



National
Qualifications
2015

X736/76/11

**Health and Food
Technology**

THURSDAY, 7 MAY

1:00 PM – 2:30 PM

Total marks — 50

Attempt ALL questions.

Write your answers clearly in the answer booklet provided. In the answer booklet you must clearly identify the question number you are attempting.

Use **blue** or **black** ink.

Before leaving the examination room you must give your answer booklet to the Invigilator; if you do not you may lose all the marks for this paper.



* X 7 3 6 7 6 1 1 *

Total marks — 50
Attempt ALL questions

Question 1

- (a) Explain the support the Environmental Health Department could provide to a Care Home about food safety practices. 3
- (b) Evaluate ways the chef could help the residents of the Care Home meet current dietary advice. 4
- (c) The Care Home aims to meet the nutritional needs of the elderly residents.

Table 1 below shows the Dietary Reference Values for 65-74 year old females.

Dietary Reference Values for females aged 65-74				
Estimated average requirements	Reference Nutrient Intakes			
Energy (MJ)	Vitamin B1 (mg)	Vitamin C (mg)	Sodium (g)	Fibre (g)
7.96	0.8	40	1.6	18

The food intake of a 70 year-old female includes the following lunch:

<p>Lunch</p> <p>Pasta with smoked bacon and cream</p> <p>Tomato, red onion and green pepper salad</p>
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Question 1 (c) (continued)

Table 2 below shows the dietary analysis of her food intake, including the lunch.

Dietary analysis of the 70 year old female's food intake				
Estimated average requirements	Reference Nutrient Intakes			
Energy (MJ)	Vitamin B1 (mg)	Vitamin C (mg)	Sodium (g)	Fibre (g)
8.24	0.5	44	2.1	13

Analyse three different aspects of the female's diet, in relation to the Dietary Reference Values (DRVs) for 65-74 year-old females.

For each aspect you should include:

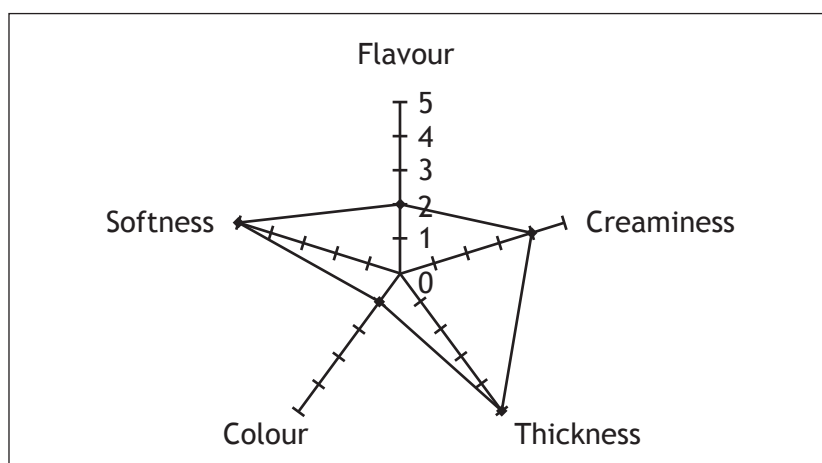
- a comment on the impact of her diet in relation to the Dietary Reference Values
- a potential consequence for her health
- a conclusion about the contribution made by her lunch choice to her food intake.

9

(d) The chef in the Care Home carried out sensory testing of the Pasta with smoked bacon and cream dish.

Evaluate the suitability of this dish for the elderly, using the star profile below.

4



Key: 5 = very high
 4 = high
 3 = slightly high
 2 = low
 1 = very low

Question 2

- (a) Explain how a food manufacturer could improve each of the following stages of food product development for a food product which failed to meet sales targets.
- (i) Concept screening 1
 - (ii) Product testing 1
 - (iii) First production run 1
- (b) Explain how each of the following steps will help a manufacturer of fruit yoghurts ensure food safety.
- (i) Ingredients are purchased from reputable suppliers 1
 - (ii) Temperature records of storage areas are maintained daily 1
 - (iii) Hygiene training is completed annually with all staff 1
 - (iv) Stock rotation 1
- (c) Explain the protection provided by consumer laws to the consumer when purchasing food products. 3

Question 3

- (a) A food manufacturer wants to modify a pastry recipe.
Describe the possible result of each of the following changes.
- (i) Butter changed to margarine 2
 - (ii) White flour changed to wholemeal flour 2
- (b) Evaluate the impact of each of the following factors on consumer choice of food 6
- (i) Packaging
 - (ii) Food labelling
 - (iii) Buy one get one free (BOGOF)

[Turn over for Question 4 on *Page six*

Question 4

- | | |
|---|---|
| (a) Evaluate the suitability of UHT products for a nursery. | 3 |
| (b) Explain the inter-relationship between the following nutrients. | 4 |
| (i) Calcium, phosphorus, Vitamin D | |
| (ii) Iron, folic acid, Vitamin C | |
| (c) Evaluate the impact breakfast cereals may have on each of the following dietary diseases. | 3 |
| (i) Osteoporosis | |
| (ii) Type 2 diabetes | |

[END OF QUESTION PAPER]

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