

New
Specification



Rewarding Learning

ADVANCED
General Certificate of Education
2018

Health and Social Care

Assessment Unit A2 7

assessing

Human Nutrition and Health

[AHC71]

MONDAY 18 JUNE, AFTERNOON

**MARK
SCHEME**

General Marking Instructions

Introduction

Mark schemes are published to assist teachers and students in their preparation for examinations. Through the mark schemes teachers and students will be able to see what examiners are looking for in response to questions and exactly where the marks have been awarded. The publishing of the mark schemes may help to show that examiners are not concerned about finding out what a student does not know but rather with rewarding students for what they do know.

The Purpose of Mark Schemes

Examination papers are set and revised by teams of examiners and revisers appointed by the Council. The teams of examiners and revisers include experienced teachers who are familiar with the level and standards expected of students in schools and colleges.

The job of the examiners is to set the questions and the mark schemes; and the job of the revisers is to review the questions and mark schemes commenting on a large range of issues about which they must be satisfied before the question papers and mark schemes are finalised.

The questions and the mark schemes are developed in association with each other so that the issues of differentiation and positive achievement can be addressed right from the start. Mark schemes, therefore, are regarded as part of an integral process which begins with the setting of questions and ends with the marking of the examination.

The main purpose of the mark scheme is to provide a uniform basis for the marking process so that all the markers are following exactly the same instructions and making the same judgements in so far as this is possible. Before marking begins a standardising meeting is held where all the markers are briefed using the mark scheme and samples of the students' work in the form of scripts. Consideration is also given at this stage to any comments on the operational papers received from teachers and their organisations. During this meeting, and up to and including the end of the marking, there is provision for amendments to be made to the mark scheme. What is published represents this final form of the mark scheme.

It is important to recognise that in some cases there may well be other correct responses which are equally acceptable to those published: the mark scheme can only cover those responses which emerged in the examination. There may also be instances where certain judgements may have to be left to the experience of the examiner, for example, where there is no absolute correct response – all teachers will be familiar with making such judgements.

- 1 (a) (i) List **three** sources of iron in the diet. (AO1)

Example of suitable points to be listed:

Sources

- shellfish
- eggs
- liver
- red meat
- beans
- nuts
- dried fruit – such as dried apricots
- wholegrains – such as brown rice
- fortified breakfast cereals
- soya bean flour
- most dark-green leafy vegetables – such as watercress and curly kale
- peas, lentils

(3 × [1])

[3]

- (ii) Describe the function of iron. (AO1, AO2)

Examples of suitable points to be described:

Function

- iron helps to make red blood cells, which carry oxygen around the body
- makes the oxygen-carrying proteins haemoglobin and myoglobin. Haemoglobin is found in red blood cells and myoglobin is found in muscles
- prevents anaemia as the human body stores some iron to replace any that is lost. Iron deficiency anaemia can affect the immune system which increases vulnerability to infection

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

[3]

- (b) Summarise the appropriate advice to help prevent the following diet-related conditions or disorders. (AO1, AO2)

Examples of suitable points to be summarised:

Hypertension

Dietary advice:

- reducing the amount of salt in the diet, eating a healthy diet and reducing caffeine and alcohol intake may reduce the risk
- potassium helps to lower blood pressure by balancing the negative effects of salt
- eating a low-fat diet that includes lots of fibre helps lower blood pressure.

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Scurvy

Dietary advice:

- the best way to prevent scurvy is to eat a healthy balanced diet that contains plenty of fruit and vegetables.

Dental caries

Dietary advice:

- cut down on sugary and starchy food and acidic drinks particularly between meals or within an hour of going to bed
- drink water, milk as an alternative
- eat calcium rich foods, e.g. yoghurt, cheese
- avoid snacking between meals.

All other valid points will be given credit

[1] for key words/phrase(s) [2] adequate summary [3] competent summary

(3 × [3]) [9]

(c) Define the term “basal metabolic rate” (BMR). (AO1, AO2)

- the sum total of the minimal activity of all tissue cells of the body under steady state conditions, BMR, is the amount of energy used when at rest

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

(d) Outline the dietary functions **and** sources of the nutrients calcium and vitamin D. (AO1, AO2)

Examples of suitable points to be outlined:

Functions of calcium:

- helping to build strong bones and teeth, supports skeletal structure and function
- regulating muscle contractions, including heartbeat
- ensuring that blood clots normally
- cell signalling
- helps lower blood pressure.

Sources of calcium include:

- milk, cheese and other dairy foods
- green leafy vegetables – such as broccoli, cabbage and okra, but not spinach
- soya beans
- tofu
- soya drinks with added calcium
- nuts
- bread and anything made with fortified flour
- fish where you eat the bones – such as sardines and pilchards.

Function of vitamin D:

- helps to regulate the amount of calcium and phosphate in the body
- absorbs calcium

- reduces the risk of rickets in children and osteomalacia and promotes bone health in adults
- Calcium and vitamin D are the most important nutrients for building bone mass and may help reduce the risk of fractures and osteoporosis in later adulthood.

Sources:

- oily fish – such as salmon, sardines, herring and mackerel
 - red meat
 - liver
 - egg yolks
 - fortified foods such as most fat spreads and some breakfast cereals
- (also accept sunlight)

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 the nutrients calcium and vitamin D
- demonstrates a limited ability to apply appropriate knowledge and understanding to the question
- demonstrates a limited ability to outline the functions of and sources of the nutrients calcium and vitamin D.

Level 2 ([4]–[6])

Overall impression: adequate

- adequate knowledge and understanding of the dietary functions and sources of the nutrients calcium and vitamin D
- demonstrates an adequate ability to apply appropriate knowledge and understanding to the question
- demonstrates an adequate ability to outline the functions and sources of the nutrients calcium and vitamin D
- answers which address only calcium or only vitamin D cannot achieve beyond this level.

Level 3 ([7]–[9])

Overall impression: competent

- competent knowledge and understanding of the dietary functions and sources of the nutrients calcium and vitamin D
- demonstrates a competent ability to apply appropriate knowledge and understanding to the question
- demonstrates a competent ability to outline the functions and sources of the nutrients calcium and vitamin D. [9]

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- 2 (a) Discuss how religion may influence the choice of food offered to residents. (AO1, AO2, AO3)

- the differing religions will influence the choice of food offered to residents for example:
 - Muslim residents will only eat food that is Halal. In Arabic it simply means permissible or allowed. To make meat halal or permissible, an animal or poultry has to be slaughtered in a ritual way. Staff should offer Halal food choices to Muslim residents. Muslims do not eat pork.
 - all food choices for Jewish residents must be Kosher which refers to a set of intricate biblical laws that detail the types of food that a Jewish person may eat and the ways in which it may be prepared and they cannot eat meat from pigs, shellfish, birds of prey. Staff should ensure Kosher choices for Jewish residents
 - Hindus will eat dairy products, fish and shellfish or even poultry. Pork is even consumed in some regions. The majority of Hindus don't eat beef – cows are seen as “The Mother”. Food choices for Hindu residents should reflect these observations
 - many Buddhists are vegetarian therefore soya based foods such as Quorn may be offered as a choice to residents as will cereal based food along with fruit and vegetables
 - different festivals for differing religious groups will influence the food choice of the residential home, e.g. Jewish New Year, Ramadan, Christmas time for Christians and Hanukkah for Jews. Staff should offer food choices to reflect these different religious festivals
 - some Roman Catholics practice abstinence from meat products on a Friday, Ash Wednesday and Good Friday so they will be offered alternative choices to meat, e.g. fish

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 religion may influence the choice of food offered to residents
- demonstrates a limited ability to apply appropriate knowledge and understanding to the question
- demonstrates a limited ability to discuss how religion may influence the choice of food offered to residents.

Level 2 ([4]–[6])

Overall impression: adequate

- adequate knowledge and understanding of how religion may influence the choice of food offered to residents
- demonstrates an adequate ability to apply appropriate knowledge and understanding to the question
- demonstrates an adequate ability to discuss how religion may influence the choice of food offered to residents.

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Level 3 ([7]–[9])

Overall impression: competent

- competent knowledge and understanding of how religion may influence the choice of food offered to residents
- demonstrates a competent ability to apply appropriate knowledge and understanding to the question
- demonstrates a competent ability to discuss how religion may influence the choice of food offered to residents. [9]

- (b) Describe how catering staff might modify diets to meet the needs of residents with the following food intolerances. (AO1, AO2)

Examples of suitable points to be described:

Coeliac disease

- ensure that residents who have coeliac disease follow a strict gluten-free diet, i.e. products made from wheat, barley, oats and rye
- provide foods that are naturally gluten-free, e.g. fresh meat, fish, cheese, eggs, milk, fruit and vegetables, rice, pulses
- buy gluten-free products
- check food labels on packaging of processed foods to be used in meal planning

[1] for key phrase/s [2] for adequate description [3] for detailed description

[3]

Examples of suitable points to be described:

Lactose intolerance

- should avoid serving dairy products from cow's milk
- use lactose free products, e.g. lacolite
- check food labels of processed foods to be used in meal planning
- check if residents may be able to eat yoghurt or cheese
- use soya/almond milk as an alternative
- provide alternative sources of calcium: green leafy vegetables – such as broccoli, cabbage and okra, soya beans, tofu, soya drinks with added calcium, nuts, bread and anything made with fortified flour, fish where the bones can be eaten – such as sardines and pilchards
- natural aged cheese can be digested by many people with lactose intolerance

[1] for key phrase/s [2] for adequate description [3] for detailed description

[3]

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- (c) Assess the importance of adequate water and fluid intake and non-starch polysaccharides (NSP) for older people. (AO1, AO2, AO3)

In terms of assessment: candidates are required to make informed judgements about the importance of adequate water and fluid intake **and** non-starch polysaccharides (NSP) for older people.

Examples of suitable points to be assessed:

Importance of water and fluids for older people:

- reduces risk of U.T.I.
- transports nutrients, hormones, waste substances such as carbon dioxide and urea around their bodies
- helps to prevent constipation which is a common problem in older people whose digestive muscles are weaker
- helps to regulate body temperature in older people who may be more prone to infections
- lubricates joints in older people who often experience stiffness
- prevents dehydration which can cause confusion, tiredness or disorientation, dizziness and low blood pressure in older people
- helps to keep mucus membranes and eyes moist, important for older people.

Importance of non-starch polysaccharide (NSP) for older people:

- fibre is an important part of a healthy balanced diet
- helps prevent heart disease, diabetes, weight gain and some cancers
- improves digestive health
- insoluble fibre doesn't dissolve in water. It passes through the gut without being broken down and helps other food move through the digestive system more easily
- soluble fibre dissolves in the water in the digestive system. It may help to reduce the amount of cholesterol in the blood and also helps lower blood pressure
- increasing sources of soluble fibre such as fruit and vegetables and oats can help soften the stools, make them easier to pass and prevent constipation, common in older people
- these foods are filling and most are lower GI which can help control appetite and have less effect on blood glucose levels.

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 the importance of adequate water and fluid intake and NSP for older people
- demonstrates a limited ability to apply appropriate knowledge and understanding to the question
- demonstrates a limited ability to assess the importance of adequate water and fluid intake and NSP for older people
- quality of written communication is basic. The candidate makes only a limited attempt to select and use an appropriate form and style of

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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 the importance of adequate water and fluid intake and NSP for older people
- demonstrates an adequate ability to apply appropriate knowledge and understanding to the question
- demonstrates an adequate ability to assess the importance of adequate water and fluid intake and NSP for older people
- answers that focus on only water and fluids or only on NSP cannot achieve beyond this level
- 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 the importance of adequate water and fluid intake and NSP for older people
- demonstrates a competent ability to apply appropriate knowledge and understanding to the question
- demonstrates a competent ability to assess the importance of adequate water and fluid intake and NSP for older people
- 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 the importance of adequate water and fluid intake and NSP for older people
- demonstrates a highly competent ability to apply appropriate knowledge and understanding to the question
- demonstrates a highly competent ability to assess the importance of adequate water and fluid intake and NSP for older people
- 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]

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- (d) Discuss the importance of good hygiene and safe practices when storing and preparing food in the residential home. (AO1, AO2, AO3)

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Examples of suitable points to be discussed:

Storing:

- food should be stored in accordance with shelf-life and food storage guidelines, e.g. dried goods in a cool, dry place like a larder; perishable foods in a fridge with a temperature not exceeding 4 °C, and frozen foods in a freezer that the temperature is maintained at –18 °C or below. This slows down the deterioration of the food and the growth of bacteria and so reduces the risk of food poisoning
- keep foods (especially fresh meat and fish) for as short a time as possible, follow storage instructions and do not keep beyond the ‘use by’ date. This helps ensure the food is safe to use
- keep food covered to prevent food being contaminated, e.g. by air borne bacteria or flies
- always store raw meat at the bottom of the fridge
- raw and cooked food should be stored separately in the fridge as bacteria from raw food can contaminate cold cooked food.

Preparing:

- ensure personal hygiene, e.g. through handwashing, not coughing or sneezing near food, covering cuts and using protective clothing. This prevents food being contaminated
- wash fruit and vegetables thoroughly (preferably under running water) to remove soil which could contaminate the food
- use appropriate equipment, e.g. utensils that are clean and in good repair, plastic chopping boards that are colour coded for different types of food. This also prevents contamination
- temperature control – defrost food thoroughly before cooking and ensure foods are cooked to a high enough temperature to destroy bacteria
- work surfaces should be kept clean and meet strict regulations for proper hygiene to reduce bacteria.

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 the importance of good hygiene and safe practices when storing and preparing food in the residential home
- demonstrates a limited ability to apply appropriate knowledge and understanding to the question
- demonstrates a limited ability to discuss the importance of good hygiene and safe practices when storing and preparing food in the residential home
- 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 the importance of good hygiene and safe practices when storing and preparing food in the residential home
- demonstrates an adequate ability to apply appropriate knowledge and understanding to the question
- demonstrates an adequate ability to discuss the importance of good hygiene and safe practices when storing and preparing food in the residential home
- candidates who address only storing or only preparing food cannot achieve beyond this level
- 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 the importance of good hygiene and safe practices when storing and preparing food in the residential home.
- demonstrates competent ability to apply appropriate knowledge and understanding to the question
- demonstrates competent ability to discuss the importance of good hygiene and safe practices when storing and preparing food in the residential home
- 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]

(e) There is one law and one set of regulations that apply to food storage and preparation in Northern Ireland. Name both. (AO1)

- The Food Safety (Northern Ireland) Order 1991
- Food Hygiene (Northern Ireland) Regulations 2006.

(2 × [1])

[2]

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- 3 (a) Name **three** other government bodies that provide dietary advice in Northern Ireland. (AO1)

Examples of suitable government bodies to be named:

- Department of Health
- Department of Education Northern Ireland (DENI)
- Public Health Agency (PHA)

(3 × [1])

[3]

- (b) List the other **four** food groups. (AO1)

Examples of suitable food groups to be listed:

- potatoes, bread, rice, pasta and other starchy carbohydrates
- fruit and vegetables
- dairy and alternatives
- oils and spreads

(4 × [1])

[4]

- (c) Discuss the importance of the food group “beans, pulses, fish, eggs, meat and other proteins” in the diet. (AO1, AO2, AO3)

Examples of suitable points to be discussed:

- these foods provide a variety of other nutrients in addition to protein including: omega 3 fatty acids, iron, calcium, chromium, copper, fluoride, phosphorus, selenium, sodium, vitamins A, B, D and E and zinc but the nutritional content varies greatly between foods. Therefore including a good variety of these foods in the diet is important
- red meat provides us with iron, and meat is also one of the main sources of vitamin B₁₂. This is important in providing people with high biological value protein, haem iron and vitamin B₂
- pulses and beans are a good source of protein. This means they can be particularly important for people who do not get protein by eating meat, fish or dairy products. However, pulses can also be a healthy choice for meat-eaters. Pulses are a good source of iron. Pulses are also a starchy food and add fibre to a meal. Eating a diet high in fibre is associated with a reduced risk of heart disease and type 2 diabetes. They are a cheap, low-fat source of protein, fibre, vitamins and minerals, and they count towards the recommended five daily portions of fruit and vegetables
- fish and shellfish are good sources of many vitamins and minerals and a healthy diet should include at least two portions of fish a week, including one of oily fish. Oily fish – such as salmon and fresh tuna – is also particularly high in vitamin D and in long-chain omega-3 fatty acids, which are important in keeping the heart healthy
- eggs as well as being a source of protein, also contain vitamins and minerals
 - eggs are a good source of vitamin D which helps to regulate the amount of calcium and phosphate in the body
 - vitamin A is also known as retinol and has several important functions helping your immune system to work as it should against

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- infections, helping vision in dim light, keeping skin and the linings of some parts of the body, such as the nose, healthy
- riboflavin is also known as vitamin B₂ it is needed to keep skin, eyes and the nervous system healthy and helps the body release energy from the food we eat
 - vitamin B₁₂ is involved in making red blood cells and keeping the nervous system healthy, releasing energy from the food we eat and processing folic acid
 - folate is one of the B-group vitamins it works together with vitamin B₁₂ to form healthy red blood cells and helps to reduce the risk of central nervous system defects, such as spina bifida, in unborn babies
 - eggs also contain iodine which helps to make the thyroid hormones. These hormones help to keep cells and the metabolic rate healthy

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 importance of beans, pulses, fish, eggs, meat and other proteins in the diet
- demonstrates a limited ability to apply appropriate knowledge and understanding to the question
- demonstrates a limited ability to discuss the importance of beans, pulses, fish, eggs, meat and other proteins in the diet
- 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 importance of beans, pulses, fish, eggs, meat and other proteins in the diet
- demonstrates an adequate ability to apply appropriate knowledge and understanding to the question
- demonstrates an adequate ability to discuss the importance of beans, pulses, fish, eggs, meat and other proteins in the diet
- 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 ([11]–[15])

Overall impression: competent

- competent knowledge and understanding of the importance of beans, pulses, fish, eggs, meat and other proteins in the diet
- demonstrates a competent ability to apply appropriate knowledge and understanding to the question
- demonstrates a competent ability to discuss the importance of beans, pulses, fish, eggs, meat and other proteins in the diet
- 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]

- (d) The Eatwell Guide does not apply to children under the age of two. Analyse the specific nutritional requirements of infants. (AO1, AO2, AO3)

In terms of analysis: candidates are required to separate their knowledge and understanding of the nutritional needs for infants into different components, such as energy, protein, fats, carbohydrates, minerals, vitamins and fluids. They are required to present arguments and make reasoned judgments on how the characteristics of each component meet the nutritional requirements for infants.

Carbohydrate

- carbohydrate aids in maintaining the overall health condition of the infants. It fuels their metabolism, continues the functioning of their nervous system and supports their growth. Carbohydrate is the primary source that fuels up energy for children to play, learn and run; deficiency of carbohydrates may stunt the growth of children

Fats and fatty acids

- quality fats consumed during infancy provide the required energy for the infant's brain, heart and liver. Fatty acids facilitate infants in absorbing the essential nutrients and building both cells and immunity. Regular breastfed infants easily consume the necessary amount of fats during their first year, but infants on formula would need the essential fatty acids containing omega-3. The omega-3 fatty acid supports the visual acuity and neurological development of the infants, and parents should offer their baby 1–2 grams of omega-3s per day

Protein

- protein supports infant's growth and development. It is vital for the replacement of body tissue, including repair and development. Protein strengthens muscles and supplies the brain cells with the necessary nutrients that aid infants in learning language skills. All the cells found in human body, including skin, hair, muscles, eyes and organs, contain protein; the protein requirements for infants and toddlers are much more than that of adults as they are growing rapidly and developing new protein tissue
- sources: fish, yogurt, pureed meat, eggs and breast milk or formula for infants within 6 months of age

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Micronutrients

- calcium: Helps in building and maintaining strong teeth and bones. It supports the muscle function by promoting healthy nerves and aids in cell signalling and communicating
- iron: It supports the red blood cells to supply oxygen to all parts of the body and plays a major role in generating haemoglobin
- magnesium: Helps in the functioning of the nerves and muscles, maintains the bones strength and steadiness of heart rhythm
- phosphorus: Helps in the formation of teeth and bones and serves in building energy for the body. It also supports the red blood cells in delivering the oxygen and healthy functioning of cells
- zinc: supports the immune system and it is very essential for the growth of children. It is very critical to several internal processes and supports the nervous system
- potassium: Helps in upholding a healthy balance of water in the body tissues and blood. It also aids in muscle function and nervous system
- vitamin A is required for healthy eyesight and bone growth. It is essential for the regular working of the immune system
- vitamin D: Helps in absorbing calcium and maintenance of healthy teeth and bone
- vitamin C: helps in holding the cells together and repairing of red blood cells, tissues and bones. It helps in promoting a healthy immune system and lessens bruising from scrapes and falls
- vitamin B group: These vitamins help the body in the process of getting or making energy from the food we eat. They also help form red blood cells
- vitamin E: It helps in protecting the body from germs and strengthens the blood circulation system as well as improves the immune system

Water

- an adequate intake of water is important to regulate temperature. Children don't display thirst sensitivity and have a higher respiratory and metabolic rates.

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 specific nutritional requirements of infants
- demonstrates a limited ability to apply appropriate knowledge and understanding to the question
- demonstrates a limited ability to analyse the specific nutritional requirements of infants
- 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.

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Level 2 ([6]–[10])

Overall impression: adequate

- adequate knowledge and understanding of the specific dietary requirements of infants
- demonstrates an adequate ability to apply appropriate knowledge and understanding to the question
- demonstrates an adequate ability to analyse the specific dietary requirements of infants
- at this level only one aspect of the question may be addressed. Candidates who address only nutritional needs or current dietary recommendations cannot achieve more than [9] marks
- 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 ([11]–[14])

Overall impression: competent

- competent knowledge and understanding of the specific dietary requirements of infants
- demonstrates a competent ability to apply appropriate knowledge and understanding to the question
- demonstrates a competent ability to analyse the specific dietary requirements of infants
- 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 specific dietary requirements of infants
- demonstrates a highly competent ability to apply appropriate knowledge and understanding to the question
- demonstrates a highly competent ability to analyse the specific dietary requirements of infants
- 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]

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- (e) Discuss the appropriate advice a G.P. may give to help a patient prevent bowel cancer. (AO1, AO2, AO3)

Examples of points to be discussed:

- eat a balanced diet: A balanced diet helps maintain weight and being a healthy weight can reduce the risk of developing bowel cancer
- avoid red and processed meats as evidence shows that there may be a link between eating red and processed meat, and the risk of bowel cancer. It is recommended to cut down to 70 grams of red or processed meat a day, the equivalent of about three thin-cut slices of roast beef, lamb or pork, where each slice is about the size of half a piece of sliced bread
- eat plenty of fibre particularly non-starch polysaccharides (NSP) as evidence consistently suggests that can reduce the risk of bowel cancer. Diets high in fibre can help keep the bowel healthy and prevent constipation. Fibre-rich foods include wholegrain pasta, bread, breakfast cereals and rice. Pulses, fruit and vegetables are also good sources of fibre

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 appropriate advice a G.P. may give to help a patient prevent bowel cancer
- demonstrates a limited ability to apply appropriate knowledge and understanding to the question
- demonstrates a limited ability to discuss the appropriate advice a G.P. may give to help a patient prevent bowel cancer.

Level 2 ([4]–[6])

Overall impression: adequate

- adequate knowledge and understanding of the appropriate advice a G.P. may give to help a patient prevent bowel cancer
- demonstrates an adequate ability to apply appropriate knowledge and understanding to the question
- demonstrates an adequate ability to discuss the appropriate advice a G.P. may give to help a patient prevent bowel cancer.

Level 3 ([7]–[9])

Overall impression: competent

- competent knowledge and understanding of the appropriate advice a G.P. may give to help a patient prevent bowel cancer
- demonstrates a competent ability to apply appropriate knowledge and understanding to the question
- demonstrates a competent ability to discuss the appropriate advice a G.P. may give to help a patient prevent bowel cancer. [9]

Total

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49

120