



Home Economics (Food & Nutrition)

General Certificate of Secondary Education GCSE 1973

Combined Mark Schemes And Report on the Components

June 2005

1973/MS/R/05

OCR (Oxford, Cambridge and RSA Examinations) is a unitary awarding body, established by the University of Cambridge Local Examinations Syndicate and the RSA Examinations Board in January 1998. OCR provides a full range of GCSE, A level, GNVQ, Key Skills and other qualifications for schools and colleges in the United Kingdom, including those previously provided by MEG and OCEAC. It is also responsible for developing new syllabuses to meet national requirements and the needs of students and teachers.

This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which marks were awarded by Examiners. It does not indicate the details of the discussions which took place at an Examiners' meeting before marking commenced.

All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the Report on the Examination.

OCR will not enter into any discussion or correspondence in connection with this mark scheme.

© OCR 2005

Any enquiries about publications should be addressed to:

OCR Publications PO Box 5050 Annersley NOTTINGHAM NG15 0DL

Telephone: 0870 870 6622 Facsimile: 0870 870 6621

E-mail: publications@ocr.org.uk

CONTENTS

General Certificate of Secondary Education

Home Economics (Food & Nutrition) (1973)

MARK SCHEME ON THE COMPONENTS

Unit 1973/01	Content Home Economics Foundation Tier	Page 1
1973/02	Home Economics Higher Tier	15

REPORT ON THE UNIT

Unit 1973	Content Chief Examiner's Report	Page 30
1973/03	Coursework	30
1973/01	Foundation Tier	37
1973/02	Higher Tier	39
*	Grade Thresholds	41

Mark Scheme 1973/01 June 2005

Section A

1 (a)	ONE mark for each correct answer TWO required Oranges Grapefruits Blackcurrants Tomatoes Cabbage	2x1	[2]
(b)	ONE mark for each correct answer TWO required Makes connective tissue Prevents scurvy Assists in absorption of iron Assists in building strong bones and teeth Helps protect against infections/disease Healing of wounds and sores Assists vitamin E Needed for the production of the blood Needed for the maintenance of the skin/healthy skin Needed for the linings of the digestive system	2 x 1	[2]
(c) (i)	ONE mark for each correct answer TWO required Prepare just before cooking Do not chop finely Tear into pieces e.g. cabbage Do not soak vegetables Do not peel	2 x 1	[2]
(c) (ii)	ONE mark for each correct answer TWO required Minimum cooking/quick cooking Use water for gravy Use a lid Steam/ use a pressure cooker Microwave Use as little water as possible Stir fry Roast Grill Griddle Barbeque	2 x 1	[2]
(d)	ONE mark for each correct answer TWO required Butter Oily fish Carrots Cheese Liver	2 x 1	[2]

(f) (i)	ONE mark for each correct answer TWO required Required for all body fluids Lubricates joints and membranes Vital to life Helps excrete waste/helps function of kidneys Some nutrients need to dissolve in water Keeps lining of mucous membranes moist Needed for all body processes Needed for digestion Helps regulate body temperature/perspiration/sweat Prevents dehydration	2 x 1	[2]
(ii)	ONE mark for each correct answer TWO required . Hot weather Lots of sport/exercise During illness/vomiting/diarrhoea Breast feeding/pregnant If constipated If dehydrated Special diets e.g. slimming	1 x 1	[1]
		7	「otal: [15]

2	(a)	ONE mark for each correct answer e.g. Cooking with water: Steaming: vegetables, fish, puddings Boiling: vegetables, rice, pasta, eggs Simmering: eggs, sauces Stewing: meat, fruit, vegetables Poaching: eggs, fish Braising: meats Casserole Pressure cooking: meat, vegetables, puddings Cooking with Fat: Frying: eggs, bacon, fish, potatoes, chips Stir fry Roasting Accept any correct example of food cooked by the method given Correct method of cooking must be given to get marks	1 x 2	[2]
(b)	(i)	One mark for each correct answer	1x1	[1]
	(ii)	Convection ONE mark for correct answer Radiation	1 x1	[1]
	(iii)	ONE mark for correct answer Conduction	1 x 1	[1]
	(c)	ONE mark for each correct answer TWO required Drying Defrosting Sterilising Heating Melting	2 x 1	[2]
(d)	(i)	Grilling a burger: fat drains away some shrinkage/becomes smaller proteins coagulate juices are lost/drier muscle fibres become firmer/harder/changes texture colour change to brown proteins denature/changes	2 x1	[2]

(ii)	ONE mark for each correct answer TWO required	2 x1	[2]
	Cheese on toast		
	Cheese melts/oozes		
	Fat melts		
	Softens/spreads		
	Bubbles		
	Protein coagulates		
	Hardens/rubbery		
	Stringy		
	Colour change to golden brown		
	Crisp/changes texture Dextrinisation		
	Bread burns/ black if overheated		
	bread burns/ black if overheated		
(iii)	ONE mark for each correct answer TWO required	2 x 1	[2]
	Custard when heated		
	Thickens/starch grains burst		
	Skin is formed		
	Water evaporates		
	Proteins coagulates		
	Changes in colour		
	Develops/changes flavour		

3 (a)	ONE mark for correct answer	1x1	[1]
	11g		
(b)	ONE mark for correct answer	1x1	[1]
	2g		
(c)	ONE mark for each correct answer	1 x 1	[1]
	Link with CHD		
	High cholesterol		
	Overweight		
(d)	Obesity ONE mark for each correct answer	1 x 1	[1]
(4)	GIVE Mark for odon outlook another	1 7 1	1.3
	Works with calcium		
	Strengthen bones and teeth Prevents rickets/osteomalacia		
	Correct functioning of muscles and nerves		
	Production of energy		
(e)	Helps the blood to clot ONE mark for each correct answer	1 x 5	[5]
(6)	ONE mark for each correct answer	1 7 3	[0]
	Meringue – adding /traps air		
	Beef burgers – binding/enriching/hold together		
	Savoury pies/sausage rolls –		
	glazing/enriching/binding		
	Mayonnaise – emulsifier		
	Egg custard/egg sauces –		
	thickening/setting/enriching		
(f)	ONE mark for each correct answer THREE required	3 x 1	[3]
	required		
	store in the fridge/store at 0-5°c/cool place		
	store away from other foods to prevent cross contamination		
	store in their boxes or packing trays or storage		
	compartments as the shells are easily damaged		
	do not wash eggs as this could remove the		
	natural protective coating keep beaten egg covered		

(g) (i)	ONE mark for each correct answer e.g.	1x2	[2]
	Reached British Farm Standards/Meat and Livestock Commission e.g. milk, meat, potatoes, eggs, apples, suitable vegetables and fruit		
(ii)	Food can be cooked in the oven e.g. pizza, pies, frozen apple crumble, cook chill foods, any other convenience/packaged food	1x2	[2]
(iii)	Dispose/throw litter/rubbish into suitable bin/litter basket /keep Britain tidy e.g. cans of pop, fizzy drinks, crisps etc.	1x2	[2]
(iv)	Gluten free, suitable for a coeliac E.g. wotsits, gluten free flour, rice cakes etc.	1x2	[2]
	<u>'</u>		Total: [20]

Section B

4 (a)	ONE mark for each correct answer TWO required Yeasts Moulds/fungi	2 x1	[2]
(b)	ONE mark for each correct answer THREE required Warmth Food Moisture/damp Time	3 x 1	[3]
(c)	ONE mark for each correct answer TWO required Yoghurts Cheese Named products e.g. Yakult, Actimel	2 x 1	[2]
(d) (i)	ONE mark for correct answer e.g. Cross –contamination is when bacteria is transferred/passed from one food to another Example	1 x 1	[1]
(ii)	raw food touches high risk foods liquid or juices from raw food drips onto a high risk food bacteria are carried from one food to another by hands/ knives/ chopping boards/dirty cloths/aprons/surfaces a bowl unwashed for mixing raw eggs could be used unwashed to make a sandwich filling, raw food touching cooked food.	2 x 1	[2]
(e)	One mark for temperature range 5- 63°C One mark for stating that the danger zone is the temperature range when bacteria will grow rapidly	2 x 1	[2]

(f)	ONE mark for each correct answer	1x 1	[1]
(i)	High risk food is a food in which harmful bacteria can grow quickly.		
	Example: Meat		
(ii)	Milk	1x1	[1]
	Cream Milky desserts e.g. custard		
	Shellfish/fish		
	Cooked rice		
	Eggs Gravy/stock		
	Soup		
	Sauces		
(g)	ONE mark for each correct answer FOUR		
	required	4 x 1	[4]
	Clean equipment/surfaces Clean premises		
	Reputable supplier		
	Check no animals are present		
	Check the food is fresh Check the sell by/best before dates		
	Make sure the food is protected/pest		
	control/protected display/counter		
	Staff selling the food follow strict hygiene practice e.g. clean overalls/hairnets/blue		
	plasters/clean hands/nails/no jewellery		
	Staff are correctly trained in food		
	hygiene/reporting any illness/reporting equipment breakdown within the store		
	Correct temperature for storage		
	Fresh packaged meat should be sealed		
(h)	ONE mark for each correct answer TWO		
	required	2 x 1	[2]
	Make it safe to eat/kill bacteria		
	Improve the colour/appearance		
	Improve the flavour Make it tender/easier to eat/improve the		
	texture		
	Aid digestion		
	Do not accept 'germs'		
	_ = 0or woodpr goillio		Total: [20]

5 (a)	ONE mark for correct answer Baking powder,	1 x 1	[1]
(b)	ONE mark for each correct answer TWO	1 x 2	[2]
	required Cheese		
	Chives/herbs Sultanas/raisins/currants/cherries/any other dried		
	fruit Any suitable fresh fruit		
	Wholemeal flour Nuts		
	Spices Vanilla essence/other essence		
	Chocolate/cocoa		
	Add brown sugar/more sugar Add more butter		
(c)		1 x 3	[3]
	required Remove the salt		
	Add a polyunsaturated/vegetable margarine instead of butter/low fat margarine/fat which		
	lowers cholesterol Use wholemeal flour		
	Add a tablespoon of bran/oat bran Add raisins/other dried fruit		
	Suitable fresh fruit		
	Add nuts Semi-skimmed/skimmed milk		
	Remove the sugar Replace with reduced sugar or sugar alternative		
	Do not accept glace cherries		
(d)		1 x 2	[2]
	Two required Strong plain flour		
	Bread		
	Pizza base Chelsea buns		
	Stolen Hot cross buns		
	Malt loaf Cheese loaf		
	Doughnuts		
	Cornflour Custard/sauces		
	Gravy Pavlova		
	Shortbread/biscuits Petit fours		
	r Gut IOUIS		

(e)	ONE mark for each correct answer THREE required e.g. Sieving Rubbing in Creaming Folding in Whisking Beating Rolling and folding pastry Kneading Do not accept 'mixing'	3 x1	[3]
(f)	ONE mark for each correct answer TWO required e.g. Sterilization Evaporated,/ canned/condensed UHT Dried/powdered Freezing	2 x 1	[2]
(g)	ONE mark for each correct answer A person who is unable to digest the milk sugar/ lactose.	1 x 1	[1]
	One from: lactolite or Soya milk, rice milk	1 / 1	Total: [15]

Why people become vegetarian = 5 marks + how a vegetarian can have a balanced diet = 10 marks

A low level response 0 -5

The candidate can make basic comments about why people become vegetarian and ways in which a vegetarian can have a balanced diet without detail or supporting evidence. Facts may not always relate to the contents. The comments and grammar will be simply expressed. There will be errors in spellings, punctuation and grammar which may be intrusive. The candidate can use a limited range of specialist terms.

A mid range response 6-11

The candidate can demonstrate some understanding of why people become vegetarian and understand some of the ways a vegetarian can have a balanced diet. May discuss different types of vegetarians. Some basic information may be offered to support the answer but in general terms with little detail. There may be occasional errors in spelling, punctuation and grammar. The candidate can use a good range of specialist terms with facility.

A high level response 12-15

The candidate will have read the information and can demonstrate an understanding of both why people become vegetarian and how a vegetarian can have a balanced diet. The explanation is developed logically and supported by relevant and appropriate information including specific nutritional information. A wide range of specialist terms are used with precision. The candidate can demonstrate the accurate use of spelling, punctuation and grammar. The response will be well presented.

Subject specific material which may be covered by the candidate: **Reasons for a vegetarian diet**

- Religion
- Dietary reasons e.g. saturated fat, cholesterol CHD, dietary fibre
- Health reasons e.g. Hormones used
- Animal welfare/moral reasons/cruelty
- Environmental issues e.g. expense to rear animal compared to producing crops
- · Dislike of taste/texture
- Due to media e.g. BSE/ salmonella
- Cost
- Peer/family pressure

How a vegetarian can have a balanced diet

- Protein- growth repair e.g. milk, cheese, eggs, quorn, beans, peas, tofu etc. As plant proteins combination LBV a mixture may be needed. Vegans can obtain protein from Soya beans, cereals, nuts, pulses and a special vegetarian cheese made from vegetable rennet.
- Carbohydrates- energy also starch e.g. bread, potatoes, cereals, rice etc
- Fat vegetable oils, nuts seeds, dairy products
- Iron- prevents anaemia e.g. egg yolk, cereal foods, fortified cereals, green leafy vegetables, nuts
- Calcium formation of strong bones and teeth, prevents rickets e.g. dairy foods, green leafy vegetables, bread, dried fruit, tofu, cheese, nuts, cereals
- Vitamin B12 only found in animal foods, cereals, yeast extract, Soya milk and dairy products
- Vitamin D egg yolk, margarine, sunlight
- · Vitamin C from fruits and vegetables

Total: [15]

Mark Scheme 1973/02 June 2005

Section A

1 (a)	ONE mark for each correct answer TWO required	2 x1	[2]
	Yeasts		
/l-\	Moulds/fungi	2 4	[0]
(b)	ONE mark for each correct answer THREE required	3 x 1	[3]
	Warmth		
	Food		
	Moisture/damp		
	Time		
(c)	ONE mark for each correct answer TWO required	2 x 1	[2]
	Yoghurts		
	Cheese Named products e.g. Yakult, Actimel		
	Nameu products e.g. Takuit, Actimei		
(d) (i)	ONE mark for correct answer	1 x 1	[1]
	Cross –contamination is when bacteria is		
	transferred/passed from one food/area to another		
(ii)	Example	2 x 1	[2]
(11)	raw food touches high risk foods	2 / 1	[^]
	I I		
	liquid or juices from raw food drips onto a high risk		
	food		
	bacteria are carried from one food to another		
	by hands/knives/chopping		
	boards/dirtycloths/aprons/surfaces		
	a bowl unwashed for mixing raw eggs could be used		
	unwashed to make a sandwich filling. Raw food		
	touching cooked food.		
(6)		04	101
(e)	One mark for temperature range 5-63°C	2x1	[2]
	One mark for stating that the danger zone is the		
	temperature range when bacteria will grow rapidly		
	,		

f)	ONE mark for the correct answer	1x 1	[1]
(i)	High risk food is a food in which harmful bacteria can grow quckly.		
(ii)	Example: Meat Milk Cream Milky desserts e.g. custard Shellfish/fish Cooked rice Eggs Gravy/stock Soup Sauces	1x1	[1]
(g)	ONE mark for each correct answer FOUR required	4 x 1	[4]
	Clean equipment/surfaces Clean premises Reputable supplier Check no animals are present Check the food is fresh Check the sell by/best before dates Make sure the food is protected/pest control/protected display/counter Staff selling the food follow strict hygiene practice e.g. clean overalls/hairnets/blue plasters/clean hands/nails/no jewellery Staff are correctly trained in food hygiene/reporting any illness/reporting equipment breakdown within the store Correct temperature for storage Fresh packaged meat should be sealed	4 X 1	[4]
(h)	ONE mark for each correct answer TWO required Make it safe to eat/kill bacteria	2 x 1	[2]
	Improve the colour/appearance Improve the flavour		
	Make it tender/easier to eat/improve the texture Aid digestion		
	Do not accept germs		
		Total: [2	20]

2 (a)	ONE mark for correct answer	1 x 1	[1]
	Baking powder,		
(b)	ONE mark for each correct answer TWO required Cheese Chives/herbs Mustard Sultanas/raisins/currants/cherries/any other dried fruit Any suitable fresh fruit Wholemeal flour Nuts Spices Vanilla essence/other essence Chocolate/cocoa Add brown sugar/more sugar Add more butter	1 x 2	[2]
(c)	ONE mark for each correct answer THREE required . Remove the salt Add a polyunsaturated /vegetable margarine instead of butter/low fat margarine/fat which lowers cholesterol Use wholemeal flour Add a tablespoon of bran/oat bran Add raisins/other dried fruit Suitable fresh fruit Add nuts Semi-skimmed/skimmed milk Remove the sugar Replace with reduced sugar or sugar alternative Do not accept glace cherries	1 x 3	[3]
(d)	ONE mark for each correct answer Strong plain flour Bread Pizza base Chelsea buns Stolen Hot cross buns Malt loaf Cheese loaf Doughnuts Cornflour Custard/sauces Gravy Pavlova Shortbread/biscuits Petit fours	1 x 2	[2]

(e)	ONE mark for each correct answer THREE required .	3 x1	[3]
	Sieving		
	Rubbing in		
	Creaming		
	Folding in		
	Whisking		
	Beating Rolling and folding pastry		
	Kneading		
	Tanodanig		
	Do not accept 'mixing'		
(f)	ONE mark for each correct answer TWO required	2 x 1	[2]
	Sterilization		
	Evaporated,/ canned/condensed		
	UHT/long life		
	Dried/powdered		
	Freezing		
(g)	ONE mark for each correct answer	1 x 1	[1]
	A person who is unable to digest the milk sugar/		
	lactose.		
		1 x 1	[1]
	One from: lactolite / Soya milk/ rice milk		
		Total:	[15]

Why people become vegetarian = 5 marks + how a vegetarian can have a balanced diet = 10 marks

A low level response 0 -5

The candidate can make basic comments about why people become vegetarian and ways in which a vegetarian can have a balanced diet without detail or supporting evidence. Facts may not always relate to the contents. The comments and grammar will be simply expressed. There will be errors in spellings, punctuation and grammar which may be intrusive. The candidate can use a limited range of specialist terms.

A mid range response 6-11

The candidate can demonstrate some understanding of why people become vegetarian and understand some of the ways a vegetarian can have a balanced diet. May discuss different type of vegetarians. Some basic information may be offered to support the answer but in general terms with little detail. There may be occasional errors in spelling, punctuation and grammar. The candidate can use a good range of specialist terms with facility.

A high level response 12-15

The candidate can demonstrate an understanding of both why people become vegetarian and how a vegetarian can have a balanced diet. The explanation is developed logically and supported by relevant and appropriate information including specific nutritional information. A wide range of specialist terms are used with precision. The candidate can demonstrate the accurate use of spelling, punctuation and grammar. The response will be well presented.

Subject specific material which may be covered by the candidate:

Reasons for a vegetarian diet

- Religion
- Dietary reasons e.g. saturated fat, cholesterol CHD, dietary fibre
- Health reasons e.g. Hormones used
- Animal welfare/moral reasons/cruelty
- Environmental issues e.g. expense to rear animal compared to producing crops
- Dislike of taste/texture
- Due to media e.g. BSE/ salmonella
- Cost
- Peer/family pressure

How a vegetarian can have a balanced diet

- Protein- growth repair e.g. milk, cheese, eggs, quorn, beans, peas, tofu etc. As plant proteins combination LBV a mixture may be needed. Vegans can obtain protein from Soya beans, cereals, nuts, pulses and a special vegetarian cheese made from vegetable rennet.
- Carbohydrates- energy also starch e.g. bread, potatoes, cereals, rice etc
- Fat vegetable oils, nuts seeds, dairy products
- Iron- prevents anaemia e.g. egg yolk, cereal foods , fortified cereals, green leafy vegetables, nuts
- Calcium formation of strong bones and teeth, prevents rickets e.g. dairy foods, green leafy vegetables, bread, dried fruit, tofu, cheese, nuts, cereals
- Vitamin B12 only found in animal foods, cereals, yeast extract, Soya milk and dairy products
- Vitamin D egg yolk, margarine, sunlight
- Vitamin C from fruits and vegetables

Total: [15]

4 (a)	This part of the question is marked according to the quality of the response		
	Low level response 1-3 marks A candidate is likely to identify a maximum of 3 ways which show the packed lunch is not a healthy choice but not fully explained		[6]
	High level response 4-6 marks A candidate is likely to explain 4-6 ways in which this packed lunch is not a healthy choice.		
	Ham is high in salt and fat Carbohydrates present in the form of sugars e.g. drink Cheese and onion crisps contain a lot of salt, fat and additives, Drink and chocolate bar high in sugar Drink could be high in additives and colourings Lacks vitamins such as vitamin C Only small amounts of calcium and iron are present Contains saturated fats in ham This type of packed lunch could lead to becoming fat overweight/obese, tooth decay as it is high in fat and sugar and calories White bread is not a good choice as it is low in fibre Contains no fresh fruit and vegetables recommendations are 5 per day Do no accept 'unbalanced' unless qualified		
(b)	ONE mark for each correct answer FIVE required	1 x 5	[5]
	Include fresh fruit and vegetables grapes/ cherry tomatoes/ carrot sticks etc.as part of eating 5 portions of fruit and vegetables, Dried fruit High fibre cereal bar Cut down on saturated fat e.g. have low fat fillings tuna, edam cheese, cottage cheese Yoghurt would provide calcium Popcorn instead of crisps/low fat crisps Rice cakes e.g Snack a jack type Reducing sugar have fruit scone, fruit bread rather than chocolate or biscuits, Change orangeade to unsweetened fruit juices, milk, yoghurt drink, water Eating NSP e.g. wholemeal bread, buns, wholemeal pitta bread, wholemeal pizza, etc Chocolate change to small amount of plain chocolate Reduce salt by changing ham to chicken/turkey and crisps to		
	low salt or no salt variety Nuts to replace the crisps		

(c)	ONE mark for each correct answer FOUR required e.g.	4 x 1	[4]
	Packaging –attractive/colourful/ appealing to target group Healthy eating claims e.g. low fat/high fibre/part of 5 a day Food sampling Posters/leaflets Buy one get one free/special offers/price cuts Loyalty points Positioning of products/near the check out/on the end of the isle Media advertising specific to supermarket/TV/magazine/newspaper advertising		
	Internet/email/text messages		
		Total: [151

5 (a) This part of the question is marked according to the response

0-2 marks candidates will identify 1/2 changes but give no explanation

3-4 marks candidates will identify 2/3 changes with at least one explanation

5-6 marks candidates will identify 3 changes with three explanations

Downward trend in energy intake
Slight increase in consumption of milk and cream
Meat and meat products contribution has increased
Fats contribution gone down
Sugar and preserves contribution gone down
Fruit and vegetables not changed
Cereal products slight decrease.

% energy from milk and cream up due to more milk products available/price reduction/milk based desserts/popularity of variety of coffees/awareness of calcium needs to avoid osteoporosis

meat and meat products consumption up due to wider range of ready meals /convenience products available containing meat/ more people eating out e.g. eating meat products/less concern regarding meat scares e.g. BSE

% energy from fat down due to more low fat spreads/ having low fat alternatives/awareness of current health issues e.g. obesity/CHD/Healthy Schools Initiative

% energy from sugar and preserves down due to more lower sugar alternatives/awareness of current health issues e.g. obesity/CHD/Healthy Schools Initiative/additives related to hyper-activity

Decrease in cereal products due to more variety of breakfast products/lifestyle changes

[6]

(b)	This part of the question is marked according to the response One mark for each identified different need. Maximum three marks Two marks for an identified different need with an explanation Maximum six marks • Age: young children, teenagers and young adults have high energy needs because of the growth spurt and are very active. As people get older they tend to use less energy from foods as the metabolism slows down and due to reduced physical activity • Sex: males tend to use more energy as they are usually bigger and have more muscle tissue • Physical activity/occupation: people who have physically demanding jobs or take lots of exercise tend to use more energy than people who sit down all day. • State of the body: Pregnancy extra energy is required for the growth of the baby and adjustment of the mother's body to pregnancy. Lactation extra energy is needed for the production of milk. Illness the metabolism may be raised at times during illness/fever but otherwise may be decreased due to less physical activity.	3x1	[6]
(c)	ONE mark for each correct answer three required e.g. One mark for the BMR determines the amount of energy a person needs One mark for stating when the whole body is completely at rest and not moving about One mark for stating this energy is measured to keep our body functioning/is used for breathing and other body processes.	3x1	[3] otal: [15]

6 This part of the question is marked according to the quality of the response.

In order to achieve a high level response both areas must be addressed in detail. If a candidate fails to address both parts of the question they remain in the lower level response. If candidates only list items they remain in the lower level response.

A low level response 0 -6

Both aspects may not have been covered. Obvious facts will be given and tend towards generalities which may be in the form of a list. Information may be muddled and not used to support points made.

A mid range response 7 -13

Candidates may not have addressed both aspects –maximum 9 marks. Both aspects considered but responses may be more superficial and lacking in depth. Information is reasonably well organised but repetitive. Less factual data given to support points made.

A high level response 14-20

Both aspects of the question will have been considered in depth. Information will be specific with sound recall and application of knowledge. A sound knowledge of the benefits of organic or GM foods to the consumer will be covered in detail.

 Subject specific information which may be covered by the candidate.

Definition of organic and genetically modified foods with examples A food which is grown and processed without the use of chemical fertilisers and pesticides

Do not accept 'grown naturally'

Examples of organic foods

- · Fruits and vegetables
- Baby foods e.g. Hipp organic
- Meats e.g. rump steak
- Organic orange juice
- Coffee
- Chocolate
- Sultanas
- Rice cakes
- Flour
- Breakfast cereals e.g. oats, muesli
- Wine
- Yoghurt
- Cheese
- Ice cream
- Biscuits

A genetically modified food is a food which has had a characteristic altered by changing one or more genes from the parent plants e.g. longer shelf life

Examples of genetically modified foods

Vegetarian cheese

Fruits such as tomatoes, applies which have been modified to slow down ripening process

Yeast that raises bread more quickly

Fat replaces e.g. Modified starch

Advantages and disadvantages of organic and genetically modified foods (disadvantages whilst not asked for may aid explanations in the first bullet point of the question) Organic foods

- Safe, unadulterated and nutritious
- Produced using traditional methods of farming without artificial fertilisers or intensive growing systems
- Taste is good
- Not contain synthetic dyes, flavourings or additives
- Not use gm organisms
- Ensures not routine drugs, growth promoters are fed to animals
- Not affect the environment
- More expensive than other foods as it is more difficult to match the volume of perfect fruit and vegetables that are produced by intensive farming

Examples fruits and vegetables, baby foods e.g. Hipp organic, meat e.g. rump steak, organic orange juice, coffee, chocolate, sultanas, rice cakes, wine, yoghurt, cheese, ice cream, biscuits, flour, breakfast cereals

Genetically modified foods

- Food is made to last longer e.g. fruit and vegetables
- Nutritional value of food products can be improved e.g. increasing the protein content of rice or lowering the saturated fat content of crops used for oil such as rape seed, corn, Soya beans
- Reduces the cost of foods as less wastage may occur when crops are harvested due to controlling crop diseases
- A wider range of food products can be produced e.g. modifying micro-organisms and adopting their use e.g. in vegetarian cheese so it contains no animal rennet.
- Some ethical groups e.g. Muslims may object because they may be eating organisms which contain copy genes from animals which are restricted in their diet due to religions.
- Some people feel we are tampering with nature.
- Unanticipated allergic reactions.

Total: [20]

Report on the Components June 2005

Chief Examiner's Report

The overall performance and achievement of candidates has been consistent with the high standards of previous years. Candidates have shown positive achievement in both the written examination and the coursework elements. It is very clear however that those Centres attending training sessions have been able to guide candidates into fully addressing marking criteria and coverage of the whole specification. Regular attendance at OCR training is strongly recommended.

1973 – Component – Coursework

The standard of work produced has been high. Credit is due to the many Centres who have acknowledged and implemented the recent changes to the Specification. Training has been of clear benefit both to teachers and candidates.

Excellent ICT skills have been evident with increased use of digital photography, food analysis programmes and internet access.

The majority of Centres also remembered to send their Centre Authentication Sheet along with their sample. This aided the moderation process enormously as it saved phone calls back to Centres to request this sheet before moderation could begin.

Key Issues within the Coursework Tasks

Resource Tasks

- These are generally carried out to a high standard and it is evident that candidates enjoy the very 'practical' nature of them. It is important to remember that these tasks do not assess research skills.
- The annotation of the practical execution has improved and there is ample evidence from the teacher and candidate to support the marks given. It is essential that this good practice continues.
- Many centres use the Resource Tasks from the Teacher Guidance. Whilst it
 is acceptable to do this teachers should now feel more confident in
 developing their own Tasks that arise from teaching the topics in the
 syllabus.

Individual Task

In order to do well in these tasks it is vital that candidates are guided to understand the assessment criteria.

Analysis

- Most Centres allow candidates to achieve the assessment criteria for the Individual Task researching and selecting information from a variety of sources both primary and secondary, based on a subject area of their own choice. However there are a small but increasing number of Centres limiting the choice of subject areas available to candidates. This is generally undesirable as candidates appear more motivated when able to make choices based on personal interest and experience.
- Information from the Internet should be summarised by the candidate rather than simply copied and put in the body of the text with no reference made to it.

- The Task Title should appear at the end of the Task Analysis. However there are still some Centres where candidates focus immediately on their chosen topic and so cannot be given high marks for the Task Analysis.
- Candidates produce better and more focused work when they are guided into a manageable topic for investigation.

• Criteria for Completion

This is now a requirement. Many Centres will have received a comment on their individual report requesting that they ask candidates to produce this. The 'Criteria for Completion' should appear at the end of the Task Analysis. It is a list of all the tasks that the candidates intend to do in the Development section. Candidates can then use this list as a checklist to ensure that they DO NOT simply produce a questionnaire, with results and a list of practical work.

Development

- The main section in which marks have been adjusted is the Development section of the Individual Task. In most cases the problem arises where candidates have not been asked to write their 'Criteria for Completion' or 'Next Steps' at the end of the Task Analysis i.e. they have not made a list of all the tasks they need to do in the Development section.
- The marking criteria for this section require that there is clear evidence of activities undertaken which enable candidates to move on from the task title to make reasoned and developed choices which they are then able to justify in the light of both their initial research and the results of these developmental activities.
- A questionnaire alone is **not** enough to warrant even half of the marks allocated to this section.

Teachers should give guidance on the kinds of possible activities required in order to develop the Task.

What is Good Practice in the Development Section?

It is good practice to encourage candidates to include SOME of the following:

- Visit shops to find out products available or to cost foods
- Interview individuals who the candidates are choosing dishes for to establish their preferences, lifestyle and so on
- Assemble food diaries of individuals on whom the study is based
- Interview food advisors, school canteen assistants, dieticians depending on the topic chosen to establish their views on the topic or to extend research
- Produce a questionnaire and results to find out the views of people who may choose to eat the dishes.
- Write letters to food companies requesting more information on their chosen topic
- Consider nutritional data on possible choices making specific comments
- Carry out further secondary research
- Make and trial some ideas before deciding on final choices for practical work
- Assess the merits of a range of possible dishes before making choices.

This section should conclude as follows:

- Choose dishes/ activities for the Execution which relate to the findings of interviews, questionnaires, shop visits and so on.
- Justify their choices whilst referring back to the Task Title and to the further research that they have carried out in this section of the Task.

please note — Questionnaires and interviews should have an aim as this helps to focus the candidate on what they are trying to find out and clearly displayed results. Vast numbers of completed questionnaires and bulky examples of food packaging are not required when work is posted. It is good practice to remind candidates that they only need to include samples of a blank questionnaire and some packaging.

Planning

- The majority of candidates produced very good planning sections.
- Instructions for organising taste testing would be appropriate here although often missed.

Execution

- The annotation of the practical execution has improved and there is ample evidence from the teacher and candidate to support the marks given. It is essential that this good practice continues
- It is vital to undertake sufficient practical work to warrant the availability of 40% of the marks for the whole task.
- The Practical Record or Log

This is now a requirement. Most centres are now producing this as evidence of the Practical Work undertaken throughout the Individual task. However, some Centres will have received the comment in their school's individual report that this is now required and they should act upon this with effect from now. Below is an example of what a Practical Record might look like. It is filled in by the candidate and signed by the teacher to verify that Practical work has taken place.

GCSE Food and Nutrition - Record of Practical Work

Date	Assessm ent area	Dishes made/ Activities carried out	Skills demonstrated	Comment – how well did I do?/ Outcome	Teacher verificatio n

• Nutritional data if included should be referred to and nutritional information should be specific.

Evaluation

- Evaluations were generally well done and candidates had been encouraged
 to review all aspects of the task as well as take account of teacher's
 comments on their work. A candidate should be aware of how she or he
 could improve their work this often comes from a discussion with the
 teacher who has assessed each section of the Individual Task.
- Many candidates used formative evaluation as an ongoing process throughout the task.
- Full marks in the Individual Task Evaluation can only be awarded if the candidate has shown accurate spelling, punctuation and grammar throughout the whole of this Task.

Application of Assessment Criteria

Achievement within Each Section of the Tasks

Resource Tasks

Planning

High level responses from candidates should provide evidence of their ability to:

- Make decisions in relation to the task showing an understanding of the topic area set
- □ Apply knowledge from previous lessons in making decisions
- □ Produce accurate and well sequenced time plans
- □ List the resources needed for the practical execution of the Task.

Execution

The marks given in this section must be justified by clear annotation

High level responses from candidates should provide evidence of their ability to:

- Organise their time and resources effectively
- □ Work independently, anticipating and overcoming problems
- Produce high quality outcomes

Evaluation

High level responses from candidates should provide evidence of their ability to:

- □ Review all aspects of their work including their planning, execution and results.
- □ Identify personal strengths and weaknesses

Individual Task

Task Analysis

High level responses from candidates should provide evidence of their ability to:

- Explain how they will carry out their task and what they need to do
- Carry out relevant initial research using both primary and secondary sources

- Analyse the results of this initial research and draw conclusions from it about the topic and about further research that they would like to do
- Produce a task title which stems from the original topic and which focuses the work which will follow
- Produce a list or plan of what they intend to do in the Development section of their work having completed their initial research i.e. 'Next Steps' (Criteria for Completion)

Development

High level responses from candidates should provide evidence of their ability to:

- Plan and carry out a range of further activities on their chosen topic, as detailed in the 'criteria for completion' / 'what next' section, which clearly lead to making choices for practical work.
- Present the results of their findings and draw conclusions
- Make and justify choices about their practical work based on their findings This might include the use of nutritional data to help to justify choices of practical work.

Planning

High level responses from candidates should provide evidence of their ability to:

- Produce accurate plans for carrying out their practical work to include lists of resources to be used. This should include any ICT resources e.g. digital camera, nutritional analysis software package, word processing package etc
- □ Produce tasting charts/diagrams/ instructions ready to be used in the Execution section.

Execution

High level responses from candidates should provide evidence of their ability to:

- □ Produce a Log of all Practical Activities that they do for the Task. This should be verified by the teacher.
- Organise their time and resources effectively
- □ Work independently, anticipating and overcoming problems
- □ Produce **several** high quality outcomes in order to warrant a high mark in this section of the Task.

Evaluation

High level responses from candidates should provide evidence of their ability to:

- □ Review each of their practical activities
- □ Review all other aspects of their work including their task analysis, development and planning
- Draw concise conclusions from their results of their work and relate this back to the original task title
- □ Evaluate as an ongoing process throughout the work.

Examples of Good Practice within Teacher's Preparation and Marking of the Coursework

It is good practice to:

- Ask candidates to keep a detailed record of practical work which is then verified by the teacher as part of their evidence for the Execution of the Individual Task
- □ **Annotate** work clearly throughout the text and Execution of all the Tasks

- □ Ensure that candidates carry out **sufficient practical work** to warrant achieving high marks in the Execution of the Individual Task
- □ Encourage candidates to cover a range of topics in their coursework
- □ Encourage candidates to select their own task title from a broad area for the Individual Task
- □ Ensure that candidates include **'Completion Criterion'** or 'Next steps' as part of their Task Analysis before going on to the Development section
- □ Ensure that sufficient guidance is given for candidates to access marks within Development.
- ☐ Give clear guidance about writing questionnaires, including deciding on aims and knowing what it is that candidates want to find out (and why)
- □ Encourage candidates to use the information they gather from the Internet or from books/journals rather than just copy or stick it into their work without making reference to it
- □ Encourage candidates to discuss their work with teachers so that when evaluating they have some idea of why they achieved the marks given to them and can use this as a basis fro discussing improvements
- □ Ensure that marking is consistent between members of a department
- □ Take into account the candidate's **spelling**, **punctuation** and **grammar** throughout the Individual Task when giving a mark for the Evaluation of this task. A comment to this effect on the work or mark sheet would show that Centres have acknowledged this.
- □ Avoid the use of A3 sheets for the candidates to work on. A4 is less bulky and easier to package and store.

Good Practice within Coursework Administration

- Internally moderate all work where there is more than one teacher
- □ Include the **Centre Authentication** Sheet with the sample of work that is sent to the moderator
- □ Avoid plastic wallets for individual pieces of work
- □ Include only ONE sample questionnaire from candidates once work is called for moderation
- □ Check addition and transposition of marks before submitting.
- □ Send work promptly once moderator is known to centre when 10 candidates or fewer send work straightaway, do not wait for moderator to contact you
- □ Where centres have more than 10 candidates do not send the whole sample to moderators this is very expensive to both school and exam board. Wait for moderator to select the sample required.

Home Economics: Food and Nutrition 1973

General Comments

Both the foundation and higher tier papers were appropriate for the ability range of candidates and consistent with previous years. The style of the paper eliminated the rubric error and there was little evidence of candidates mismanaging their time. Overall there was reasonable performance from the majority of candidates, with some excellent responses from some centres.

When candidates use additional sheets, it would be helpful for examiners if they made reference to the location of the continuation of their answers.

Free response questions would improve if candidates planned their response.

Suggestions for candidate support in examination preparation:

- Careful reading of the whole question before beginning to answer
- Identify key words. Highlight if appropriate
- One word answers, unless specifically asked for, rarely gain a mark. Examiners look for qualification of a point
- Avoid merely repeating information in the question without further qualification, in the answer
- Plan free response questions. Highlight key words.
- Practice free response questions
- Avoid the use of general terms "good for you ", "healthy" etc.

1973/1 Foundation Tier

Comments on Individual Questions

Section A

This part of the paper is designed to challenge candidates at the E/G level

1 Minerals - 15 marks

- a) Candidates were able to identify foods containing vitamin C
- b) Vague answers such as "healthy" being used as the most popular reason fort the body needing vitamin C, which would not achieve a mark
- c) i Candidates misread the question. Poor quality answers. Ignored the key word "prepared"
- ii Similarly the word "cooked" ignored. "Boiling" generally given as one of the answers. Most candidates gained one mark for "steaming" as the answer
- d) Answered well. Candidates were able to identify foods containing vitamin A
- e) Poor quality answers. Lack of knowledge and confusion with other vitamins, especially vitamin D
- f) Some good answers. The majority of candidates gave responses such as "hot weather" and "dehydrated.

2 Methods of Cooking -15 marks

- a) Very good answers with a high proportion of candidates gaining full marks
- b) Either not attempted or poorly answered. Lack of knowledge and understanding of heat transference. "Heat up" and "Heat down" frequent answers
- c) Good answers. Candidates were familiar with the use of the microwave.
- d) Vague and repetitive answers. Lack of understanding resulted in most candidates gaining one mark. Many copied the example for the Victoria Sandwich Cake.

3 Eggs – 20 marks

- a&b) Answered well, with many candidates gaining full marks
- c&d) Only answered by a few good candidates. Most did not know or understand nutritional facts. There was a lack of knowledge of saturated fats and phosphorus. Candidates confused vitamins and minerals. Vague responses such as "keeps us healthy".
- e) Candidates were confused as to what was being asked. Many repeated the example and very few gained full marks. Knowledge of eggs was weak.
- f) Most candidates were able to give one response, usually relating to temperature control, but experienced difficulties in stating any more suggestions for storing eggs.
- g) Few candidates identified the British Farm symbol and the Oven symbol. Many candidates confused "gluten free" with "wheat free". The majority understood the "Litter Bin" symbol.

Section B

4 Food Spoilage - 20 marks

a&b) Candidates response was poor with many not attempting any answer. Some of the candidates who did attempt this question thought that yeast is bacteria, leading to incorrect answers in question c.

- c) Again candidates response was poor due to lack of knowledge required for questions a) and b).
- d) i/ii These two questions were often confused, with many candidates giving an example of cross contamination for question i) not a definition as asked for in the question.
- e) Candidates were unable to give a clear definition for "danger zone".
- f) i/ii Mixed responses, with a number of candidates failing to give any answers.
- g) Reasonable responses, although most referred to staff hygiene rather than premises, with little or no reference to "fresh meat" key words in question.
- h) A high standard of answers. Candidates showed a clear understanding of the reasons for cooking meat.

5 Scones - 15 marks

- a) Excellent response with most candidates identifying the raising agent.
- b) Good knowledgeable answers, with many suggestions for additional flavour and colour
- c) Good answers. Candidates showed an awareness of how to adapt the recipe to make it healthier. Incorrect term "low fat butter" used by many candidates.
- d) Most candidates gave correct answers for the uses of strong flour, with bread the most popular example. The uses of corn flour was unknown by many candidates.
- e) The majority of candidates only gained one mark. Confused answers, with little understanding of "air" as a raising agent.
- f) Lack of knowledge resulting in weak responses.
- g) Very few candidates gained any marks. Repetition of the question content "intolerant to lactose" was frequently used in an attempt to answer the question.

6 Vegetarians -15 marks

This question indicates a clear differentiation from foundation to higher tier.

The first part of this question was well answered with most candidates giving detailed answers for the reasons for a vegetarian diet.

The second part of the question gave general points relating to a balanced diet, but were not specific to a vegetarian diet and lacked detail.

Most candidates understood and included examples of alternative protein foods, but few other essential nutrients were identified. Some confusion and misunderstanding by several candidates, who stated that fish was an alternative to meat and suitable for a vegetarian.

1973/2 Higher Tier

Comments on Individual Questions

Section A

1 Food Spoilage - 20 marks

- a&b) This question was answered well. Candidates correctly identified types of micro-organisms and understood the conditions needed for bacterial growth. c)Good responses with several candidates gaining full marks.
- d) i/ii These two questions were often confused, with many candidates giving an example of cross contamination for question i) not a definition as asked for in the question, and repeated the answer for ii)
- e) Candidates responses were mixed. Some very good answers, giving the correct temperature range for the "danger zone".
- f) i/ii Generally good answers with several candidates gaining full marks.
- g) Most candidates were able to identify good hygiene practice in a supermarket. The majority concentrated on staff hygiene and not on premises, or made no reference to fresh meat, as demanded by the question.
- h) A high standard of response, with majority of candidates giving sound reasons for cooking meat and thus gaining full marks.

2 Scones – 15 marks

- a) Excellent response.
- b) Good knowledgeable answers with a range of suitable suggestions to improve colour and flavour.
- c) Candidates responded well with a clear understanding of adaptations required to make the recipe healthier. Some confusion and misuse of the term "low fat butter".
- d) The majority of candidates gave a use for strong flour, but candidates had difficulty in giving a correct answer for a product made from corn flour.
- e) Candidates responded well with the majority gaining full marks.
- f) Mixed response, with some candidates gaining full marks but others either not attempting the question or misunderstanding it.
- g) Disappointing response. Minority of candidates achieved full marks. Many repeated the question for their answer "intolerant to lactose".

3 Vegetarian – 15 marks

The first part of this question was well answered with most candidates giving detailed answers for the reasons for a vegetarian diet.

The second part of the question gave general points relating to a balanced diet, but were not specific to a vegetarian diet and lacked important detail.

Most candidates understood and included examples of alternative protein foods, but few other essential nutrients were identified. Some confusion and misunderstanding by several candidates, who stated that fish was an alternative to meat and suitable for a vegetarian.

4 Packed Lunch – 15 marks

On the whole candidates answered this question well. a&b) Some candidates misread the question and either repeated the question, or gave answers in a) that should have been in b). "Brown bread" frequently mistakenly identified as a healthier substitute. Adaptations not always qualified.

c) Good response with many candidates gaining full marks. Repetition and one word answers failed to gain full marks.

5 Energy - 15 marks

- a) A medium level response. Insufficient detail given in answers. Statistics often correct, but no suitable reasons given. Candidates failed to achieve a high level response if they could not explain "the changes made in the consumptions of foods".
- b) Generally misunderstood with some confusing answers. Energy requirements, mostly referred to physical activities, a misconception that the bigger you get the more energy you need.
- c) BMR not understood. Poor response from most candidates.

6 Organic and GM Foods

This is the most testing question on the paper and is intended to give the more able candidates the opportunity to demonstrate knowledge and understanding. Some good answers on organic foods, but little understanding regarding GM foods. A lot of repetition of points that were not fully understood, e.g. "natural foods" "no fertilizers used" - vague answers used "injected with chemicals". Some examples of foods given but they were confused. Very few structured answers for the second half of the question, when explaining the benefits of organic or GM foods.

Candidates who had read the question carefully, planned their answers, understood the word "explain", and then demonstrated their factual knowledge and understanding, were able to gain high marks.

General Certificate of Secondary Education (Home Economics: Food & Nutrition) (1973) June 2005 Assessment Session

Component Threshold Marks

Component	Max Mark	Α	В	С	D	Е	F	G
Paper 1	100			49	41	33	26	19
Paper 2	100	67	58	49	40			
Coursework	100	79	67	56	45	34	23	12

Syllabus Options

Foundation Tier

	Max Mark	Α*	Α	В	С	D	Е	F	G
Overall Threshold Marks	200				104	85	67	49	31
Percentage in Grade					34.6	30.4	17.3	11.0	4.9
Cumulative Percentage in Grade					34.6	67.0	85.4	95.9	99.1

The total entry for the examination was 1587

Higher Tier

	Max Mark	A*	Α	В	С	D	Ε	F	G
Overall Threshold Marks	200	159	141	123	105	85	75		
Percentage in Grade		10.0	26.7	33.8	19.8	7.6	1.38		
Cumulative Percentage in Grade		10.0	36.7	70.8	90.7	98.1	99.2		

The total entry for the examination was 1450

Overall

	A *	Α	В	С	D	E	F	G
Percentage in Grade	4.9	12.8	16.2	26.4	19.5	9.6	5.7	2.5
Cumulative Percentage in Grade	4.9	18.1	35.0	62.3	82.3	92.2	97.5	99.1

The total entry for the examination was 3035

OCR (Oxford Cambridge and RSA Examinations)
1 Hills Road
Cambridge
CB1 2EU

OCR Information Bureau

(General Qualifications)

Telephone: 01223 553998 Facsimile: 01223 552627 Email: helpdesk@ocr.org.uk

www.ocr.org.uk

For staff training purposes and as part of our quality assurance programme your call may be recorded or monitored

Oxford Cambridge and RSA Examinations is a Company Limited by Guarantee Registered in England Registered Office; 1 Hills Road, Cambridge, CB1 2EU Registered Company Number: 3484466 OCR is an exempt Charity

OCR (Oxford Cambridge and RSA Examinations) Head office Telephone: 01223 552552

Facsimile: 01223 552553



