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## **Workshop 2 – Health and Food Technology Question Paper**

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### **Candidate F Evidence**

**This section contains  
candidate evidence – please store securely**

Question 1

MARKS  
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MARGIN

A restaurant is extending its range of fish dishes.

- (a) Identify two nutrients found in oily fish.

Give one function of each of the nutrients identified.

4

Nutrient 1 protein

Function Help with the growth and repair.

Nutrient 2 Iron

Function helps with formation of red blood cells, which carry oxygen around the body.

- (b) State two practical ways to increase consumption of fish.

2

Practical Way 1 Include fish in main meals, for example include tuna in pasta.

Practical Way 2 Have fish in sandwiches for lunch or make fish snacks.

- (c) The restaurant has the following dish on its menu.

*Baked Cod with a Herb Breadcrumb Crust*

Explain how this dish could contribute to healthier eating.

2

This can contribute to healthier eating as the dish is baked so no fat has been added, this prevents obesity which leads to heart disease. The herbs also give flavouring without maybe using salt. This helps us eat less salt, which prevents us from having high blood pressure.



\* X 7 3 6 7 5 0 1 0 2 \*

## Question 1 (continued)

(d) An Environmental Health Officer inspects the restaurant and finds the following.

- The fridge is operating at 10°C
- Desserts are stored in the same fridge as raw meat

Describe how this could cause food poisoning.

2

The fridge temperature can cause bacteria to grow, as bacteria grows faster when the temperature is higher. This can cause food poisoning as there is bacteria on the chilled food and it may not have to be cooked so bacteria will not be killed.

Total marks 10

[Turn over

The Desserts could cause food poisoning as they are stored in the <sup>same</sup> fridge as the raw meat. This can happen as the juices on the raw meat could touch the desserts, and the desserts not be cooked so the bacteria won't be killed, which leads to food poisoning.



\* X 7 3 6 7 5 0 1 0 3 \*

## Question 2

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An active three year old boy is starting nursery school.

The table below shows the daily reference values for 1 to 3 year olds.

Dietary Reference Values for 1 – 3 year olds					
Estimated average requirements	Reference Nutrient Intakes				
Energy (MJ)	Protein (g)	Vitamin B (mg)	Iron (mg)	Vitamin C (mg)	Calcium (mg)
5.2	14.5	0.6	6.9	30	350

The table below shows the daily analysis of this 3 year old boy's meals.

Dietary analysis of his typical day's meals					
Energy (MJ)	Protein (g)	Vitamin B (mg)	Iron (mg)	Vitamin C (mg)	Calcium (mg)
4.8	16.0	0.5	7.4	27	370

- (a) Taking account of the Dietary Reference Values (DRVs) for 1 – 3 year olds, evaluate the suitability of his typical day's meals.

6.

Evaluation The 3 year old is low on his energy intake this isn't good as he is active and he won't have enough energy so he could feel tired move often/quicker and not keep up with the kids in nursery. However he is over his protein intake, and protein is a <sup>secondary</sup> ~~primary~~ source of energy, which is good as he is already low on energy, stop him feeling as tired. Protein also helps growth and repair in the body. This is good for him, as he is only young and still growing. He has a good intake of iron, this means he won't be at the risk of developing anaemia. He will also not be as tired, as the iron helps the formation of red blood cells, which carry oxygen around the body.



\* X 7 3 6 7 5 0 1 0 4 \*

## Question 2 (continued)

- (b) Identify and explain two different ways in which food manufacturers could develop products that encourage healthier eating for children.

4

Way 1. Advertising the food with  
their favourite kids programmes.

Explanation This then makes the  
children want to eat the foods  
their favourite characters may be eating.

Way 2. Give a free toy with  
the product.

Explanation This ~~en~~ then makes the children  
want to eat the food as they  
get a prize / toy everytime they do,  
so they'll be ~~encouraged~~ to  
wanting  
eat more healthy foods.

Total marks 10

[Turn over]



\* X 7 3 6 7 5 0 1 0 5 \*

### Question 3

MARKS

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A local tourist attraction wants to sell a healthy picnic bag option for families. Each picnic bag must serve four people.

- (a) (i) Consider all the information shown in the table below.

Features	Picnic Bag A	Picnic Bag B	Picnic Bag C
Choice of sandwich fillings	3 options	4 options	2 options
Type of Bread	Wholemeal sliced bread	Tortilla wrap	White crusty rolls
Drinks	<ul style="list-style-type: none"> <li>• 2 litre bottle of flavoured water</li> <li>• 4 cups</li> </ul>	<ul style="list-style-type: none"> <li>• 1 litre bottle of vanilla milkshake</li> <li>• 2 cups</li> </ul>	<ul style="list-style-type: none"> <li>• 2 litre of fizzy pineapple juice</li> <li>• 6 cups</li> </ul>
Packaging	Reusable insulated bag	Reusable plastic bag	Brown paper bag
Additional items included	Paper plates and napkins  4 fruit salad tubs	Hand wipes  Family size bag of crisps	Money off voucher for next purchase  Family size chocolate bar
Cost	££	£££	££

Key:  
 £                      →                      £££  
 Inexpensive                      Expensive

Identify the most suitable picnic bag for the tourist attraction to sell.

1

Picnic Bag     A    



\* X 7 3 6 7 5 0 1 0 6 \*

## Question 3 (a) (continued)

(ii) Give three reasons for your choice of picnic bag.

3

Reason 1 As the type of bread they  
have is wholemeal which contains  
fibre, which gives the family energy for the

Reason 2 The picnic bag serves 4 people, this  
is what the tourist attraction wants. The bag  
has 4 cups and 4 fruit tubs so there is  
enough for everyone.

Reason 3 There is 3 options of sandwich, so  
there is a choice and there is guaranteed  
everyone likes something which increases

the day and they want to sell a healthy option and this is healthier than the rest. 2

(b) State two functions of dietary fibre.

Function 1 prevents constipation  
and bowel disorder

Function 2 that ~~per~~ fills you up for  
longer, which prevents snacking on  
fatty / sugary / salty foods which  
leads to becoming obese.

[Turn over]



\* X 7 3 6 7 5 0 1 0 7 \*

Question 3 (continued)

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- (c) The choice of packaging is considered carefully by food manufacturers. Evaluate the use of aluminium cans for the drinks industry.

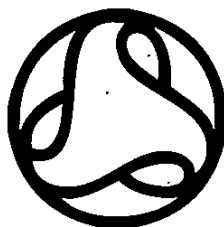
2



Evaluation They are good as they can be  
recycled, which people like as they may  
be environmental friendly, this increases sales.  
They keep the product instead safe,  
not damaged, and stop bacteria from  
getting into the products.

- (d) (i) Identify the following symbol.

1



Symbol Fairtrade.  
~~Trading standard mark.~~

- (ii) Explain how this symbol may influence consumer choice of foods.

1

Explanation this may influence  
customers to buy it as they know  
the growers/farmers in the poorer  
countries are getting a decent pay.

Total marks 10



\* X 7 3 6 7 5 0 1 0 8 \*



MARKS

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Question 4

A Scottish bakery chain wants to extend its range of scones.

- (a) Explain the following two stages in the product development process.

2

Concept generation This is when the  
develop new ideas

First production run This is when the product  
goes through the full product line for  
the first time and can be assed.

[Turn over

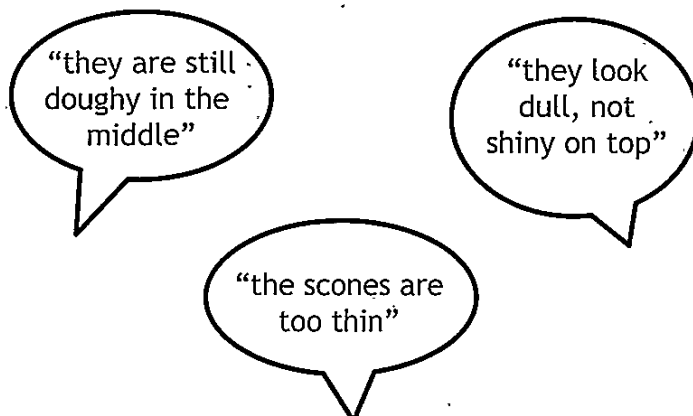


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Question 4 (continued)

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- (b) The bakery chain carried out sensory testing with a group of consumers. They received the following comments about the scones.



Explain why these faults could have happened when producing the scones.

4

~~the~~ They could still be doughy in the middle as the oven temperature could of been too low or the <sup>scones</sup> ~~products~~ have not been in the oven for long enough. The scones could be too thin as they could have had not enough air in the scones while making them or they could have not used self raising flour. The scones could have look dull and not shiny as there was not any sugar on the top, to give colour. or the starch in the flour could have not raised to the top giving the colour.



Question 4 (continued)

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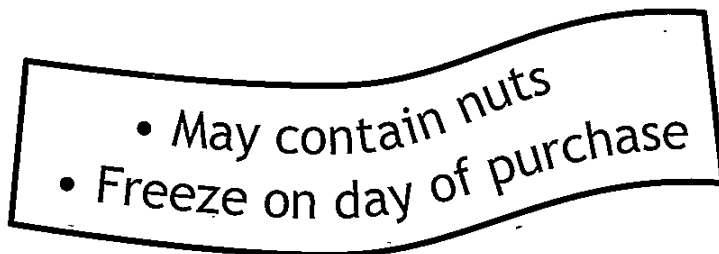
- (c) Describe two rules that must be followed when carrying out sensory testing.

2

Rule 1 The person must be honest  
about their scores.

Rule 2 ~~Must be~~ it must be done  
~~fairly~~ fairly and be <sup>judged</sup> on the  
food only, not the person.

- (d) The label on the scone packaging includes the following information.



Explain one benefit to the consumer of each of the above points of information.

2

As it says 'may contain nuts'. This is  
good to the consumer as if they have nut  
allergies, and it may be harmful for  
them to take nuts, so this is good  
warning. It is good that the customers know  
to freeze on the day of purchase as this  
can stop them from developing food  
poisoning, as you know how to store the food  
correctly.

Total marks 10



\* X 7 3 6 7 5 0 1 1 1 \*

Question 5

MARKS

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- (a) A couple want to reduce the cost of their weekly food shopping, and would like to buy ethically produced food, with low food miles.

Make four evaluative comments about the suitability of the following method of shopping for the couple.

4



Sunnytown Weekly Farmers Market

- Locally grown organic fruit and vegetables at low prices
- Free range eggs available
- Over 30 stalls of food produce
- All fish and meat vacuum packed
- Fairtrade group selling a range of coffee, tea and chocolate

Evaluation

Point 1 As the food is locally produced  
this means the food miles are low,  
as the food was produced near  
by, this is good as this is what the  
couple want.

Point 2 The fruit and vegetables are at low  
prices, so this helps the couple  
reduce their cost of their shop.

Point 3 There is over 30 stalls, this  
may not be good as it may be  
time consuming, as there is  
so many stalls, that they will have to  
go round every week.



\* X 7 3 6 7 5 0 1 1 2 \*

## Question 5 (a) (continued)

Point 4 they sell free range eggs.  
this is good for the couple as  
they want ethically produced  
food.

- (b) Explain how the following factors may affect consumer choice of food. 2

Budget If someone has a low budget, they  
may tend to not <sup>buy</sup> as healthy food as <sup>so</sup>  
fruit and vegetables are / can be expensive <sup>they</sup>  
very high in fat/sugar foods.  
Advertising Unhealthy foods are more  
advertised, so this can encourage people  
to buy these foods, ~~which~~ which can be  
high in fat and lead to obesity.

- (c) Give two reasons why Trading Standards officers would inspect the food stalls at a Farmers Market. 2

Reason 1 To make sure the food was  
organic, locally or ethically produced,

Reason 2 Make sure the food they were  
selling was safe for customers to buy/eat  
and not cause them food poisoning.

[Turn over for Question 5 (d) on Page fourteen]



\* X 7 3 6 7 5 0 1 1 3 \*

Question 5 (continued)

MARKS

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- (d) Evaluate the suitability of Ultra Heat Treated (UHT) products for the consumer.

2

They are good for consumers as you know the product is cooked and hot all the way through which prevents the risk of food poisoning. However, customers may not like the fact the food is remained hot so this doesn't give bacteria a chance to grow, or if it does it will be killed, as product is hot. - this is good for customers as it prevents food poisoning.

Total marks 10

[END OF QUESTION PAPER]



\* X 7 3 6 7 5 0 1 1 4 \*

## ADDITIONAL SPACE FOR ANSWERS

question 2(a) continued.

He has a good intake of calcium. This is good as calcium helps form strong bones and teeth. He needs this as he is only young and his bones will still be developing.

The boy is also low on vitamin C, this is bad as this can mean <sup>if</sup> he ~~can~~ hurt himself, his cuts and wounds will take longer to heal.

He is also a wee bit low on Vitamin B. Vitamin B helps with the function of the nervous system, and helps realise energy from carbohydrates. He needs more vitamin B, so ~~the~~ energy will be realised from carbohydrates, and he needs this energy as he is active.

