

Candidate 2 evidence

Insert your chosen assignment brief below.

Develop a dish for the 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. Develop a dish	<p>Developing a dish is important to the brief because it needs to taste nice for teenagers to like it.</p> <p>Developing a dish is important to the brief because the appearance needs to look appealing for pupils to like it.</p> <p>Developing a dish is important to the brief as I will need to consider pupils preferences so that the dish will sell.</p>
2. School canteen	<p>School canteen is important to the brief because it needs to meet the nutritional guidelines for the school.</p> <p>School canteen is important to the brief because preparation time needs to be taken into consideration when creating a dish.</p> <p>School canteen is important to the brief because the allergies of pupils need to be taken into consideration so no one has an allergic reaction.</p>

3. increases fruit and vegetable intake.

Increasing the fruit and vegetable intake is important to the brief because pupils aren't keen on eating fruit so adding fruit to dishes will increase the intake for school pupils.

Identify the target group
(if not already identified
within the brief)

Secondary School Pupils

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. Develop a dish	Interviewing the head, [redacted] school canteen
2. School Canteen	Internet Research for School Meal Guidelines
3. Increases fruit and vegetable intake	Questionnaire for 20 school pupils who go to the school canteen for school meals

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

Interview with _____ the head of the school canteen. I asked _____, the following questions about the food in the canteen to gather information for my Home Economics assignment.

Questions to ask the school canteen	Answers
1. What dishes containing fruits are available to the school pupils?	The dishes containing fruits that are available to the school pupils are fresh fruit salad, fresh fruit portions and fresh fruit by themselves.
2. What is the popular fruit eaten by school pupils at the moment?	The most eaten fruit would have to be grapes.
3. How long does it take to prepare your dishes?	Most dishes should be prepared and cooked in 45 minutes to 1 hour.
4. What allergies do you have to take into consideration?	The allergies taken into consideration are nuts which cannot be used. Information is provided if pupils have allergies so they can avoid the foods they can't eat.
5. What kind of seasonal produce do you use in your dishes?	According to the seasons, some fruits are expensive and not in good quality for example, persimmons and sharonfruit are expensive and strawberries aren't in good conditions during winter so frozen might be used instead of fresh.
6. Are pupils influenced by the look of the food?	Yes, pupils like colourful foods that look appealing.
7. How many desserts do you have on offer?	Fruit salad is the only dessert that is prepared in the school kitchen and it is very popular.

Conclusions for canteen questions

1. I found out that most of the preparing and cooking takes less than 45 minutes so I will look for a recipe that will completed in 45 minutes.
2. I found out that nuts are taken in to consideration when creating a dish so therefore I will not use nuts in my dish.
3. I found out that pupils are influenced by the look of a dish so I will plan to make my food look attractive by serving it neatly so pupils will want it.
4. I found out the canteen only sells fruit salad for dessert so I plan to make a dessert using fresh fruit to give the pupils a choice and to attract pupils who don't want fruit salad every day so sales could go up.

Investigation 2**School Meal Guidelines**

<http://www.gov.scot/resource/doc/238187/0065394.pdf>

The amount of fruit and vegetables eaten depends of the age of the child. For young kids in secondary schools, the amount of fruit and vegetables is around 80g. There is a choice of choosing at least two types of vegetables and two types of fruit this does not include any sort of fruit juice and must be provided every day as part of the school lunch. The fruit that is being provided can be fresh, frozen or even canned.

In the secondary school, for the small fruit the canteen must use for the small sized fruits there should be approximately 2 plums, 2 Clementine's, 3 apricots, 2 kiwi fruits, 7 strawberries, 14 cherries, a handful of grapes and 2 handfuls of raspberries. It is very important to have fruit provided in school for the pupils as a minority of young people eat the recommended amount. Fruits provide a large range of minerals to a large range of vitamins. A way to increase the amount of fruit is to add fresh fruit, canned fruit or dried fruit in puddings and desserts. Desserts should include a high fibre food such as wholemeal flour to improve the nutritional content. Pastry is not to be used often as it is high in fat and meals should be low in fat.

Conclusions

1. I found out that a least 80g of fruit is to be eaten by school pupils everyday so therefore I will put 80g of fruit into the dessert dish I am going to make.
2. I found out that ways to increase fruit intake for young people is to add fruit like canned, fresh or dried fruit into desserts so therefore I will add any of the 3 different types of fruits.
3. I found out that fruit juice isn't considered as part of the 80g of fruit so therefore I will not use fruit juice by itself in my dish.
4. I found out that wholemeal flour is a good addition to add fibre so I will try to use some wholemeal flour.
5. I will not make a pastry dessert as they can be high in fat and cause heart problems. I will use vegetable fat in my dessert which is low in saturated fat.

Investigation 3**Questionnaire Results**

I asked 20 school pupils about what they prefer in desserts.

Questions	Answers	
From the following fruits: which do you prefer in desserts? Please tick those that apply to you	Raspberries	18
	Oranges	7
	Kiwi	4
	Grapes	4
	Apples	14
	Bananas	8
	Pear	8
	Other	5- strawberries
Do you prefer hot desserts or cold desserts? Please tick one	Hot	5
	Cold	9
	Either	6
Do you prefer to eat canned fruit, frozen fruit, dried fruit or fresh fruit? Please tick one	Fresh fruit	13
	Frozen fruit	6
	Canned fruit	0
	Dried fruit	1
What spices/flavouring would you like in your dessert? Please tick one	Nutmeg	0
	Cinnamon	7
	Vanilla	13
	Cardamom	0
Which do you prefer? Please tick one	Crumble	9
	Muffin	6
	Cake	5

Conclusions for questionnaire

- According to my questionnaire, 18 people preferred that they like raspberries in their desserts so therefore I will make a dessert containing raspberries which will provide fruit.
- 9 people out of 20 preferred a cold dessert so therefore I will make a cold dessert containing raspberries.
- 13 people out of 20 preferred that they like fresh fruit in their dessert so therefore I will use fresh fruit in my cold dessert.
- 13 people out of 20 prefer vanilla flavouring in their dessert so therefore I will add in vanilla to my dessert.
- 9 people of 20 voted that they prefer a crumble style so therefore I will create a crumble with fresh raspberries that has vanilla flavouring in it.

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

1. Apple and Raspberry Crumble with a bottom layer of apples mixed through with Raspberries and a crumbly oat layer on top baked till golden brown. This is suitable because the school meal guidelines say that pupils must eat at least 2 fruit and this dish meets the needs of the brief for pupils to increase their fruit intake.

2. Apple and Raspberry pie

A familiar fruit filled dessert is a close cousin to the classic Apple Pie with a all butter piecrust filled with apples and raspberry filling underneath a crisp layer of pale golden pastry. This is suitable because there aren't many desserts containing fruit in the school canteen so therefore this gives the chance for pupils to buy this at the school canteen.

3. Apple Crumble

traditional sweet stewed apple filling topped with crispy, buttery golden brown crumble and this is suitable as

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: Apple and Raspberry Crumble

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

Apple and Raspberry Crumble

Serves 2

INGREDIENTS

120g Apples
 40g fresh/frozen raspberries
 30g granulated sugar
 1.25ml pure vanilla extract
 Crumble topping:
 50g plain flour
 20g granulated sugar
 15g brown sugar
 20 ml rolled oats
 30g sunflower margarine, cut into small pieces

Method

1. Preheat the oven to 180 degrees C. Grease the bottom and sides of a foil container.
2. Wash, peel, core and slice apples.
3. Layer the bottom of the container with sliced apples.
4. In a medium bowl, combine raspberries, 30g sugar and vanilla. Stir and place in your baking dish.
5. For the topping, combine flour, sugar, brown sugar, oats and margarine in a separate bowl. Cut together with a pastry cutter/with your hands/ until mixture resembles coarse "oatmeal-like" crumbs.
6. Sprinkle topping mixture all over the top of the raspberries. Bake for 25 to 30 minutes, or until topping is golden brown.

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	
Raspberries	I chose to use raspberries in my dish because 18 people chose this in my questionnaire as their most preferred fruit and this is suitable as it will increase the fruit intake of the school pupils if they buy this dish.
Apples	I chose to use apples in my dish because this was the second most preferred fruit chosen by 14 school pupils and this is suitable because it will also increase their fruit intake.
Oats	I chose to add oats to my dish as it helps meet the requirements of dietary fibre and this is suitable as it meets the school meal guidelines.
Baking (method of cooking)	I chose to bake my dish because there was no added fat which means this meets the school meal guidelines of foods shouldn't be high in fat.
The dish was served cold	I chose to serve my dish cold as 9 school pupils preferred cold dishes.
The dish doesn't contain nuts	In my final product I didn't use nuts because I found out from my interview with the canteen manager that I cant use nuts due to allergies school pupils might have.

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

Suitable type of test is a rating test.

This suitable because:

- It allows people to show how much they like or don't like certain aspects or a variety of products. The aspects are taste, texture and appearance.
- It is easy to use to gather information about the dish.
- It gives you accurate numbers of what people think of the dish.

Key:-

1. Like a lot
2. Like a little
3. Neither like nor dislike
4. Dislike a little
5. Dislike a lot

I gave this to 5 people who go to the school canteen a lot.

	<u>Taster 1</u>	<u>Taster 2</u>	<u>Taster 3</u>	<u>Taster 4</u>	<u>Taster 5</u>
<u>Taste</u>	1	1	1	1	1
<u>Texture</u>	1	2	1	2	2
<u>Appearance</u>	1	3	1	2	2

Comments

4 people said that they really liked the flavour as it was quite sweet.

Conclusions

1. The data from the table tells me that 5 people liked the taste a lot this tells me that the flavours I used were enjoyed by the school pupils so they would buy the dish.
2. 3 people liked the texture a little and this tells me that I cooked it right.

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)

In my dish I used raspberries as this was the most preferred fruit in the questionnaire (investigation 3) by 18 pupils out of 20 and this was suitable as the pupils said it was the fruit they liked the most and this means that my dish is most likely to sell in the school canteen.

In my interview with the head of the school canteen (investigation 1), I found out that there aren't any dessert dishes containing fruit. My dish is suitable as it contains fruit this means that it meets the need of brief increase the fruit intake for school pupils.

According to my internet research on school meal guidelines (investigation 2), fresh fruit could be used in the dishes. My dish is suitable as I used fresh fruit in my dish so therefore this will also increase the fruit intake of school pupils in the school canteen.

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

In my sensory test, 5 out of 5 pupils really liked the taste of my dish so this is suitable as school pupils in the school canteen are more likely to eat it and there will be no food going to waste.

In my sensory test, 2 pupils out of 5 liked the appearance of my dish a lot as well as 2 pupils out of 5 who liked the appearance of my dish a little and this is suitable as the school pupils in the school canteen are more likely to eat the dish because of the dish looking very appealing.

In my sensory test, 3 pupils out of 5 said that they liked the texture a little and this is suitable as it tells me I cooked my dish right which means pupils are likely to buy it in the school canteen and like it because the texture is just right.

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)

One adaption I would make to my dish is to decrease the amount of sugar as 4 pupils out of 5 said it was quite sweet. This is suitable as it would meet the government school meal guidelines.

A variation I would make to my dish is to add in another fruit like pears as this was the third most preferred fruit by 8 pupils out of 20 and this is suitable because pupils would like pears to be in a dessert fruit dish.

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

I conclude that my dish was suitable for the school canteen because in investigation 1 when interviewing the head of the school canteen I found out that they didn't have a lot of fruit dishes on offer which means that I developed a dish that wasn't already in the school canteen so I am giving the school pupils the chance to increase their fruit intake and this meets the needs of the brief.

I conclude that my dish was suitable for the school canteen because in investigation 2, according to the governments school meal guidelines, there has to be at least 80g of fruit in a dish for school pupils to eat and my dish was suitable as I included more than 80g of fruit in my dish so therefore the school pupils will increase their fruit intake.

I conclude that my dish was suitable for the school canteen because in investigation 3, as I included 2 fruits in my dish so therefore i am giving the school pupils the chance to increase their fruit intake.