

# Examiners' Report

## June 2012

### GCSE Design & Technology: Food Technology 5FT02 01

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## Introduction

In the third year of this examination, pleasing progress has been made in candidates' Food Technology learning. The delivery of knowledge, understanding and skills continues to show good progression for a wide range of ingredients, components, materials and processes, through the use of primary and secondary foods and the focus on food preparation, processing and preservation, nutrition and health issues, product analysis and product manufacture topics across Food Technology at both a domestic and industrial level of application. There were a range of levels of outcome for candidates. This paper contained a broad and varied distribution of marks across the paper, which achieved a good balance of recall, selection, application and communication of knowledge and understanding in Food Technology, as well as product analysis and evaluation, through short and extended writing activities, as well as the design question.

Marks were scored evenly across all areas of the paper. Handwriting was variable, with some answers illegible. Some candidates lost marks through carelessness or lack of thought and effort.

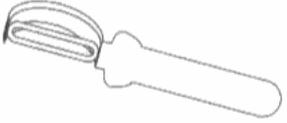
5FT02 paper requires candidates to answer 14 questions in 90 minutes.

The multiple choice questions and short answer questions were well received. Short, concise answers tended to fair better than lengthy responses that were too wordy or indeed went beyond the space for answers. Many candidates managed to write at considerable length in this time for the extended writing tasks. However, some of the answers were not focussed on the question. Relevance rather than length is the key to higher marks. Additional pieces of paper are unhelpful to the marking process. The amount of space provided in the booklet for answers is more than we would expect any answer to take and not a recommendation of the amount candidates should write.

Candidates need to have a full understanding of the requirements of different question types: name, state, give, describe, outline, evaluate and explain. Often, candidates had difficulty in achieving the full marks for questions asking for an explanation, because answers were not supported with relevant linked examples or reasoning. Additionally, some of the technical questions relating to food products and nutritional understanding were incorrect or vague. Technical understanding enables candidates to access the higher marks. The design question was well received, and significant improvements have been seen with the quality of sketched and written communication by candidates. Additionally, the extended writing answers were much better organised, with good planning and use of terminology presented by candidates.

### Question 11 (a) (i)

A good introductory question and this was answered very well by most candidates, identifying correctly what a palette knife was used for, but there were quite a few candidate's who incorrectly wrote about the bun tin being a baking tray.

	Peeler	To peel skin off things like potatoes Apples and oranges (1)
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**ResultsPlus**

**Examiner Comments**

Many good answers focussing on the removal of skin, size reduction and peeling food items.

	Peeler	To peel skin off of fruit & vegetables (1)
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**ResultsPlus**

**Examiner Comments**

A correctly labelled small piece of hand held equipment.

### Question 11 (a) (ii)

The use of this piece of equipment was correctly labelled by most candidates, with many answers focussing on spreading, lifting, folding, slicing or removing items from trays. A significant number of candidates identified a food product or component linked to the use.

	Palette knife	Used to remove food from a tray (1)
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**ResultsPlus**  
Examiner Comments

Good answer and awarded one mark.

	Palette knife	To spread a mixture or sauce evenly over a surface or cake. (1)
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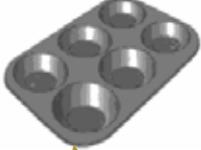


**ResultsPlus**  
Examiner Comments

Good technical answer supported with an example of use for a food or component.

### Question 11 (a) (iii)

There was a range of accurate answers to this question, identifying the name of the equipment. Pattie tin or tart/ bun tin were the most popular answers, with some confusion with baking trays.

	cup cake / muffin baking tray. (1)	To bake small cakes/ Yorkshire pudding/muffins/ pastry/tarts/pies
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**ResultsPlus**

**Examiner Comments**

One mark awarded for this answer as the technical name is identified at the start of the answer. On its own, 'baking tray' would not have been awarded a mark.

	baking tray (1)	To bake small cakes/ Yorkshire pudding/muffins/ pastry/tarts/pies
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**ResultsPlus**

**Examiner Comments**

This answer is incorrect, as a baking tray is a flat surface, without the ability to mold or shape individual portions of baked products. No marks awarded for this answer.

### Question 11 (a) (iv)

A straight forward question, with a range of good answers, identifying the correct name of the brush used in food preparation.

	Pastry brush (1)	To grease baking tins, glaze/ brush pastry with egg/milk/ sugared water
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**ResultsPlus**

**Examiner Comments**

The correctly named brush, receives 1 mark.

	pastry brush (1)	To grease baking tins, glaze/ brush pastry with egg/milk/ sugared water
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**ResultsPlus**

**Examiner Comments**

Many candidates just mentioned 'brush' and therefore did not secure the mark. This candidate achieved 1 mark.

## Question 11 (b) (i)

This question was well answered by the majority of candidates. Most candidates were able to correctly name two other nutrients found in eggs. The main error occurred where the stem of the question was repeated in the answer. The nutrients and their sources, functions and deficiencies underpin the whole qualification.

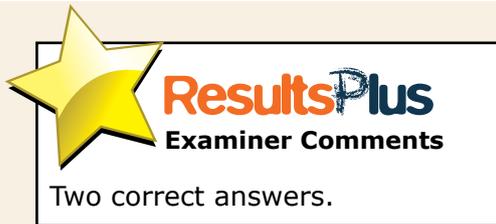
Most candidates achieved 1 mark but many did not know about the vitamin content of eggs, and included vague references to vitamins or minerals.

(b) Eggs are rich in protein.

(i) Name **two** other nutrients found in eggs. (2)

1 Fat

2 Vitamin D



1 Vitamin A

2 Fat



## Question 11 (b) (ii)

Primary and secondary foods will be used throughout practical work and it is an opportunity to consider how they must be handled and stored prior to preparation and processing to meet the needs of the recipe or consumer.

Generally, this question was well answered by most candidates with the most popular answers being store in a cool, dry area.

(ii) Give **two** ways eggs should be handled or stored correctly to avoid contamination.

(2)

- 1 Wash hands before handling avoid cross contamination
- 2 Stored in the fridge door away from raw meat



**ResultsPlus**  
Examiner Comments

Some good technical vocabulary within this answer, demonstrating full marks.

- 1 should be stored in a dry cool place like fridge
- 2 should be handled safely to reduce breaking them



**ResultsPlus**  
Examiner Comments

Two accurate answers following the stem of the question.

### Question 11 (b) (iii)

Primary and secondary foods will be used throughout practical work and it is an opportunity to consider how they can be used during preparation and processing to meet the needs of the recipe or consumer through an understanding of the working characteristics of ingredients. Generally, candidates answers tended to successfully focus on mixing and combining properties. Some responses focussed on types of recipes/dishes involving eggs, but failed to mention the actual functional use of the egg within the context of the question.

(iii) Give **three** functional uses of eggs in food preparation.

- 1 Binding
- 2 Glazing
- 3 Emulsification



**ResultsPlus**

**Examiner Comments**

A good recall and application of knowledge question, based upon the functional uses of eggs in recipes and food products.

- 1 They can be used for glazing
- 2 binding ingredients together
- 3 to enrich a sauce



**ResultsPlus**

**Examiner Comments**

Majority of candidates understood the context of the question and were able to offer at least two uses.

### Question 11 (b) (iv)

This question focussed on the effect of heat on protein and responses varied from very technical, with references to coagulation and temperature changes, to visual changes of colour and texture. There were really only two popular answers; the white turns white and the egg goes solid. A few candidates knew about the temperatures for coagulation.

(iv) Describe what happens when eggs are heated. (2)

The egg white turns from transparent to white and hardens.  
The yolk turns from a liquid to a solid.



**ResultsPlus**  
Examiner Comments

This response gives a description of the sensory changes occurring to eggs during heating.

The proteins on the egg white begin to coagulate and become harder, giving the whites a white colour. The yolk coagulates slower, meaning it can still be runny, but after several minutes they start to harden.



**ResultsPlus**  
Examiner Comments

An excellent answer, not only focussing on the technical and sensory changes to the eggs during heating, but also the ordering of changes during time control.

## Question 11 (c)

The majority of candidates were able to gain 1 mark but did not offer an explanation about why a pastry case might be 'baked blind'. A few candidates made references to eye sight or a failure to 'see'. Candidates were unable to use connective words within their answers to show their topic understanding. Some candidates focussed on the filling covering pastry causing it to be 'blind' cooking.

(c) A quiche consists of a savoury egg custard filling in a pastry case.

Explain why a pastry case is 'baked blind'.

(2)

Pastry is 'baked blind' so that the inside bottom of the pastry cooks and ~~is~~ has a nice crunchy texture like the rest of the pastry. Also because it will be stable to hold the filling.



**ResultsPlus**  
Examiner Comments

An accurate statement and linked response achieves two marks.

A pastry case is baked blind so that it is able to be cooked when it is filled with the filling and it will not go soggy. It will stay firm and be strong so a filling can be added to it.



**ResultsPlus**  
Examiner Comments

References to the sensory and physical properties of the term pastry case, show some understanding of the process 'baking blind'.

## Question 11 (d)

This question required candidates to describe two modifications to the savoury quiche food product that would make it suitable for a consumer following a weight loss diet, using candidate's product analysis and evaluation skills. Many candidates offered sound modifications to the food product, focussing on the type of milk, fat, cheese to create a healthy improvement to the recipe that would be low in fat (less animal fats/ proteins, cholesterol), and /or high in fibre, starchy carbohydrates and/or increasing the vegetable content as part of the five a day scheme. There were many imaginative savoury quiches that had tomato based sauces instead of egg custard sauces, and changes to the fats and flour used in pastry making. However, candidates often struggled to describe how these modifications were making it suitable for the special dietary need. Vague statements about changing the butter were not worthy of any marks. This question offered stretch and challenge opportunities.

There were a significant number of responses that referred to low fat butter or changes to all butter. Frequently, answers that did not include reasons or strayed from modifications, referred to exercise to help weight loss.

(d) The following recipe was used to produce a prototype quiche:

200 g plain flour  
50 g butter  
50 g lard  
100 ml cold water  
3 eggs  
1 onion  
50 g cheddar cheese  
125 ml milk

Describe **two** modifications that would make the quiche suitable for someone following a weight loss diet.

(4)

- 1 One way to make it suitable is too swap the cheddar cheese for low fat cheese this means that the person will be eating less fat.
- 2 another way to make it suitable is too swap the milk for skimmed milk this is because it is lower in fat.



**ResultsPlus**  
Examiner Comments

These responses focus on the fat content and ways of reducing fat within individual components of the recipe.

- 1 You can replace 125ml of milk with soya milk which is healthier and fresh which is suitable when you want to lose weight.
- 2 You can replace 50g of cheddar cheese with low-fat cheese which will reduce the fat intake and will help reduce weight.



**ResultsPlus**

**Examiner Comments**

Some good suggestions of recipe development, but the descriptions need further clarification linked to the relevance of a weight loss diet.

## **Question 12**

The design question produced some outstanding responses from candidates with excellent sketching and annotation. The link between coursework activities in the design task was most apparent and it was pleasing to see some innovative food product design work. A wide range of seasonal soups were presented with most candidates managing to illustrate and label two different ideas. Centres continue to work hard to raise achievement in this section of the question paper. All examiners noted the continued improvement in communication techniques and the ability of the candidates to be creative, imaginative and at times quite inventive with their recipes.

Where candidates had read the question carefully and planned their answer methodically, and sketches and annotation succeeded in showing how the design had met the specification points, they were rewarded with some high marks. It is not acceptable to just label the specification points; the responses must be annotated indicating how the design has met each point. The point that caused greatest difficulty was the suitability to be reheated. Responses needed to focus on ways this can be achieved. Therefore correct answers could have referenced that the food product maybe reheated in a microwave or on the hob, heating instructions in packaging container, reheated in saucepan, previously cooked, size of vegetables reduce cooking time, or a mention about transference of heat (conduction or convection)

Candidates who planned their answers carefully were rewarded with high marks because they used the specification as a checklist, to ensure they covered all the points.

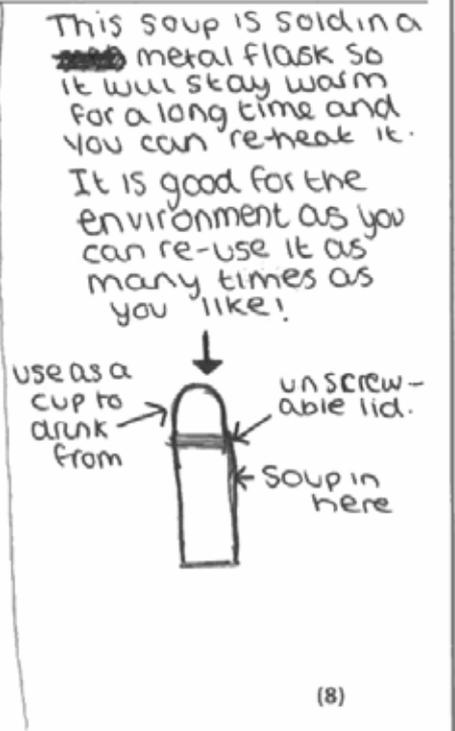
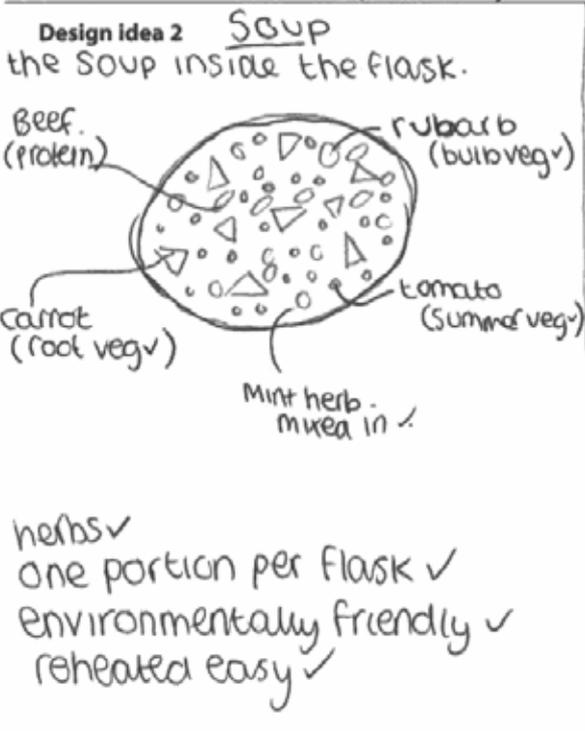
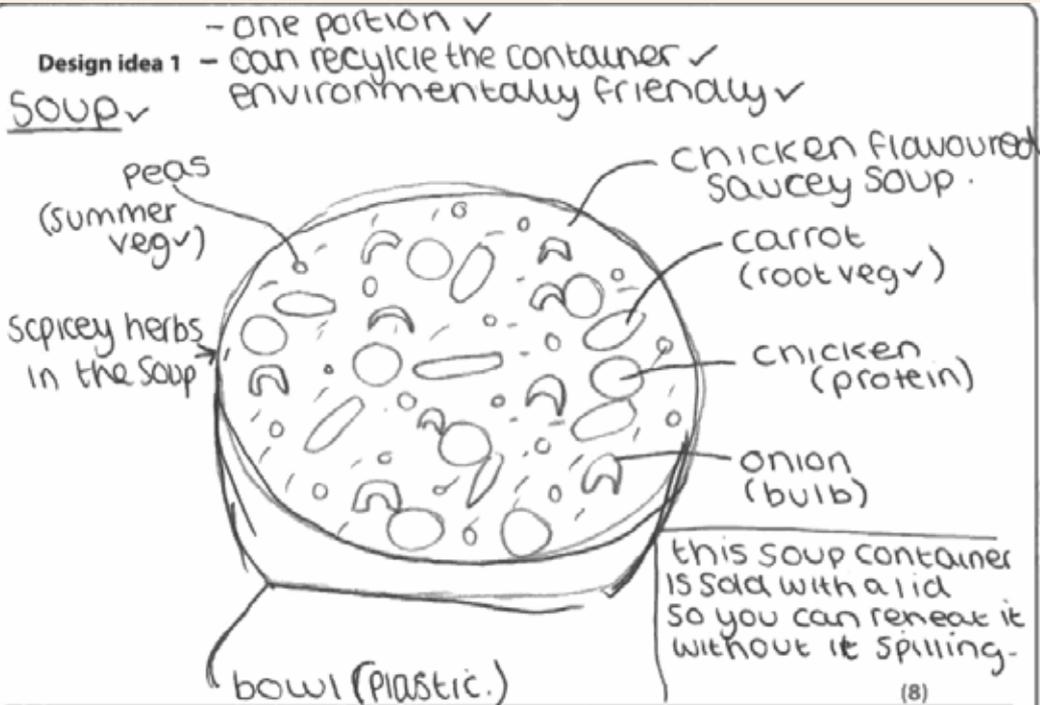
Use the specification as a checklist to ensure that each design is annotated differently, and that each point is met for the design brief.

A good variety of vegetables were included and recorded, but some candidates were confused between root and bulb vegetables. Candidates knew which protein foods would go with their soups but didn't always include portion control for that question. Packaging was included but only half the candidates knew about reheating, how to do it and why.

This was a popular question and the majority of candidates responded fully. Some of the designs were very good, being fully annotated and sketched well. There seemed to be a logical process in answering where the candidate had worked through the specification points one by one.

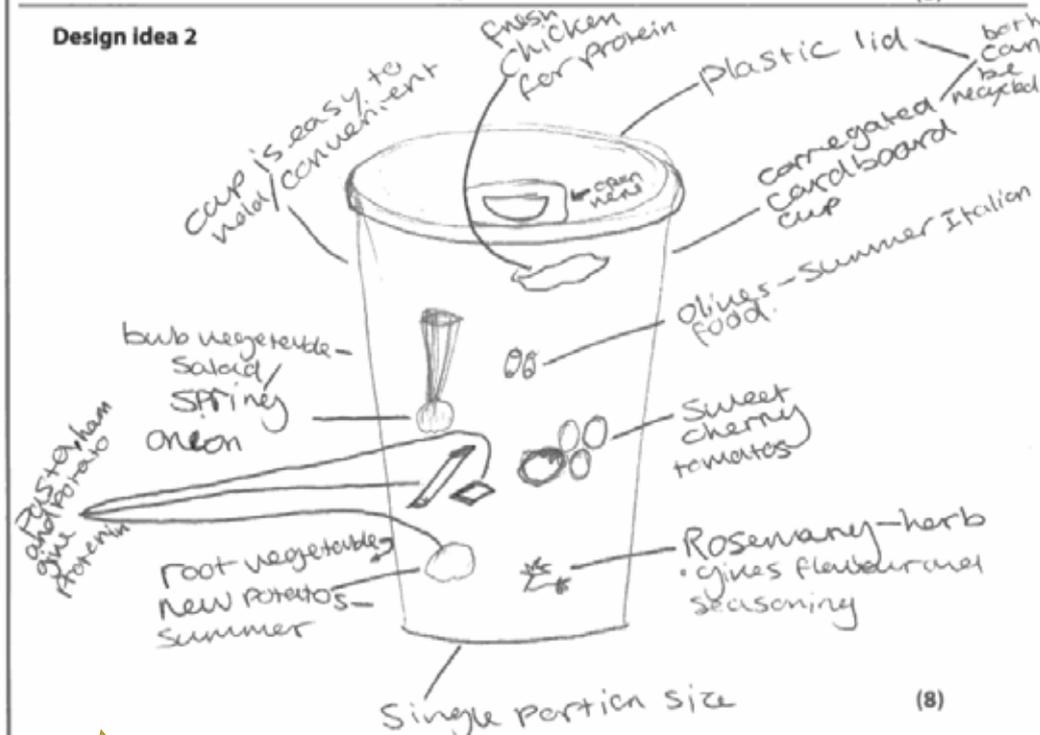
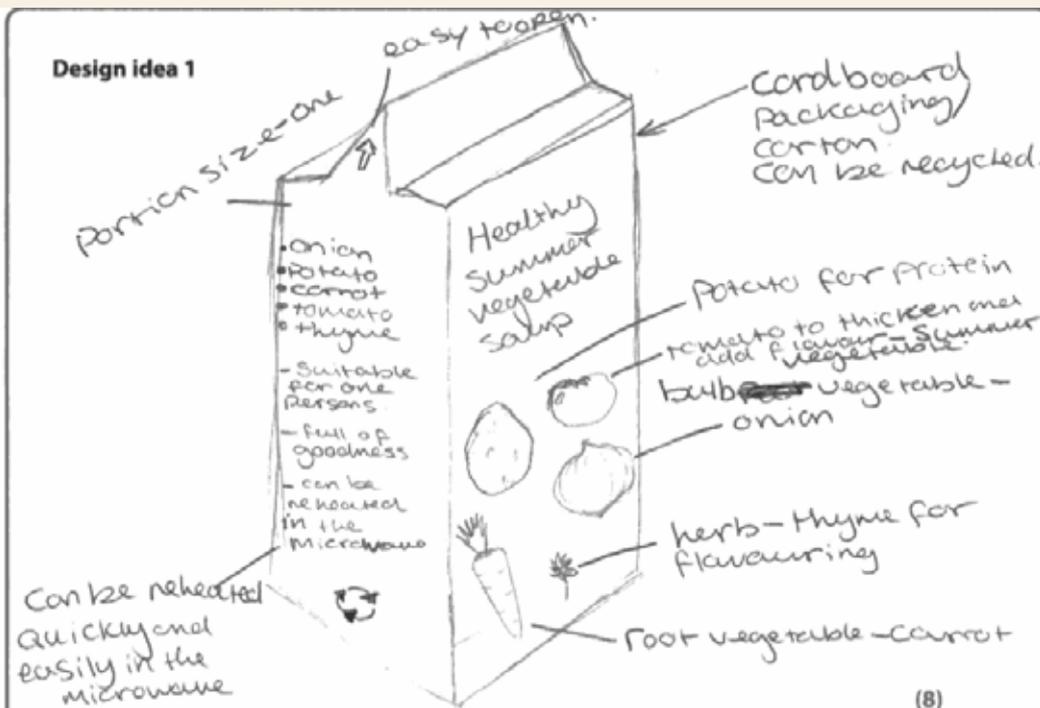
Many had indicated portion size by measurement, size or sketching against a hand.

The level of understanding of what was required from this question was very good, and some marks could be picked up even if the question was not fully answered.



**ResultsPlus**  
Examiner Comments

There was sometimes confusion with root and bulb vegetable and some mentioned fruits. Some candidates did not specify how the soup was to be reheated. Many answers repeated the specification point of 'able to be reheated easily'.

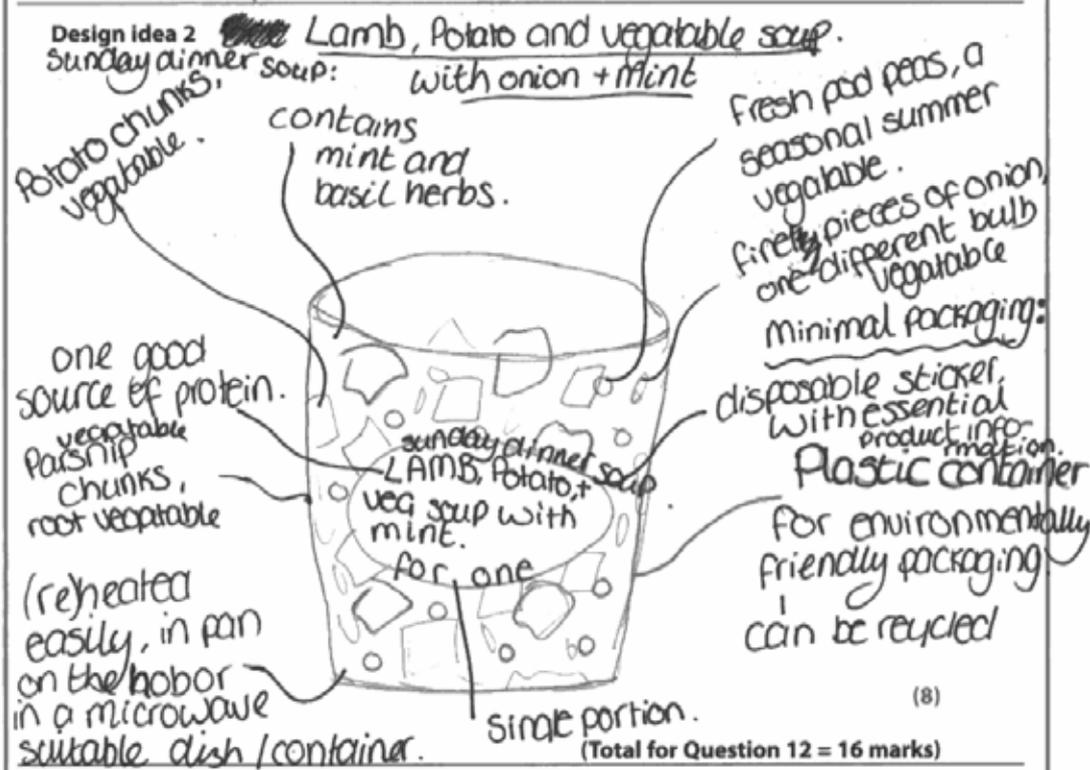


**ResultsPlus**  
Examiner Comments

A pleasing set of answers by this candidate.

Other observations by examiners during marking included: the second design was often not as detailed as the first, maybe due to time constraints and exam pressure.

Also, it was sometimes a duplicate of the first with few different points shown.



**ResultsPlus**  
Examiner Comments

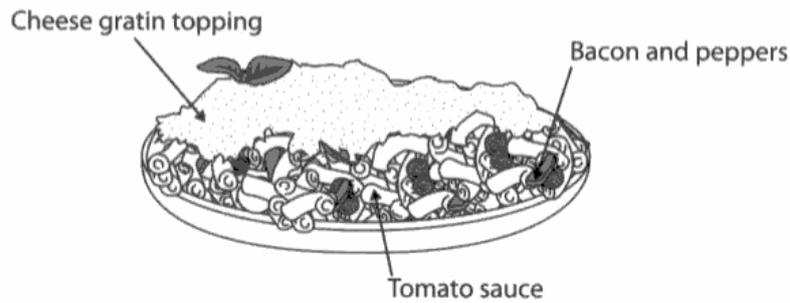
A pleasing range of responses shown for the first few points of the specification, followed by some repetition, which restricted access to the higher marks.

### Question 13 (a)

Candidates were expected to identify three industrial food preparation techniques, and their answer could have focussed on separation processes such as cleaning, drying, peeling, grading or size reduction, mixing and combining, blanching or weighing and measuring activities.

Candidates either knew all three responses or listed a random selection of vague, incorrect answers, with no relevance to the question.

13 The drawing below shows an individual pasta bake product, sold in the chilled section of a supermarket.



(a) List **three industrial** food preparation techniques used to make the pasta bake product.

(3)

Food preparation technique 1

chopping the peppers

Food preparation technique 2

grating cheese

Food preparation technique 3

stirring the sauce

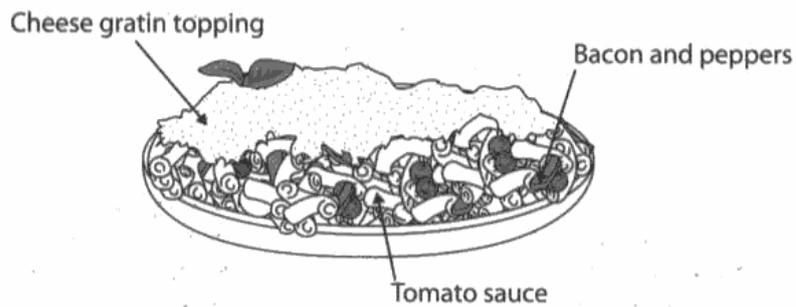


**ResultsPlus**

**Examiner Comments**

The most popular answers were chopping, slicing and dicing/grating. Stirring is incorrect.

13 The drawing below shows an individual pasta bake product, sold in the chilled section of a supermarket.



(a) List **three industrial** food preparation techniques used to make the pasta bake product.

(3)

Food preparation technique 1

*grating*  
*grating a block of cheese with a grater.*

Food preparation technique 2

*Dice the peppers and bacon with a knife.*

Food preparation technique 3

*blend together the tomato sauce using a blender.*



**ResultsPlus**  
Examiner Comments

The majority of candidates achieved full marks and were able to comfortably discuss skills. Wide depth of answers offered.

### Question 13 (b)

The most common answers included blast freezing or CAM, but very limited explanations were provided in order to get the second mark. This was disappointing as it was a nicely worked question with an abundance of answers that were acceptably linked to industrial processing.

(b) Describe **one industrial** processing method used to create the pasta bake. (2)

Batch production uses standard components that are purchased in bulk to create a cost-effective method of producing the product.



**ResultsPlus**  
Examiner Comments

A technical answer focussing on standard components and their merits in industrial food processing.

Computer Aided manufacture (CAM) would be used to create this pasta bake because it speeds up the process of them being made and makes sure they meet the quality standard.



**ResultsPlus**  
Examiner Comments

A good, technical answer.

A limited number of candidates were able to discuss manufacturing processes with sound knowledge and technical terms.

### Question 13 (c)

The focus of this question was the application of knowledge and understanding of the cook/chill process and how manufacturers use the process to ensure food safety. Some candidates answered this question well, with a good understanding of time and temperature control. A limited number of candidates discussed bacteria and the conditions for growth. Many responses focussed on re-heating which would lead to food poisoning.

(c) Pasta bake products are often sold as a cook-chill product.

Describe **one** way in which the cook-chill process makes the pasta bake safe to eat.

(2)

The COOK-CHILL method ensures it is safe to eat as during cooking the ingredients any bacteria is killed and when it is chilled ~~the~~ it slows down growth of bacteria.



**ResultsPlus**  
Examiner Comments

The candidate's answer demonstrates an awareness of bacterial activity during the cook-chill process.

'Cook-chill' involves cooking a product then cooling it down very quickly. This makes the pasta bake safe to eat as it slows the growth of bacteria & makes it easy to reheat without contamination & <sup>micro</sup>organism growth.



**ResultsPlus**  
Examiner Comments

Temperature control and micro organism activity show a linked response, but it would have been desirable for the candidate to have developed this further with the temperature range for each process.

### Question 13 (d)

The answers for this question demonstrated excellent knowledge on sustainability and the environmental issues surrounding food production. Good progress has been made with this area of the specification and the direct link to coursework activities.

(d) Designers need to consider the sustainability of a commercial product.

Give **two** ways a manufacturer could ensure that the pasta bake product is sustainable.

(2)

- 1 Ingredients ~~is~~ used in the product could be locally grown e.g. tomato.
- 2 The packaging used on the product could be recycled/reuse.



**ResultsPlus**  
Examiner Comments

Two good answers linked to environmental implications during design activities.

(d) Designers need to consider the sustainability of a commercial product.

Give **two** ways a manufacturer could ensure that the pasta bake product is sustainable.

(2)

- 1 Use locally sourced ~~that~~ ingredients to reduce food miles, which doesn't harm the environment
- 2 Ensure that ~~the~~ ingredients are fresh and aren't Genetically modified or enhanced by additives



**ResultsPlus**  
Examiner Comments

This question was very well answered by most candidates. The most common answers being seasonal and local ingredients, with some candidates exploring GM and organic foods.

### Question 13 (e) (i)

Candidates answered this question with varying degrees of success, depending on their interpretation of the command word 'explain'. Where candidates provided a linked explanation to their initial statement, they were rewarded with the full 2 marks. All candidates attempted the question with the majority gaining at least 1 mark. Responses were knowledgeable showing understanding of meal planning factors for a main meal product.

(e) Explain why the pasta bake product is successful at meeting the following specification points:

(i) can be eaten as a main meal

(2)

There is a good source of carbohydrates in there also some tomatoes that are a good vegetable and one of your five a day. The pasta bake is a very filling dish. Also, protein from the bacon.



**ResultsPlus**  
Examiner Comments

A good answer securing 2 marks.

It is successful at meeting the specification because the pasta bake has a range of food groups. pasta = carbohydrate, bacon = protein, peppers = vitamin C and cheese is a fat product. so the dish has all a human needs as a nutritional meal.



**ResultsPlus**  
Examiner Comments

A good answer from this candidate.

Generally, this was well answered but quite a few responses only obtained 1 mark rather than the 2 marks, as no credible explanation was given to secure the second mark.

### Question 13 (e) (ii)

Candidates answered this question with varying degrees of success, depending on their interpretation of the command word 'explain'. Where candidates provided a linked explanation to their initial statement, they were rewarded with the full two marks. Many candidates did not state a specific target group but were able to provide good reasoning for the popularity of pasta bake.

(ii) appeals to a wide range of age groups.

(2)

Everyone can eat the pasta bake because it is easy to prepare and does not take a lot of cooking or skill. It is not spicy and can be eaten by anyone.



**ResultsPlus**

**Examiner Comments**

The omission of the named target group is disappointing in this response, however the answer shows a good level of understanding linked to skill level and sensory characteristics.

Anyone from aged 3 to age 103 could eat it. It includes all of the 7 food groups. This means that many people can eat it. Also the main part of it is pasta and <sup>almost</sup> everyone loves pasta.



**ResultsPlus**

**Examiner Comments**

A named target group age range with a linked explanation secures two marks. A good answer and reflective of a C grade response with references to popularity and food groups.

Candidates wrote about the popularity of the product but many candidates didn't give a second credible response. They didn't think that the pasta bake would be cheap or that it was a convenience food.

### Question 13 (f)

As an extended writing exercise linked to Quality of Written Communication (QWC), this question proved to be challenging for many candidates. This question is marked using the level descriptors outlined in previous sample assessment materials in the teacher guidance that accompanies the specification materials. Candidates must demonstrate accurate technical vocabulary linked to food technology and a good understanding of the evaluation process. When writing answers effectively, with clarity and organisation, candidates were rewarded with high marks. It is possible to provide 3-4 well explained evaluated points to achieve the high marks. Candidates could answer this question in either a bullet pointed list or paragraph format focussing on the main comparisons and similarities between the two recipes. An accurate explanation of each comparison, together with clear, effective communication throughout the response will gain full marks.

Evaluation and comparison in these answers are worthy of high level responses in the level descriptors.

This question posed the most difficulties on the exam paper for candidates as many did not appear to understand what was required of them. It was often a case of the two recipes being repeated with no explanation given or observations made. However, those that did answer correctly often understood very well and made relevant points related to a comparison of the recipes.

Many identified A as being one off and B as manufactured in large quantities. There were many references to cheese, cream and milk containing saturated fat and vegetable oil being unsaturated, and healthier.

Colours were often identified as additives and mustard powder added to give extra flavour.

Less/more peas and ham and more cheese were popular points. Also the addition of extra salt as a preservative to extend shelf life was a point frequently made.

Evaluate recipe A compared with recipe B for use by a food manufacturer. (6)

- \* Recipe B ~~contains~~ uses more powdered ingredients than Recipe A, reducing fat content
- \* Recipe B's use of powdered ingredients lead to less nutrients in the ~~overall~~ product
- \* Recipe B contains more flavour variety, due to the use of mustard powder, spices, ~~as~~ pulses etc.
- \* Recipe B ~~is~~ has a richer flavour thicker texture because of the whipping cream and oil.
- \* Recipe B has more additives as a result of the added ~~and~~ colours, making it more unhealthy.
- \* Recipe A uses ~~has~~ larger quantities of ingredients making it heavier and a bigger portion

- \* Recipe A contains more cheese and ham, giving it a higher fat content
- \* Recipe B is higher in starch, making it unhealthier

Evaluate recipe A compared with recipe B for use by a food manufacturer.

(6)

- \* Recipe B ~~contains~~ uses more powdered ingredients than Recipe A, reducing fat content
- \* Recipe B's use of powdered ingredients lead to less nutrients in the ~~overall~~ product
- \* Recipe B contains more flavour variety, due to the use of mustard powder, spices, ~~and~~ purees etc.
- \* Recipe B ~~is~~ has a richer flavour thicker texture because of the whipping cream and oil.
- \* Recipe B has more additives as a result of the added ~~cost~~ colours, making it more unhealthy.
- \* Recipe A uses ~~higher~~ larger quantities of ingredients making it heavier and a bigger portion
- \* Recipe A contains more cheese and ham, giving it a higher fat content
- \* Recipe B is higher in starch, making it unhealthier



**ResultsPlus**  
Examiner Comments

A bullet pointed format for the response is perfectly acceptable, as long as the evaluation reflects the comparison between Recipe A and Recipe B.

\*(f) A food manufacturer produces a range of pasta products.

Below are two recipes for a pasta bake.

Recipe A (ingredients only)	Recipe B (ingredients only)
<p><b>Pasta</b></p> <p>200 g cooked pasta</p> <p><b>Sauce</b></p> <p>150 ml liquid milk 25 g white flour 25 g butter 50 g cheddar cheese seasoning (salt and pepper)</p> <p><b>Additional ingredients</b></p> <p>50 g peas 50 g ham seasoning (salt and pepper)</p>	<p><b>Pasta</b></p> <p>200 g cooked pasta</p> <p><b>Sauce</b></p> <p>100 ml water 30 g dried skimmed milk powder 25 g cheddar cheese 50 ml whipping cream 25 g white flour 25 ml vegetable oil mustard powder colours salt</p> <p><b>Additional ingredients</b></p> <p>25 g peas 25 g ham starch salt spices garlic puree</p>

Evaluate recipe A compared with recipe B for use by a food manufacturer.

(6)

In recipe A 200g of cooked pasta is used, these could be standard components which means these are cheaper for the manufacturer because they're pre-bought. The same ~~is~~ said in recipe B. In recipe B there is a lot more ingredients for the sauce compared to recipe A which means it could cost more to

make rather than being cheap.

In recipe B, ~~they~~ they there are more additional ingredients ~~to~~ compared to recipe A.

This again raises the price up and can also mean (looking at the ingredients) it would be less sustainable.



**ResultsPlus**  
Examiner Comments

There is some confusion with this response that draws in standard components, cost, ingredients and sustainability but with limited relevance to the actual question.

## Question 14 (a)

Hazard Analysis Critical Control Point (HACCP) was the only acceptable answer for this question.

14 Control systems are used to make sure a product is safe, legal and consistent.

(a) Name **one** control system used within the food industry to maximise product safety.

(1)

HACCP Hazard Analysis Critical Control Point



**ResultsPlus**  
Examiner Comments

Correct answer rewarded with 1 mark.

14 Control systems are used to make sure a product is safe, legal and consistent.

(a) Name **one** control system used within the food industry to maximise product safety.

(1)

HACCP Hazard Analysis Critical Control Point



**ResultsPlus**  
Examiner Comments

Correct answer, despite spelling mistake.

## Question 14 (b)

In contrast to question 13c, candidates were able to engage with the question and discussed with confidence bacteria, growth conditions and offered appropriate food examples. The most popular responses were naming the protein food and saying that it caused bacteria to grow due to the highly nutritious content.

(b) Explain the meaning of the term 'high risk food'.

(2)

A 'high risk food' is a food that could be dangerous if not cooked and must be handled with care so bacteria is not spread. An example of these foods are meats, such as uncooked chicken.



**ResultsPlus**  
Examiner Comments

A good answer securing 2 marks.

~~This~~ 'High risk food' means when certain food could cause illness or danger to someone. For example prawns are a high risk food because if they are not cooked properly, they could give people food poisoning.



**ResultsPlus**  
Examiner Comments

A good answer with some technical detail and awarded 2 marks.

## Question 14 (c)

This was a well answered question with a good description of one reason for the increase in the incidence of food poisoning. The most popular answers related to the increased production of food and meals outside of the home, lack of basic cooking skills amongst groups of the population, misunderstandings about date marks on the food packaging and issues of personal hygiene. Many references to cross contamination with high risk foods and inaccurate reheating of foods provided an acceptable range of responses.

(c) Describe why the incidence of food poisoning has increased.

(2)

The incidence of food poisoning has increased because people are careless about what they do with their food, how long they cook it for, and how it should be stored. Ingredients are not being cleaned properly and are causing illnesses.



**ResultsPlus**  
Examiner Comments

The majority of answers focussed on hygiene, with some candidates referring to cross contamination and the increase use of food prepared outside of the home.

Food poisoning has increased due to consumers becoming less aware of food safety precautions. Increased buying of ready-meals that when reheated may not be cooked.



**ResultsPlus**  
Examiner Comments

A good answer receiving 2 marks.

## Question 14 (d)

Generally, candidates' understanding of the Food Safety Act 1990 was satisfactory, with many answers focussed on the need for accurate labelling information in descriptions/ advertising. A good proportion of candidates were able to recall at least one of the statements in the Food Safety Act 1990.

(d) Consumers are protected by the Food Safety Act 1990. risk of food poisoning  
Give **one** offence listed in the Food Safety Act 1990. (1)

all food must be in date  
as eligible to eat when sold and must  
contain an expiry date.



**ResultsPlus**  
Examiner Comments

This candidate has answered positively to this question, mainly referring to labelling criteria.

All food served shouldn't of gone past  
the sell by date or used by date



**ResultsPlus**  
Examiner Comments

Another answer referring to labelling and date marks.

### Question 14 (e)

This question focussed on the application of quality to a food product and how a consumer judges the quality of a product. The most common answers tended to focus on the sensory or performance characteristics of a product.

(e) Food manufacturers try to produce high quality products.

Give **two** ways by which the quality of a food product might be judged by a consumer.

(2)

- 1 the look and the quality of the packaging
- 2 by being organic products customers think it has better quality.



**ResultsPlus**  
Examiner Comments

Two good answers.

- 1 the overall look of the product and its packaging.
- 2 the taste and textures of the food so that they are easy selling.



**ResultsPlus**  
Examiner Comments

Two answers referring to packaging and sensory characteristics, rewarded with full marks.

## Question 14 (f)

The topic 'quality' is an important area of study in Food Technology, within product design and manufacture. Most candidates gained 1 mark due to a definition or example of quality control check references. Some candidates were able to make a clear distinction between the two terms QC and QA.

Very mixed answers – candidates either knew the answers or they didn't. A lot of candidates got the answers mixed up and thought quality assurance was to do with checking the product during production and not the other way around.

(f) Explain the difference between Quality Assurance (QA) and Quality Control (QC).

(2)

Quality assurance is when a product is guaranteed to be <sup>of</sup> a certain quality. Quality control is when the manufacturers check to see if the whole product is at the quality it should be at. eg. taste/appearance/packaging.



**ResultsPlus**  
Examiner Comments

A good response providing explanation and technical detail.

Assuring <sup>the</sup> quality of a product means that you are giving someone reason to believe that the quality is good/high. Controlling the quality means that when the food is being manufactured you are making sure that at every stage the quality is being upheld to a high standard.



**ResultsPlus**  
Examiner Comments

A lengthy response showing a pleasing understanding of the term quality, but the difference between QA and QC lacks rigour for a high level response.

## Question 14 (g)

This question was answered very well and fully in most cases, showing technical understanding, good use of vocabulary and terminology linked to food technology as well as excellent application of knowledge and understanding. Candidates understood what was expected of them and many candidates gave six points or more related to food labelling.

The most popular answers included references to the use by date, best before date, ingredients, name and address of manufacturer, instructions for cooking and storage and allergies.

Many candidates were able to expand on each point and give further information such as explanations for the use by and best before dates, and which foods they applied to and what that meant to the consumer in terms of food safety and consumer protection.

Allergies were given in the majority of answers with a good understanding of the importance of giving such information and therefore avoiding reactions to foods such as nuts, which occasionally can be serious.

Bar code, serving instructions and advertising were often mentioned as voluntary pieces of information provided by food manufacturers. Also special diets for diabetics, vegetarians and those with certain religious beliefs were often quoted with success.

*\*(g) Food labelling provides important information for the consumer.  
Discuss the ways in which food labelling informs and protects the consumer. (6)*

*Food labelling provides important information to the consumer, because if there was no allergy information then people would become allergic and have a reaction to it. People who are on diets need to know the dietary needs also you need what the product is called, otherwise you won't know what you're eating. You need the manufacturer's address if you want to complain, also you need preparation method, so the consumer knows how to cook it. Need the list of all ingredients from big to small. So you know what's inside of what you're eating.*



**ResultsPlus**  
Examiner Comments

A pleasing response with good understanding of the topic.

On food labelling, it is important to state if the product contains any food which may cause an allergic reaction. This would protect any potential customer who suffers from a certain allergy as they would know to avoid it. Also it is common for a product's label to say if it is suitable for vegetarian or vegan consumption. This would inform some potential customers as to if they are allowed to eat the product. As well as this, food products' labels can state the cooking/heating time of the product which is important as it informs the customer on how not to undercook or overcook the product, this protects them as ~~it~~ undercooking ~~and~~ could lead to food poisoning. Furthermore, food labelling sometimes provides information on the ~~the~~ nutrient and caloric content of the food. This is important as it informs the customer of how ~~much~~ or healthy what they are consuming, which will ~~help~~ help them watch their "guideline daily amounts". Another feature of food labelling is that, by law, it must contain the contact details of the manufacturer. This is informative and important to the customer as then they know who to contact if they have any complaints, queries, or suggestions.



## ResultsPlus

Examiner Comments

A high level response answer with good technical vocabulary and discussion, showing an excellent understanding of this topic.

This was a well answered question. The candidate communicated the information effectively and was able to explain it well.

Some candidate's answers were very detailed and would have achieved more than 6 marks if there were more marks to obtain.

## **Paper Summary**

The coverage of the subject content on the 2012 GCSE exam paper was thorough and varied, effectively testing the candidates technical knowledge and understanding of Food Technology. The 'ramped' nature of the exam paper and variety of questions styles and command words promoted accessibility to all candidates. Progression and application of knowledge and understanding within the subject area was evident, promoting stretch and challenge opportunities for all candidates.

## **Grade Boundaries**

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