

Candidate 1 evidence

Insert your chosen assignment brief below.

Develop a dish for school canteen which increases fruit and vegetable intake

Section 1: Planning (27 marks)

1a Exploring the brief (6 marks)

You should:

- identify three key issues from the brief (3 marks)
- explain why each key issue is important to the brief (3 marks)

Key issue	Why is this issue important to the brief?
1.School Canteen	<p>The product I make must be suitable to eat in a school canteen, therefore I need to consider:</p> <ul style="list-style-type: none"> • products that are quick to make as the canteen will have to make a number of dishes to provide a good selection for pupils and staff • Products that are quick to serve as the canteen only have a short time to serve the food (normally 45mins to an hour) • Products that are easy to serve as there is a lot of people to serve, with limited time and a que to be maintained. • Products and ingredients that children like - to ensure there is little waste
2Fruit and vegetables	<p>The product I make must contain fruit and/or vegetables, therefore I need to consider:</p> <ul style="list-style-type: none"> • The fruits that are popular with school children • The vegetables that are popular with school children • The fruit and vegetables that are available to use in the school canteen

3. Develop a dish	<p>The product I make must be developed by me, therefore I need to consider:</p> <ul style="list-style-type: none">• The practical skills that I have so that I can make the product to a high standard• The time available to me so that I can make a product in a set time• The facilities and resources available to me so that I can make the product to a high standard
Identify the target group (if not already identified within the brief)	Secondary school children

1b Carrying out research (15 marks)

For each key issue you have identified from the brief, you should now carry out an investigation to find out information about the issue.

You should use at least two different investigative techniques to find out information about the key issues.

Key issue	Investigative technique
1.School Canteen.	Interview the canteen supervisor to find out what type of fruits and vegetables are used in the school canteen and what type of food products are popular
2.Fruit and vegetables	Questionnaire with school canteen pupils to find out what fruit and vegetables and type of food products are purchased at the school canteen
3.Develop a dish	Interview with a Home Economics teacher to find out what practical skills I am good at and what things I need to consider when preparing a dish for the school canteen

Present the information you have gathered from each investigation. You may use any suitable format. (15 marks – 5 marks for each investigation)

The information you present from each investigation should:

- identify the investigative technique you used
- identify the source(s) of the information

You must make sure the results of your investigation are clear. You must select and summarise three main points of information from each investigation which can be used to develop your product.

Insert the information you have gathered from your research below.

Investigation 1

Key Issue - School Canteen

Technique: Interview with the canteen supervisor

Aim: My aim is to find out what type of fruits and vegetables are used in the school canteen and what type of food products are popular

Q1. What variety of fruit do you sell in the school canteen?
grapes, water melon, orange, blueberries, kiwi

Q2. What vegetables are used in products in the school canteen?
Carrots, Peas, Broccoli, Sweetcorn, Beans, Cauliflower

Q3. What are the most popular sweet dishes sold in the canteen?
Home baking - shortbread, krispies, doughnuts and cookies

Q4. Is there a most popular savoury dish sold in canteen?
All foods

Q5. What is more popular hot or cold food at lunchtime with the pupils?
Hot food

Q6. Do pupils prefer eating with cutlery or by hand?
Both because we do pizza and paninis also main meals in boxes

Q7. Do the majority of pupils prefer to buy a meal or snack at lunchtime?
Same as above

Q8. What is the healthiest dish you sell in the school canteen currently?
Fruit, Sandwich, Wraps

Summary Of Findings:

1. Carrots, Peas, Broccoli, Sweetcorn, Beans and Cauliflower are the vegetables that are available in the school canteen, therefore I need to consider using at least one of these in my final product.
2. Grapes, water melon, orange, blueberries and kiwi fruit are the fruits vegetables that are available in the school canteen, therefore I need to consider using at least one of these in my final product.
3. Hot food is the most popular choice by pupils in the school canteen, therefore I should consider making a hot dish as my final product.
4. Pupils buy meals and snacks at the school canteen, so my options are of making either of these is available.

Investigation 2	
Key Issue: Fruit and Vegetables	
Technique: Questionnaire	
Aim: To find out what fruit and vegetables and type of food products are purchased at the school canteen	
Source of Information: 20 secondary school pupils	
RESULTS:	
Q1. What's your favourite vegetable?	
Broccoli -9	Sweetcorn-2
Carrots - 7	Peas - 0
	Tomato -2
Q2. What's your favourite fruit?	
Strawberry-9	Kiwi-5
Grapes -0	Oranges - 0
	Blueberries- 6
	Watermelon - 0
Q3. What's your favourite type of dish?	
Pizza-8	
Pasta-10	
Baguete-2	
Potato	
Rice	
Q4. Do you prefer a meal or a snack	
Meal-15	
Snack-5	
Q5. Do you prefer hot or cold food?	
Hot-17	
Cold-3	
Q6. If you are focusing on increasing your fruit and vegetable intake would you prefer a dish with fruit or vegetables?	
Fruit-9	
Vegetables-11	
Summary of Findings:	
<ol style="list-style-type: none"> 1. School pupils that eat in the school canteen prefer to eat the vegetable broccoli (10/20). Therefore, I will try to include this vegetable in my dish to ensure it is popular with my target market. 2. School pupils who attend the school canteen like to eat hot food (17/20) rather than cold food (3/20). Therefore I will try to make a hot dish when developing my product. 3. School pupils who eat in the school canteen like to eat pasta dishes (10/20). Therefore I will try to choose a pasta based product as my final solution. 4. School pupils who eat in the school canteen would prefer a dish to include vegetables (11/20) rather than fruit (9/20) when the focus is trying to increase their fruit & vegetable intake. Therefore, I will try to include vegetables in my final product. 	

Investigation 3
<p>Key Issue: Develop a Dish</p> <p>Technique: Interview</p> <p>Aim: To find out what practical skills I am good at and what things I need to consider when preparing a dish for the school canteen</p> <p>Source of Information: _____, Food & Consumer Technology Teacher</p> <p>RESULTS:</p> <p>Q1. What practical skills do you think I am good at?</p> <p><i>Your practical skills are very good - you are particularly good at chopping vegetables finely and you have very good control of the heat on the hob.</i></p> <p><i>I think you are capable of making most recipes to a high standard.</i></p> <p>Q2. What type of dish do I think would be popular in school canteen?</p> <p><i>Italian style dishes are mostly popular I think - pasta and rice based dishes, pizza - dishes that are easy and quick to eat. Also these can be served in pots and eaten with a fork or the pizza in slices.</i></p> <p><i>Pasta dishes can also be made quickly in the school canteen and are very easy to serve as they don't need cut or sliced and are served a one portion.</i></p> <p>Q3. What things do I need to consider when making a product for the school canteen?</p> <ul style="list-style-type: none"><i>It needs to be cost effective</i><i>It needs to consider healthy eating guidelines - low in fat, sugar, contain fruit and vegetables etc.</i><i>It needs to be products that pupils want to eat and considers their likes and dislikes</i><i>It needs to be easy to serve and quick to serve as they have very limited time - normally only 45 minutes to an hour.</i><i>It needs to look appealing when it is served in the glass cabinets</i> <p>Q4. What methods of cooking do you think would be best to be used in a school canteen?</p> <p><i>Baked items that can be made and left to cook without any attention would be good so that staff can work and focus on another job. Stir frying is also a healthy way of cooking and is quick which would be beneficial for the school canteen.</i></p> <p>Q5. What fruit and vegetables do you think I should include in my product?</p> <p><i>It is important to include fruit and /or vegetables that pupils and staff like and are available to use in the school canteen. Also consider which fruit and / or vegetables are in season as this will make the product cheaper to make and taste nicer.</i></p> <p>SUMMARY OF FINDINGS:</p> <ol style="list-style-type: none"><i>The chopping of vegetables is an area my teacher thinks I have a strength, therefore I need to ensure I include vegetables and this practical skill in my final product so I can make it to a high standard.</i><i>I need to choose a recipe that is easy and quick to serve in the school canteen, therefore</i>

the method and cooking and preparation time of recipes needs to be considered carefully when choosing my final product.

3. A baked item is something I need to consider when making my final product as this is a cooking method that does not need to be constantly watched so canteen staff can get on with other food preparation.
4. When choosing what fruit and/or vegetables to use in my final product, I need to consider which ones are enjoyed by my target group, and are available to use in the school canteen, and even think about the ones that are in season so that I can make a cheaper product and one that tastes nice.

1b continued

From the investigations you have carried out, you must present **three** ideas for your food product.

This must include:

- a detailed description of each idea (3 marks)
- a justification of why you think each idea might be suitable for the brief (3 marks)

Insert your food product ideas below.

Food Product Ideas
<p>Product Idea 1 Pizza slice</p> <p>Description A bread bases pizza slice topped with tomato and basil sauce and mozzarella cheese finished with slices of tomato and sweetcorn.</p> <p>Justify suitability: It would be suitable because as you can see pizza was the second most popular type of dish in the questionnaire with the school pupils in the canteen (Investigation 2). Therefore I can adapt my product and I know it will be popular and sell well with the school pupils. The toppings can vary on different days but still consider the vegetables that are available to use in the school canteen (Investigation 1) and that school pupils like in Investigation 2. It would also be easy to serve as it is in slices and that is a consideration that was pointed out in Investigation 3.</p>
<p>2.Product Idea 2 Cottage Pie</p> <p>Description A mince beef and vegetable base cooked in gravy and topped with a creamy mashed potato top.</p> <p>Justify suitability: It would be suitable to make a cottage pie because in investigation 2 we can see a hot meal is popular with 17/20 secondary school pupils. The cottage pie would contain carrots and broccoli which were the most popular vegetables in investigation 2 with 7/20 preferring carrots and 9/20 preferring broccoli.</p>

3Product idea 3**Meatball Pasta Bake****Description**

A rich tomato sauce with carrots and broccoli and pasta combined with round sausage meat balls and sprinkled with mozzarella and cheddar cheese and baked in the oven until golden.

Justify suitability:

It would be suitable to make a meatball pasta bake because in investigation 2 we can see that pasta was the most popular choice of dish with 10/20 pupils. The bake would contain of broccoli and carrots which were the most popular vegetables in investigation 2 with 7/20 preferring carrots and 9/20 preferring broccoli. It is also a baked food item - once it is made and put together it can be cooked and kept warm in the oven which was something that was highlighted in Investigation 3 as important. It also involves chopping vegetables in the method which is where my strength is identified in Investigation 3.

Section 2: The product (10 marks)

2a The product idea (2 marks)

From the ideas you generated in 1b, choose one food product to develop.

Food product: Meatball Pasta Bake

You must provide a recipe for the food product you are going to develop.
This recipe must include:

- a detailed list of all ingredients used
- an accurate method

Insert your recipe information below.

Recipe Information

Ingredients

150g sausage meat
25g fresh white breadcrumb
5mls dried thyme
15 mls olive oil
150mls chopped tomatoes
30 mls sundried tomato paste
250g of pasta
50g carrot
50g broccoli
125g mozzarella cubes
30mls of grated cheddar cheese

Method

1. Make meatballs - put the sausage meat, breadcrumbs and thyme in a bowl and mix to combine. Shape into 10 small balls.
2. Heat oil in a wide pan and cook the sausage balls for 10 mins until nicely browned.
3. Add chopped tomatoes and tomato paste, cover and simmer gently for 20 mins.
4. Place water in a pan and bring to boil. Add pasta to a pot and let it boil until soft.
5. Adding the carrots and broccoli for the final 5 mins of cooking time of pasta.
6. Drain broccoli and pasta, add in with the sauce and spoon into a heatproof dish.
7. Heat oven to 200C/180C fan/ gas 6.
8. Crumble mozzarella cubes into the top of the pasta.
9. Sprinkle with cheddar cheese and bake for 15-20 mins until bubbling and crusty.

2a continued

You will be assessed on the relevance of the food product idea you develop in order to meet the issues in the brief. **(8 marks)**

Justify why you have chosen this product from the range of ideas you gave in the previous section.

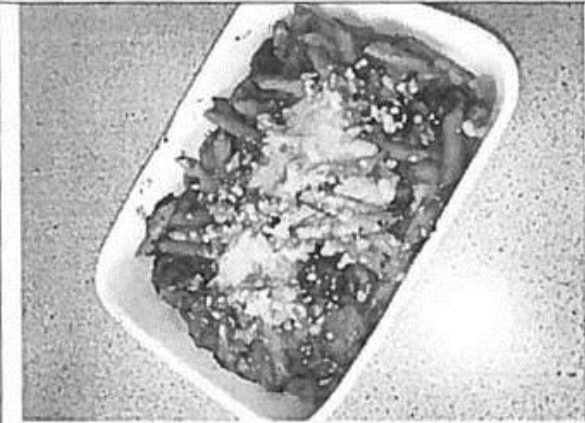
Your justifications must be related to at least:

- **three ingredients** used in the product
- **one cooking method** used in the product
- **two features** of the product

Justifications	
INGREDIENTS IN MY PRODUCT	WHY THIS IS IMPORTANT IN MEETING THE NEEDS OF THE BRIEF:
Broccoli	Broccoli was the most popular vegetable in the questionnaire (investigation 2) so this will make my product popular with school canteen users. It will also make the dish aesthetically pleasing as it is a bright coloured vegetable.
Carrots	Carrots were the second most popular vegetable in the questionnaire (Investigation 2) and are being used in the dish so that it will be popular with school canteen users. It will also add colour to the dish and meets the brief to increase fruit and vegetable intake.
Pasta	In Investigation 3 we see that the home economics teacher suggests that Italian dishes would be popular in school canteen, and pasta falls into that category. Therefore, it should be a popular choice for pupils when they are ordering from the school canteen.
COOKING METHOD IN MY PRODUCT	WHY THIS IS IMPORTANT IN MEETING THE NEEDS OF THE BRIEF:
Baking	From investigation 3 my Home Economics teacher said that baked items can be made and left to cook without any attention. This would be good so that canteen staff can work and focus on another job. Baking is also a healthier method of cooking as no added fat is used.
FEATURES OF MY PRODUCT	WHY THIS IS IMPORTANT IN MEETING THE NEEDS OF THE BRIEF:
Easy to serve	At the school canteen, canteen staff want to serve their food quickly as they have limited time to serve it and have a queue to maintain. The Home Economics teacher in Investigation 3 said pasta dishes were easy and quick to serve.
Quick to prepare	At the school canteen, canteen staff want food product to be quick to prepare as they have to make a selection of dishes to put on offer not just one choice. The Home Economics teacher in Investigation 3 said pasta dishes were quick to prepare.

You must now make your product so that you can use it as a basis for sensory testing and evaluation.

Insert a photograph of your food product below.



3a Sensory testing (11 marks)

You must carry out sensory testing of the food product you have made.

You must:

- identify an appropriate sensory test and an appropriate group of testers (2 marks)
- state at least three reasons why this method of testing will provide relevant information (3 marks)
- present the results of your testing clearly and appropriately (3 marks)
- provide at least three conclusions based on the results of testing (3 marks)

Insert your sensory testing information below.

Sensory testing Information					
Sensory test: Rating test					
Group of Testers: 5 school pupil canteen users					
Aim - To find out pupils' opinion on my product					
Information required:					
Pupils opinion on the:					
<ul style="list-style-type: none"> • appearance of the product. • taste of the product. • smell of the product. • texture of the product. 					
Results from Sensory Test:					
Key					
1=dislike a lot					
2= dislike a little					
3= neither like or dislike					
4= like a little					
5=like a lot					
	Person 1	Person 2	Person 3	Person 4	Person 5
Appearance	4	5	5	4	4
Taste	5	5	3	4	4
Smell	5	5	5	5	5
Texture	4	4	4	4	4
Suggestions or Improvements to the product:					
Person 1 - more seasoning					
Person 2- more salt and pepper needed					
Person 3 - less sauce					
Person 4- more seasoning					
Person 5- more veg					

CONCLUSION:

1	The smell of the dish was excellent as 5 out of 5 of the pupils asked liked the smell a lot so that would encourage school pupils to want to purchase it in a school canteen, especially if the nice smell filled the canteen.
2	The appearance of the dish was good as all pupils either liked it a little or a lot. This is good as it means a lot of pupils would be attracted to buying the product when it is displayed in the school canteen.
3	2/5 pupils liked the taste a lot and 2/5 pupils like the taste a little. This is good as it means if they enjoy the taste of the dish they are likely to buy it again in the school canteen.
4	5/5 tasters liked the texture of the dish a little this is good as it means they will purchase this again in the school canteen.

Section 4: Evaluation (12 marks)

4a Evaluation (12 marks)

You will be assessed on the relevance and depth of your evaluation of the food product you have made.

Evaluate the suitability of your food product for the brief based on the **results of your investigations**. (3 marks)

My final product meets the brief in the following ways:

- It contains vegetables that are available and liked by school pupils so if eaten will increase their vegetable intake and they will enjoy my product
- It is suitable for serving in the school canteen because it is a quick and easy to serve and it can be made in big amounts.
- It is a product that is developed by me and I made it to a high standard using the practical skills (chopping) that my Home Economics teacher identified in Investigation 3 as being very good.

Evaluate the suitability of your food product for the brief based on the **sensory testing you have carried out**. (2 marks)

The smell of the dish was excellent as 5 out of 5 of the pupils asked liked the smell a lot. This is important in the school canteen as if the product has a nice smell the pupils will want to order and purchase it.

The appearance of the dish was good as all pupils either liked it a little or a lot. This is important when in a display cabinet in the school canteen as if the pupils like the look of it they will then purchase it.

Describe any adaptations, improvements or variations that you could make to improve your food product. (2 marks)

Give a reason why each adaptation/improvement/variation would be suitable. (2 marks)

Amendment - Add more seasoning (salt and pepper)

I would add more seasoning to the dish as in my sensory testing 3/5 pupils did not think it was seasoned well enough.

Amendment - Use a variety of other vegetables

Again in my Sensory Testing one pupil suggested the use of more vegetables, this would allow more likes and dislikes of pupils to be met and would allow seasonal vegetables to be used at certain points of the year.

Make final conclusions about how well your food product meets the needs of the brief overall. (3 marks)

My final product meets the brief in the following ways:

F- The dish contains 3 different types of vegetables in the dish
O - This is good as it means the dish meets the brief of developing a dish for school canteen which increases fruit and vegetable intake
C - This means pupils are more likely to meet their Dietary goals for fruit and veg so if they consume my product it is allowing them to get 3/5 portions at lunchtime alone.

F - It will be popular in the school canteen as it is a hot meal
O - this is good as it was what pupils said they liked to purchase in Investigation 2
C - this will ensure pupils will buy the dish and that there is minimum waste in school.

F- The dish I made was rated 5 by two people, 4 by two people and 3 by one pupil on taste.
O - this is good as it shows that the pasta dish was enjoyed by the majority of tasters
C - which would encourage pupils to repurchase the dish when it is available again on the school menu.