



**General Certificate of Secondary Education
January 2019**

Home Economics

**Unit 1: Diet and Health
and Consumer Awareness**

[GHE11]

THURSDAY 17 JANUARY, MORNING

**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) State **two** functions of vitamin C. (AO1)

Answers should include any **two** of the following points:

- maintains body's connective tissue
- increases absorption of non-haem iron
- antioxidant properties – helps protect against CHD
- improves immune system – helps fight infection in the body

All other valid responses will be given credit.

(2 × [1])

[2]

(b) Explain why the following advice is given in the “8 tips for eating well”: (AO1, AO2)

Answers should include any of the following points:

(1) Eat more fish

- provides essential fatty acids – cannot be made by the body
- omega 3 in oily fish assists brain development
- fish oils lower cholesterol – helps reduce risk of CHD
- white fish is low in calories – good for weight management
- calcium – found in fish where the bones are eaten, e.g. sardines, herring
- good source of HBV protein – essential for growth/repair
- oily fish is a good source of fat soluble vitamins A and D

(2) Eat less salt

- a high intake of salt can raise blood pressure – hypertension
- hypertension can lead to increased risk of coronary heart disease and stroke

All other valid responses will be given credit.

[1] basic explanation, [2] competent explanation

(2 × [2])

[4]

(c) Write down **two** ways we can reduce our salt intake. (AO1)

Answers should include any **two** of the following points:

- avoid processed food using fresh where possible
- don't make salt available at the table
- check food labels to determine salt content
- add herbs and spices instead of stock cubes or salt for flavour
- use low sodium alternatives

All other valid responses will be given credit.

(2 × [1])

[2]

(d) Discuss why we should base our meals on starchy foods. (AO1, AO2)

Answers should include any of the following points:

- good source of energy – helps to meet current nutritional guidelines which state that 50% of our energy should come from carbohydrates
- starchy foods often provide other nutrients – NSP, B vitamins, calcium and iron
- provide slow release of energy – avoids spike in blood sugar, keeps level constant.
- high satiety value – less need to snack on high fat foods, helps with weight management

All other valid responses will be given credit.

[1] basic discussion, [2] competent discussion

(1 × [2])

[2]

AVAILABLE
MARKS

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- 2 (a) Explain how this table could be useful to someone concerned about their fat intake. (AO1, AO2)

Answers should include any of the following points:

- shows fat content per 100 g – allows for comparison with other foods
- indication given of total fat content per serving – useful to calculate dietary intake
- shows amount of saturated fat which could be useful for consumers concerned about their cholesterol

All other valid responses will be given credit.

[1] basic explanation, [2] competent explanation

(1 × [2])

[2]

- (b) Discuss the role of insoluble non-starch polysaccharide (NSP) in the diet. (AO1, AO2)

Answers should include any of the following points:

- helps waste products move through the gut easily so prevents constipation or other bowel disorders
- high fibre foods are filling and reduces the risk of snacking on high fat/sugar foods therefore helps with weight management
- assists digestion

All other valid responses will be given credit.

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

[4] highly competent discussion

(1 × [4])

[4]

- (c) Explain why a toddler should not eat a diet high in non-starch polysaccharide (NSP). (AO1, AO2)

Answers should include any of the following points:

- they have a smaller capacity for food – will become too full too quickly
- makes diet bulky and filling, reducing intake of essential nutrients
- can cause diarrhoea if eaten in excess

All other valid responses will be given credit.

[1] basic explanation, [2] competent explanation

(1 × [2])

[2]

- (d) Discuss why people with coeliac disease might find this label useful when shopping. (AO1, AO2)

Answers should include any of the following points:

- it is used on food packaging which is certified as gluten free
- it indicates that this food product is safe to eat for those with coeliac disease
- it is an easy, quick way to identify gluten free products on the shelves rather than having to read the ingredients label

All other valid responses will be given credit.

[1] basic discussion, [2] competent discussion

(1 × [2])

[2]

AVAILABLE
MARKS

- (e) Describe the dietary advice for an individual with coeliac disease.
(AO1, AO2)

Answers should include any of the following points:

- avoid foods containing gluten, e.g. wheat, barley, rye
- substitute gluten containing foods with gluten free foods, e.g. rice, potatoes, cornflour
- check food labels for gluten content

All other valid responses will be given credit.

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

(1 × [3])

[3]

AVAILABLE
MARKS

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- 3 (a) Discuss **two** ways of ensuring a good supply of calcium in the diet of an adolescent (12–18 years). (AO1, AO2)

Answers should include any **two** of the following points:

- ensure adequate intake of milk and dairy foods as these are a rich source of calcium
- add dark green leafy vegetables to meals
- include fish such as canned sardines or canned salmon as they are a good source of calcium if eaten regularly
- include fortified white bread as it is a good source if it is eaten regularly
- consume foods rich in vitamin D

N.B. do not accept non-dietary sources, e.g. supplements/sunlight

All other valid responses will be given credit.

[1] basic discussion, [2] competent discussion

(2 × [2])

[4]

- (b) Write down **three** ways of preventing dental caries in adolescents (12–18 years). (AO1)

Answers should include any **three** of the following points:

- cut down on the amount of sugary foods, e.g. sweets, biscuits
- avoid adding sugar to foods
- replace sugary drinks with water
- cut down on sticky, chewy foods which stay in the mouth for a long time, e.g. toffee
- replace sugary snacks with fruit or vegetables
- eat sweets all at once or after a meal
- do not snack between meals
- maintain good oral hygiene, e.g. brushing with fluoride toothpaste or flossing
- visit dentist regularly

All other valid responses will be given credit.

(3 × [1])

[3]

7

AVAILABLE
MARKS

4 (a) Identify **four** personal hygiene rules to prevent food poisoning.

Answers should include any four of the following points:

- wash and dry hands thoroughly before handling food
- avoid handling food if you are unwell
- wear a clean apron
- remove jewellery before preparing food
- avoid touching hair and tie long hair back

All other valid responses will be given credit.

(4 × [1])

[4]

(b) Outline how the Food Safety (NI) Order 1991 protects the consumer in keeping food safe. (AO1, AO2)

Answers may address some of the following points:

- It is an offence to produce, treat or alter food in a harmful manner, or sell food that is:
 - unfit for human consumption
 - has been declared injurious to health
 - is so contaminated that it would be unreasonable to expect consumers to eat it
 - is not of the nature, substance or quality demanded by the consumer
 - is falsely or misleadingly labelled or presented

All other valid responses will be given credit.

[1] basic outline, [2] competent outline

(1 × [2])

[2]

(c) Evaluate the use of convenience foods by an older adult (65+ years). (AO1, AO2, AO3)

Answers should include any of the following points:

Positive

- some have high nutritional value, e.g. frozen peas
- ready-made meals save preparation time
- some foods are ready to eat – can be easier for an older person to prepare
- eliminates the need for advanced food preparation skills
- some convenience foods have a longer shelf-life – reduces need to go out shopping if mobility is an issue
- smaller portion sizes available – more economical for an older adult living on their own
- can add variety to diet

Negative

- can be more expensive for those older adults on reduced incomes
- some convenience foods may have a short shelf life so must be eaten quickly
- may be high in salt if processed – may contribute to risk of hypertension at this life stage
- ready meals are often high in saturated fat – may contribute to risk of CHD at this life stage
- convenience foods, e.g. desserts are sometimes high in sugar and may contribute to obesity levels at this life stage
- may be lacking in NSP if low in fresh fruit and/or vegetables – may contribute to bowel disorders common in this age group

All other valid responses will be given credit.

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

AVAILABLE
MARKS

Level 1 ([1]–[2])

Overall impression: basic

- Identifies and comments on a few obvious points relevant to the question
- A limited evaluation applied in simple terms to the question.

Level 2 ([3]–[4])

Overall impression: competent

- Identifies and comments on some key points relevant to the question
- A competent evaluation applied accurately to the question.

Level 3 ([5]–[6])

Overall impression: highly competent

- Identifies and comments on the key points relevant to the question
- A highly competent evaluation applied accurately within the context of the question.

N.B. positive and negative comments must be included to access Level 3

(1 × [6]) – Answers must refer to older adults to access Level 3

[6]

AVAILABLE
MARKS

12

5 Discuss nutritional and dietary requirements during pregnancy. (AO1, AO2, AO3)

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Answers should include any of the following points:

- carbohydrate – energy needs should be met by complex carbohydrates, e.g. bread, pasta, rice and potatoes, with energy requirements increasing in the last 3 months
- protein – needed for the growth and development of the baby and for repair and maintenance of the mother's body tissue during and after pregnancy – meat, fish, well-cooked eggs, pulses and cereals
- fat – fat intake should be maintained rather than increased. Essential fatty acids play an important role in reducing high blood pressure in the mother and in the development of the brain in the fetus – olive oil, oily fish, margarine
- calcium – increase needed during pregnancy for the development of the fetus' skeleton and maintenance of the mother's bones – milk and dairy foods, white bread and dark green leafy vegetables
- iron – to meet mother's needs and to provide the baby with a store of iron for the first few months after birth – red meat, dark green leafy vegetables, fortified breakfast cereals
- folate – required for the development of the brain and nervous system in the baby. A lack of folate may lead to spina bifida, miscarriage, premature birth or slow growth – fortified cereals, dark green leafy vegetables, pulses
- NSP – needed to reduce constipation – fruit, vegetables, wholegrain bread, wholewheat pasta and brown rice

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

- Identifies and comments on a few obvious points relevant to the question
- A limited discussion applied in simple terms to the question
- Quality of written communication is basic.

Level 2 ([4]–[6])

Overall impression: competent

- Identifies and comments on some key points relevant to the question
- A competent discussion applied accurately to the question
- Quality of written communication is competent.

Level 3 ([7]–[9])

Overall impression: highly competent

- Identifies and comments on the key points relevant to the question
- A highly competent discussion applied accurately within the context of the question
- Quality of written communication is highly competent.

(1 × [9])

N.B. folic acid supplements may be accepted as they are prescribed in early pregnancy.

Answers must refer to dietary sources to access Level 3

[9]

9

- 6 Suggest and justify diet and lifestyle advice for parents wishing to reduce their children's risk of obesity. (AO1, AO2, AO3)

Answers may address any of the following points:

Dietary Advice

- reduce intake of fat, e.g. cut down intake of processed/fast food, change cooking methods – grill instead of frying
- reduce intake of sugar, e.g. switch to low sugar breakfast cereals, low sugar snacks such as fruit, reduce consumption of fizzy drinks
- increase intake of fruit and vegetables as they are low in calories, fat and sugar, e.g. eat as a snack and include at mealtimes
- increase NSP intake to encourage a feeling of fullness and prevent snacking, e.g. wholegrain toast or cereals
- try to achieve a balanced diet by following the advice from the Eatwell Guide, e.g. eat treats less often and in small amounts

Lifestyle Advice

- encourage 3 meals a day and provide child-sized portions
- try to achieve energy balance by matching energy intake from food with energy expenditure
- increase physical activity, e.g. clubs and sports

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

NB – Must have diet and lifestyle points and relate to reducing risk of obesity to access Level 3

Level 1 ([1]–[3])

Overall impression: basic

- Identifies and comments on a few obvious points relevant to the question
- A limited justification applied in simple terms to the question
- Quality of written communication is basic.

Level 2 ([4]–[6])

Overall impression: competent

- Identifies and comments on some key points relevant to the question
- A competent justification applied accurately to the question
- Quality of written communication is competent.

Level 3 ([7]–[9])

Overall impression: highly competent

- Identifies and comments on the key points relevant to the question
- A highly competent justification applied accurately within the context of the question
- Quality of written communication is highly competent.

(1 × [9])

[9]

Section A

AVAILABLE
MARKS

9

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SECTION B – Consumer Awareness

AVAILABLE
MARKS

7 (a) Write down **two** types of media used for advertising. (AO1)

Answers may include any two of the following:

- newspapers
- magazines
- television
- cinema
- internet
- billboards
- transport – buses, taxis
- flyers
- sponsorship at sports events
- social media.

All other valid responses will be given credit.

(2 × [1])

[2]

(b) Explain **two** ways store layout can influence consumers. (AO1, AO2)

Answers may include any two of the following points:

- front entrance of store – warm air blowing to make consumer feel welcome
- freshly baked bread at entrance of store to tempt consumer when they enter
- best offers are placed to right of front entrance as 75% of consumers look to the right on entering a store
- fruit and vegetables placed near front of store – associated with freshness
- luxuries placed at eye-level, essentials on lower shelves
- expensive foods placed on the right side of a shelf as people tend to look from left to right
- sweets and magazines placed beside tills for impulse purchases
- essentials placed at back of store so consumers walk past tempting goods and may buy them
- special offers placed on end of aisles where consumers slow down – more chance of impulse purchase
- products often grouped together in aisle – encourage consumer to purchase more than they planned.

All other valid responses related to store layout will be given credit

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

[1] basic explanation, [2] competent explanation

(2 × [2])

[4]

- (c) Evaluate family and friends as a source of information for a consumer planning to buy a television. (AO1, AO2, AO3)

Answers may include any of the following points:

Positive:

- relaxed and informal
- you can ask questions to get specific information relevant to your needs
- another person's experience of using a product or service can be valuable

Negative:

- information can be biased
- the knowledge of family and friends is unqualified
- information supplied may be inaccurate

All other valid responses will be given credit.

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

Level 1 ([1]–[2])

Overall impression: basic

- Identifies and comments on a few obvious points relevant to the question
- A limited evaluation applied in simple terms to the question.

Level 2 ([3]–[4])

Overall impression: competent

- Identifies and comments on some key points relevant to the question
- A competent evaluation applied accurately to the question.

Level 3 ([5]–[6])

Overall impression: highly competent

- Identifies and comments on the key points relevant to the question
- A highly competent evaluation applied accurately within the context of the question.

N.B. Positive and negative comments must be included to access Level 3.

(1 × [6])

[6]

AVAILABLE
MARKS

12

- 8 (a) Write down **two** responsibilities associated with being an effective consumer. (AO1)

Answers may include any of the following points:

- to read information carefully (including the small print)
- to know their consumer rights
- to complain effectively
- to be an ethical and environmentally aware consumer
- to manage and budget money wisely
- to claim reasonable compensation if things go wrong

All other valid responses will be given credit.

(2 × [1])

[2]

- (b) Evaluate the use of cash as a method of payment when shopping. (AO1, AO2, AO3)

Answers should include any of the following points:

Positive:

- can see how much is spent – useful if trying to manage money
- may be the only means of purchase if the consumer does not have access to a credit card or cheque account
- no interest charges on the purchase which helps to avoid debt

Negative:

- security – can be stolen, lost or counterfeit
- cannot be used as an online payment method
- access to banks/ATM to withdraw cash can be limited

All other valid responses will be given credit.

[1] basic evaluation, [2] adequate evaluation [3] competent evaluation, [4] highly competent evaluation

(1 × [4])

[4]

- (c) Discuss **one** advantage of each of the following shopping options: (AO1, AO2)

Answers should include any **one** of the following points:

1. Mail Order

- convenient for consumers who have difficulty accessing shops
- payment can be spread over a period of time
- large or heavy items can be delivered

2. Independent shop

- offer personal and friendly service
- may be in residential areas for ease of access
- usually sell items in small quantities

All other valid points will be given credit.

[1] basic discussion, [2] competent discussion

(2 × [2])

[4]

10

- 9 (a) State **two** ways that consumers are protected under the Unfair Trading Regulations, 2008. (AO1)

Answers should include any **two** of the following points:

- it is unlawful for traders to mislead consumers about their legal rights
- it is unlawful for a trader to give false or deceptive information about his business, status or qualifications
- there is a ban on aggressive practices
- traders are banned from making misleading comparisons

All other valid responses will be given credit.

(2 × [1])

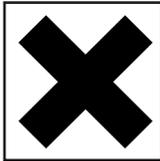
[2]

- (b) Explain the purpose of the following safety labels:



1.

© British Standards Institution



2.

Answers should include any the following points:

1. Kitemark
 - Kitemark assures consumers that a product is safe and reliable
 - Kitemark informs consumers that the product conforms to relevant safety standards
 - Kitemark shows that the product has been independently tested and satisfies BSI safety standards
2. Harmful or Irritant
 - informs consumers that the product may be harmful if inhaled or swallowed
 - highlights that product could have a negative impact on health, e.g. skin or breathing problems

All other valid responses will be given credit.

[1] basic explanation, [2] competent explanation

(2 × [2])

[4]

- (c) Discuss the support and information provided by the Consumer Council (NI). (AO1, AO2)

Answers should include any of the following points:

- handles complaints about: buses, planes, trains, ferries, natural gas, electricity, coal and water
- campaigns on behalf of consumers to improve standards of customer service and consumer protection
- gives advice through its website, 'Consumerline'
- produces publications, e.g. Money Saving Guide, Your Guide to Home Energy Bills
- helps consumers complain effectively, e.g. letter of complaint templates

All other valid responses will be given credit.

[1] basic discussion, [2] competent discussion, [3] highly competent discussion

(1 × [3])

[3]

AVAILABLE
MARKS

9

- 10** Discuss how environmental and ethical factors influence food shopping.
(AO1, AO2, AO3)

Answers may address any of the following points:

Environmental factors

- food miles – purchase locally produced food to reduce carbon footprint
- packaging – avoid excess packaging to reduce waste sent to landfill
- packaging – choose recyclable packaging and refill packs to reduce use of raw materials
- bags for life – use cloth bags or reusable grocery bags to lessen the environmental impact of plastics
- production methods – consider food produced using environmentally friendly methods, e.g. organic
- plant based diets – less environmental impact than meat production

Ethical factors

- animal welfare – buy free range eggs, dolphin friendly tuna
 - vegan/vegetarian diets – moral decision not to use animals as a food source
 - child labour – choose fairtrade products which protects producers and prohibits the use of child labour
 - sustainability – choose foods that are sustainably produced, e.g. fish
- All other valid responses will be given credit.

N.B. To be awarded Level 3, candidates must include both environmental and ethical issues.

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

Level 1 ([1]–[3])

Overall impression: basic

- Identifies and comments on a few obvious points relevant to the question
- A limited analysis applied in simple terms to the question
- Quality of written communication is basic.

Level 2 ([4]–[6])

Overall impression: competent

- Identifies and comments on some key points relevant to the question
- A competent analysis applied accurately to the question
- Quality of written communication is competent.

Level 3 ([7]–[9])

Overall impression: highly competent

- Identifies and comments on the key points relevant to the question
- A highly competent analysis applied accurately within the context of the question
- Quality of written communication is highly competent.

(1 × [9])

[9]

9

Section B

40

Total

100

AVAILABLE
MARKS