Healthy Eating is a food selection guide which visually represents the proportion of the five food groups recommended for consumption each day.

Eat for Health

The Eat for Health program is a resource funded by the Australian government that provides up-to-date advice about the amounts and kinds of foods that we need to eat for health and wellbeing. The Eat for Health website contains the Australian Dietary Guidelines and the Australian Guide to Healthy Eating. The website provides tips and advice on eating healthy, and resources to help people make healthy food choices.

The *Australian Dietary Guidelines* and the *Australian Guide to Healthy Eating* are resources developed on behalf of the Australian Government; they work together to guide, educate, and encourage Australians to eat various foods from the five food groups. They provide the population with up-to-date advice about the amounts and kinds of foods that they should eat. Educators and health professionals recommend people follow the *Australian Dietary Guidelines* to improve their health and wellbeing. It is hoped that these recommendations will help reduce the risk of diet-related conditions, such as obesity and overweight, and diseases, such as cardiovascular disease, some types of cancer, and type 2 diabetes.

The *Australian Dietary Guidelines* and the *Australian Guide to Healthy Eating* have been developed for Australians as a guide for people with no significant health conditions.

There are specific guidelines for particular groups in society.

[Click here](#) to access the *Australian Dietary Guidelines* for adults.

[Click here](#) to access the *Australian Dietary Guidelines* for children.

[Click here](#) to access the *Australian Dietary Guidelines* for pregnancy.

[Click here](#) to view a visual image of the *Australian Guide to Healthy Eating*.

[Click here](#) to view the Australian Guide to Healthy Eating poster for Indigenous Australians.

[Click here](#) to access the recommended serving sizes for children, adolescents, and toddlers.

[Click here](#) to access the recommended serving sizes for adults.

Practical Ways to Apply the Australian Dietary Guidelines

Australian Dietary Guideline One

Australian Dietary Guideline Two
<p>To achieve and maintain a healthy weight, be physically active and choose amounts of nutritious food and drinks to meet your energy needs.</p> <ul style="list-style-type: none"> • Children and adolescents should eat sufficient nutritious foods to grow and develop normally. They should be physically active every day and their growth should be checked regularly. • Older people should eat nutritious foods and keep physically active to help maintain muscle strength and a healthy weight.

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

The most effective way to apply this guideline is for people to balance their energy intake with their energy output. Understanding what a serving size looks like and how many serves of the different food groups they need each day may help them maintain their weight.

[Click here](#) to calculate energy, nutritional needs, and recommended serving sizes for activity levels, gender, height, and weight.

Australian Dietary Guideline Two

Australian Dietary Guideline Two

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

- Plenty of vegetables, including different types and colours, and legumes/beans
- Fruit
- Grain (cereal) foods, mostly wholegrain and/or high cereal fibre varieties, such as breads, cereals, rice, pasta, noodles, polenta, couscous, oats, quinoa and barley
- Lean meats and poultry, fish, eggs, tofu, nuts and seeds, and legumes/beans
- Milk, yoghurt, cheese and/or their alternatives, mostly reduced fat (reduced fat milks are not suitable for children under the age of 2 years)

And drink plenty of water.

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

Fruits, vegetables, and legumes

The Australian Dietary Guidelines recommend eating various types and colours of vegetables and fruits. Different coloured vegetables contain unique compounds that have many health benefits. The guidelines also recommend that people eat fresh produce in season. Fruits and vegetables consumed in season are at their peak in nutritional value. They are also usually ready to harvest in abundant quantities, meaning more of them are available and may cost less. Eating vegetables assists with weight control because they have a low energy value and help fill people up, which means they are less likely to consume other foods that contain more kilojoules.

Practical ways to apply everyday food behaviours and habits include:

- Add a little unsaturated fat when cooking or presenting fruits and vegetables. This makes it easier for the body to absorb the fat-soluble vitamins A, D, E, and K.
- Add vegetables to foods like soups and savoury muffins.
- Cook fruit and vegetables in a small amount of water. The more water you use to cook your fruit and vegetables, the greater the amount of vitamin C and B group vitamins will escape.
- Cook fruit and vegetables for a short time to retain nutrients.
- Cut vegetables into large pieces or eat them whole. This gives the food a lower GI level, making people feel full for longer and increasing digestion time.
- Eat vegetable sticks as raw snacks throughout the day.
- Hide vegetables in meals containing meat such as spaghetti bolognese, burgers, and lasagne.
- Leave the skin or peel of fruits and vegetables on as much as possible as they can increase satiety levels.
- Steam, stir-fry, or microwave fruit and vegetables to maintain nutrient levels during cooking.

[Click here](#) to learn about the fruit group.

[Click here](#) to learn about the vegetables and legumes group.

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

Wholegrain, wholemeal, and high-fibre bread are of higher nutritional quality than white varieties.

Practical ways to apply everyday food behaviours and habits include:

Replace some of the white flour in baking with wholemeal.

- Swap white bread products such as wraps, bread, and breakfast cereals with products that contain wholemeal or whole grains.
- Use a range of grains in cooking.

[Click here](#) to learn about the grain group.

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

Lean meats are meats with a relatively low-fat content or the fat content has been reduced.

Practical ways to apply everyday food behaviours and habits include:

- Avoid using crumbed meat, poultry, and seafood unless it is freshly prepared and baked in an oven or even an air-fryer.
- Choose lean meat.
- Consume fish at least once a week.
- Consume more legumes and beans.
- Grilling, roasting, baking, stewing, steaming, and slow cooking meat.
- Limit processed and cured meats as they can be high in added salt and saturated fat.
- Remove the skin from the chicken.
- Trim the fat from meat.

[Click here](#) to learn about the lean meat and poultry, fish, eggs, tofu, nuts and seeds, and legumes/beans group.

Milk, yoghurt, cheese, or their alternatives, mostly reduced fat

The Australian Dietary Guidelines recommend mainly choosing reduced-fat dairy foods. However, children under two years have high energy needs and should have full-fat dairy foods.

Practical ways to apply everyday food behaviours and habits include:

- Swapping full-cream dairy foods for reduced-fat dairy foods.

[Click here](#) to learn about the milk, yoghurt, cheese and/or their alternatives (mostly reduced fat).

Use Small Amounts

Unsaturated fats are represented in the Use Small Amounts section. The unsaturated fats in this section are considered healthy, but they still contain kilojoules and can contribute to weight gain. For this reason, they are recommended in small amounts.

Only Sometimes and in Small Amounts

The foods represented in the Only Sometimes and in Small Amounts are generally high in alcohol, saturated fat, sugar, and/or salt. They should be therefore consumed in small amounts.

Drink more water

The Australian Guide to Healthy Eating encourages people to choose water as their preferred drink.

Practical ways to apply everyday food behaviours and habits include:

- Flavour water with lemon or lime.
- Drink more herbal tea.
- Refill water bottles with plain tap water.

Watch one of these videos about the Australian Guide to Healthy Eating:

<https://youtu.be/7rgl5q-XnKg>

<https://youtu.be/dzAX5j1J6m4>

Australian Dietary Guideline Three

Australian Dietary Guideline Three

Limit intake of foods containing saturated fat, added salt, added sugars and alcohol.

- a. Limit intake of foods high in saturated fat such as many biscuits, cakes, pastries, pies, processed meats, commercial burgers, pizza, fried foods, potato chips, crisps and other savoury snacks.
 - Replace high fat foods which contain predominantly saturated fats such as butter, cream, cooking margarine, coconut and palm oil with foods which contain predominantly polyunsaturated and monounsaturated fats such as oils, spreads, nut butters/pastes and avocado.
 - Low fat diets are not suitable for children under the age of 2 years.
- b. Limit intake of foods and drinks containing added salt.
 - Read labels to choose lower sodium options among similar foods.
 - Do not add salt to foods in cooking or at the table.
- c. Limit intake of foods and drinks containing added sugars such as confectionary, sugar-sweetened soft drinks and cordials, fruit drinks, vitamin waters, energy and sports drinks.
- d. If you choose to drink alcohol, limit intake. For women who are pregnant, planning a pregnancy or breastfeeding, not drinking alcohol is the safest option.

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

Limit intake of foods high in saturated fat

Practical ways to apply everyday food behaviours and habits include:

- Avoid foods with hidden fats.
- Consume less discretionary food products.
- Consume low-fat food products.
- Select foods low in salt, saturated fat, and sugar.
- Replace foods high in saturated fat with foods that contain unsaturated fats.

Watch this video to learn how to limit the amount of added saturated fat in the diet: <https://youtu.be/NREenShn6zo>

Limit intake of foods and drinks containing added salt

Practical ways to apply everyday food behaviours and habits include:

- Avoid food products that contain hidden salt.
- Remove salt from the serving table.
- Use dried or fresh herbs and spices instead of salt.
- Use lemon and lime to tenderise the meat and add flavour to meals instead of sauces and marinades.

Watch this video to learn about limiting the amount of added salt in the diet: <https://youtu.be/SKReBNxAHt8>

Limit intake of foods and drinks containing added sugars

Practical ways to apply everyday food behaviours and habits include:

- Avoid consuming too many foods that contain sugar and sugar substitutes so that people fill up on more nutritious foods with less energy value.
- Become familiar with alternative names for sugar to avoid products that contain them.
- Consume fruit canned in juice, not syrup.
- Only drink fruit juice sometimes.
- Only eat dried fruit as a sometimes food.
- Read the nutritional information panel and the ingredient list on a food package to see if a food contains sugar.

Watch this video to learn about limiting the amount of added sugars in the diet: <https://youtu.be/a3fKSYL4l48>

Australian Dietary Guideline Four

Australian Dietary Guideline Four
Encourage, support, and promote breastfeeding.

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

Practical ways to apply everyday food behaviours and habits include:

- Employers should provide breastfeeding mothers places to breastfeed or express milk for their babies.
- Encourage women to breastfeed.
- Ensure that breastfeeding mothers are receiving the nutrition and liquid they need.

Australian Dietary Guideline Five

Australian Dietary Guideline Five
Care for your food; prepare and store it safely.

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

Practical ways to apply everyday food behaviours and habits include:

- Avoid storing high-risk foods between 5°C and 60°C.
- Keep foods that should be stored cold at 5°C or below and hot foods above 60°C.
- Ensure the food is not past its use-by date.
- Store foods raw food in the fridge below cooked foods.
- Thaw frozen foods in the refrigerator overnight.

Innovations in Technology

A range of innovations in technology have been developed to assist people in applying the Australian Dietary Guideline and the Australian Guide to Healthy Eating recommendations.

FoodSwitch App

Consumers who use the FoodSwitch app can scan the barcode of packaged food to access simple health and nutrition information that suggests similar healthier food choices that they could purchase instead. The app uses science-based algorithms to calculate and then display simple nutrition profiles of the food. The data from the use and development of the app is used to influence government policies and industry practice.

Click here to read about the app: <https://www.georgeinstitute.org.au/projects/foodswitch>

Watch this video about the app: https://youtu.be/cC_SH-Mcw5U

Good Tucker App

Good Tucker is an app designed to assist people living in remote Aboriginal and Torres Strait Islander communities to make healthier food and beverage choices at their local store. Consumers can scan the barcode of food products.

The Good Tucker app works by scanning a products barcode and showing at a glance how healthy or unhealthy a product is with a simple thumbs up. The Thumbs rating is derived from a combination of the products' Health Star Rating and Australian Bureau of Statistics' discretionary food classification.

Watch this video about the Good Tucker app: <https://youtu.be/uyWJ1zDZNjk>

Written Activities

Women who eats nothing but cheese and potatoes tries to eat vegetables

Watch the video at this link unit 4.25 minutes: <https://youtu.be/7krGDcdXM6Q>

Answer the following questions:

1. Kelly eats nothing but cheese and potatoes. She is at risk of various lifestyle factors.

Answer the questions in the table below.

What lifestyle diseases is Kelly at risk of?	Why is she at risk of these lifestyle diseases?	How can Kelly prevent this lifestyle disease?

2. Explain how Kelly could apply Australian Dietary Guidelines two.

Recommendations	Explanation
Enjoy a wide variety of nutritious foods from these five groups every day:	
Plenty of vegetables, including different types and colours, and legumes/beans	
Fruit	
Grain (cereal) foods, mostly wholegrain and/or high cereal fibre varieties, such as breads, cereals, rice, pasta, noodles, polenta, couscous, oats, quinoa and barley	
Lean meats and poultry, fish, eggs, tofu, nuts and seeds, and legumes/beans	
Milk, yoghurt, cheese and/or their alternatives, mostly reduced fat (reduced fat milks are not suitable for children under the age of 2 years)	
And drink plenty of water.	

3. Explain how Kelly could apply Australian Dietary Guideline three.

Recommendations	Explanation
Limit intake of foods high in saturated fat	
Limit intake of foods and drinks containing added salt	
Limit intake of foods and drinks containing added sugars	

4. Kelly's family could have used the key behavioural principles when she was younger to encourage her to eat healthier foods.

What are the key behavioural principles?	How could Kelly's family have followed the key behavioural principles to encourage her to consume healthier foods?

Written Activity Two

Food Donations

Study the food items in the food donation parcel that is pictured.



Apply the recommendations of the Australian Dietary Guidelines and the Australian Guide to Healthy Eating to the food items in the donation box.

Ingredients in the Donation Box	Recommendations
White Pasta	
Salami	
Full-cream milk	
White Bread	
Tinned Vegetables	
Sauce	

Written Activity Three

Would you rather?

Apply your understanding of the Australian Dietary Guidelines and the Australian Guide to Healthy Eating to determine which food item you would rather have.

Circle the food you would rather and **justify** your decision.

Food Item	Justification
Orange Juice or Water	
Dried Fruit or Frozen Fruit	
Salami or Roast Chicken	
Deep-fried Potato Chips or Roasted Potato Chips	
Commercial Dip or Homemade Dip	
Butter or Olive Oil	
3 Star beef mince or lean beef mince	
Thickshake or Smoothie	
Deep-fried fish or Grilled Fish	

Practical Activity One

Maggi Noodle Makeover

In this activity, you will need to conduct a product analysis and apply the Australian Dietary Guidelines and the Australian Guide to Healthy Eating recommendations to the recipe below.

Product Analysis

1. **Use** the *How to Read Food Labels* information at the link below to determine whether the amount of nutrients in the Maggi noodles is within the Eat for Health program recommendations.

<https://www.eatforhealth.gov.au/eating-well/how-understand-food-labels>

Maggi Noodles			Is this amount too much, too little or just right?		
Nutrients	Per serving (380g)	Per 100g	Way too much	A little bit too much	Within the acceptable range
Energy	1250Kj	330Kj			
Protein	7.2g	1.9g			
Total Fat	11.4g	3g			
- Saturated Fat	11.4g	3g			
Carbohydrate	40.6g	10.7g			
- Sugars	<1g	<1g			
Fibre	-	8.4g			
Sodium	935mg	245mg			
List of Ingredients:			What other names are in the ingredients list for saturated fat, salt and sugar?		

2. **Answer** the following questions:

- a. Do you think the Maggi Noodles are healthy?

- b. In what ways do the Maggi noodles meet the recommendations of the Australian Dietary Guidelines and Australian Guide to Healthy Eating?

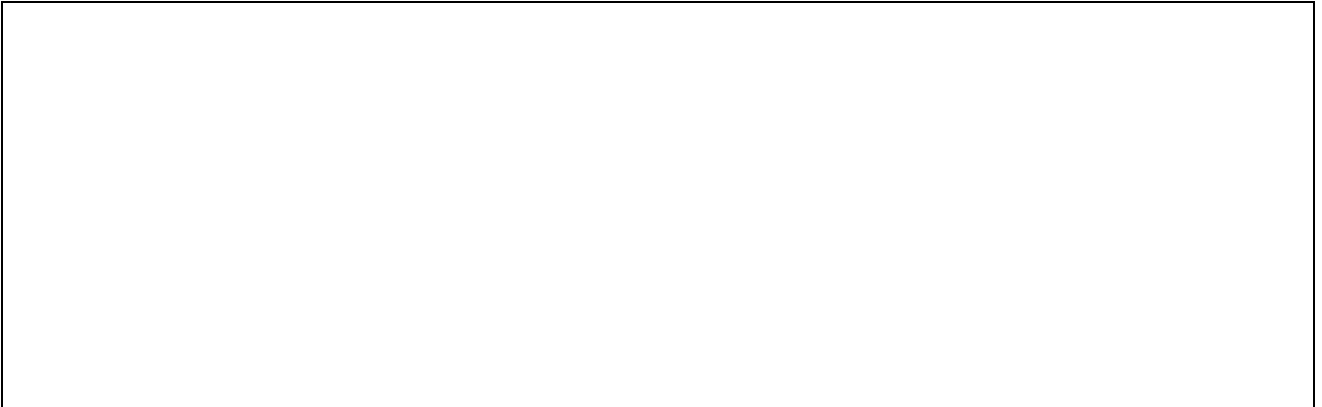
Product Comparison

1. **Select** one of the noodles that your teacher has on display.
2. **Use** the nutritional information panel to **create** a graph that compares the nutritional value of the noodles you have chosen and the Maggi noodles.

Include the recommendations of the *How to Read Food Labels* document on the graph.

Watch this video to find out how to create the graph:

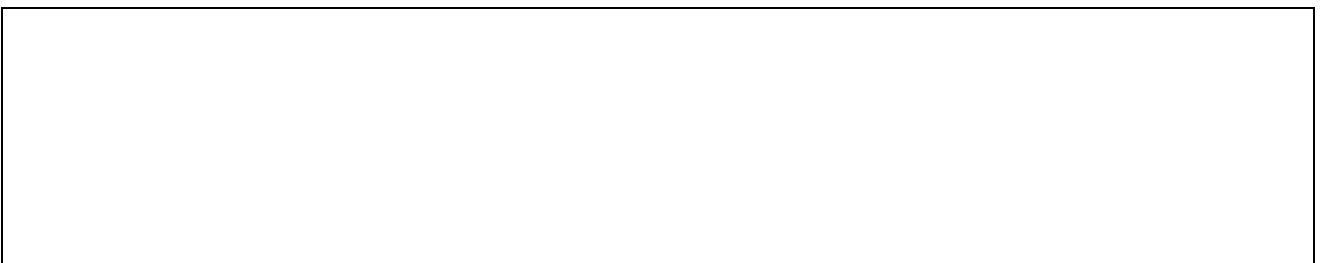
3. **Insert** a copy of the graph below.



4. Using the data you have collected, **compare** the nutritional value of the two types of noodles with the recommendations from the *How to Read Food Labels* document.

Nutrition	Comparison
Energy	
Total Fat	
Saturated Fat	
Sugars	
Fibre	
Sodium	

5. **State** which noodle is the healthiest option. **Justify** your opinion.



6. **Cook** the noodles according to the instructions on the package.

Conduct a sensory analysis of the Maggi noodles.

Describe the sensory properties of the Maggi noodles in the table below.

Noodles	Appearance	Texture	Taste	Aroma
Maggi Noodles				
Chosen Noodles				

7. **State** which noodle has the most appealing sensory properties. **Justify** your opinion.

Cooking

8. **Select** one of the recipes at this link: <https://www.maggi.com.au/recipes/2-minute-noodle-recipes/>
9. **Use** your preferred noodle in this recipe.
10. **Explain** why you chose to use this noodle and not the other noodle in this recipe.

Practical Activity Two

Pantry Investigation

In this activity, you will need to look at the food products in your pantry and refrigerator. Try to find all the food products that contain too much saturated fat, salt and sugar.

Click here to download the [How to Read Food Labels](http://www.eatforhealth.gov.au) document from www.eatforhealth.gov.au

Sugar

1. How much sugar was recommended per 100g?

2. What kind of food and drink products contained more than the recommended amount of sugar?

3. What other names for sugar did you find on the food labels?

Salt

1. How much salt was recommended per 100g?

2. What kind of food and drink contained more than the recommended amount of salt?

3. What other names for salt did you find on the food labels?

Saturated Fat

1. How much saturated fat was recommended per 100g?

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2. What kind of food and drink contained more than the recommended amount of saturated fat?

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3. What other names for fat did you find on the food labels?

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Discussion

1. What kind of food products did and did not contain the recommended amounts of saturated fat, sugar and salt?

What food products contained the recommended amounts of saturated fat, sugar and salt?	What food products did not contain the recommended amounts of saturated fat, sugar and salt?

2. What food products contained the recommended amounts of saturated fat, sugar and salt?

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3. Were you surprised by the results of this activity?

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4. How could you improve your shopping and cooking habits to ensure that the foods you consume are healthy?

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Summary Activity

Applying the Healthy Eating Recommendations

What is the main idea about this key knowledge & key skill? (Two or three sentences in your own words)	
List some ways to apply the recommendations of the Australian Dietary Guideline Two.	
Enjoy a wide variety of nutritious foods from these five groups every day:	
Plenty of vegetables, including different types and colours, and legumes/beans	
Fruit	
Grain (cereal) foods, mostly wholegrain and/or high cereal fibre varieties, such as breads, cereals, rice, pasta, noodles, polenta, couscous, oats, quinoa and barley	
Lean meats and poultry, fish, eggs, tofu, nuts and seeds, and legumes/beans	
Milk, yoghurt, cheese and/or their alternatives, mostly reduced fat (reduced fat milks are not suitable for children under the age of 2 years)	
And drink plenty of water.	

List some ways to apply the recommendations of the Australian Dietary Guideline Three.	
Limit intake of foods containing saturated fat, added salt, added sugars and alcohol.	
Limit intake of foods and drinks containing added salt.	
Limit intake of foods and drinks containing added sugars such as confectionary, sugar-sweetened soft drinks and cordials, fruit drinks, vitamin waters, energy and sports drinks.	

Exam Preparation

Multiple-Choice Questions (5 marks)

Choose the response that is correct or that **best answers** the question.

1. Which of the following drinks would be the best choice for someone who is trying to maintain their weight?
 - a. An electrolyte replacement drink
 - b. A glass of water flavoured with a squeeze of lemon drink
 - c. An energy drink that contains caffeine
 - d. A bottle of freshly squeezed orange juice
2. Identify the meal that best applies the Australian Guide to Healthy Eating recommendations.
 - a. Steak with low-fat gravy, corn, potatoes, carrots and parsnips.
 - b. Chicken schnitzel with lettuce, bacon, tomato and cucumber salad.
 - c. A lean steak with green beans, corn-on-the-cob, cauliflower, carrots and baked potato with a small spoonful of low-fat sour cream.
 - d. Tofu stir-fry with white rice and Asian greens.
3. The guidelines recommend that Australians limit their intake of foods containing saturated fat, added salt, added sugars, and alcohol.

All of the following are possible ways of applying this recommendation except:
 - a. Replacing sugary drinks with water.
 - b. Choosing lean proteins like fish, chicken and legumes.
 - c. Swapping processed snacks like corn chips with options like carrot sticks, apple slices, or unsalted nuts
 - d. Choosing to use butter when cooking and baking
4. Which of the following changes could a person make to decrease the amount of saturated fat in their meals?
 - a. Replace low-fat milk with full-cream milk
 - b. Use coconut oil instead of olive oil
 - c. Replace olive oil with butter
 - d. Make salad dressings with low-fat yoghurt, vinegar and herbs.
5. Which of the following healthy eating recommendations from the Australian Dietary Guidelines and the Australian Guide to Healthy Eating is most effective for maintaining a healthy weight, and which practical strategies can be used to implement this recommendation into daily food behaviours and habits?
 - a. Increasing the serving sizes of vegetables with an evening meal
 - b. Using herbs and spices to flavour foods instead of salt
 - c. Choosing whole grain and high-fibre rice rather than white rice
 - d. Opting for lean protein sources and reducing intake of red and processed meat

Short Answer Questions (18 marks)**Question 1 (8 marks)**

- Recommend an alternative for the muffin ingredients listed below that meets the criteria of the Australian Dietary Guidelines. (2 marks)
- Explain why each food is a suitable alternative. (6 marks)

Ingredient	Substitution	Explanation
Butter	Olive oil	
White sugar	Fruit or fruit puree	
White flour	Wholemeal flour	

Note: This question draws on your knowledge from Unit 3 as well as Unit 4.

Question 2 (4 marks)

Describe how people can use technological innovations to help them choose and prepare food that aligns with the recommendations of the Australian Dietary Guidelines and the Australian Guide to Healthy Eating.

Question 3 (6 marks)

In the table below, provide specific examples of how to incorporate the recommendations of the Australian Guide to Healthy Eating when selecting, planning and preparing meals.

Food Behaviour	Recommendations of the Australian Guide to Healthy Eating
Selecting food	
Planning Meals	
Preparing Meals	

Exam Preparation

Multiple-Choice Questions (5 marks)

Choose the response that is correct or that **best answers** the question.

1. Which of the following drinks would be the best choice for someone who is trying to maintain their weight?
 - a. An electrolyte replacement drink
 - b. A glass of water flavoured with a squeeze of lemon drink
 - c. An energy drink that contains caffeine
 - d. A bottle of freshly squeezed orange juice

Answer B is correct. The AGtHE promotes the consumption of water as it is needed for a variety of bodily functions.

Answer A is incorrect, an electrolyte replacement drink may be helpful for rehydrating after intense physical activity, but it may also contain added sugar.

Answer C is incorrect, energy drinks that contain added sugars can contribute to weight gain and caffeine can also disrupt sleep patterns if consumed in excess.

Option D is incorrect, as freshly squeezed orange juice may be high in energy and natural sugars. It also tends to have less dietary fibre than an orange and can contribute to weight gain if consumed in excess.

2. Identify the meal that best applies the Australian Guide to Healthy Eating recommendations.
 - a. Steak with low-fat gravy, corn, potatoes, carrots and parsnips.
 - b. Chicken schnitzel with lettuce, bacon, tomato and cucumber salad.
 - c. A lean steak with green beans, corn-on-the-cob, cauliflower, carrots and baked potato with a small spoonful of low-fat sour cream.
 - d. Tofu stir-fry with white rice and Asian greens.

Answer C is correct. This meal contains a variety of different coloured vegetables. The sour cream that is used is low-fat.

Answer A is incorrect. Sometimes, low-fat sauces can contain added sugar and salt. The meal lacks a variety of coloured and types of vegetables.

Answer B is incorrect. This meal contains bacon, which is a discretionary food choice as it contains saturated fat and salt. Chicken schnitzels are also often fried, making them high in energy.

Option D is incorrect. This meal contains white rice, but the AGtHE recommends brown rice, which is a whole grain.

3. The guidelines recommend that Australians limit their intake of foods containing saturated fat, added salt, added sugars, and alcohol.

All of the following are possible ways of applying this recommendation except:

- a. Replacing sugary drinks with water.
- b. Choosing lean proteins like fish, chicken and legumes.
- c. Swapping processed snacks like corn chips with options like carrot sticks, apple slices, or unsalted nuts
- d. Choosing to use butter when cooking and baking

Answer D is correct. Butter is high in saturated fat, which can increase the risk of heart disease. To limit saturated fat intake, it is recommended to choose healthier alternatives like olive oil, canola oil, or unsweetened applesauce.

Answer A, B and C are all ways of applying the recommendation to limit intake of saturated fat, added salt, added sugars, and alcohol.

4. Which of the following changes could a person make to decrease the amount of saturated fat in their meals?
- Replace low-fat milk with full-cream milk
 - Use coconut oil instead of olive oil
 - Replace olive oil with butter
 - Make salad dressings with low-fat yoghurt, vinegar and herbs.

Answer D is correct. This is a good option for reducing saturated fat intake because it suggests using low-fat yogurt instead of high-fat alternatives like mayonnaise, which can be high in saturated fat. Vinegar and herbs can add flavor to the salad dressing without adding excessive salt, sugar, or other unhealthy ingredients, making it a healthier choice.

Answer A is incorrect. Full-cream milk contains more saturated fat than low-fat milk, which can increase the intake of saturated fat.

Answer B is incorrect. Coconut oil is high in saturated fat and therefore does not help to reduce the intake of saturated fat in meals.

Answer C is incorrect. Butter is high in saturated fat and replacing olive oil with butter will increase the intake of saturated fat.

5. Which of the following healthy eating recommendations from the Australian Dietary Guidelines and the Australian Guide to Healthy Eating is most effective for maintaining a healthy weight, and which practical strategies can be used to implement this recommendation into daily food behaviours and habits?
- Increasing the serving sizes of vegetables with an evening meal
 - Using herbs and spices to flavour foods instead of salt
 - Choosing whole grain and high-fibre rice rather than white rice
 - Opting for lean protein sources and reducing intake of red and processed meat

Answer D is correct. Opting for lean protein and reducing intake of red and processed meats is the most effective strategy for maintaining a healthy weight due to their high energy and saturated fat content.

Answer A, B, and C are incorrect. While increasing vegetable serving sizes, using herbs and spices instead of salt, and choosing whole grains are also healthy eating recommendations, they may not be as effective for weight management on their own.

Short Answer Questions (18 marks)**Question 1** (8 marks)

- a. Recommend an alternative for the muffin ingredients listed below that meets the criteria of the Australian Dietary Guidelines. (2 marks)
- b. Explain why each food is a suitable alternative. (6 marks)

Ingredient	Substitution	Explanation
Butter	Olive oil	Any one of the following responses was accepted: <ul style="list-style-type: none"> Butter is high in saturated fat, which can increase cholesterol levels and the risk of heart disease. Olive oil is a source of healthy unsaturated fats, which can help to reduce cholesterol levels and improve heart health.
White sugar	Fruit or fruit puree	Any one of the following responses was accepted: <ul style="list-style-type: none"> Fruit is a natural source of sugar and contains fibre, which slows down the absorption of sugar into the bloodstream and helps to regulate blood sugar levels. In contrast, added sugar (such as granulated sugar) provides energy but lacks the beneficial nutrients and fibre found in fruit. Fruit contains vitamins, minerals, and antioxidants that are important for overall health and may help to reduce the risk of chronic diseases such as heart disease and cancer. Note: Answers similar to honey or maple syrup were not accepted because they contain the same amount of energy per teaspoon as sugar, they both have high glycaemic index values, which means that they can cause a rapid increase in blood sugar levels and they are often heavily processed and may contain added sugars, artificial flavorings, and other additives. They can also both contribute to dental caries (also known as tooth decay) if consumed in excess. Brown sugar is not much better than white sugar in terms of its nutritional content. Brown sugar is made by adding molasses to white sugar, giving it a slightly different flavour and colour. While molasses does contain some trace minerals such as iron and calcium, the amount present in brown sugar is not significant enough to provide any meaningful health benefits.
White flour	Wholemeal flour	Any one of the following responses was accepted: <ul style="list-style-type: none"> Wholemeal flour is made by grinding the entire wheat kernel, including the bran and germ. This means that it contains more nutrients than white flour, including fibre, protein, vitamins, and minerals. Wholemeal flour has a lower glycaemic index than white flour, which is beneficial for overall health and may help to reduce the risk of type 2 diabetes. The fibre in wholemeal flour also helps to make you feel fuller for longer, which can help with weight management and reduce the risk of overeating. The fibre in wholemeal flour also helps to promote healthy digestion and regular bowel movements.

Note: This question draws on your knowledge from Unit 3 as well as Unit 4.

Question 2 (4 marks)

Describe how people can use technological innovations to help them choose and prepare food that aligns with the recommendations of the Australian Dietary Guidelines and the Australian Guide to Healthy Eating.

Any one of these responses were accepted:

- The Food Switch App is a free mobile application that allows users to scan the barcode of a food item and receive information about its nutritional content. The app provides a rating system that indicates how healthy the product is based on its levels of sugar, salt, saturated fat, and overall energy. Users can also view healthier alternatives to the product they scanned, which makes it easier to choose healthier options at the grocery store.

The Food Switch App can also be used to prepare healthier meals at home. Users can search for healthy recipes and filter them by dietary requirements or ingredient preferences. The app provides nutritional information for each recipe, which makes it easier to track calorie intake and nutrient levels.

- The Good Tucker App is an Australian App that was designed to help Australians, in particular Indigenous Australians, choose healthier foods. People can scan a product and the app gives it a rating that indicates if it is a nutritious food choice. The App also explains to people what kinds of cooking methods are best.
- One way that technology can be used is through the development of mobile apps. There are many apps available that can help users track their food intake and make healthier food choices. Some apps provide access to recipes that have been modified to be healthier, while others provide nutritional information for foods and meals. Users can set goals and track their progress, which can help them stay motivated and make healthier choices.
- Technology can be used is through the use of online resources. There are many websites and online tools available that can help users plan meals and make healthier food choices. Some websites provide access to recipes and meal plans that are aligned with the Australian Dietary Guidelines and the Australian Guide to Healthy Eating, while others provide information about nutrition and healthy eating.

Question 3 (6 marks)

In the table below, provide specific examples of how to incorporate the recommendations of the Australian Guide to Healthy Eating when selecting, planning and preparing meals.

Food Behaviour	Recommendations of the Australian Guide to Healthy Eating
Selecting food	<p>Any one of these sample answers were accepted:</p> <ul style="list-style-type: none"> • Opt for lean protein sources: When selecting protein sources, choose lean options such as fish, chicken, turkey, tofu, legumes, and nuts. • Limit intake of foods high in saturated fat, added salt, added sugars, and alcohol: Avoid or limit foods such as processed snacks, sugary drinks, alcoholic beverages, and fried foods. • Check food labels: Look at the food label and choose foods that have lower amounts of saturated fat, added salt, added sugars, and higher amounts of fiber and nutrients.
Planning Meals	<p>Any one of these sample answers were accepted:</p> <ul style="list-style-type: none"> • Apps like Weight Watchers App enable users to search for recipes, access nutritional information, and create shopping lists based on their preferred foods. • Plan meals in advance: Take time to plan out meals for the week ahead, incorporating a variety of fruits, vegetables, whole grains, lean proteins, and healthy fats. • Batch cook: Prepare large batches of food in advance and freeze individual portions for quick and healthy meals throughout the week.

	<ul style="list-style-type: none"> • Swapping ingredients in recipes can result in people selecting less unhealthy ingredients with healthier options, such as using whole grain pasta instead of white pasta, or using Greek yogurt instead of sour cream. • Use the FoodSwitch app: This app allows users to scan barcodes of food items and receive a rating based on their nutritional content. Users can then choose to switch to healthier alternatives based on the app's recommendations.
Preparing Meals	<p>Any one of these sample answers were accepted:</p> <ul style="list-style-type: none"> • Choose healthy cooking methods: Use cooking methods such as grilling, steaming, baking or stir-frying with minimal oil to reduce the intake of saturated and trans fats. • Reduce salt: Use herbs and spices or salt substitutes to flavour foods instead of adding salt to reduce the intake of sodium. • Use healthy oils: Use oils such as olive oil, canola oil or avocado oil instead of butter or other animal fats when cooking to reduce the intake of saturated fats. • Increase vegetable intake: Add more vegetables to meals, salads or soups to increase the intake of fibre, vitamins and minerals. • Portion control: Use smaller plates, bowls and cups to control portion sizes, and try to fill half of the plate with vegetables, a quarter with lean protein, and a quarter with whole grains.