



National  
Qualifications  
2018

**X736/76/11**

**Health and Food  
Technology**

FRIDAY, 25 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 **three** factors which could influence consumer choice of food. 3
- (b) Explain **three** dietary factors which may prevent osteoporosis. 3
- (c) A lunch group aims to meet the nutritional needs of pregnant women.

Table 1 shows the Dietary Reference Values for females 19–50 during pregnancy.

Dietary Reference Values for females 19–50 during pregnancy				
Estimated average requirements	Reference nutrient intakes			
Energy (MJ)	Protein (g)	Vitamin C (mg)	Iron (mg)	Folate ( $\mu\text{g}$ )
9.9	51	50	14.8	300

The food intake of a 30 year old pregnant woman includes the following lunch.

<p>Scrambled egg on wholemeal toast</p> <p>Spinach and strawberry smoothie</p>
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Table 2 shows the dietary analysis of the 30 year old pregnant woman's food intake, including the lunch.

Dietary analysis of the pregnant woman's food intake				
Estimated average requirements	Reference nutrient intakes			
Energy (MJ)	Protein (g)	Vitamin C (mg)	Iron (mg)	Folate ( $\mu\text{g}$ )
10.3	55	55	12.4	275

## Question 1 (c) (continued)

Analyse **three different** aspects of the pregnant woman's diet, in relation to the Dietary Reference Values (DRVs) for females aged 19–50 during pregnancy.

For each aspect of her diet you have identified:

- comment on the impact of her diet in relation to the dietary reference values
- indicate a potential consequence for her health
- give a conclusion about the contribution made by her lunch choice to her food intake.

9

(d) Explain the functional properties of eggs when manufacturing baked products.

3

(e) Evaluate the use of alternative proteins in the diet.

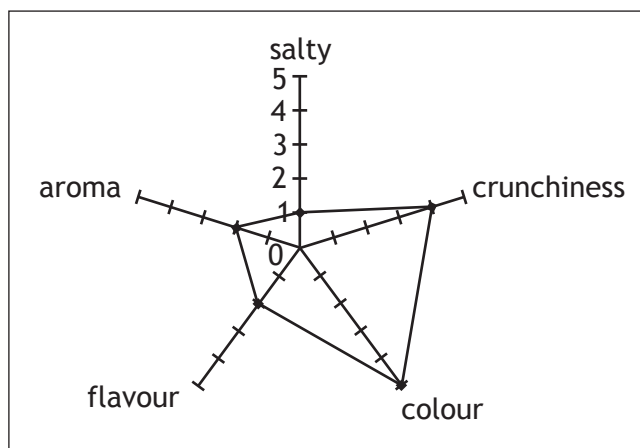
2

[Turn over

Question 2

- (a) The star profile below shows the results of sensory testing for a rice salad.  
Evaluate the suitability of the rice salad for teenagers.

4



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

- (b) The rice salad failed to meet sales targets.

Explain how a food manufacturer could improve each of the following stages of food product development for the rice salad.

- (i) Concept generation 1
- (ii) Prototype production 1
- (iii) Marketing plan 1

- (c) Consumer organisations provide a range of information.

Evaluate the usefulness of this information for consumers when purchasing food. 3

**Question 3**

- |   |   |
|---|---|
| (a) Evaluate the use of functional foods for a consumer.            | 3 |
| (b) Explain the effects of obesity on health.                       | 3 |
| (c) Evaluate the impact of food packaging on each of the following: |   |
| (i) the environment   |   |
| (ii) the consumer.  | 4 |

[Turn over for next question

## Question 4

- |  |          |
|--|----------|
| (a) A burger restaurant wants to use locally produced foods in their menu.<br>Evaluate the suitability of locally produced foods for the restaurant. | <b>3</b> |
| (b) Explain control measures the burger restaurant should implement to ensure food safety.   | <b>3</b> |
| (c) Evaluate the contribution of red meat in the diet.   | <b>4</b> |

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