

# **Home Economics (Food and Nutrition)**

General Certificate of Secondary Education **GCSE 1973**

## **Mark Schemes for the Components**

**June 2008**

**1973/MS/R/08**

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# 1973/01 Paper 1

## Section A

1 (a) (i)	<p><b>ONE mark for each correct answer. THREE required.</b></p> <p>Oranges Blackcurrants Carrots Potatoes</p>	3 x 1	<b>[3]</b>
(ii)	<p><b>ONE mark for each correct answer. TWO required.</b></p> <p>Maintains body's connective tissue Heal wounds Helps iron absorption Antioxidant properties Prevents scurvy Helps in building strong bones Helps in building strong teeth Blood production Maintenance of the skin Healthy gums Support the immune system/helps prevent illnesses Helps prevention of infection</p>	2 x 1	<b>[2]</b>
(iii)	<p><b>ONE mark for correct answer.</b></p> <p>Vitamin C is Water Soluble No mark if both boxes ticked</p>	1 x 1	<b>[1]</b>
(iv)	<p><b>ONE mark for each correct answer. TWO required.</b></p> <p>Use uncooked when possible Prepare just before use Do not soak Remove skins only if necessary/leave skins on Peel thinly Cut with sharp knife, or tear, to reduce damage to cell walls Use water – in gravy or sauce/soup Use lids on pans Do not overcook Small amount of water in cooking Stir frying Microwaving Steaming Barbecue/Grill/Griddle Roast/bake</p>	2 x 1	<b>[2]</b>

<b>(b) (i)</b>	<b>ONE mark for each correct answer. THREE required.</b> Milk Butter Cheese Oily fish Eggs Carrots	3 x 1	<b>[3]</b>
<b>(ii)</b>	<b>ONE mark for each correct answer. TWO required.</b> Night vision/see in dim light/helps sight Healthy skin Mucous membranes Growth – bones & teeth To make visual purple Antioxidant properties Can protect against cancer and heart disease	2 x 1	<b>[2]</b>
<b>(iii)</b>	<b>ONE mark for correct answer.</b> Vitamin A is fat soluble No mark if both boxes ticked	1 x 1	<b>[1]</b>
<b>(c)</b>	<b>ONE mark for the correct answer.</b> Vitamin D	1 x 1	<b>[1]</b>

**[Total 15]**

2 (a)	<p><b>ONE mark for each correct answer. FOUR required.</b></p> <p>Bacon          Beef          Chicken          Duck          Ham/Gammon          Kidney          Lamb/Mutton          Liver          Pork          Turkey          Veal          Venison          Types of offal – heart, kidney, liver etc          Burgers – must be qualified – beef, mince, lamb etc          Sausages – must be qualified – pork etc          Poultry/Game are acceptable, but not in addition to examples of the specific meats in these categories.</p>	4 x 1	<b>[4]</b>
(b)	<p><b>ONE mark for each correct answer. THREE required.</b></p> <p>Vitamin A/carotenes          Vitamin K          B vitamins – Thiamin (B1)                            Riboflavin (B2)                            Niacin                            Pyridoxine (B6)                            B12            Folic acid          Protein          Fat          Iron          Zinc          Phosphorus          Magnesium</p>	3 x 1	<b>[3]</b>
(c)	<p><b>ONE mark for each correct answer. TWO required.</b></p> <p>Safe to eat/kill bacteria          Prevent food poisoning          Make tender, easier to eat/improve texture          Improve flavour/taste          Improve colour/appearance          Improve keeping qualities</p>	2 x 1	<b>[2]</b>
(d) (i)	<p><b>ONE mark for the correct answer.</b></p> <p>Vegetarian/Vegan/lacto vegetarian          Rastafarian          Buddhist          Seventh Day Adventist          Babies up to weaning stage          Doctors recommendations</p>	1 x 1	<b>[1]</b>

<b>(ii)</b>	<b>ONE mark for the correct answer. TWO required.</b> Religion Culture Environmental Peer pressure Health reasons Animal welfare Dislike/Taste/Texture Economical reasons	2 x 1	<b>[2]</b>
<b>(iii)</b>	<b>ONE mark for the correct answer. THREE required.</b> Quorn Nuts TVP Cereals Pulse vegetables (without examples) or Peas, Beans Fish or one named fish – 1 mark only Lentils Seeds Tofu Soya	3 x 1	<b>[3]</b>

**[Total 15]**

3 (a) (i)	<b>ONE mark for correct answer</b>  Fat	1 x 1	<b>[1]</b>
(b) (i)	<b>ONE mark for correct answer</b>  Carbohydrate	1 x 1	<b>[1]</b>
(ii)	<b>ONE mark for correct answer. THREE required Award marks even if answer (ii) is incorrect.</b>  Allows protein to function/do its job Helps keep blood sugar levels constant Follows Healthy Eating guidelines Starchy foods eg potatoes provide other nutrients Reduces fatty food intake Fill you up. Cuts out need for other foods, eg snacks Does not cause tooth decay Slow energy release	3 x 1	<b>[3]</b>
(c) (i)	<b>ONE mark for correct answer.</b>  Butter	1 x 1	<b>[1]</b>
(ii)	<b>ONE mark for correct answer.</b>  158	1 x 1	<b>[1]</b>
(d)	<b>ONE mark for each correct answer. FOUR required.</b>  Activities (accept one example only) At rest (accept one example only) Growth Metabolism Exercise Pregnancy Breast feeding Muscles/movement Maintain normal body temperature Body's function – heartbeat, breathing – at rest Tissue repair Concentration Strength	4 x 1	<b>[4]</b>



<b>(e)</b>	<b>ONE mark for the correct answer.</b>  The amount of energy needed when the body is completely at rest. The energy needed when the body is not moving about. Needed for breathing, heart beat etc.	1 x 1	<b>[1]</b>
<b>(f)</b>	<b>ONE mark for the correct answer.</b>  Excess is stored as fat – overweight – high risk of obesity.	1 x 1	<b>[1]</b>
<b>(g) (i)</b>	<b>ONE mark for each correct answer. FOUR required.</b>  Should supply 25% of daily intake of energy/nutrients. Breaks an overnight fast – stops you feeling hungry. Reduces the risk of eating unhealthy snacks. Missing breakfast can affect: <ul style="list-style-type: none"> <li>• behaviour/concentration</li> <li>• performance at school/work</li> <li>• poor problem solving abilities</li> <li>• cause low blood sugar levels</li> <li>• feeling hungry – may lead to increased intake of sugary and fatty foods.</li> <li>• energy levels</li> </ul> Breakfast cereals as part of a healthy eating and balanced diet, providing slow release energy. Breakfast provides increased levels of vitamins, protein, calcium, iron and carbohydrates (especially breakfast cereals). Most important/first meal of the day.	4 x 1	<b>[4]</b>
<b>(ii)</b>	<b>ONE mark for each correct answer. THREE required.</b>  For three marks: Must be balanced, with a drink and be appropriate for a teenager. One item only, maximum of one mark.  Milk Cereal. Accept brand names, but not “cereal bars”. Porridge. Toast or bread with spread or butter. Peanut butter, marmite, marmalade, jam with toast or bread. Continental style breakfast. Pancakes, crumpets, pikelets. Cold cuts, cheese. Cooked – bacon, sausage, beans, tomatoes, mushrooms, fish, eggs. Drinks – water, fruit/vegetable juice, smoothie, milk, tea, coffee, hot chocolate. Fruit – fresh or dried. Nuts. Yoghurt	3 x 1	<b>[3]</b>

**[Total 20]**

## Section B

4 (a) (i)	<p><b>ONE mark for correct answer.</b></p> <p>To give texture/shortening.</p>	1 x 1	<b>[1]</b>
(ii)	<p><b>ONE mark for correct answer.</b></p> <p>To give flavour/colour. Hard marg (compared to soft) easier to rub in texture.</p>	1 x 1	<b>[1]</b>
(b)	<p><b>ONE mark for each correct answer. FOUR required.</b></p> <p><b>Bacon</b>/protein/fat <b>Flour</b>/carbohydrate/starch <b>Milk</b>/protein/fat/calcium <b>Tomato</b>/carbohydrate/sugar/vitamin A and C/ NSP.</p>	4 x 1	<b>[4]</b>
(c)	<p><b>ONE mark for correct answer.</b></p> <p>Conduction of heat. Ensure pastry base of pastry is cooked. To catch any leakages from the flan. Easier to put in and get out of the oven.</p>	1 x 1	<b>[1]</b>
(d)	<p><b>ONE mark for each correct answer. FOUR required.</b></p> <p>1 Add air/improves texture &amp; taste. Removes lumps in flour.</p> <p>2 Correct texture. Problems rolling out. Provide steam when cooking. Bind ingredients together.</p> <p>3 Short sharp movements/texture and taste. Small amounts of flour to prevent sticking, but not too much to change the balance of ingredients. Do not turn or over handle to avoid changing proportions of ingredients and spoil texture. Correct size gives correct thickness. Correct thickness for even cooking.</p> <p>4 For flavour texture dextrinisation (giving colour), fat melts, absorbed by flour. Even cooking and colour. To stop over/under cooking.</p>	4 x 1	<b>[4]</b>

(e) (i)	<p><b>ONE mark for the correct answer. Do not accept pie or tart without qualification.</b></p> <p>Savoury pies                      Fruit pies          Cornish pasties                  Jam tarts          Sausage rolls                      Bakewell tart          Quiche Lorraine                  Lemon meringue pie          Other acceptable products</p>	1 x 1	<b>[1]</b>																		
(ii)	<p><b>ONE mark for correct answer. FIVE required.</b></p> <table border="1" data-bbox="539 566 1209 1115"> <thead> <tr> <th></th> <th>Pastry</th> <th>Example of use</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Filo</td> <td>Baklava Parcels/baskets Spring rolls Accept dishes usually made with strudel pastry: Apple strudel Samosa (1)</td> </tr> <tr> <td>2</td> <td>Suet (1)</td> <td>Steak and kidney pudding</td> </tr> <tr> <td>3</td> <td>Hot water crust</td> <td>Pork pies (1)</td> </tr> <tr> <td>4</td> <td>Choux (1)</td> <td>Chocolate Eclairs</td> </tr> <tr> <td>5</td> <td>Flaky Puff Rough Puff (1)</td> <td>Vanilla slices</td> </tr> </tbody> </table>		Pastry	Example of use	1	Filo	Baklava Parcels/baskets Spring rolls Accept dishes usually made with strudel pastry: Apple strudel Samosa (1)	2	Suet (1)	Steak and kidney pudding	3	Hot water crust	Pork pies (1)	4	Choux (1)	Chocolate Eclairs	5	Flaky Puff Rough Puff (1)	Vanilla slices	5 x 1	<b>[5]</b>
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(f)	<p><b>ONE mark for correct answer. THREE required.</b></p> <p>Special offers          In store tasting          Food samples          Celebrity in store promotion          Flyers/posters          In store announcements          Product association eg character/uniforms/fancy dress/gifts etc          Prominent position eg end of aisle          Colourful displays</p>	3 x 1	<b>[3]</b>																		

**[Total 20]**

5 (a)	<p><b>ONE mark for each correct answer. THREE required. Must give different answer for each question.</b></p> <p>Boiling an egg                                  Convection or conduction          Baking a cake                                 Convection or conduction          Grilling bacon                                 radiation or conduction</p>	3 x 1	[3]
(b)	<p><b>ONE mark for each correct answer. TWO required.</b></p> <p>No zones hotter or cooler than others/even temperature.          Dishes can be cooked at the same temperature.          Food cooks more quickly/saves energy.          Oven will heat more quickly.</p>	2 x 1	[2]
(c) (i)	<p><b>FOUR marks for the correct answer. Detailed description for FOUR marks. One and two word answers, ONE mark only.</b></p> <p>Air trapped during mixing/rubbing in.          Gas produced by raising agent.          Starch from flour gelatinises.          Air and steam expand with heat and push up the mixture.          Mixture becomes firm and brown. Dextrinises on surface.</p>	4 x 1	[4]
(ii)	<p><b>THREE marks for the correct answer. Detailed description for THREE marks. One and two word answers, ONE mark only.</b></p> <p>Starch granules absorb water and swell when heated.          Some starch is released as heat is increased.          Gelatinisation softens and swells.          Colour change.</p>	3 x 1	[3]
(iii)	<p><b>THREE marks for the correct answer. Detailed description for THREE marks. One and two word answers, ONE mark only.</b></p> <p>Cell structure broken down, becomes less bulky.          Becomes bright green (chlorophyll) when first cooked.          If over cooked, changes to olive/green brown.          Loss of vitamins.          Loss of structure if overcooked.          Flavour enhanced.</p>	1 x 3	[3]

[Total 15]

<b>6</b>	<p><b>A HIGH level of response 12 – 15 marks</b></p> <p>Both parts of the question will have been considered in depth. Information will be specific to causes of food spoilage and good personal hygiene, with sound recall and application of knowledge. The candidate can demonstrate the accurate use of spelling, punctuation and grammar. A range of specialist terms used.</p> <p><b>A MID level of response 7 - 11</b></p> <p>Both parts of the question will have been considered but responses may be superficial and lacking depth. Information will be reasonably well organised but may be factual recall. There may be occasional errors in spelling, punctuation and grammar. The candidate uses some specialist terms.</p> <p><b>A LOW level of response 0 - 6</b></p> <p>Both aspects of the question may not have been covered. Some obvious general facts will be given. Information may be muddled and not used to support points made. There will be errors in spelling, punctuation and grammar. The candidate uses few, if any, specialist terms.</p> <p>Candidates with one two word answers in a list cannot achieve a high level response.</p> <p><u>Subject specific material that may be covered by the candidate.</u></p> <p><u>Good Kitchen and Personal Hygienic Practices.</u></p> <p>Handle food as little as possible. Wash hands before handling food. Tie back long hair. Wear protective clothing. Avoid coughing/sneezing over food. Cover cuts with waterproof dressing. Blow nose away from food, then wash hands. Wash hands after toilet. Avoid wearing jewellery etc that could trap bacteria. Remove nail varnish. Report any illness eg diarrhoea. No smoking.</p>
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Keep hot food hot and cold food cold.  
 Store chilled and frozen foods correctly.  
 Store raw meat in the refrigerator – below food that is not going to be cooked or reheated.  
 Keep raw and cooked foods apart.  
 Wash chopping boards, knives and other equipment and hands, after use with raw food.  
 Cool left over food quickly and keep it cool.  
 Observe “sell by” and “best before dates” and stock rotation.  
 Keep all food covered.  
 Keep pets away from food preparation.  
 Use clean equipment and surfaces.  
 Dispose of rubbish in covered bins.  
 Use clean spoon, not fingers, to taste food.  
 Colour coded chopping boards.  
 Extra care with high risk foods.

Causes of food spoilage.

Natural decay within the food.  
 Micro-organisms, yeasts, bacteria and moulds.

Yeast – fermentation attack food eg jam  
 Bacteria – contamination from soil, air, our bodies.  
 Pathogenic bacterial entering food.  
 Bacteria allowed to multiply.  
 Moulds – spores growing on food surfaces.  
 Enzymes – browning, destroying vitamin content.

Incorrect temperature during preparation, storing and cooking of food.

- Kept too long in danger zone
- Cooling food too slowly prior to refrigeration
- Not reheating food to high enough temperature
- Undercooking
- Storing hot foods below 63°C.

Food prepared too far in advance and stored at room temperature.  
 Using cooked food contaminated with bacteria.  
 Not thawing frozen food, especially poultry, correctly.  
 Cross contamination from raw to cooked food.  
 Infected food handlers.  
 Incorrect use of leftovers.  
 Shelf life – “use by” and “best before” not observed.  
 Contaminated equipment.  
 Pests/pets.  
 Chemical.  
 Radiation.  
 Pollution.

[Total 15]

# 1973/02 Paper 2

## Section A

1 (a) (i)	<b>ONE mark for correct answer.</b> To give texture/shortening.	1 x 1	[1]
(ii)	<b>ONE mark for correct answer.</b> To give flavour/colour. Hard marg (compared to soft) easier to rub in texture.	1 x 1	[1]
(b)	<b>ONE mark for each correct answer. FOUR required.</b> <b>Bacon/protein/fat</b> <b>Flour/carbohydrate/starch</b> <b>Milk/protein/fat/calcium</b> <b>Tomato/carbohydrate/sugar/vitamin A and C/NSP</b>	4 x 1	[4]
(c)	<b>ONE mark for correct answer.</b> Conduction of heat. Ensure pastry base of pastry is cooked. To catch any leakages from the flan. Easier to put in and get out of the oven.	1 x 1	[1]
(d)	<b>ONE mark for each correct answer. FOUR required.</b> 1 Add air/improves texture & taste. Removes lumps in flour. 2 Correct texture. Problems rolling out. Provide steam when cooking. Bind ingredients together 3 Short sharp movements/texture and taste. Small amounts of flour to prevent sticking, but not too much to change the balance of ingredients. Do not turn or over handle to avoid changing proportions of ingredients and spoil texture. Correct thickness for even cooking. 4 For flavour texture dextrinisation (giving colour), fat melts, absorbed by flour. Even cooking and colour. To stop over/under cooking	4 x 1	[4]

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**[Total 20]**



2 (a)	<p><b>ONE mark for each correct answer. THREE required. Must give different answer for each question.</b></p> <p>Boiling an egg Baking a cake Grilling bacon</p> <p>Convection or conduction Convection or conduction radiation or conduction</p>	3 x 1	<b>[3]</b>
(b)	<p><b>ONE mark for each correct answer. TWO required.</b></p> <p>No zones hotter or cooler than others/even temperature. Dishes can be cooked at the same temperature. Food cooks more quickly/saves energy. Oven will heat more quickly</p>	2 x 1	<b>[2]</b>
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**[Total 15]**

<b>3</b>	<p><b>A HIGH level of response 12 – 15 marks</b></p> <p>Both parts of the question will have been considered in depth. Information will be specific to causes of food spoilage and good personal hygiene, with sound recall and application of knowledge. The candidate can demonstrate the accurate use of spelling, punctuation and grammar. A range of specialist terms used.</p> <p><b>A MID level of response 7 - 11</b></p> <p>Both parts of the question will have been considered but responses may be superficial and lacking depth. Information will be reasonably well organised but may be factual recall. There may be occasional errors in spelling, punctuation and grammar. The candidate uses some specialist terms.</p> <p><b>A LOW level of response 0 - 6</b></p> <p>Both aspects of the question may not have been covered. Some obvious general facts will be given. Information may be muddled and not used to support points made. There may be errors in spelling, punctuation and grammar. The candidate uses few, if any, specialist terms.</p> <p>Candidates with one two word answers in a list cannot achieve a high level response.</p> <p><u>Subject specific material that may be covered by the candidate.</u></p> <p><u>Good Kitchen and Personal Hygienic Practices.</u></p> <p>Handle food as little as possible. Wash hands before handling food. Tie back long hair. Wear protective clothing. Avoid coughing/sneezing over food. Cover cuts with waterproof dressing. Blow nose away from food, then wash hands. Wash hands after toilet. Avoid wearing jewellery etc that could trap bacteria. Remove nail varnish Report any illness eg diarrhoea No smoking</p>
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 Shelf life – “use by” and “best before” not observed.  
 Contaminated equipment.  
 Pests/pets.  
 Chemical.  
 Radiation.  
 Pollution.

[Total 15]

## Section B

4 (a)	<b>ONE mark for one correct answer. SIX required.</b>			6x1	<b>[6]</b>	
	Vitamin	Use in the body	Good sources			Deficiency
	B12	Prevents anaemia Helps cells divide Nervous system 1	Liver, fish, meat, cheese, milk, eggs, <u>fortified</u> breakfast cereals/bread 1			Pernicious anaemia Neurological problems 1
	D	Works with <u>calcium</u> to form healthy bones & teeth 1	Exposure to sun. Margarine. Oily fish, liver 1			Rickets in children Weak bones 1
(b) (i)	<b>ONE mark for the correct answer.</b>  Water soluble – vitamins C & B group			1	<b>[1]</b>	
(ii)	<b>ONE mark for the correct answer.</b>  Fat soluble – vitamins A D E K			1	<b>[1]</b>	
(iii)	<b>ONE mark for the correct answer.</b>  A D E K			1	<b>[1]</b>	
(c) (i)	<b>ONE mark for the correct answer.</b>  Nutrients, usually vitamins and or minerals added to strengthen/increase the nutritional value of food.			1	<b>[1]</b>	
(ii)	<b>ONE mark for the correct answer.</b>  Breakfast cereals Drinks Biscuits Breads Flour Margarine Yoghurt			1	<b>[1]</b>	

<b>(d)</b>	A HIGH level response 4 marks.		1 x 4	<b>[4]</b>
	List of facts without any explanation, max 2 marks.			
	Forms part of the red blood cell, protein, haemoglobin	Carries oxygen around the body. Prevents – anaemia/weakness/ tiredness/poor resistance to infection/poor concentration and muscle cells not working well		
	Stored in the liver	Not essential to meet daily requirements		
	Balanced diet	Good sources – offal, red meat, oily fish, poultry and game, fortified bread, green leafy vegetables, pulses, dried fruit, fortified breakfast cereals		
	Vegetarian	Bread, cereals, pulses, vegetables		
	Avoid blocking iron absorption  Vitamin C	Avoid foods and drinks high in tannins, phytates being eaten at the same time as iron rich foods. Needed for absorption of iron.		
	Individual needs Pregnant women  The elderly Young women Small children/adolescents	Growth of unborn baby but advised not to eat liver or liver products. Do not absorb iron efficiently During menstruation Growing rapidly		

**[Total 15]**

5 (a) (i)	<p><b>ONE mark for correct answer.</b></p> <p>Wholemeal bread</p>	1 x 1	<b>[1]</b>
(ii)	<p><b>ONE mark for each correct answer. TWO required.</b></p> <p>Fibre NSP content          Follows healthier eating guidelines          Prefer the taste to white bread          Aware of the needs for healthier options          Availability and promotions          Use in bought sandwiches etc as substitute for white bread          Prevents constipation          Helps prevent bowel cancer</p>	2 x 1	<b>[2]</b>
(b)	<p>Marks allocated depend on the quality of response.          Reference may be made to the balance of good health/eat well plate.</p> <p>HIGH level 10-12          5 different guidelines used to explain in detail the changes shown in the table.</p> <p>MID level 5-9          3 different guidelines used to explain with some detail the changes shown in the table.</p> <p>LOW level 0-4          Candidates may only give 1 or 2 explanations of the balance of health guidelines. Answers may be muddled, repetitive with little detail.</p> <p>Repetition of answer (a) (ii) max 1 mark.</p>		<b>[12]</b>
	Reduction in fat intake	<p>Prevention of associated diseases          Oils and fats down          Low fat yogurt up          Snacks down          Whole milk down          Semi-skimmed up          Ice cream down</p>	
	Reduction in sugar intake	<p>Prevention of associated diseases          Carbonated soft drinks down          Sugar/confectionary down</p>	
	Reduction in salt intake	<p>Prevention of associated diseases          Bagged snacks down</p>	
	Increase in fibre/NSP	<p>Prevention of associated diseases          Wholemeal bread up          Fruit &amp; vegetables up</p>	
	Food that may have additives	<p>Prevention of associated diseases          White bread down          Carbonated drinks down          Bagged snacks down</p>	

	Provision of nutrients	Dairy products – calcium, protein, B group vitamins. Advised to eat moderate amounts. Choose lower fat alternatives. Fruit juices Fruit and vegetables supply vitamins and minerals, part of 5-a-day.
	Mineral water up	Contribution to daily water intake
	Alternative snacks	Yogurt, fruit & veg, fruit drinks – all up. Bagged snacks down
	A variety of foods	Most food groups represented (exception – meat and alternatives)

**[Total 15]**

6	<p><b>High Level Response: 14 – 20</b></p> <p>A full understanding of: Energy balance. The health risks if this balance is not achieved.</p> <p>For a candidate to be awarded a high level balanced responses across the two components are required, supported by relevant and appropriate information with logically developed explanations.</p> <p>If a candidate answers one part well, but only gives a limited explanation of the other part, they will only be able to achieve the top of medium response.</p> <p><b>Medium Level Response: 7 – 13</b></p> <p>Some understanding of both components. Basic information may be expressed in general terms. Use of some specialist terms.</p> <p><b>Low Level Response: 0 – 6</b></p> <p>Basic comments. Facts may not be supported by evidence. Emphasis on components may be uneven. Comments may be expressed simply and with little understanding. Few if any specialist terms used.</p> <p><b>If answers given as a list, candidate remains in the low level.</b></p>		
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**Subject specific material that may be covered by the candidate.**

Energy balance and needs.

Energy balance	Maintain constant weight. Need to balance energy taken in as food with energy used during activity.
Mechanical	Muscle movement, voluntary and involuntary.
Chemical	Chemical and metabolic reactions. Growth and repair. Concentration.
Heat	Maintain body temperature.
Different needs	Male, Female, Physical activity, Pregnancy, breast feeding, Age, Occupation, BMR, Illness.
Energy from food	Fat (almost twice as much), Carbohydrate (starch and sugar) & Protein.

Health risks – when Balance is not achieved.

Overweight, Obese	Diabetes mellitus (IDDM) CHD High blood pressure. Damage to joints. Risk of complications during surgery and pregnancy. Loss of confidence.	
Underweight	Tired. Headaches. Muscle waste. Use up fat stores. Loss of confidence. Anorexia.	
Special needs	Pregnancy	- overweight, difficult to regain figure - underweight, increased risk to unborn baby
	Lactation	- problems producing milk
	Illness	- slows down recovery

**[Total 20]**

# Grade Thresholds

General Certificate of Secondary Education  
Home Economics Food & Nutrition (Specification Code 1973)  
June 2008 Examination Series

## Component Threshold Marks

Component	Max Mark	A*	A	B	C	D	E	F	G
Paper 1	100				55	47	39	32	25
Paper 2	100		67	56	46	34			
Coursework	100		79	67	56	45	34	23	12

## Specification Options

### Foundation Tier

	Max Mark	A*	A	B	C	D	E	F	G
Overall Threshold Marks	200				111	92	73	55	37
Percentage in Grade					34.7	29.5	19.0	10.5	3.8
Cumulative Percentage in Grade					34.7	64.3	83.3	93.8	97.7

The total entry for the examination was 2304

### Higher Tier

	Max Mark	A*	A	B	C	D	E	F	G
Overall Threshold Marks	200	159	140	121	102	79	67		
Percentage in Grade		12.2	24.1	29.7	23.6	9.0	0.63		
Cumulative Percentage in Grade		12.2	36.2	66.0	89.7	98.7	99.3		

The total entry for the examination was 2076

### Overall

	A*	A	B	C	D	E	F	G
Percentage in Grade	5.7	11.4	14.1	29.4	19.8	10.3	5.5	2.0
Cumulative Percentage in Grade	5.7	17.2	31.3	60.8	80.6	90.9	96.4	98.5

The total entry for the examination was 4380

Statistics are correct at the time of publication.

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