



**ADVANCED  
General Certificate of Education  
2019**

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## **Health and Social Care**

**Assessment Unit A2 7  
*assessing*  
Human Nutrition and Health**

**[AHC71]**

**MONDAY 17 JUNE, AFTERNOON**

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**MARK  
SCHEME**

## General Marking Instructions

### ***Introduction***

The main purpose of a mark schemes is to ensure that examinations are marked accurately, consistently and fairly. The mark scheme provides examiners with an indication of the nature and range of candidates' responses likely to be worthy of credit. It also sets out the criteria which they should apply in allocating marks to candidates' responses.

### ***Assessment objectives***

Below are the assessment objectives for **GCE Health and Social Care**.

Candidates should be able to:

- AO1** Demonstrate knowledge and understanding of the specified content.
- AO2** Apply knowledge, understanding and skills to a variety of health, social care and early years contexts.
- AO3** Investigate, analyse, and evaluate acquired knowledge and understanding, present arguments, make reasoned judgements and draw conclusions.

### ***Quality of candidates' responses***

In marking the examination papers, examiners should be looking for a quality of response reflecting the level of maturity which may reasonably be expected of a 17- or 18-year-old which is the age at which the majority of candidates sit their GCE examinations.

### ***Flexibility in marking***

Mark schemes are not intended to be totally prescriptive. No mark scheme can cover all the responses which candidates may produce. In the event of unanticipated answers, examiners are expected to use their professional judgement to assess the validity of answers. If an answer is particularly problematic, then examiners should seek the guidance of the Supervising Examiner.

### ***Positive marking***

Examiners are encouraged to be positive in their marking, giving appropriate credit for what candidates know, understand and can do rather than penalising candidates for errors or omissions. Examiners should make use of the whole of the available mark range for any particular question and be prepared to award full marks for a response which is as good as might reasonably be expected of a 17- or 18-year-old GCE candidate.

### ***Awarding zero marks***

Marks should only be awarded for valid responses and no marks should be awarded for an answer which is completely incorrect or inappropriate.

### ***Types of mark schemes***

Mark schemes for tasks or questions which require candidates to respond in extended written form are marked on the basis of levels of response which take account of the quality of written communication.

Other questions which require only short answers are marked on a point for point basis with marks awarded for each valid piece of information provided.

### ***Levels of response***

In deciding which level of response to award, examiners should look for the 'best fit' bearing in mind that weakness in one area may be compensated for by strength in another. In deciding which mark within a particular level to award to any response, examiners are expected to use their professional judgement.

The following guidance is provided to assist examiners.

- **Threshold performance:** Response which just merits inclusion in the level and should be awarded a mark at or near the bottom of the range.
- **Intermediate performance:** Response which clearly merits inclusion in the level and should be awarded a mark at or near the middle of the range.
- **High performance:** Response which fully satisfies the level description and should be awarded a mark at or near the top of the range.

### ***Quality of written communication***

Quality of written communication is taken into account in assessing candidates' responses to all tasks and questions that require them to respond in extended written form. These tasks and questions are marked on the basis of levels of response. The description for each level of response includes reference to the quality of written communication.

For conciseness, quality of written communication is distinguished within levels of response as follows:

- Level 1: Quality of written communication is basic.
- Level 2: Quality of written communication is adequate.
- Level 3: Quality of written communication is competent.
- Level 4: Quality of written communication is highly competent.

In interpreting these level descriptions, examiners should refer to the more detailed guidance provided below:

**Level 1 (Basic):** The candidate makes only a limited attempt to select and use an appropriate form and style of writing. The organisation of material may lack clarity and coherence. There is little use of specialist vocabulary. Presentation, spelling, punctuation and grammar may be such that intended meaning is not clear.

**Level 2 (Adequate):** The candidate makes a reasonable attempt to select and use an appropriate form and style of writing. Relevant material is organised with some clarity and coherence. There is some use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are sufficiently competent to make meaning evident.

**Level 3 (Competent):** The candidate successfully selects and uses the most appropriate form and style of writing. Relevant material is organised with a high degree of clarity and coherence. There is extensive and accurate use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are of a high standard and ensure that meaning is clear.

**Level 4 (Highly competent):** The candidate successfully selects and uses the most appropriate form and style of writing. Relevant material is extremely well organised with the highest degree of clarity and coherence. There is extensive and accurate use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are of the highest standard and ensure that meaning is absolutely clear.

1 (a) Identify **three** main sources of fat in the diet. (AO1)

AVAILABLE  
MARKS

**Example of suitable sources to be identified:**

- meat
- fish oils
- butter
- margarine, spreads
- cooking fats and oils
- milk
- milk products: cream and cheese
- baked goods, i.e. pastries, cakes, biscuits and breads
- eggs
- poultry and game
- high fat snacks
- chocolate
- seeds and nuts
- avocados
- oily fish

All other valid responses will be given credit

(3 × [1])

[3]

(b) List **three** risks of eating excess fat to the health of children. (AO1)

**Examples of suitable risks to be listed:**

- raised levels of circulating LDL cholesterol increasing the risk of heart disease and stroke
- increased weight
- obesity
- type 2 diabetes
- mobility problems
- irritable bowel syndrome (IBS)
- high blood pressure
- asthma

All other valid responses will be given credit

(3 × [1])

[3]

(c) Describe the dietary functions of the following fat soluble vitamins. (AO1, AO2)

**Examples of suitable points to be described:**

Vitamin A

- helps the body's natural defence against illness and infection (the immune system) work properly
- helps vision in dim light
- keeps skin and the lining of some parts of the body, such as the nose, healthy
- betacarotene is a precursor of Vit. A and is an antioxidant

[1] basic description , [2] adequate description, [3] competent description

(1 × [3])

[3]

AVAILABLE MARKS
Vitamin E
<ul style="list-style-type: none"> <li>• helps to maintain healthy skin, eyes</li> <li>• strengthens the immune system</li> <li>• antioxidant, helping body fight off infection</li> </ul>
[1] basic description , [2] adequate description, [3] competent description
(1 × [3])
[3]
Vitamin K
<ul style="list-style-type: none"> <li>• helps wounds to heal properly as it is needed for blood clotting</li> <li>• helps keep bones healthy by assisting the transport of calcium throughout the body, regulating blood calcium levels</li> <li>• may play a role in the prevention of fractures in postmenopausal women with osteoporosis</li> <li>• plays a role in bone metabolism</li> </ul>
[1] basic description , [2] adequate description, [3] competent description
(1 × [3])
[3]
<b>(d) (i) Name <b>three</b> sources of Vitamin C. (AO1)</b>
<b>Examples of suitable sources to be named:</b>
<ul style="list-style-type: none"> <li>• oranges and orange juice</li> <li>• red and green peppers</li> <li>• strawberries</li> <li>• blackcurrants</li> <li>• green leafy vegetables</li> <li>• new potatoes</li> <li>• supplements</li> </ul>
All other valid responses will be given credit
(3 × [1])
[3]
<b>(ii) Explain <b>three</b> dietary functions of Vitamin C. ( AO2)</b>
<b>Examples of suitable points to be explained:</b>
Dietary functions
<ul style="list-style-type: none"> <li>• maintains healthy skin, blood vessels</li> <li>• maintains bones and cartilage as it is required for the synthesis of collagen, the body's connective tissue</li> <li>• is vital for wound healing needed for the growth and repair of tissues in all parts of the body</li> <li>• aids the absorption of iron: eating foods with vitamin C at the same time as non-haem iron foods significantly increases its absorption</li> <li>• has antioxidant properties</li> <li>• supports a healthy immune system; studies show that foods high in vitamin C are associated with lower risk of cardiovascular disease, stroke and cancer, and with increased longevity</li> <li>• prolonged deficiency of vitamin C causes scurvy</li> </ul>
[1] basic explanation , [2] competent explanation
[3 × [2]]
[6]

(e) Discuss the dietary functions and sources of carbohydrates for adolescents.  
(AO1, AO2)

AVAILABLE  
MARKS

**Examples of suitable responses:**

**Dietary functions**

- provides energy for the body as a primary function, especially the brain and the nervous system as carbohydrates are the body's main source of fuel needed for physical activity, brain function and operation of the organs of adolescents
- enables fat metabolism as carbohydrates need to be present in order for fat to be utilised for energy by adolescents
- acts as a protein saver for adolescents who are undergoing a period of rapid growth and development and may also reduce cholesterol levels
- high fibre bread and cereals promote regular bowel movement and help prevent constipation

**Sources:**

Starch:

- potatoes
- bread
- cereals
- rice
- pasta

Sugar:

- sweets
- cakes and biscuits
- sugary drinks
- energy drinks
- chocolate

All other valid points will be given credit

[0] is awarded for a response not worthy of credit.

**Level 1 ([1]–[3])**

Overall impression: basic

- basic knowledge and understanding of the dietary functions and sources of carbohydrates for adolescents
- demonstrates a limited ability to apply appropriate knowledge and understanding to the question
- demonstrates a limited ability to discuss the functions and sources of carbohydrates for adolescents.

**Level 2 ([4]–[6])**

Overall impression: adequate

- adequate knowledge and understanding of the dietary functions and sources of carbohydrates for adolescents
- demonstrates an adequate ability to apply appropriate knowledge and understanding to the question
- demonstrates an adequate ability to discuss the functions and sources of carbohydrates for adolescents.

**Level 3 ([7]–[9])**

Overall impression: competent

- competent knowledge and understanding of the dietary functions and sources of carbohydrates for adolescents
- demonstrates a competent ability to apply appropriate knowledge and understanding to the question
- demonstrates a competent ability to discuss the functions and sources of carbohydrates for adolescents.

[9]

AVAILABLE  
MARKS

33

2 (a) Discuss how the following factors may influence food choices when shopping for a family. (AO1, AO2, AO3)

AVAILABLE MARKS

Culture

**Examples of suitable points to be discussed:**

- traditions: in many cultures there are restrictions such as the exclusion of meat, milk and alcohol from the diet and these foods will be avoided
- culinary practices: in many cultures there are traditions which must be observed in the ritual slaughtering and preparation of food, for example Muslims will only choose food that is Halal. All food for Jews must be Kosher and they will not choose meat from pigs, shellfish or birds of prey. Hindus will not choose meat from a cow and many avoid all meat and are vegetarian.
- beliefs: many cultures are vegetarian therefore soya based foods such as Quorn may be chosen, as will cereal based food along with fruit and vegetables.
- festivals: a festival focused around a particular time of year for differing cultures will influence the food choices, e.g. Thanksgiving U. S. A., Ramadan for Muslims, Christmas time for Christians and Hanukkah for Jews
- many older people will prefer the diet they have grown up with, e.g. may be resistant to trying new foods like pasta, preferring meat, vegetables and potatoes
- some Roman Catholics practise abstinence from meat products on a Friday

All other valid points will be given credit

[0] is awarded for a response not worthy of credit.

**Level 1 ([1]–[3])**

Overall impression: basic

- basic knowledge and understanding of how culture may influence food choices when shopping for a family
- demonstrates a limited ability to apply appropriate knowledge and understanding to the question
- demonstrates a limited ability to discuss how culture may influence food choices when shopping for a family.

**Level 2 ([4]–[6])**

Overall impression: adequate

- adequate knowledge and understanding of how culture may influence food choices when shopping for a family
- demonstrates an adequate ability to apply appropriate knowledge and understanding to the question
- demonstrates an adequate ability to discuss how culture may influence food choices when shopping for a family.

**Level 3 ([7]–[9])**

Overall impression: competent

- competent knowledge and understanding of how culture may influence food choices when shopping for a family.
- demonstrates a competent ability to apply appropriate knowledge and understanding to the question
- demonstrates a competent ability to discuss how culture may influence food choices when shopping for a family.

[9]

## Labelling

AVAILABLE  
MARKS**Examples of suitable points to be discussed:**

- organic grown without the use of pesticide
- sustainable farming
- locally sourced
- animal welfare
- use by or best before date
- nutritional information on labels can help people choose between products, and keep a check on the amount of foods high in fat, salt and added sugars that they are eating.
- colour-coded labelling red, amber and green, is designed to help people see 'at a glance' what is in their food. Red means the food or drink is high in a particular nutrient that they should try to cut down on, eat less often or choose these foods in small amounts. Amber means medium, and if a food is labelled mostly amber they can choose to eat it most of the time. Green means low, and the more green labels a food has the healthier the food choice is
- the ingredients list can help people work out how healthy the product is or if it is a risk to their health, e.g. if they have a nut allergy foods containing nuts will not be chosen; coeliac or lactose intolerant
- ready meals cooking time and cooking instructions can attract people, e.g. microwaving is perceived as quick and easy and may influence choices made by people who have busy lives
- visually appealing labels, e.g. bright coloured cartoon characters may be chosen by a family with young children
- portion size, e.g. meal for 1, meal for 4

All other valid points will be given credit

[0] is awarded for a response not worthy of credit.

**Level 1 ([1]–[3])**

Overall impression: basic

- basic knowledge and understanding of how labelling may influence food choices when shopping for a family
- demonstrates a limited ability to apply appropriate knowledge and understanding to the question
- demonstrates a limited ability to discuss how labelling may influence food choices when shopping for a family.

**Level 2 ([4]–[6])**

Overall impression: adequate

- adequate knowledge and understanding of how labelling may influence food choices when shopping for a family
- demonstrates an adequate ability to apply appropriate knowledge and understanding to the question
- demonstrates an adequate ability to discuss how labelling may influence food choices when shopping for a family.

**Level 3 ([7]–[9])**

Overall impression: competent

- competent knowledge and understanding of how labelling may influence food choices when shopping for a family
- demonstrates a competent ability to apply appropriate knowledge and

AVAILABLE  
MARKS

understanding to the question

- demonstrates a competent ability to discuss how labelling may influence food choices when shopping for a family. [9]

**(b)** Describe **three** ways a school may implement this policy to help ensure that children become healthier. (AO1, AO2)

**Examples of suitable ways to be discussed:**

- providing healthy food and drinks in the canteen
- providing healthy food and drinks in the tuck shop or from a vending machine, breakfast club or afterschool club
- helping children learn about food – how it grows and where it comes from, the different types of food that make up a balanced diet
- making sure that older children know how to cook healthy meals and make healthy choices through KS3 Home Economics
- encouraging healthy packed lunches, healthy snacks at break
- fresh water must be freely available every day – thirst, tooth friendly and helps concentration

All other valid points will be given credit

[1] basic description , [2] adequate description, [3] competent description

(3 × [3]) [9]

**(c)** Assess how a vegan diet can meet the nutritional requirements of individuals. (AO1, AO2, AO3)

In terms of assessment: candidates are required to make informed judgements based on the nutrients in food (protein, carbohydrates, fats, vitamins and minerals) and about how a vegan diet can meet the nutritional requirements of individuals.

**Examples of suitable responses:**

- protein: vegans eat no animal products so their dietary sources of protein are of low biological value, missing some of the essential amino acids. Therefore it is important for vegans to eat a wide variety of pulses, cereals, seeds and nuts to meet the need for growth, particularly important during periods of rapid growth such as adolescence
- carbohydrates: carbohydrates from grains, fruits, vegetables, beans, nuts and seeds are the basis for a healthy vegan diet. When following a vegan lifestyle, the individual should be careful to include enough of these foods in their diet. Starchy carbohydrates are usually foods with a lower glycaemic index (GI) and these will help maintain blood sugar levels. Starch in the diet can help cut down on the amount of fatty foods that individuals may include in their diet. Carbohydrate acts as a protein sparer so that protein will be used for its primary function which is growth
- NSP: vegans consume foods high in NSP which supplies the body with a rich source of soluble and insoluble fibre, e.g. wholegrain bread and cereals, fruit and vegetables, beans and lentils aiding digestion and preventing constipation
- fat: sources of omega 3 fatty acids include walnuts, flax seed oil,

AVAILABLE MARKS
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rapeseed oil, soya oil and soya based foods such as tofu which meet nutritional requirements

- vitamins A, C and E: vegans tend to eat lots of fruit and vegetables which contain these vitamins. Vitamin C aids the absorption of non-haem iron and helps prevent anaemia from occurring
- vitamin B12. vitamin B12 is only found naturally in foods from animal sources. Sources for vegans are therefore limited and a vitamin B12 supplement may be needed. Folate plays an integral role in DNA, RNA and protein synthesis. To get the full benefit of a vegan diet, vegans should do one of the following: eat fortified foods two or three times a day or take B12 supplements
- vitamin D: this is not naturally present in vegetable foods, so vegans will need to eat fortified foods such as cereals or margarine
- calcium: vegans can get all the calcium they need from their diet, e.g. fortified soya milk and juice, calcium-set tofu, calcium milk and yoghurt alternatives and fortified bread, soya beans and nuts, bok choy, broccoli, Chinese cabbage, kale, mustard greens, tahini and pulses
- iron: the Recommended Dietary Allowance (RDA) for iron is 12–15 milligrams (mg) per day. Vegans are more susceptible to lower iron levels than non-vegetarians as the non-haem iron found in plant sources is poorly absorbed by the body, so vegans need to eat plenty of iron rich vegetables in conjunction with vitamin C to aid its absorption. This is particularly important for menstruating females, e.g. pulses, wholemeal flour, bread and breakfast cereals fortified with iron, dark green leafy vegetables, nuts and dried fruits
- zinc is important because of its role in growth and sexual maturation. It is possible to get all the zinc needed from eating a varied and balanced vegan diet on a daily basis, e.g. legumes, nuts, seeds, vegetables, grains and oatmeal

All other valid points will be given credit

[0] is awarded for a response not worthy of credit.

### **Level 1 ([1]–[4])**

Overall impression: basic

- basic knowledge and understanding of how a vegan diet can meet the nutritional requirements of individuals
- demonstrates a limited ability to apply appropriate knowledge and understanding to the question
- demonstrates a limited ability to assess how a vegan diet can meet the nutritional requirements of individuals
- quality of written communication is basic. The candidate makes only a limited attempt to select and use an appropriate form and style of writing. The organisation of material may lack clarity and coherence. There is little use of specialist vocabulary. Presentation, spelling, punctuation and grammar may be such that intended meaning is not clear.

### **Level 2 ([5]–[8])**

Overall impression: adequate

- adequate knowledge and understanding of how a vegan diet can meet the nutritional requirements of individuals
- demonstrates an adequate ability to apply appropriate knowledge and

understanding to the question

- demonstrates an adequate ability to assess how a vegan diet can meet the nutritional requirements of individuals
- quality of written communication is adequate. The candidate makes a reasonable attempt to select and use an appropriate form and style of writing. Relevant material is organised with some clarity and coherence. There is some use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are sufficiently competent to make meaning evident.

AVAILABLE  
MARKS

### Level 3 ([9]–[12])

Overall impression: competent

- competent knowledge and understanding of how a vegan diet can meet the nutritional requirements of individuals
- demonstrates a competent ability to apply appropriate knowledge and understanding to the question
- demonstrates a competent ability to assess how a vegan diet can meet the nutritional requirements of individuals
- quality of written communication is competent. The candidate successfully selects and uses the most appropriate form and style of writing. Relevant material is organised with a high degree of clarity and coherence. There is extensive and accurate use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are of a high standard and ensure that the meaning is clear.

### Level 4 ([13]–[15])

Overall impression: highly competent

- highly competent knowledge and understanding of how a vegan diet can meet the nutritional requirements of individuals
- demonstrates a highly competent ability to apply appropriate knowledge and understanding to the question
- demonstrates a highly competent ability to assess how a vegan diet can meet the nutritional requirements of individuals
- quality of written communication is highly competent. The candidate successfully selects and uses the most appropriate form and style of writing. Relevant material is extremely well organised with the highest degree of clarity and coherence. There is extensive and accurate use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are of the highest standard and ensure that meaning is absolutely clear.

[15]

42

3 (a) Discuss how following the current dietary advice in the Eatwell Guide achieves a healthy balanced diet for individuals. (AO1, AO2, AO3)

AVAILABLE MARKS

**Examples of suitable points to be discussed:**

- eat at least 5 portions of a variety of fruit and vegetables every day. They should make up over a third of the food we eat each day. Fruit and vegetables are a good source of vitamins, minerals and fibre
- base meals on potatoes, bread, rice, pasta or other starchy carbohydrates, ideally wholegrain. Starchy food should make up just over a third of the food we eat. Choose higher-fibre, wholegrain varieties, such as whole wheat pasta and brown rice, or simply leave skins on potatoes. There are also higher fibre versions of white bread and pasta. Starchy foods are a good source of energy and the main source of a range of nutrients in the diet
- have some dairy or dairy alternatives (such as soya drinks) choosing lower fat and lower sugar options. These are good sources of protein and some vitamins, and they're also an important source of calcium, which helps to keep bones strong
- eat some beans, pulses, fish, eggs, meat and other proteins (including 2 portions of fish every week, one of which should be oily). These foods are good sources of protein, vitamins and minerals. Pulses such as beans, peas and lentils are good alternatives to meat because they're lower in fat and higher in fibre and protein too. Choose lean cuts of meat and mince and eat less red and processed meat like bacon, ham and sausages
- choose unsaturated oils and spreads and consume these in small amounts. Unsaturated fats are healthier fats and include vegetable, rapeseed, olive and sunflower oils. All types of fat are high in energy and should be eaten sparingly
- eat foods high in fat, salt and sugar less often and in small amounts. These foods include chocolate, cakes, biscuits, sugary soft drinks, butter, ghee and ice cream. They're not needed in the diet and so should be eaten less often and in smaller amounts
- drink 6–8 cups/glasses of fluid a day. Water, lower-fat milks and lower-sugar or sugar-free drinks including tea and coffee all count. Fruit juice and smoothies also count towards fluid consumption but they contain free sugars that can damage teeth, so limit these drinks to a combined total of 150 ml per day. This helps keep the body hydrated and aids digestion. Alcohol adhere to safe limits for men and women
- women 2000 kcal and men 2500 kcal – all food and all drink

All other valid points will be given credit

[0] is awarded for a response not worthy of credit.

**Level 1 ([1]–[4])**

Overall impression: basic

- basic knowledge and understanding of how following the current dietary advice in the Eatwell Guide achieves a healthy balanced diet for individuals
- demonstrates a limited ability to apply appropriate knowledge and understanding to the question

- demonstrates a limited ability to discuss how following the current dietary advice in the Eatwell Guide achieves a healthy balanced diet for individuals
- quality of written communication is basic. The candidate makes only a limited attempt to select and use an appropriate form and style of writing. The organisation of material may lack clarity and coherence. There is little use of specialist vocabulary. Presentation, spelling, punctuation and grammar may be such that intended meaning is not clear.

AVAILABLE  
MARKS

### Level 2 ([5]–[8])

Overall impression: adequate

- adequate knowledge and understanding of how following the current dietary advice in the Eatwell Guide achieves a healthy balanced diet for individuals
- demonstrates an adequate ability to apply appropriate knowledge and understanding to the question
- demonstrates an adequate ability to discuss how following the current dietary advice in the Eatwell Guide achieves a healthy balanced diet for individuals
- quality of written communication is adequate. The candidate makes a reasonable attempt to select and use an appropriate form and style of writing. Relevant material is organised with some clarity and coherence. There is some use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are sufficiently competent to make meaning evident.

### Level 3 ([9]–[12])

Overall impression: competent

- competent knowledge and understanding of how following the current dietary advice in the Eatwell Guide achieves a healthy balanced diet for individuals
- demonstrates a competent ability to apply appropriate knowledge and understanding to the question
- demonstrates a competent ability to discuss how following the current dietary advice in the Eatwell Guide achieves a healthy balanced diet for individuals
- quality of written communication is competent. The candidate successfully selects and uses the most appropriate form and style of writing. Relevant material is organised with a high degree of clarity and coherence. There is extensive and accurate use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are of a high standard and ensure that meaning is clear. [12]

**(b)** Discuss how recipes can be modified to meet current dietary advice. (AO1, AO2, AO3)

#### Examples of suitable points to be included in discussion:

- pasta: use whole-wheat pasta instead of white pasta; this will almost triple the fibre content. (4.5 g vs 1.8 g and 156 vs 157 calories)
- fat: use low fat spreads, one calorie sprays or dry fry instead of full fat products and oils
- use brown rice instead of white rice

- use wholemeal bread instead of white bread, e.g. when making breadcrumbs
- milk: use semi skimmed or skimmed milk instead of whole milk
- meat: when making casseroles, cut back on meat, poultry or fish and increase the amount of vegetables. Use leaner cuts of meat. Purchase lower fat content, e.g minced meat 5% fat
- fat: for baked goods, use half the butter, shortening or oil
- sugar: reduce the amount of sugar by one-third to one-half. Instead, add spices such as cinnamon, cloves, allspice and nutmeg, or flavourings such as vanilla or almond extract to boost sweetness
- salt: for most main dishes, salads, soups and other foods, reduce the salt by half or even eliminate it; reduce salt by half in baked goods that don't require yeast too. For foods that require yeast some salt may be necessary for leavening to keep baked goods from being too dense or flat. Use low-sodium soy sauce in a smaller amount than a recipe calls for to decrease the amount of salt
- toppings: eliminate items generally added out of habit or for appearance, such as icing, coconut or whipped cream toppings, which are all high in fat and calories
- condiments: reduce the use of condiments, such as pickles, olives, butter, mayonnaise, syrup, jelly and mustard, which can have large amounts of salt, sugar, fat and calories. Use fresh condiments such as cucumbers instead of pickles, cherry tomatoes instead of olives, non-fat or reduced fat spreads instead of butter or mayonnaise. Instead of syrup or jelly, try fresh berries that are mashed, or thin slices of fresh apples, peaches or pears.
- cheese: if a recipe calls for 100 g cheddar cheese, use 50 g instead.

AVAILABLE  
MARKS

All other valid points will be given credit

[0] is awarded for a response not worthy of credit.

### **Level 1 ([1]–[5])**

Overall impression: basic

- basic knowledge and understanding of how to modify recipes to meet current dietary advice
- demonstrates a limited ability to apply appropriate knowledge and understanding to the question
- demonstrates a limited ability to discuss how to modify recipes to meet current dietary advice
- quality of written communication is basic. The candidate makes only a limited attempt to select and use an appropriate form and style of writing. The organisation of material may lack clarity and coherence. There is little use of specialist vocabulary. Presentation, spelling, punctuation and grammar may be such that intended meaning is not clear.

### **Level 2 ([6]–[10])**

Overall impression: adequate

- adequate knowledge and understanding of how to modify recipes to meet current dietary advice
- demonstrates an adequate ability to apply appropriate knowledge and understanding to the question

- demonstrates an adequate ability to discuss how to modify recipes to meet current dietary advice
- quality of written communication is adequate. The candidate makes a reasonable attempt to select and use an appropriate form and style of writing. Relevant material is organised with some clarity and coherence. There is some use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are sufficiently competent to make meaning evident.

AVAILABLE  
MARKS

### Level 3 ([11]–[15])

Overall impression: competent

- competent knowledge and understanding of how to modify recipes to meet current dietary advice
- demonstrates a competent ability to apply appropriate knowledge and understanding to the question
- demonstrates a competent ability to discuss how to modify recipes to meet current dietary advice
- quality of written communication is competent. The candidate successfully selects and uses the most appropriate form and style of writing. Relevant material is organised with a high degree of clarity and coherence. There is extensive and accurate use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are of a high standard and ensure that meaning is clear. [15]

(c) Analyse the dietary risk factors for cardiovascular disease and the appropriate dietary advice to help prevent it. (AO1, AO2, AO3)

In terms of analysis: candidates are required to separate their knowledge and understanding of the dietary risk factors into different components such as sugar, salt and fat. They are also required to separate their knowledge and understanding of the appropriate dietary advice to help prevent cardiovascular disease. They are required to present arguments and make reasoned judgments on how the characteristics of each component helps to prevent cardiovascular disease.

#### Examples of suitable responses:

Dietary risk factors:

- a diet containing too much sugar can increase the chances of developing type 2 diabetes, which is proven to dramatically increase the chances of developing cardiovascular disease
- a high sodium intake is a known cause of hypertension which may damage arteries, a risk factor for cardiovascular disease
- food containing saturated fats can increase the levels of bad cholesterol in the blood, another risk factor for cardiovascular disease
- consuming alcohol above recommended limits damages heart muscle

Dietary advice for preventing cardiovascular disease:

- eat a healthy, balanced low-fat, high-fibre diet which should include plenty of fresh fruit and vegetables (five/seven portions a day) and whole grains
- limit the amount of salt eaten to no more than 6 g (0.2 oz) a day
- eat less saturated fats, e.g. red meat 70 g day; 500 g week

- increase the intake of monounsaturated fatty acids which may protect against coronary heart disease, for example oleic acid from olive oil
- follow a mediterranean diet to lower rates of developing coronary heart disease due to a large intake of fruit and vegetables
- substitute saturated fats by MUFAs which may result in a reduction of LDL cholesterol so people should increase consumption of polyunsaturated fats and n-3, for example increasing intake of fish (oily)
- increase the intake of low fat dairy products, nuts, fruit and vegetables which are known to help reduce high blood pressure. Eating more foods containing potassium such as bananas and vegetables may be beneficial
- follow a diet which is rich in calcium foods but not solely from dairy sources, as these can be high in fat. Calcium is associated with a low risk of developing cardiovascular disease as it binds dietary fats and stops their absorption
- consume alcohol within safe limits. Red wine contains anti-oxidants which are linked to positive heart health
- increase NSP intake by eating more cereals, beans, nuts, fruit, vegetables and seeds as some high fibre foods lower blood cholesterol
- consume foods rich in Vitamin E found in vegetable oil, sunflower seeds and oil etc. Vitamin E is an anti-oxidant nutrient and can lower the risk of developing cardiovascular disease
- use fresh fruit and vegetables and starchy foods as snacks, as another method of reducing fat content in diet
- consume products that claim to lower cholesterol, for example Benecol

AVAILABLE  
MARKS

All other valid points will be given credit

[0] is awarded for a response not worthy of credit.

### **Level 1 ([1]–[5])**

Overall impression: basic

- basic knowledge and understanding of the dietary risk factors and the appropriate advice to help prevent cardiovascular disease
- demonstrates a limited ability to apply appropriate knowledge and understanding to the question
- demonstrates a limited ability to analyse the dietary risk factors and the appropriate advice to help prevent cardiovascular disease
- quality of written communication is basic. The candidate makes only a limited attempt to select and use an appropriate form and style of writing. The organisation of material may lack clarity and coherence. There is little use of specialist vocabulary. Presentation, spelling, punctuation and grammar may be such that intended meaning is not clear.

### **Level 2 ([6]–[10])**

Overall impression: adequate

- adequate knowledge and understanding of the dietary risk factors and the appropriate advice to help prevent cardiovascular disease
- demonstrates an adequate ability to apply appropriate knowledge and understanding to the question
- demonstrates an adequate ability to analyse the dietary risk factors and the appropriate advice to help prevent cardiovascular disease
- quality of written communication is adequate. The candidate makes a reasonable attempt to select and use an appropriate form and style of

writing. Relevant material is organised with some clarity and coherence. There is some use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are sufficiently competent to make meaning evident.

AVAILABLE  
MARKS

**Level 3 ([11]–[14])**

Overall impression: competent

- competent knowledge and understanding of the dietary risk factors and the appropriate advice to help prevent cardiovascular disease
- demonstrates a competent ability to apply appropriate knowledge and understanding to the question
- demonstrates a competent ability to analyse the dietary risk factors and the appropriate advice to help prevent cardiovascular disease
- quality of written communication is competent. The candidate successfully selects and uses the most appropriate form and style of writing. Relevant material is organised with a high degree of clarity and coherence. There is extensive and accurate use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are of a high standard and ensure that meaning is clear.

**Level 4 ([15]–[18])**

Overall impression: highly competent

- highly competent knowledge and understanding of the dietary risk factors and the appropriate advice to help prevent cardiovascular disease
- demonstrates a highly competent ability to apply appropriate knowledge and understanding to the question
- demonstrates a highly competent ability to analyse the dietary risk factors and the appropriate advice to help prevent cardiovascular disease
- quality of written communication is highly competent. The candidate successfully selects and uses the most appropriate form and style of writing. Relevant material is extremely well organised with the highest degree of clarity and coherence. There is extensive and accurate use of appropriate specialist vocabulary. Presentation, spelling, punctuation and grammar are of the highest standard and ensure that meaning is absolutely clear.

[18]

45

**Total**

**120**