



# **2012 Health and Food Technology**

## **Intermediate 2**

### **Finalised Marking Instructions**

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**2012 Health and Food Technology  
Intermediate 2**

**Marking Scheme**

**Question 1**

- |                                                                                                                              |
|------------------------------------------------------------------------------------------------------------------------------|
| (a) For <b>each</b> of the following nutrients state:<br>(i) <b>one</b> function;<br>(ii) <b>two different</b> food sources. |
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<b>Core skills:</b> Recall and use of knowledge	<b>Mark allocation:</b> 6 marks
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2 × 1 mark for correct function of each nutrient
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4 × 1 mark for correct food source
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**Carbohydrate**

**Function**

1. Energy.
2. Warmth.
3. Supports body functions/breathing/pumping blood/producing blood cells.
4. Can act as a protein sparer.

**Food Sources**

1. Fruit.
2. Vegetables.
3. Bread.
4. Breakfast cereals.
5. Rice.
6. Pasta.
7. Potato.
8. Pulses.
9. Sugar.
10. Soft drinks.
11. Sweets/chocolate.
12. Cakes.
13. Biscuits.
14. Puddings.
15. Honey/preserves.

### Question 1 (continued)

#### Vitamin D

##### Function

1. (Formation of) healthy/strong bones and teeth.
2. Works with calcium (and phosphorus) to form bones and teeth.
3. Promotes quicker healing of bone fractures.
4. Allows calcium to be absorbed (in the small intestine).
5. Required for blood clotting.

##### Food sources

1. Oily fish.
2. Fish liver oils.
3. Butter/margarine.
4. Egg yolk.
5. (Fortified) breakfast cereals.
6. Milk/cheese

(b) State **two** diet related diseases linked to a high intake of sugar.

**Core skills:** Recall and use of knowledge | **Mark allocation:** 2 marks

2 × 1 mark for correct diet related problem.

1. Dental caries/tooth decay.
2. Weight gain/overweight/obesity.
3. Type 2 diabetes.

**Question 1 (continued)**

(c) Taking account of the Dietary Reference Values (DRVs) for a boy aged 1-3 years, evaluate the suitability of the toddler's meals.

**Core skills:** Evaluation **Mark allocation:** 4 marks

4 x 1 mark for correct evaluation linked to the needs of the case study.

Fact	Opinion	Link	Consequence
High in Energy – 610MJ (EAR 5.2MJ)	Not suitable	Toddler	<ol style="list-style-type: none"> <li>Any extra could be converted to fat leading to overweight/obesity.</li> <li>Energy could be converted to fat increasing his risk of CHD/diabetes.</li> </ol>
Low in Protein 11.8g (RNI 14.5)	Not suitable	Toddler	<ol style="list-style-type: none"> <li>Will be growing rapidly/may not grow properly.</li> <li>Needed for repair of the body tissues as toddlers often fall and hurt themselves.</li> </ol>
High in Calcium – 380mg (RNI 350mg)	Suitable	Toddler	<ol style="list-style-type: none"> <li>Bones will grow properly.</li> <li>Teeth will grow properly.</li> </ol>
	Not suitable	Toddler	<ol style="list-style-type: none"> <li>May cause hypercalcaemia (over a long period of time).</li> </ol>
High in Vitamin B – 0.6mg (RNI 0.5mg)	Suitable	Toddler	<ol style="list-style-type: none"> <li>Releases energy (from food) as he may not be active.</li> <li>Needed for (normal) growth as still growing/may not grow properly.</li> </ol>
Low in Iron – 4.2mg (RNI 6.9)	Not suitable	Toddler	<ol style="list-style-type: none"> <li>May feel too tired to play/walk.</li> <li>May want to sleep a lot.</li> <li>May suffer from anaemia (in later life).</li> </ol>
High in Vitamin C – 35mg (RNI 30mg)	Suitable	Toddler	<ol style="list-style-type: none"> <li>Will help absorb iron and prevent anaemia.</li> <li>Will help prevent infections.</li> <li>Will form connective tissue as toddler is still growing.</li> <li>Will form the walls of the blood vessels as toddler is still growing.</li> <li>Excess will be excreted daily.</li> <li>Helps to heal the wounds and she may be prone to cuts/falls injury.</li> </ol>

## Question 2

(a) A manufacturer wants to introduce a range of “Food-to-go” lunch boxes.

The food must:

- be international
- be ready to eat
- be aesthetically pleasing
- be value for money
- have recyclable packaging

Study the information about the “Food-to-go” lunch boxes below and choose the **most suitable** to be sold.

**Core skills:** Drawing conclusions

**Mark allocation:** 4 marks

1 mark for correct choice

3 x 1 mark for reasons linked to the needs of the case study

Correct choice: **Lunch Box B**

Fact	Link	Conclusion/justification
Packaging – waxed cardboard box with cardboard dividers/wooden fork/paper napkin	Manufacturer/consumer	<ol style="list-style-type: none"> <li>1. Packaging can be recycled which is what the manufacturer wants/will appeal to consumer and increase sales.</li> <li>2. Provides all materials needed to eat the meal.</li> <li>3. The wooden fork can be recycled which is what the manufacturer wants/may appeal to consumers and so increase sales.</li> <li>4. The paper napkin can be recycled which is what the manufacturer wants/may appeal to consumers and so increase sales.</li> </ol>
Contents – Italian pasta salad, mini bread sticks, watermelon slices. Good.	Manufacturer	<ol style="list-style-type: none"> <li>1. No preparation required, which is what the manufacturer wants.</li> <li>2. Foods are all international which is what the manufacturer wants.</li> <li>3. All the foods are of Italian origin so are international.</li> </ol>
	Consumer	<ol style="list-style-type: none"> <li>1. Meal is ready to eat which may appeal to consumers and increase sales.</li> </ol>

<b>Fact</b>	<b>Link</b>	<b>Conclusion/justification</b>
Appearance – 4stars/excellent/best	Consumer	1. More likely to choose the lunch box. 2. More likely to enjoy the lunchbox.
	Manufacturer	1. May increase sales.
Flavour – 3stars/good/second best rating	Consumer	1. More likely to enjoy the product. 2. More likely to make repeat purchases.
	Manufacturer	1. May increase sales.
Cost – ££/inexpensive/one of the cheapest/best value	Consumer	1. May be more likely to buy it.
	Manufacturer	1. May lead to increased sales. 2. May make a greater profit.

## Question 2 (continued)

(b) Identify **two** sensory tests the manufacturer could carry out on the “Food-to-go” lunch boxes.

Explain the information the manufacturer would gain from test 1.

**Core skills:** Recall and Use of Knowledge | **Mark allocation:** 3 marks

2 × 1 mark correct identification of sensory test.

1 mark for correct explanation

### **Preference/Rating test**

1. Collect information/opinions about specific attributes of a product.
2. Identify specific strengths/weaknesses in a product.
3. Allows changes to be made to specific attributes based on results of testing.

### **Ranking/Scoring/Grading test**

1. Find out how much a tester likes/dislikes a product.
2. Make judgments about specific characteristics of a product eg flavour/colour.

### **Discrimination/Difference test**

1. Find out if testers can tell the difference between the manufacturer’s product and that of a competitor.
2. Find out if testers can tell the difference between an existing product and a new recipe.
3. Find out if testers can tell the difference if the proportions of ingredients are changed eg reduced salt.

### **Paired comparison test**

1. Find out if testers can tell the difference between two products in terms of a specific attribute eg sweetness.
2. Find out if testers can identify changes made in a recipe.

### **Triangle test**

1. Find out if the tester can identify the product on test from two other similar products.
2. Find out how similar/different the test product is from the other products.

### **Taste threshold test**

1. Find out the minimum concentration of an ingredient before the product becomes unacceptable.

## Question 2 (continued)

(c) Identify **two** points of information which, by **law**, must be stated on a food label. Explain the importance of **each** point to the consumer.

**Core skills:** Recall and Use of Knowledge | **Mark allocation:** 4 marks

2 × 1 mark correct identification of point.

2 × 1 mark correct explanation linked to point.

### **Ingredients list** (in descending order)

1. The consumer can take account of likes/dislikes.
2. The consumer can take account of allergies/intolerances.
3. The consumer can take account of the proportion/amount of an ingredient in the product.
4. The consumer can see if the product is suitable for a vegetarian.

### **Name of food**

1. So the consumer is not misled/is clear about what is being bought.
2. Names of certain foods are prescribed by law so the consumer is not misled.

### **Treatment/processing/conditioning of food**

1. So the consumer knows of any process the food has undergone (accept appropriate examples, eg part baked/dried/smoked).

### **Net quantity/weight/volume of product**

1. So the consumer can compare prices.
2. So the consumer can calculate value for money.
3. So the consumer can check if the package contains enough for their needs/how many to buy.

### **Date mark**

Use by date

1. So the consumer can calculate the shelf life of the food.
2. So the consumer knows when the food will no longer be safe to eat/may cause food poisoning.

Best before date

1. Tells the consumer the date until which the food has best appearance/flavour/texture/nutritive value.
2. So the consumer knows when the food will not be/taste as good but will still be safe to eat.  
(draft not clear)

### **Storage instructions**

1. So the consumer can store food to keep it in optimum condition.
2. So the consumer can maximize the shelf life of the food.
3. So the consumer can enjoy the food at its best.
4. So the consumer can check if they have the correct storage facilities (accept appropriate examples eg freezer).

### **Preparation/cooking instructions**

1. So the consumer gets the best results/enjoys the product at its best.
2. To ensure the product is safe to eat.
3. So the consumer does not use the product wrongly (eg 'not suitable for microwaving').

### **Name and address/contact details of the manufacturer/packer/seller**

1. So the consumer can contact the manufacturer in case of complaint/enquiry.



## Question 2 (continued)

### Place/country of origin

1. The consumer may wish to avoid products from a certain country.
2. The consumer may wish to support a particular country (accept examples, eg Produce of Scotland).

### Lot/batch number

1. The consumer can identify any products which are recalled by the manufacturer.

### Known allergens

1. The consumer is warned of potential health risk of specific allergens (accept examples).

(d) Name **one** Act which protects the consumer when buying food.

**Core skills:** Recall and Use of Knowledge | **Mark allocation:** 1 mark

1 mark for correct Act.

1. The Food Safety Act (1990).
2. The Food Safety (General Food Hygiene) Regulations (1995).
3. The Weights and Measures Act (1985).
4. The Trades Descriptions Act (1968).
5. The Food Hygiene (Scotland) Regulations (2006).
6. The General Food Regulations (2004).
7. Consumer Protection from Unfair Trading Regulations/CPR's (2008).

### Question 3

(a) The landlord of a student flat wants to buy a microwave for use in a small, shared kitchen. Choose <b>one</b> of the microwaves below and evaluate its suitability.	
<b>Core skills:</b> Evaluation	<b>Mark allocation:</b> 4 marks
4 x 1 mark for points of evaluation linked to the needs of the case study	

#### Microwave A

Fact	Opinion	Link	Consequence
H 25cm x W43cm x D33cm	Suitable	Students/Landlord	<ol style="list-style-type: none"> <li>1. Large enough for them to cook food.</li> <li>2. Will not take up too much space in the small kitchen.</li> </ol>
	Not suitable	Students	<ol style="list-style-type: none"> <li>1. May not be large enough if the students wish to share.</li> <li>2. May not be large enough if the students have guests.</li> </ol>
Power – 700W	Suitable	Students	<ol style="list-style-type: none"> <li>1. It's powerful enough to cook the food quickly.</li> <li>2. It will use less energy so saving money.</li> </ol>
	Not suitable	Students	<ol style="list-style-type: none"> <li>1. It may take a longer time to cook the food.</li> </ol>
Available in black or white	Suitable	Students/Landlord	<ol style="list-style-type: none"> <li>1. Colours are neutral so may fit in with kitchen décor/other appliances.</li> <li>2. Choose one to match the kitchen/other appliances.</li> </ol>
	Not suitable	Students/Landlord	<ol style="list-style-type: none"> <li>1. Colours may not match kitchen décor/other appliances.</li> </ol>
Manual operation	Suitable	Students	<ol style="list-style-type: none"> <li>1. The controls easy to use.</li> </ol>
	Not suitable	Students	<ol style="list-style-type: none"> <li>1. The microwave may not have features the students would like.</li> <li>2. It may be difficult to set accurately.</li> </ol>

<b>Fact</b>	<b>Opinion</b>	<b>Link</b>	<b>Consequence</b>
Chaos defrost	Suitable	Students	<ol style="list-style-type: none"> <li>1. Will save time as they may be busy/ studying.</li> <li>2. Quicker as a number of students share the kitchen so they will not have to wait as long to use the microwave.</li> </ol>
Auto weight cook facility	Suitable	Students	<ol style="list-style-type: none"> <li>1. Programme sets automatically cooking the students' food correctly/giving good results.</li> <li>2. Programme is set automatically and they may have few cooking skills.</li> <li>3. They could carry out other tasks without having to check the food.</li> </ol>
	Not suitable	Students	<ol style="list-style-type: none"> <li>1. They might not know the weight of the food.</li> <li>2. They may not know how to use this function.</li> </ol>

## Microwave B

Fact	Opinion	Link	Consequence
H31cm x W46cm x D36cm	Suitable	Students	<ol style="list-style-type: none"> <li>1. It is big enough to cook a meal.</li> <li>2. It is big enough if they wish to share.</li> <li>3. It is big enough if they have guests.</li> </ol>
	Not suitable	Students	<ol style="list-style-type: none"> <li>1. It may take up too much room in the small kitchen.</li> </ol>
Power – 800W	Suitable	Students	<ol style="list-style-type: none"> <li>1. It will cook food quickly and they may be busy/studying.</li> <li>2. It will use more energy so be more expensive.</li> </ol>
	Not suitable	Students	<ol style="list-style-type: none"> <li>1. It may fit in with the kitchen décor/other appliances.</li> </ol>
Stainless steel finish	Suitable	Students	<ol style="list-style-type: none"> <li>1. It may not match the kitchen décor/other appliances.</li> </ol>
	Not suitable	Students/Landlord	<ol style="list-style-type: none"> <li>1. It might be difficult to maintain a good appearance.</li> </ol>
Touch controls	Suitable	Students	<ol style="list-style-type: none"> <li>1. May find the controls easy to use.</li> <li>2. Will be able to set the controls accurately so food will be less likely to be over/under cooked.</li> </ol>
	Not suitable	Students	<ol style="list-style-type: none"> <li>1. May find the controls difficult to use.</li> </ol>
Inverter technology	Suitable	Students	<ol style="list-style-type: none"> <li>1. It cooks the food evenly so will get a good result/will enjoy eating the food.</li> <li>2. The food will cook evenly, so will be less likely to get food poisoning.</li> </ol>
	Not suitable	Students	<ol style="list-style-type: none"> <li>1. If the students have small children in/visiting the flat so preventing accidents.</li> </ol>
Child safety lock	Suitable	Students	<ol style="list-style-type: none"> <li>1. Will incur extra costs for a feature which may not be needed.</li> </ol>
	Not suitable	Landlord	<ol style="list-style-type: none"> <li>1. Will incur extra costs for a feature which may not be needed.</li> </ol>

### Question 3 (continued)

(b) State **two** ways the landlord could get advice when choosing a microwave.

**Core skills:** Recall and Use of Knowledge | **Mark allocation:** 2 marks

2 x 1 mark for correct source of advice

#### Source of advice

1. Citizens' Advice Bureau.
2. Which? Magazine/Consumer Association.
3. Consumer Advice Centre.
4. Reputable retail outlets
5. Magazines, eg Good Housekeeping.
6. Friends and family.
7. Internet.
8. Food technologists.

(c) Explain **two** ways **one** of the following might affect a consumer's choice of food.

- Budget
- Knowledge of nutrition

**Core skills:** Recall and Use of Knowledge | **Mark allocation:** 2 marks

2 x 1 mark for correct explanation linked to the consumer

#### Budget

1. If budget is limited consumers may choose more economy brands/low cost brands/cheapest.
2. If budget is limited consumers may be restricted in their choice of foods.
3. If budget is limited consumers may choose more convenience food as they may be cheaper/less fresh foods as they may be more expensive.
4. If budget is limited consumers may choose lower quality foods as they may be cheaper.
5. If budget is high then consumers may choose foods from stores they may perceive as 'quality' stores.
6. If budget is high consumers may choose to buy more 'quality' foods/more ready-prepared foods/luxury items.

#### Nutritional knowledge

1. Consumers may choose/avoid certain foods they know to be healthy/unhealthy.
2. Consumers may choose certain foods which are promoted as being nutritious.
3. Consumers may still choose less healthy options despite knowing they are unhealthy.
4. Consumers may be guided by taste and personal preferences if they have no knowledge of nutrition.

### Question 3 (continued)

(d) A student wants to buy a ready made meal. Study the information about ready made meals below and choose the <b>most suitable</b> for the student.
<b>Core skills:</b> Drawing conclusions   <b>Mark allocation:</b> 4 marks
1 mark for correct choice 3 x 1 mark for reasons linked to the needs of the case study

Correct choice: **Ready made meal B**

Fact	Opinion	Link	Consequence
Texture	Suitable – 4/very good/ second best score	Student	<ol style="list-style-type: none"> <li>1. Is likely to enjoy the meal.</li> <li>2. There is likely to be little waste, so saving money.</li> </ol>
Value for money	Suitable – 5/excellent/best score	Student	<ol style="list-style-type: none"> <li>1. The student is likely to be on a limited budget.</li> </ol>
Portion size	Suitable – 5/excellent/best score	Student	<ol style="list-style-type: none"> <li>1. There is likely to be enough for the student to eat.</li> <li>2. There is less likely to be any left over, so the student is not wasting money.</li> <li>3. Student is unlikely to have to buy any more food for that meal.</li> </ol>
Colour	Suitable – 3/average score	Student	<ol style="list-style-type: none"> <li>1. Likely to find the meal attractive/aesthetically appealing.</li> </ol>
Ease of preparation	Suitable – 5/excellent/best score	Student	<ol style="list-style-type: none"> <li>1. The meal will be quick to prepare and the student may be busy.</li> <li>2. The student may have limited cooking skills.</li> <li>3. The meal is likely to require little equipment to prepare and the student may have limited equipment available.</li> </ol>

#### Question 4

(a) A party planner has been asked to provide a cake for a child's birthday party. The cake must:

- appeal to children
- be personalised
- be additive free

Study the information about cakes below and choose the **most suitable** cake for the party planner to provide.

**Core skills:** Drawing conclusions

**Mark allocation:** 4 marks

1 mark for correct choice

3 x 1 mark for reasons linked to the case study

Correct choice: Cake **C**

#### Type of cake – sponge

1. Good as most children like sponge cake.
2. Good as there is no fruit/nuts which children may not like.
3. Good as there is no nuts to which children may be allergic.
4. Good as the cake will most likely be eaten preventing waste/saving the parent money.

#### Range of sizes available - ✓✓✓/good/widest range

1. ✓✓✓/good/widest range good as the planner can choose the most appropriate size for the party.
2. ✓✓✓/good/widest range, good as there will be no waste if there is only a small number of guests.
3. ✓✓✓/good/widest range, good as there will be a big enough cake for even a large number of guests.

#### Aesthetic appeal - ✓✓✓✓/excellent/best

1. ✓✓✓✓/excellent/best, good as the children will want to eat it.
2. ✓✓✓✓/excellent/best, good as the children will enjoy the cake.
3. ✓✓✓✓/excellent/best, good as required by the party planner.

#### Additives used – No

1. Good as this is what the party planner wanted.
2. Good as this will help avoid allergies in the children at the party.
3. Good as this will help avoid some children becoming hyperactive at the party.

#### Shelf life - ✓✓✓/good/second best

1. ✓✓✓/good/second best, good as any leftover cake will keep fresh for longer.
2. ✓✓✓/good/second best, good as the cake is unlikely to be stale before the day of the party.
3. ✓✓✓/good/second best, good as the party planner will be able to buy the cake ahead of time.

#### **Question 4 (continued)**

##### **Free personalisation – 24hrs notice required**

1. Good as a personalised cake was required by the party planner.
2. Good as the cake can be personalized professionally which will give a good result.
3. Good as will appeal to the child as most children like to have their name on their birthday cake.
4. Good as the cake only needs to be ordered 24hrs in advance of the party.
5. Good as there is no additional cost for personalizing the cake, so saving money.

##### **Cost - ££/fairly inexpensive/one of the cheapest**

1. ££/fairly inexpensive/one of the cheapest, good as the party planner/parent will get value for money.



**Question 4 (continued)**

- (b) Explain why a food manufacturer would consider the following when developing a food product.
- Cost of ingredients
  - Flavour

**Core skills:** Recall and Use of Knowledge | **Mark allocation:** 2 marks

2 x 1 mark for correct explanation

**Cost of ingredients**

1. To ensure the manufacturer makes enough profit.
2. To ensure the product is value for money for the consumer.
3. To ensure that the product is priced similarly to its competitors.

**Flavour**

1. To make the product appealing to the consumer, so increase sales.
2. To ensure repeat purchases, so increase sales.
3. To increase consumer appeal by offering a range of flavours.
4. To increase consumer appeal by offering 'limited edition' flavours.
5. To offer current trend flavours and so increase consumer appeal.

- (c) State the correct temperature range required for a refrigerator.

**Core skills:** Recall and Use of Knowledge | **Mark allocation:** 1 mark

1 mark for correct temperature within the range

1. 0°C - 5°C.

#### Question 4 (continued)

- (d) Explain why a food manufacturer may carry out **two** of the following stages in product development.
- Concept generation
  - Prototype production
  - Marketing Plan

**Core skills:** Recall and Use of Knowledge | **Mark allocation:** 2 marks

2 x 1 mark for correct explanation

#### **Concept generation**

1. Brainstorming ideas for a new product.
2. Development of ideas from market analysis.
3. Identifying a gap in the market.
4. To start the product development process.

#### **Prototype production**

1. Make a sample/specimen of the product.
2. To test the production line.
3. To test the product against the specification.
4. To find out the cost of a new product.
5. To allow modifications to be made before the product goes into full production.
6. To decide on the viability of the product.

#### **Marketing Plan**

1. Decisions will be taken on how the product will be promoted.
2. Decisions will be taken on the price of the product.
3. Decisions will be taken on the advertising of the product.
4. Decisions will be taken on the packaging of the product.
5. Decisions will be taken on the positioning of the product (for sale).

#### Question 4 (continued)

- (e) Give **one** example of **one** the following changes which occur during food production
- Reversible change
  - Irreversible change

<b>Core skills:</b> Recall and Use of Knowledge	<b>Mark allocation:</b> 1 mark
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#### Reversible change

1. Water > steam > water.
2. Water > ice > water.
3. Chocolate melts on heating > solidifies on cooling.
4. Margarine/butter/lard melts of heating > solidifies of cooling.

#### Irreversible change

1. Water mixed with flour > paste.
2. Starch gelatinised when heated in a liquid.
3. Starch > dextrin when heated with dry heat.
4. Egg white coagulates on heating.
5. Sugar caramelises on heating.
6. Meat browns when cooked.

#### Question 4 (continued)

(f) Explain how changing the proportion of ingredients in **two** of the following products would affect the finished result.

- Increase the proportion of flour in a sauce
- Increase the proportion of sugar in a sponge
- Increase the proportion of fat in pastry

**Core skills:** Recall and Use of Knowledge | **Mark allocation:** 2 marks

2 x 1 mark for correct explanation

#### **Increase the proportion of flour in a sauce**

1. The sauce will be thicker/more viscose.
2. The sauce will gel.

#### **Increase the proportion of sugar in a sponge**

1. The sponge will be sweeter.
2. The sponge will burn more readily.
3. The sponge will sink in the middle.
4. The sponge will be coarser grained.
5. A sugary coating will form on the sponge.
6. Any fruit will sink/collapse.
7. The sponge will be darker in colour.

#### **Increase the proportion of fat in pastry**

1. Flavour will be richer.
2. Pastry will be a darker colour.
3. Pastry will be more fragile/crumby.
4. Pastry will be greasy.

## Question 5

(a) State **three** Scottish dietary targets. Give a **different** practical way of meeting **each** target.

**Core skills:** Recall and Use of Knowledge | **Mark allocation:** 6 marks

3 x 1 mark for Scottish dietary target

3 x 1 mark for practical way linked to Scottish dietary target

### **Fruit and vegetables**

Dietary target

1. Increase intake of fruit and vegetables.
2. Increase intake of fruit and vegetables to 5 portions per day.
3. Intake of fruit and vegetables to double.
4. Intake of fruit and vegetables to 400g per day.

Practical way

1. Add fruit to breakfast cereals.
2. Replace high sugar/high fat snacks with fruit/vegetables.
3. Puree fruit/vegetables into drinks/smoothies.
4. Use as a basis for desserts.
5. Use a variety of vegetables in soups.
6. Add into stews/casseroles/pizzas/pasta dishes.
7. Use as a main course dish eg vegetable curry.
8. Add an extra serving of vegetables/salads with main course dishes.
9. Use salad to fill sandwiches.

### **Bread**

Dietary target

1. Increase bread intake (mainly using wholemeal).
2. Increase bread intake by 45%.

Practical way

1. Use to accompany soups/main courses.
2. Use in desserts eg bread and butter/summer pudding.
3. Serve sandwiches to replace high fat/sugar snacks.
4. Use breadcrumbs to top savoury dishes/coat foods for frying.
5. Breadcrumbs can be added to provide bulk eg burgers.

### **Breakfast cereals**

Dietary target

1. Increase intake of breakfast cereals.
2. Intake of breakfast cereals to double.
3. Intake of breakfast cereals to double to 34g per day.

Practical way

1. Use breakfast cereals to replace high fat/sugar snacks.
2. Add cereals to baked products eg biscuits.
3. Use as toppings for crumbles/yoghurts/savoury dishes.
4. Use as a coating for food to be baked/fried/grilled.

## Question 5 (continued)

### **Total complex carbohydrates**

#### Dietary target

1. Increase intake of total complex carbohydrates/fruit and vegetables/bread/breakfast cereals/rice/pasta/potatoes.
2. Increase intake of TCC foods by 25%.

#### Practical way

1. Increase portion size of bread/potatoes/rice/pasta/breakfast cereals/fruit/vegetables.
2. Replace high fat/sugar snacks with bread products/breakfast cereals/fruit.
3. Use bread/breakfast cereals in desserts/baking/top savoury dishes.
4. Add potatoes/rice/pasta/vegetables to soups/savoury dishes (accept appropriate examples).

### **Fish**

#### Dietary target

1. Eat more fish especially oily fish.
2. Intake of white fish to be maintained.
3. Intake of oily fish to double to 88g/week

#### Practical way

1. Use as fillings for sandwiches/baked potatoes.
2. Use in pates.
3. Use to replace meat/poultry in main course dishes.
4. Add into pasta dishes/pizza.

### **Salt**

#### Dietary target

1. Intake of salt to be reduced.
2. Intake of salt to reduce (from 163mmol/day) to 100mmol/day/no more than 6g/day.

#### Practical way

1. Replace ready-made foods with home-made versions.
2. Limit intake of processed foods (eg ham/cheese).
3. Limit intake of salty snacks (eg crisps).
4. Replace salt with LoSalt/salt substitute.
5. Use herbs/spices to flavour food.
6. Read labels and choose lower salt products.
7. Taste food before adding salt.

## Question 5 (continued)

### **Sugar**

#### Dietary target

1. Adult intake of (NME) sugar not to increase.
2. Intake of (NME) sugar in children to reduce by half.
3. Intake of (NME) sugar in children to reduce to less than 10% of energy.
4. Reduce intake of NME sugar.

#### Practical way

1. Choose breakfast cereals with no added sugar.
2. Replace biscuits/cakes/sweets/chocolate/desserts with bread products/fruit.
3. Replace sugar with sweeteners/do not add sugar to tea/coffee.
4. Reduce sugar/use sugar substitutes/replace sugar with fruit in baking.
5. Read labels and choose lower sugar products.
6. Choose tinned fruit in natural juice rather than syrup.
7. Choose drinks with no added sugar.

### **Fat**

#### Dietary target

1. Reduce intake of fat.
2. Reduce total fat intake.
3. Intake of total fat to be reduced to no more than 35% of food energy.
4. Reduce intake of saturated fat.
5. Average intake of saturated fat to be reduced to no more than 11% of food energy.

#### Practical way

1. Replace (whole) milk with semi-skimmed/skimmed milk.
2. Replace butter/margarine with low-fat spread.
3. Choose cottage/edam/reduced-fat cheese to replace cheddar/hard cheese.
4. Choose lean meat/cut any extra fat from meat/replace red meat with white meat.
5. Replace high fat snacks (eg crisps) with eg bread products/fruit.
6. Grill/bake/steam/poach/microwave foods instead of frying.
7. Skim fat from gravy/soups/stews.
8. When frying use a griddle-pan/dry fry.
9. Read labels and choose lower-fat products.

### Question 5 (continued)

- (b) A Home Economics department wants to buy hand blenders. The pupils often make soup and use breadcrumbs in their cooking. The kitchens have limited storage space.  
Study the information about hand blenders below and choose the **most suitable** hand blenders for the department to buy.

**Core skills:** Drawing Conclusions

**Mark allocation:** 4 marks

1 mark for correct choice

3 x 1 mark for reason linked to the needs of the case study

Correct choice: **A**

#### **Power – 300W/most powerful blender**

1. 300W/most powerful blender, good as pupils will be able to blend the food quicker/time is often short in HE classes.
2. 300W/most powerful blender, good as the blender last longer/be less likely to break as it will be used often.

#### **Stainless steel blades**

1. Good as they will be long lasting so saving the HE department money.
2. Good as they will be long lasting so saving the HE department the inconvenience of replacing them.
3. Good (as they will not rust) so will save the pupils time/effort cleaning them.

#### **Anti splash guard**

1. Good as the pupils will be less likely to get burned when using the blender.
2. Good as the pupils will make less mess/will have less clearing up to do when using the blenders.

#### **3 speeds/widest range of speeds**

1. 3 speeds/widest range of speeds, good as the pupils can choose the correct speed for making soup/breadcrumbs.
2. 3 speeds/widest range of speeds, good as the pupils will be able to blend quickly as time is often short in HE classes.

#### **Purées/blends/chops**

1. Purées/blends, good as the pupils often make soup.
2. Chops, good as the pupils often make soup so can use the blender to chop the vegetables.
3. Chops, good as the pupils can use it to make breadcrumbs which they use often.
4. Good as the classes will use all the functions of this blender, making it good value for the department.



### Question 5 (continued)

#### Wall attachment

1. Good as there is limited storage space in the department.
2. Good as the blenders may be stored close to each unit.
3. Good as it will be easy for teachers to check if the blenders are correctly stored/cleaned.

#### Noise level – low

1. Good as the teacher will still be able to be heard when the blenders are being used.
2. Good as a number of blenders are likely to be used at one time.
3. Good as the noise will be less likely to disturb other classes.

#### Cost – 12.99/second cheapest

1. 12.99, good as this is the cheapest model which has all the functions the HE department need.
2. 12.99/second cheapest, good as the HE department will not have much money.

(c) State **one** advantage and **one** disadvantage of buying foods online.

**Core skills:** Recall and Use of Knowledge | **Mark allocation:** 2 marks

1 mark for advantage

1 mark for disadvantage

#### Advantage

1. Can view a wide range of products.
2. Can check if the item is in stock/waiting time.
3. Can compare prices.
4. Can compare features of different models.
5. Can check at any time of day/night.
6. Can order from home.
7. Can organize to have goods delivered.
8. May be quicker/saves time as a favourites list can be created.
9. Can schedule a delivery slot in advance.

#### Disadvantage

1. May be difficult to choose from a photograph/may not be a photograph available.
2. Have to wait for goods to arrive.
3. May have to pay an additional cost for delivery.
4. May have to wait in for delivery.
5. Goods may not arrive.
6. Goods may be damaged.
7. May have the inconvenience of returning goods.
8. Must have a debit/credit card.
9. Risk of fraud/identity theft.
10. Must have internet access.
11. No personal service/advice.
12. May take longer.
13. Inappropriate goods may be substituted.
14. Quality/freshness may not be as required.
15. Range/choice of products may be limited.
16. Best before dates may be too close to the current date.

## Intermediate 2 Home Economics

### Analysis of 2012 Question Paper

<b>Context:</b>	<input checked="" type="checkbox"/>	Health and Food Technology
	<input type="checkbox"/>	Lifestyle and Consumer Technology
	<input type="checkbox"/>	Fashion and Textile Technology

### Analysis of question content and question choice.

Question	Content Outline	Choice		Mark
		Yes	No	
<b>1</b> (a) (b) (c)	Function and sources of CHO and Vitamin D.		✓	<b>6</b>
	Diet related diseases linked to sugar.		✓	<b>2</b>
	Evaluation of day's meals for toddler.		✓	<b>4</b>
<b>2</b> (a) (b) (c) (d)	Choice of 'Food-to-go' lunchboxes.		✓	<b>4</b>
	Sensory testing.		✓	<b>3</b>
	Food labelling.		✓	<b>4</b>
	Act which protects the consumer when buying food.		✓	<b>1</b>
<b>3</b> (a) (b) (c) (d)	Evaluation of microwave for student.	✓		<b>4</b>
	Sources of consumer advice.		✓	<b>2</b>
	Consumer's choice of food.	✓		<b>2</b>
	Choice of ready meals for a student.		✓	<b>4</b>
<b>4</b> (a) (b) (c) (d) (e) (f)	Choice of child's birthday cake.		✓	<b>4</b>
	Cost and flavour of food in product development.		✓	<b>2</b>
	Temperature of refrigerator.		✓	<b>1</b>
	Stages in product development.	✓		<b>2</b>
	Reversible and irreversible changes in foods.	✓		<b>1</b>
	Effect of proportions of ingredients in products.	✓		<b>2</b>
<b>5</b> (a) (b) (c)	Practical ways to meet Scottish dietary targets.		✓	<b>6</b>
	Choice of hand blenders for HE department.		✓	<b>4</b>
	Advantages and disadvantages of buying on-line.		✓	<b>2</b>

	<b>Context:</b>	✓	<b>Health and Food Technology</b>
			<b>Lifestyle and Consumer Technology</b>
<b>Intermediate 2 Home Economics. Analysis of the 2012 Question Paper</b>			<b>Fashion and Textile Technology</b>
<b>Question Paper Summary: Mark Allocation</b>			

Question	Component Unit				Skill Assessment			Totals
	Management of Practical Activities	Product Development	Consumer Studies	Choice	Recall and use of knowledge	Draw conclusions	Evaluate	
1 (a)	6				6			
(b)	2				2			
(c)	4						4	
<b>Totals</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>4</b>	<b>12</b>

		Context:	✓	Health and Food Technology
				Lifestyle and Consumer Technology
Intermediate 2 Home Economics. Analysis of the 2012 Question Paper				Fashion and Textile Technology
<b>Question Paper Summary: Mark Allocation</b>				

Question		Component Unit				Skill Assessment			Totals
		Management of Practical Activities	Product Development	Consumer Studies	Choice	Recall and use of knowledge	Draw conclusions	Evaluate	
1	(a)	6							12
	(b)	2			0	6			
	(c)	4				2		4	
2	(a)		4				4		12
	(b)		3			3			
	(c)			4		4			
	(d)			1		1			
3	(a)			4	4			4	12
	(b)			2		2			
	(c)			2	2	2			
	(d)			4			4		
4	(a)		4				4		12
	(b)		2			2			
	(c)	1				1			
	(d)		2		2	2			
	(e)	1			1	1			
	(f)	2			2	2			
5	(a)	6				6			12
	(b)		4				4		
	(c)			2		2			
<b>Totals</b>		<b>22</b>	<b>19</b>	<b>19</b>	<b>11</b>	<b>36</b>	<b>16</b>	<b>8</b>	
<b>Target Range</b>		<b>15-25 marks</b>	<b>15-25 marks</b>	<b>15-25 marks</b>	<b>10-12 marks</b>	<b>30-37 marks</b>	<b>15-20 marks</b>	<b>8-10 marks</b>	<b>60 marks</b>

[END OF MARKING INSTRUCTIONS]