General Certificate of Secondary Education 2011

## Home Economics

# Unit 1: Diet and Health and Consumer Awareness 

[GHE11]

## TUESDAY 17 MAY, MORNING

## MARK SCHEME

## Section A - DIET AND HEALTH

1 (a) Label the following sections of the eatwell plate. (AO1)
Answers should include the following three titles in the correct sections:
Largest section:

- bread, rice, potatoes, pasta and other starchy foods.

Medium section:

- milk and dairy foods
- do not accept milk only
- dairy only can be accepted.

Smallest section:

- foods and drinks high in fat and/or sugar.
$(3 \times[1])$
(b) The Food Standards Agency has identified '8 tips for eating well'. (AO1)

Write down three of these tips:
Answers should include any three of the following:

- base your meals on starchy foods
- eat lots of fruit and vegetables
- eat more fish - including a portion of oily fish each week
- cut down on saturated fat and sugar
- try to eat less salt - no more than 6 g a day
- get active and try to be a healthy weight
- drink plenty of water
- don't skip breakfast
- not "eat a variety of foods"
- eat 4-6 portions of fruit and vegetables is acceptable
- drink 6-8 glasses of water is acceptable.
$(3 \times[1])$


## Section A - DIET AND HEALTH

2 Fruit and vegetables are an important part of the diet.
(a) Write down four different ways to creatively use fruit and vegetables in the diet. (AO1)

Answers may include any four of the following:

- make meals colourful and attractive by adding brightly coloured ingredients
- creatively combine ingredients, e.g. carrot and parsnips to shepherd's pie
- include favourite foods with new ones, e.g. mango and apple
- make fruit into smoothies
- add in an interesting way to the meal - e.g. in wraps, tortillas, pitta bread, add chopped up fruit to breakfast cereals
- do not accept "mix in with other foods"
- accept add more to pizza, curry, etc.
- accept "present in attractive ways".

All other valid responses will be given credit
(4×[1])
(b) Explain two health benefits for children of eating fruit and vegetables. (AO1, AO2)

Answers may include the following:

- less risk of obesity as fruit and vegetables are almost fat-free
- strengthens their developing teeth and prevents against dental caries
- high in insoluble fibre - will reduce their risk of bowel problems, constipation
- high in soluble fibre, controls blood sugar levels - will help to prevent diabetes
- fruit is high in vitamin C - helps vulnerable immune system
- antioxidant properties - reduces risk of CHD, cancers
- do not accept "leads to a healthy balanced diet"
- accept eating habits created in childhood prevents CHD or obesity, etc. in adulthood.
All other valid responses will be given credit
Must be specific to a health benefit to be awarded full marks
[1] basic explanation
[1] competent explanation
(2×[2])


## Section A - DIET AND HEALTH

3 (a) Justify why the modifications to this recipe would be useful to someone concerned about Coronary Heart Disease. (AO2, AO3)

Justification should relate to fat, sodium or cholesterol.

- saturated fat in bacon reduced by using chicken
- saturated fat in butter reduced by using polyunsaturated margarine
- sodium in bacon reduced by using chicken
- overall fat content reduced
- fat content in cheese reduced by using low fat variety
- cholesterol is reduced by using chicken and low fat products
- margarine contains Vitamin A - anti-oxidant properties - prevents CHD
must be related to CHD for full marks to be awarded.
[0] is awarded for a response not worthy of credit
[1-2] basic justification
[3-4] competent justification
[5-6] highly competent justification
(b) Identify two further changes that could be made to improve this recipe. (AO1)

Answers may include two of the following changes:

- add vegetables
- pasta - wholewheat
- salt - low sodium/herbs
- flour - wholemeal
- milk - semi-skimmed
- do not accept brown bread or brown pasta
- do not accept reduction of quantities except with "salt".
(2×[1])
(c) Chicken is high-risk food. (AO1, AO2, AO3)

Discuss how salmonella food poisoning can be prevented when handling chicken.

- keep raw chicken away from cooked and ready-to-eat foods
- ensure chicken thoroughly cooked until piping hot in the middle to $70^{\circ} \mathrm{C}$
- if chicken has been cooked and is being kept warm, should be kept at $63^{\circ} \mathrm{C}$
- always wash hands before handling raw chicken
- if suffering from food poisoning do not handle food until 48 hours after symptoms have stopped
- accept use-by date
- accept handling properly when defrosting
- need specific temperatures for highly competent
- accept colour coding equipment.
[0] is awarded for a response not worthy of credit
[1-2] basic discussion
[3-4] competent discussion
[5-6] highly competent discussion


## Section A - DIET AND HEALTH

(d) Outline how the Environmental Health Officer protects the consumer in keeping food safe. (AO1, AO2, AO3)

Answers may address some of the following points:

- EHO Dept is authorised by local council to enforce health and safety and food legislation
- main role is to ensure high levels of food safety
- deals specifically with health matters in relation to food and drink that is unfit for consumption
- food premises can be inspected at any time without giving notice
- have power to make sure food businesses comply with food safety legislation
- do not accept training.

All other valid responses will be given credit
[0] is awarded for a response not worthy of credit
[1] basic outline
[2-3] competent outline
[4] highly competent outline

## Section A - DIET AND HEALTH

4 Young women are at risk of developing osteoporosis in later life.
(a) Suggest two pieces of advice other than diet that should be followed to reduce the risk of osteoporosis. (AO1)

Answers may address some of the following points:

- avoid smoking
- reduce alcohol intake
- take up some weight-bearing exercise
- ensure "peak bone mass" is achieved
- do not accept family history unless linked to lifestyle advice
- do not accept supplements
- accept sunlight - source of vitamin D
- accept "check if medication affects bone mass".
(2×[1])
(b) Discuss the role of vitamin D and calcium in bone health. (AO1, AO 2 , AO3)

Answers should include:

- vitamin D increases the absorption of calcium from foods
- calcium is important for building bones
- calcium increases bone density which increases bone mass
- food sources not relevant.
[0] is awarded for a response not worthy of credit
[1] basic discussion
[2-3] competent discussion
[4] highly competent discussion
(1×[4])


## Section A - DIET AND HEALTH

(c) Foods such as bread and margarine have calcium and vitamin D added to them. (AO1, AO2, AO3)

Discuss two reasons why food is fortified.
Answers could include:

- to enrich products for individuals with special diets
- to enrich a staple food with a nutrient that it does not naturally contain
- to replace nutrients lost during processing
- to improve the nutritional status of a specific group of people
- to prevent deficiency disorders
- accept it is the law to fortify certain foods, e.g. vitamin A and vitamin D to margarine, calcium to bread
- do not accept to improve marketing appeal.
[0] is awarded for a response not worthy of credit
[1] basic discussion
[2] competent discussion
( $2 \times[2]$ )


## Section A - DIET AND HEALTH

5 Discuss the advantages and disadvantages of convenience foods on the health and lifestyle of a busy family. (AO1, AO2, AO3)

Answers may address some of the following points:
Positive
Health

- in some cases nutritive value is maximised through, e.g. freezing peas freshly picked and frozen
- convenience jar sauces encourages the use of fresh meats, vegetables, etc.
- can check food labels to ensure unwelcome levels of fat or salt not present.
Lifestyle
- ready-made meals save time
- ease of use - some foods are ready to eat or cook
- eliminates the need for advanced skills - meal can be put together by anyone.


## Negative

Health

- may be high in salt if processed
- often high in saturated fat
- sweet desserts or children's yoghurts sometimes very high in sugar
- nutritive value is often lost during processing - additives used to improve the food's sensory appeal
- may have been stored incorrectly and therefore be unsafe.

Lifestyle

- can be more expensive
- food has short shelf life so must be eaten quickly
- reduces skills
- can cause waste, therefore bad for environment
- easily stored
- smaller portion sizes
- accept expensive or inexpensive if explained.

All other valid points will be given credit
[0] is awarded for a response not worthy of credit
To be awarded Level 3 candidates must:

- include advantages and disadvantages
- include reference to health and lifestyle.


## Section A - DIET AND HEALTH

## 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.
$(1 \times[9])$


## Section A - DIET AND HEALTH

AVAILABLE MARKS

6 Suggest and justify ways of achieving a healthy diet for an individual who plays a lot of sport. (AO1, AO2, AO3)

Answers may address some of the following points:

- foods from all five food groups should be taken to ensure a balanced diet
- low fat food should be eaten to avoid excess body fat
- complex carbohydrates essential to release energy slowly as needed - starch-based foods, rice, pasta, cereal products
- carbohydrate intake may need to be increased by $70 \%$ before an event to increase glycogen stores - carbohydrate loading
- protein intake does not need to be increased unless involved in heavy training
- sufficient carbohydrate must be taken to ensure protein sparing effect
- foods rich in B group vitamins - wheat, cereals, red meat, dairy products, eggs - helps the release of energy from carbohydrates
- iron intake should be high to ensure oxygen is available to muscles and to prevent tiredness
- vitamin C foods important to assist with absorption of iron
- calcium intake vital to ensure peak bone mass is achieved and bones maintain their strength for sport
- fluid balance should be maintained - more than 6-8 glasses - to replenish fluid lost by sweating
- must be related to food but not for every nutrient
- accept food diary.
* If in list or point form max marks is 6

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 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.


## Section B - CONSUMER AWARENESS

7 (a) Write down two types of media which can be 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.
(2×[1])
(b) Explain how this symbol could influence consumers when buying a t-shirt. (AO1, AO2)

FAIRTRADE

- shows that products are sourced from producers in developing countries
- informs customers that international fair trade standards have been met
- fair prices have been paid to producers
- companies have invested in local communities
- safe and healthy working conditions
- environmental protection has been considered
- children are not exploited but may be given training or employment in controlled conditions.
[1] brief explanation
[2] competent explanation
(1×[2])
(c) Discuss how the following factors influence the consumer when shopping for food. (AO1, AO2)

1. Cultural

- religion
- up-bringing
- holidays
- family, friends
- trends
- beliefs
- customs.

2. Psychological

- celebrations
- advertisements
- bribe/encourage/reward
- planned/impulse buying
- emotions
- peer pressure/role models/celebrity icons
- snob appeal of buying high end products
- store layout.
[1] basic discussion
[1] competent discussion
(2×[2])


## Section B - CONSUMER AWARENESS

8 (a) Write down three barriers that may prevent an individual from being an effective consumer. (AO1)

Answers may include three barriers from the following:

- disability
- age
- ethnicity
- knowledge
- resources
- geographical
- language
- religion
- do not accept gender
- do not accept race and ethnicity together.
(3×[1])
(b) Discuss two possible consequences of not managing your money properly. (AO1, AO2, AO3)

Answers may include any two of the following:

- unpaid bills
- inability to manage general household expenses
- unmanageable debt
- stress related illness
- loss of home
- relationship difficulties.

All other valid responses will be given credit
[1] basic discussion
[1] competent discussion
(2×[2])

## Section B - CONSUMER AWARENESS

(c) A large number of shops offer store cards as a method of payment.

Evaluate this option. (AO1, AO2, AO3)

- safer than carrying cash
- allows a consumer to borrow money from the card issuer to buy products
- benefits may be offered, e.g. points/discounts/store card holder evening
- rates of interest are often higher
- store cards can encourage impulse buying and excessive spending
- regular monthly payments need to be made to pay off money borrowed on the store card
- can only be used to purchase goods in that shop/chain
- evaluates either the store or the consumer.
- include advantages and disadvantages
[0] is awarded for a response not worthy of credit
[1-2] basic evaluation
[3-4] competent evaluation
[5-6] highly competent
( $1 \times[6]$ )


## Section B - CONSUMER AWARENESS

9 (a) Evaluate the use of shopping channels as a way of buying goods. ( $\mathrm{AO} 2, \mathrm{AO} 3$ )

Answers may address any of the following points:
Advantages

- can see products being demonstrated by experts
- products can be viewed in comfort of own home
- may be entertaining
- detailed information provided
- suitable for housebound
- the price you see may not be the price you pay
- available 24/7.

Disadvantages

- persuasive selling can encourage impulse buying
- can be difficult to determine quality
- cannot try on products before purchase
- returning products that are unsuitable can be time-consuming and expensive
- have to plan to watch particular schedule.

All other valid responses will be given credit
[0-1] basic evaluation
[2-3] competent evaluation
[4] highly competent*

* Must include positive and negative comments to be awarded full marks. (1×[4])
(b) Explain how the Consumer Protection (Distance Selling) Regulations 2000 protects consumers when buying goods from a shopping channel. (AO1, AO2)

Answers may include some of the following:

- protects consumers when they shop from TV, internet, telephone, catalogue or magazine
- ensures consumers receive clear information about suppliers'
details - name, address
- prevents hidden charges in paying for item or delivery
- entitles customers to cancel an order within seven days from receiving the goods
- entitles them to a full refund if goods or services are not received within 30 days
- not Sale and Supply of Goods Act.

All other valid responses will be given credit
[1] basic explanation
[1] competent explanation
(1×[2])

## Section B - CONSUMER AWARENESS

(c) Describe how the magazine "Which?" supports and informs consumers. (AO1, AO2, AO3)

Answers may address some of the following points:

- monthly magazine produced by the Consumer Association
- consumers subscribe for membership
- carries out product testing and reports on a selection of goods and services
- it establishes a "best-buy" product from independent assessment
- provides a website "www.which.co.uk" which offers information on goods, services and publications
- carries out surveys and uses these to inform campaigns, e.g. unfair bank charges
- publishes books on a range of topics
- it identifies and gives awards for good practice and good products or services
- it presents podcasts to inform consumers about topical consumer related issues
- provides a legal service for members
- provides extensive advice on money management/savings/ investments/credit, etc.
- Which? helpline phonecall service will give immediate advice on selecting best product or service
- Which? money helpline - impartial expert advice on everyday money issues
- Which? local - "members only" site which recommends local tradespeople, etc
- do not accept "gives consumer advice"
- make "retailer of the year" award
- makes super-complaints from large groups of consumers
- mystery shoppers to evaluate services.

All other valid points will be given credit
[0] is awarded for a response not worthy of credit
[1] basic description
[2-3] competent description
[4] highly competent description (1×[4])

## Section B - CONSUMER AWARENESS

10 Discuss how marketing influences children or consumers buying goods for children. (AO1, AO2, AO3)

Answers may address some of the following points:

- use brightly coloured packaging
- develop fun image to attract children
- TV advertising at a time when children are watching, e.g. Saturday morning, or between children's programmes
- use of free samples
- endorsement by children's sports or media celebrity
- use of cartoon character on packaging
- product placement of children's goods on TV
- position in store - e.g. end of aisle low shelves
- pester power - influences adults to buy products that children want.

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 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.

| $[9]$ | 9 |
| ---: | :---: |
| Section B | 40 |
| Total | 100 |
|  |  |

