



**General Certificate of Secondary Education
2018**

Home Economics

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

[GHE11]

MONDAY 21 MAY, 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.

Section A – Diet and Health

AVAILABLE
MARKS

- 1 (a) Food poisoning affects some people more than others. Identify **two** vulnerable groups of people. (AO1)

Answers should include any two of the following groups:

- babies
- young children
- older people
- pregnant women
- people who are ill

All other valid responses will be given credit.

(2 × [1])

[2]

- (b) Underline the food poisoning bacteria spread by coughing and sneezing. (AO1)

Answer is 'Staphylococcus aureus'

(1 × [1])

[1]

- (c) Explain the difference between the terms 'use by' and 'best before' on food labels. (AO1, AO2)

Answers should include any of the following points:

'Use by' dates

- found on perishable or high risk foods, e.g. meat or dairy foods as they have a short shelf life
- food should be eaten by this date to avoid the risk of food poisoning
- food that has a 'use by' date should be stored according to manufacturer's storage instructions to ensure food is safe to consume

'Best before' dates

- found on low risk foods that would be expected to retain their quality for a longer time, e.g. frozen, dried or tinned foods
- 'best before' dates relate more to the quality of the product rather than food safety
- after the date has passed, the food does not necessarily become harmful but might begin to lose its quality – flavour or texture
- the 'best before' date is only accurate if the food has been stored according to storage instructions

All other valid responses will be given credit.

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

(1 × [3])

[3]

- (d) Write down **two** other pieces of information that are required by law on a food label. (AO1)

Answers should include any two of the following points:

- the name of the food or drink
- a list of ingredients
- allergen information
- storage conditions
- conditions of use
- name and address of manufacturer or of a seller within the European Union
- weight or volume

- | | | AVAILABLE MARKS |
|---|-----|-----------------|
| <ul style="list-style-type: none"> country of origin (if it would be misleading not to show it, e.g. Greek yoghurt made in France) back of pack nutrition information (mandatory from 13th Dec 2016) <p>(2 × [1])</p> | [2] | |
| <p>(e) Explain how an Environmental Health Officer protects the consumer in keeping food safe. (AO1, AO2)</p> <p>Answers should include some of the following points:</p> <ul style="list-style-type: none"> EHO is authorised by local council to enforce health and safety and food legislation investigate complaints about food safety and food poisoning deals specifically with health matters in relation to food and drink that is unfit for consumption food premises can be visited at any time without giving notice have power to make sure food businesses comply with food safety legislation <ul style="list-style-type: none"> issue improvement notices inspect and seize food may issue emergency prohibition notices and orders <p>All other valid responses will be given credit.
[1] basic explanation, [2] competent explanation</p> <p>(1 × [2])</p> | [2] | |
| <p>(f) Manufacturers often make health claims on food labels. Discuss how consumers may be misled by this statement: (AO1, AO2)</p> <p>'80% fat free':</p> <p>Answers should include some of the following points:</p> <ul style="list-style-type: none"> appears to have low fat content – could be mistaken for a 'low fat' product still has 20% fat content – could be a very high amount depending on weight of product and amount consumed the remaining 20% may be saturated fat as the type of fat is not clearly stated the food could be high in sugar, salt or saturated fat and is therefore not a healthy choice <p>All other valid responses will be given credit.
[1] basic discussion, [2] competent discussion</p> <p>(1 × [2])</p> | [2] | 12 |

2 (a) Discuss why the following are important during pregnancy: (AO1, AO2)

Answers should include any of the following points:

Non-starch polysaccharide (NSP):

- improves digestive system and helps prevent constipation which is common in pregnancy
- soluble NSP may help lower blood pressure, beneficial during pregnancy
- foods rich in NSP are filling so prevent grazing and unnecessary weight gain during pregnancy

Folic acid:

- helps foetal development of the brain and nervous system
- prevents neural tube defects, e.g. spina bifida or cleft lip/palate
- prevents premature birth
- helps make red blood cells and reduces the risk of iron deficiency anaemia in mother and foetus

All other valid responses will be given credit.

[1] basic discussion, [2] competent discussion

Max [1] if no reference to pregnancy

(2 × [2])

[4]

(b) Analyse why pregnant women are encouraged to drink orange juice with foods containing iron. (AO1, AO2, AO3)

Answers should include any of the following points:

- orange juice is a source of vitamin C
- increases absorption of iron
- reduces non-haem iron to haem iron
- maximises availability of iron when it is most needed during pregnancy

All other valid responses will be given credit.

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

Max [2] if no reference to pregnancy

(1 × [3])

[3]

(c) Identify **one** reason why pregnant women should avoid foods containing large amounts of vitamin A. (AO1)

Answers should include any one of the following points:

- can be toxic for the baby in large amounts
- may cause birth defects

All other valid responses will be given credit.

(1 × [1])

[1]

8

AVAILABLE
MARKS

- 3 (a) Describe **one** dietary factor that contributes to coronary heart disease. (AO1, AO2)

Answers should include any of the following points:

- high intake of saturated fat; can increase blood cholesterol levels which increases risk of coronary heart disease
- high intake of salt; can increase blood pressure and so increase the risk of developing coronary heart disease
- low intake of fruit and vegetables; low intake of antioxidants
- low intake of soluble fibre

All other valid responses will be given credit.

[1] basic description, [2] competent description

(1 × [2])

[2]

- (b) Suggest and justify **two** pieces of lifestyle advice to reduce an adult's risk of CHD. (AO1, AO2)

Answers should include any of the following points:

- avoid smoking
 - damages the lining of the arteries so fatty deposits build up there
 - smoking may make blood more likely to clot
 - carbon monoxide in cigarette smoke reduces the amount of oxygen that the blood can carry to the heart
 - nicotine in cigarettes increases production of adrenaline which makes the heart beat faster and raises blood pressure
- increase physical activity
 - improves functioning of heart muscle
 - reduces risk of obesity
- avoid excessive alcohol intake
 - can damage the heart muscle
 - may cause weight gain
 - can lead to increased blood pressure
- maintain a healthy weight
 - excess weight puts strain on the heart and increases blood pressure
- avoid stress

All other valid responses will be given credit.

[1] basic justification, [2] competent justification

(2 × [2])

[4]

- (c) Explain why it is important for older adults (65+ years) to have a regular intake of water. (AO1, AO2)

Answers should include any of the following points:

- may improve concentration/brain function and avoid age related confusion
- reduce thirst sensation which increases risk of dehydration in this age group
- helps remove waste – prevents constipation common with advancing age
- maintains body temperature at 37 °C

All other valid responses will be given credit.

[1] basic explanation, [2] competent explanation

Max [1] if no reference to older adult

(1 × [2])

[2]

AVAILABLE
MARKS

(d) Write down **two** dietary sources of water. (AO1)

Answers should include any two of the following points:

- drinking water
- milk/yoghurt
- fruit/fruit juice
- vegetables
- soups/stews
- jelly

(2 × [1])

[2]

AVAILABLE
MARKS

10

- 4 (a) Discuss **two** reasons why breakfast is important for children (4–11 years). (AO1, AO2)

Answers may include any two of the following points:

- boosts metabolism – breaks fasting and refuels the body from the night before
- breakfast should meet 25% of daily energy needs – children are active
- helps concentration – improves ability to perform in school
- provides energy – important during period of rapid growth
- prevents snacking on high fat or sugar foods later in day thus preventing childhood obesity
- establishes good mealtime routine when young which is important for later life

All other valid responses will be given credit.

[1] basic discussion, [2] competent discussion

Max [1] if reason doesn't refer to children

(2 × [2])

[4]

- (b) Describe **one** effect of eating too many sugary foods on the child's health. (AO1, AO2)

Answers should include one of the following points:

Sugary foods:

- can encourage dental caries due to the action of the acid produced by bacteria present in plaque eroding the enamel
- are high in calories, if these calories are not used they are converted and stored as fat so may cause obesity and increased risk of type 2 diabetes

All other valid responses will be given credit.

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

(1 × [3])

[3]

- (c) Discuss **two** points to consider when preparing meals for a child with a food allergy. (AO1, AO2)

Answers may include any two of the following points:

- read the food labels carefully
- ask shop assistant for information where food is not labelled
- identify and exclude the foods that cause the allergy from all meals
- identify replacements for foods that cannot be eaten
- be aware of traces of food allergens that may be present in manufactured food, e.g. traces of nuts in other products such as chocolate
- take care when preparing food to avoid allergen cross-contamination

All other valid responses will be given credit.

[1] basic discussion, [2] competent discussion

(2 × [2])

[4]

AVAILABLE
MARKS

(d) Identify **two** foods that could not be eaten by a child who is lactose intolerant. (AO1)

Answers may include any two of the following foods:

- milk and products containing milk
- dairy products, e.g. butter and ice cream

All other valid responses will be given credit.

(2 × [1])

[2]

AVAILABLE
MARKS

13

- 5 Discuss how the Eatwell Guide helps consumers achieve a healthy, balanced diet. (AO1, AO2, AO3)

AVAILABLE
MARKS

Answers should include any of the following points:

- gives a clear visual picture of the proportions of different foods needed to achieve a well balanced diet so it makes it easy to see the types of foods that should be included
- foods are divided into the main food groups, shown on the plate and advice is given with each group so consumers can make informed choices when shopping, cooking or eating out
- consumers can use additional advice on oils and spreads which helps them monitor levels of these foods in their diet
- fruits and vegetables and starchy carbohydrate foods should be eaten in bigger quantities as they are the two largest food groups on the plate
- if food and drinks that are high in fat, sugar and salt are eaten, these should be eaten less often and in small amounts as they may lead to diet related disorders
- provides a recommendation for fluid intake and how to achieve this target
- a snapshot of the use of food labelling information is included – provides an explanation for consumers to make healthy food choices, e.g. foods low in fat, saturated fat, sugar and salt
- average daily energy requirements are included for men and women – helps people understand how many kilocalories/kilojoules they actually need per day
- it is not meant to represent the balance required in any one specific meal – it represents the overall balance of a healthy diet over the day, or week
- it is suitable for most people to use – except children under 2 – including people of all ethnic origins and vegetarians so it can be used to help them to make healthier choices
- following advice from the Eatwell Guide could help reduce a range of diet related disorders including CHD, obesity and dental caries

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.

NB: candidate must go beyond describing the sections of the plate to be awarded higher than Level 1.

(1 × [9])

[9]

9

- 6 Evaluate the impact of fast foods on the health and lifestyle of an adolescent. (AO1, AO2, AO3)

AVAILABLE
MARKS

Answers may address some of the following points:

Health

Fast foods:

- are energy dense and overconsumption can contribute to the development of obesity
- are high in fat, salt and sugar – increasing risk of dietary disorders, e.g. CHD, hypertension, diabetes
- may lead to poor eating habits which contradict dietary advice and may negatively impact on health
- provide some nutrients, e.g.
 - chicken curry provides protein in chicken, carbohydrates in rice
 - cheeseburger provides iron in meat, calcium in cheese, vitamins in salad
 - sandwiches/subs may provide range of nutrients in fillings and carbohydrate in bread
 - pizza base provides carbohydrate, vegetable topping may contribute to 5-a-day

Lifestyle

Fast foods:

- encourage disregard for environment – packaging waste, litter
- can be expensive if relied upon over a period of time
- do not require cooking skills so may restrict the development of these skills
- are widely available, fast food outlets sometimes open 24 hours
- may offer a wide range of dishes – may widen palate as new foods can be experienced
- may be on special offer so save money
- are convenient due to no preparation
- do not require cooking equipment – useful if in limited accommodation, e.g. student housing
- provide the opportunity to socialise easily with friends at fast food outlet

Max of [6] for only health or lifestyle, or only positive/negative points

[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 evaluation 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 evaluation 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 evaluation applied accurately within the context of the question
- Quality of written communication is highly competent.

NB: Must include health and lifestyle points and positive and negative comments related to either the health and lifestyle of adolescents to be awarded full marks.

All other valid points will be given credit.

(1 × [9])

[9]

Section A

AVAILABLE MARKS
9
61

Section B – Consumer Awareness

AVAILABLE
MARKS

- 7 (a) Explain the difference between ‘needs’ and ‘wants’ when budgeting. (AO1, AO2)

Answers should include some of the following points:

- ‘needs’ are priorities/essentials such as food, clothing and electricity
- ‘wants’ are additional things that improve the quality of life such as holidays, eating out or a nice car.
- ‘needs’ should be purchased before ‘wants’ to stay within budget

All other valid responses will be given credit.

[1] basic explanation, [2] competent explanation

(1 × [2])

[2]

- (b) Write down **two** methods of paying for goods or services. (AO1)

Answers should include any two of the following points:

- cash
- cheque
- debit card
- credit card
- store cards
- loan/hire purchase

All other valid responses will be given credit.

(2 × [1])

[2]

- (c) Outline **three** possible consequences for a family who cannot manage their finances effectively. (AO1, AO2)

Answers should include any three of the following points:

- disconnection of services, e.g. electricity, internet, telephone
- debt – inability to manage household expenses and prioritise bills which leads to debt mounting up
- cycle of debt – fall into cycle of borrowing money to repay debt which can result in further borrowing
- failure to repay debts on time can lead to increased charges and poor credit rating
- stress related illness – anxiety can lead to physical illness
- loss of home – repossession by bank or landlord can result in homelessness
- relationship difficulties – stress of poor money management puts pressure on couple’s relationship or parent/child relationship
- lack of money for essentials – food, clothing and basic necessities
- lack of money for luxuries – days, holidays, celebrations

All other valid responses will be given credit.

[1] basic outline, [2] competent outline

(3 × [2])

[6]

(d) Identify **two** changes in lifestyle that may affect an individual's ability to manage their finances effectively. (AO1)

Answers may include any two of the following points:

- redundancy/job loss
- retirement
- moving house
- divorce
- bereavement
- illness
- going to college/university
- new baby
- getting married

All other valid responses will be given credit.

(2 × [1])

[2]

12

AVAILABLE
MARKS

8 (a) Describe **two** financial incentives offered by supermarkets. (AO1, AO2)

Answers may include any two of the following points:

- price promotions – BOGOF/20% off meal deal – to reduce price a consumer pays – saves them money
- price reductions – sales, end of day reductions
- cross brand promotions – brands sold together in the same offer – encourages customers to try the new product
- money off vouchers – encourages repeat purchase of the product for current or future sales
- loyalty cards – gives points with purchases so customers are rewarded for purchases – points can be converted into money off vouchers or free gifts
- gift with purchase – encourages customers to purchase goods due to free gift – increases value for money of purchase

All other valid responses will be given credit.

[1] basic description, [2] competent description

(2 × [2])

[4]

(b) Analyse how a consumer can help protect the environment when shopping for food. (AO1, AO2, AO3)

Answers may include any of the following points:

- consider 'food miles' – choose local products that haven't travelled many miles
- buy fresh food while it is in season – reduces energy and greenhouse gases contributing to climate change
- shop closer to home so using less fuel when shopping
- avoid excess packaging – consider buying products in cellophane without cardboard outers or vice versa or look for products that aren't individually wrapped to reduce waste going to landfill
- choose recyclable packaging – look for the recycling symbol to indicate the product can be recycled or the percentage of recycled material that has been used
- choose refill packs of products, e.g. coffee, spices – less wasteful than glass packaging
- use reusable bags for shopping or reuse plastic bags rather than new ones, to reduce litter and carbon footprint
- consider how the food has been produced – use of environmentally friendly pesticides or organic produce
- look for the Soil Association symbol – indicates standards of organic production and processing
- consider 'dolphin friendly tuna' or 'sustainable foods', e.g. fish certified
- only buy what is needed to reduce food waste as producing, distributing and cooking food uses fuel, energy and water. Each of these emit greenhouse gases which contribute to climate change

All other valid points 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 analysis applied in simple terms to the question.

AVAILABLE
MARKS

Level 2 ([3]–[4])

Overall impression: competent

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

NB: to be awarded Level 3 candidates must demonstrate the skill of analysis.

Max [4] if no reference to food

(1 × [6])

[6]

AVAILABLE
MARKS

10

9 (a) Write down **two** products that would display this label: (AO1)

Answers should include any two of the following:

- refrigerators, freezers and combined appliances
- washing machines, tumble dryers and combined appliances
- dishwashers
- ovens
- water heaters and hot water storage appliances
- air conditioners
- light bulbs
- television

All other valid responses will be given credit.

(2 × [1])

[2]

(b) Discuss how this label could help consumers make an informed choice when buying goods. (AO1, AO2)

Answers may include any of the following points:

- shows the energy efficiency of the product: “A” represents the most efficient – uses least energy, “G” represents the least efficient – uses most energy
- it indicates how expensive an electrical appliance is to run
- colour banded so energy efficiency easily indicated
- allows consumers to compare similar products for energy efficiency

All other valid responses will be given credit.

[1] basic discussion, [2] competent discussion

(1 × [2])

[2]

AVAILABLE
MARKS

(c) Describe how the magazine 'Which?' supports and informs consumers.

(AO1, AO2)

Answers should include some of the following points:

- provides a legal service for members
- provides extensive general advice on money management/savings/investments/credit, etc.
- Which? money helpline – impartial expert advice on personal money issues, e.g. pension
- makes super-complaints on behalf of large groups of consumers
- provides a website which offers information on goods, services and publications
- carries out product testing and reports on a selection of goods and services establishes a “best-buy” product from independent assessment
- carries out surveys and uses these to inform campaigns, e.g. unfair bank charges
- publishes books on a range of topics, e.g. Which? Money and produces a monthly magazine available by subscription
- it identifies and gives awards for good practice and good products or services
- it presents podcasts to inform consumers about topical consumer related issues

All other valid responses will be given credit.

[1] basic description, [2] adequate description

[3] competent description, [4] highly competent description

(1 × [4])

[4]

8

AVAILABLE
MARKS

10 Evaluate the internet as a shopping option for consumers. (AO1, AO2, AO3)

Answers should include some of the following points:

Positive

- can be accessed 24 hours a day – useful for shift workers
- goods can be ordered by computer, smart phone or tablet – allows for more convenient shopping
- don't have to leave comfort of home – useful for those with mobility problems or those with small children
- wide variety of products available – worldwide marketplace
- lower prices as some firms sell directly online so have lower or no overheads
- saves time and petrol costs going round shops

Negative

- can't see what is being bought – may be difficult to judge quality or appearance
- may have to pay for delivery – and have the cost and bother of returning goods if unsuitable
- have to wait for delivery – may be considerable time depending on where goods are coming from
- have to be available at home to take receipt of goods – could be difficult if out at work
- tempting to impulse buy unnecessary goods when online shopping as it is very easy to buy with 'one-click'
- need to have debit/credit card – could be susceptible to online fraud
- do not have the social interaction of shopping

All other valid responses 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 evaluation 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 evaluation 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 evaluation applied accurately within the context of the question
- Quality of written communication is highly competent.

NB: To be awarded Level 3 candidates must include both positive and negative points

(1 × [9])

[9]

Section B

Total

AVAILABLE
MARKS

9

39

100