



GCSE MARKING SCHEME

HOME ECONOMICS - FOOD & NUTRITION

SUMMER 2014

INTRODUCTION

The marking schemes which follow were those used by WJEC for the Summer 2014 examination in GCSE HOME ECONOMICS - FOOD & NUTRITION. They were finalised after detailed discussion at examiners' conferences by all the examiners involved in the assessment. The conferences were held shortly after the papers were taken so that reference could be made to the full range of candidates' responses, with photocopied scripts forming the basis of discussion. The aim of the conferences was to ensure that the marking schemes were interpreted and applied in the same way by all examiners.

It is hoped that this information will be of assistance to centres but it is recognised at the same time that, without the benefit of participation in the examiners' conferences, teachers may have different views on certain matters of detail or interpretation.

WJEC regrets that it cannot enter into any discussion or correspondence about these marking schemes.

GCSE HOME ECONOMICS: FOOD AND NUTRITION

SUMMER 2014

Q.1 (a)	Award 1 mark for each correct response.	[2]
	(i) Cup cake (ii) Cereal	
(b)	Award 1 mark for correct response. Any one from: <ul style="list-style-type: none">• Prevent tooth decay/damage/rotting teeth• Prevent obesity/makes you fat• Prevent diabetes/type 2 diabetes	[1]
(c)	Award 1 mark for a correct response. Any one from: <ul style="list-style-type: none">• Artificial sweeteners (Accept trade names like Truvia/Stevia/Saccharin Stevixylitol)• Honey• Coconut sugar• Maple syrup• Fruit juices• Molasses• Date sugar• Golden syrup• Brown rice syrup	[1]
Q.2	Award 1 mark for each correct response. <ul style="list-style-type: none">• False• True• True	[3]
Q.3 (a)	Award 1 mark for each correct response. (i) Pasta (ii) To fight infection (iii) Liver	[3]
(b)	Award 1 mark for each different point to a maximum of two. Any two from: <ul style="list-style-type: none">• Growth/muscle strength• Repair• Secondary source of energy/provides energy/more energy Growth and repair in one line allow 2 marks	[2]

Q.4 (a) Award **1 mark** each for any two of the following responses: [2]

- Remove/reduce the ice cream/replace the ice cream with a lower fat alternative/use frozen yoghurt/low fat crème fraiche, etc.
- Use yoghurt
- Replace whole milk with semi-skimmed/skimmed/low-fat (must be a named milk). 1 mark only for change in named milk.
- Replace milk with ice or juice
- Replace milk with fruit with a high water content

(b) Award **1 mark** for any one of the following responses: [1]

- Replace dairy product with a lacto free product
- Use soya/goats/kosher or other named alternative that does not contain sugar (lactose)

(c) **Award 0 – 2 marks** for a basic response which makes little reference to the value of milkshakes and/or smoothies. Simple list. [6]

Award 3 – 4 marks for a good response with some reference to the value of milkshakes and/or smoothies. Writing is structured, fit for purpose, reasoned and clearly expressed. Specialist vocabulary is correct.

Award 5 – 6 marks for an excellent response with clear balance and specific detail of the value of milkshakes and/or smoothies. Writing is well-structured, fit for purpose, clearly expressed. Specialist vocabulary is used appropriately.

Likely answers may include:

- The Nutritional value of the micro nutrients
- Calcium
- Vitamin D/Vitamin C
- Macro nutrients-proteins/fats, etc.
- For growth, etc.
- Providing a meal, nutrients quickly
- Suitable for eating/drinking 'on the go'
- Includes fruit/part of five-a-day
- High energy
- Filling
- Fibre
- Some UHT, good for lunch boxes
- Can be bad for teeth (but better than fizzy drinks)
- Some very high in sugar/sugar rush
- Some high in fat
- High calorific value
- Colourful/attractive
- Adding flavour/variety

Q.5 (a) Award **1 mark** for a simple description.

[4]

Award **2 marks** for a detailed explanation (2 x 2 marks).

Reference may be made to:

(i) **MAP**

Modified Atmosphere Packaging – award **1 mark** if correctly identified.

MAP is a technology that has been developed to ensure that packaged food and food products stay fresh and attractive for as long as possible.

A preservation technique used where the air surrounding the food in the package is changed to another composition.

Preserves colour, taste and nutrient content.

It prolongs or preserves the shelf-life of perishable foods.

Also accept reasons behind replacing the oxygen levels with nitrogen and CO₂ to lower pH or inhibit growth of bacteria.

(ii) **Vacuum Packaging**

A method of packaging that removes air from the package.

It can involve both rigid and flexible types of packaging.

The intent is usually to remove oxygen from the container to extend the shelf life of foods.

Vacuum packing reduces atmospheric oxygen/air, limiting the growth of aerobic bacteria or fungi.

Stores dry foods over a long period of time.

Used for cereals, nuts, cured meats, cheese, smoked fish, coffee and crisps. On a home basis, vacuum packing can also be used to store fresh foods, such as vegetables, meats and liquids, because it inhibits bacterial growth.

Reference to preservation without removing air - **1 mark**

(b) Award **1 mark** for a simple description.

[1]

Award **2 marks** for a detailed explanation (2 x 2 marks).

(i) **RDA/RDI**

The Reference Daily Intake or Recommended Daily Intake (RDI) is the daily intake level of a nutrient that is considered to be sufficient to meet the requirements of 97 - 98% of healthy individuals. Must relate to nutrients not foods.

The RDI is based on the older Recommended Dietary Allowance (RDA) found on packaging to guide the consumer.

(ii) **GI**

The Glycaemic Index (GI) is a ranking of carbohydrate containing foods based on the overall effect on blood glucose levels. Reference to starch/carbohydrate in food.

Slowly absorbed foods have a low GI rating, whilst foods that are more quickly absorbed have a higher rating.

Q.6	<p>(a) Award 1 mark for a correct response. [1]</p> <p>Any one from:</p> <p>Strong flour (white or wholemeal)/bread flour/flour high in GLUTEN content</p>	
	<p>(b) Award 1 mark for simple response, award 2 marks for more detailed response. [2]</p> <p>Likely answers may include:</p> <p>Food fortification or enrichment is when nutrients are added to foods, e.g. margarine, breakfast cereals. Started during World War II.</p> <p>Extra ingredients added – no marks, unless reference to adding nutritional value.</p>	
	<p>(c) Award up to 3 marks for a detailed response. [3]</p> <p>Likely answers may include:</p> <p>Yeast makes dough rise. Yeast works by consuming sugar and excreting carbon dioxide and alcohol. Stretches the dough.</p> <p>No marks for reference to kneading or conditions for growth.</p>	
	<p>(d) Award 0 – 2 marks for a basic response which makes little reference to how to achieve a quality finished product. [6]</p> <p>Award 3 – 4 marks for a good response that covers all stages of bread making. Some specialist vocabulary used.</p> <p>Award 5 – 6 marks for an excellent response with a detailed description covering all stages of how to achieve a quality bread roll. Writing is well-structured, fit for purpose, clearly expressed. Specialist vocabulary is used appropriately.</p> <p>Likely answers may include:</p> <ul style="list-style-type: none"> • Correct choice of ingredients • Correct/accurate weighing • Use of fresh or quick action yeast • Addition of Vitamin C tablet • Addition of enough liquid at the correct temperature • Extensive kneading to develop gluten/elasticity/stretching • Use of a dough hook • Not using too much flour on the surface • Keeping dough warm throughout process • Leaving to rise/proving/knocking back the dough • Portion control • Suitable shaping • Glazing • Cooking at correct temperature • Cooking correct amount of time • Do not over prove • Hollow sounding 	

Q.7 (a) Award **1 mark** each for any three correct responses from the following: [3]

- Improve taste/flavour
- Safer/prevents food poisoning
- Easier to digest
- To kill bacteria
- To preserve it
- More attractive/improves appearance
- Change/Improves texture
- Activates certain ingredients, e.g. liquid to solid as in quiche

(b) (i) Award **1 mark** each for any two correct responses from the following: [2]

- Be careful when heating the fat/oil (reference to smoking points of oils)
- Never leave the fat heating in the wok
- Consideration of temperature control during the process
- Use correct methods for checking the temperature of the oil
- Use a wok cradle to prevent wobbling on hob/burner
- Always make sure ingredients are prepped ahead of starting to stir-fry
- Make sure food is dry, adding water will spit
- Not too much oil/fat
- Handle facing in
- Heat resistant utensils

Reference to use of low or medium heat – no marks

(ii) **Award 0 – 1 mark** for a basic response. [4]

Award 2 – 3 marks for a more detailed response. Max 2 marks for a basic bulleted list.

Award 4 marks for a good response covering the main points.

Likely answers may include:

- Food is cooked quickly therefore fat soluble vitamins are not lost
- It is healthy because fried in small amount of oil
- Economical because only one ring used
- One pan only/less washing up
- Makes food safe for eating
- Makes food taste better
- Helps you present food in different ways
- Makes food more attractive/appetising
- Maintains colour
- Reference to texture/keeps vegetable crunchy
- Quick method of cooking

Quick and easy – **1 mark** only.

Accept other relevant answers.

Q.7 (b) (iii) **Award 0 – 2 marks** for a basic response which may resemble a list or no specific reference to preparation of high risk food. [6]
Communication is hampered by lack of meaning and poor expression. Little or no use of specialist vocabulary.

Award 3 – 4 marks for a good response which displays some knowledge of preparing and cooking high risk foods. Writing is structured, fit for purpose, reasoned and clearly expressed. Some specialist vocabulary used.

Award 5 – 6 marks for an excellent response which displays sound knowledge of preparing and cooking high risk foods. Writing is well-structured, fit for purpose and clearly expressed. Specialist vocabulary is used appropriately.

Likely answers may include:

- Do not use the same equipment for raw and cooked foods
- Wash hands before and after handling raw meat
- Use colour coded equipment to avoid cross contamination
- Correct storage temperatures
- Ensure chicken is refrigerated until just before use
- Wash chopping boards before use
- Food hygiene and cleaning procedures - equipment
- Correct reheating temperatures
- Correct cooking temperatures
- Core temperature of chicken should reach 70-72°C degrees (piping hot)
- Reference to checking chicken is cooked – cutting to check for pink inside
- Cooking chicken prior to adding vegetables
- Storage after cooking
- Check ingredients are fresh/sell by date

Q.8 (a) **Award 0 – 2 marks** for basic response resemble a list. Communication is hampered by lack of meaning and poor expression. Little or no use of specialist vocabulary. [6]

Award 3 – 4 marks for a good response with specific examples and clear ideas. Writing is structured, fit for purpose, reasoned and clearly expressed. Specialist vocabulary is correct.

Award 5 – 6 marks for an excellent response with sound reasoning and descriptions. Writing is well-structured, fit for purpose and clearly expressed. Specialist vocabulary is used appropriately.

Likely answers may include:

- Use a cool bag/cool box/polystyrene material to insulate
- Keep covered in boot of car
- Ensure all refrigerated food is kept together
- Do not buy frozen foods as they would defrost
- Use a collection service
- Use a home delivery service
- Take quicker route home
- Store in a fridge if available in work
- Buy foods with good packaging to keep foods in shape, avoid squashing, etc. e.g. eggs
- Park car in a shaded cool spot/not sunny area

(b) **Award 0 – 2 marks** for basic response which discusses one or more ways. Communication is hampered by lack of meaning and poor expression. Little or no use of specialist vocabulary. [6]

Award 3 – 4 marks for a good response with specific examples and clear ideas. Writing is structured, fit for purpose, reasoned and clearly expressed. Some specialist vocabulary used.

Award 5 – 6 marks for an excellent response with sound reasoning and descriptions. Writing is well-structured, fit for purpose and clearly expressed. Specialist vocabulary is used appropriately.

Likely answers may include:

- Buying in bulk
- Look out for offers
- Shop after eating
- Once you have decided what to cook, write a shopping list
- Decide who you are cooking for
- Think about the food you already have, e.g. dried pasta in the cupboard
- Work from a pre-planned menu
- Make the most of BOGOF offers/money off vouchers
- Look out for own branded products
- Shop in discount stores as appropriate
- Look out for bargains at the end of the day
- Buying food nearing use by date can sometimes save money
- Shop for seasonal ingredients
- Read the labels to ensure that the food is suitable for the family members/no waste
- Use local produce e.g. farm shops
- Use of online comparison sites
- Sensible use of tinned/frozen/dry foods often cheaper than fresh e.g. tinned tomatoes

Q.9 (a) (i) **Award 0 – 3 marks** for a basic response which mentions a few points. Limited knowledge evident. Little or no attempt at assessing. Writing conveys some meaning although errors and poor expression hamper communication. Very little reference to the examples given. Little or no use of specialist vocabulary. [6]

Award 4 – 7 marks answer shows some understanding and discussion. Evidence of a good range of knowledge and understanding. Some reference to all examples given. Writing is structured to communicate meaning and contains relatively few errors. Some specialist vocabulary used.

Award 8 – 10 marks for a response which shows good understanding. Good application of in-depth knowledge and evident throughout with some discursive comments and clear assessing. Specific reference to all the examples given in the question. Writing is well-structured, fit for purpose, clearly expressed and largely error free. Specialist vocabulary is used appropriately.

Award 11 – 12 marks for a very detailed response which covers points mentioned and allows the candidates to discuss, evaluate and assess. Specialist vocabulary is used with ease.

Likely answers may include:

Effective choice of ingredients and equipment

Two items could be

- Food processors
- Liquidiser/blender
- Mixer: hand/table top (accept trade names)
- Microwave oven
- Steamer
- Woks
- Pressure cooker
- Toaster
- Equipment to make food attractive for children
- Bread maker
- Contact grill
- Rice cooker/slow cooker
- Actifry, etc.

Reasons could include

- Quick methods to prepare and cook
- Healthy methods qualified with reference to nutritive content, etc.
- Appealing/fun to use
- Quicker to reheat
- Suitable for single use
- Can be used for a wide variety of functions
- Can be used unattended
- Saves washing up
- Reference to saving time and energy

Q.9 (a) (ii) **Convenience foods** [6]

- Dried/dehydrated, e.g. milk
- Frozen, e.g. peas
- Bottles/jars, e.g. pickles, ready-made sauces
- Cook chill, e.g. ready meals
- Ready to eat, e.g. biscuits, cakes, crisps
- Part processed, e.g. vegetables/stir fry/pastry
- Tinned foods

Credit can be given for discussing the different types of convenience foods and giving examples of how they can be used.

Recipe/meal suggestions will allow candidates to access the higher mark bands.

Award a maximum of 3 marks if reference to ready meals only.

(b) **Award 0 – 3 marks** for a basic response which mentions a few points. [12]

Limited knowledge evident. Little or no attempt at assessing. Writing conveys some meaning although errors and poor expression hamper communication. Very little reference to the examples given. Little or no use of specialist vocabulary.

Award 4 – 7 marks Answer shows some understanding and discussion. Evidence of a good range of knowledge and understanding. Some reference to all examples given. Writing is structured to communicate meaning and contains relatively few errors. Some specialist vocabulary used.

Award 8 – 10 marks for a response which shows good understanding. Good application of in-depth knowledge and evident throughout with some discursive comments and clear assessing. Specific reference to all the examples given in the question. Writing is well-structured, fit for purpose, clearly expressed and largely error free. Specialist vocabulary is used appropriately.

Award 11 – 12 marks for a very detailed response which covers points mentioned, the candidates discuss, evaluate and assess. Specialist vocabulary is used with ease.

(i) **Food waste**

Avoiding food waste

- Buy essential first
- Buy only what you need
- Avoid buy one get one free if perishable unless it can be frozen
- Where possible shop with a list
- Cook suitably sized meals/portion sizes
- Buy perishables in fairly small quantities
- Be aware of use by/sell by dates
- Use all of ingredients, e.g. whole chicken
- Veg peelings on compost heap
- Buy only what you need

Credit an awareness of correct storage of foods.

Q.9 (b) (ii) **Using left-overs**

Re-using

- Make soups/stock/sauces
- Mincemeat to make dishes such as shepherds pie/rissoles/pasties
- Add vegetables to dishes such as casseroles
- Use potatoes as toppings, freeze in piped form
- Add to pasta for pasta bakes
- Make fillings for packed lunches/tortillas, burritos
- Eat cold for lunch

Re-heating

- Always reheat thoroughly to avoid food poisoning
- Use microwave cooker
- Steam on a plate over a saucepan but must reach core temperature
- Only re-heat once



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