

X118/12/01

NATIONAL
QUALIFICATIONS 2014

FRIDAY, 2 MAY
1.00 PM – 3.00 PM

HOME ECONOMICS
HEALTH AND FOOD
TECHNOLOGY
HIGHER

80 marks are allocated to this paper.

This paper consists of **two** sections.

Candidates should attempt the following:

Section A—All questions

Section B—Question 1 and any other **two** questions.

The breakdown of Knowledge and Understanding (**KU**) and Evaluation (**EV**) marks are indicated beside each question.



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SECTION A

Attempt ALL questions.

You should spend approximately 30 minutes on this part of the paper.

Marks

- | | |
|---|-------------|
| 1. State one source of vitamin D. | 1 |
| 2. Identify one symptom of food poisoning. | 1 |
| 3. Give one benefit of water in the diet. | 1 |
| 4. Identify one benefit of Fair Trade foods. | 1 |
| 5. State one source of bacillus cereus. | 1 |
| 6. What does the abbreviation CHD stand for? | 1 |
| 7. Explain the term “due diligence” in relation to the food industry. | 1 |
| 8. Identify the process by which liquid oils are converted to solid fats. | 1 |
| 9. Give two ways food manufacturers have replaced sugar in food products. | 2 |
| 10. State two procedures to ensure effective sensory testing. | 2 |
| 11. State two responsibilities of the Environmental Health Department (EHD). | 2 |
| 12. Give two effects of dehydration on food. | 2 |
| 13. Explain two benefits of market research. | 2 |
| 14. Give one advantage and one disadvantage of cook-chill products. | 2 |
| | (20) |

[Turn over

SECTION B

Attempt THREE questions from this section: Question 1 and any other TWO questions.

You should spend approximately 30 minutes on each question.

Marks

1. (a) The table opposite shows a day's nutrient content of meals eaten by an overweight 8 year old boy.
Using your knowledge of nutrition, and the information provided, evaluate the suitability of this day's nutritional intake. **6 EV**
- (b) Explain the effects of heat on **each** of the following.
- (i) Vitamin C
 - (ii) Starch **4 KU**
- (c) Evaluate the contribution of non starch polysaccharides (NSP) in the diet. **4 EV**
- (d) Identify and explain **three** dietary factors which may contribute to hypertension. **6 KU**
- (20)**

1. (a) (continued)

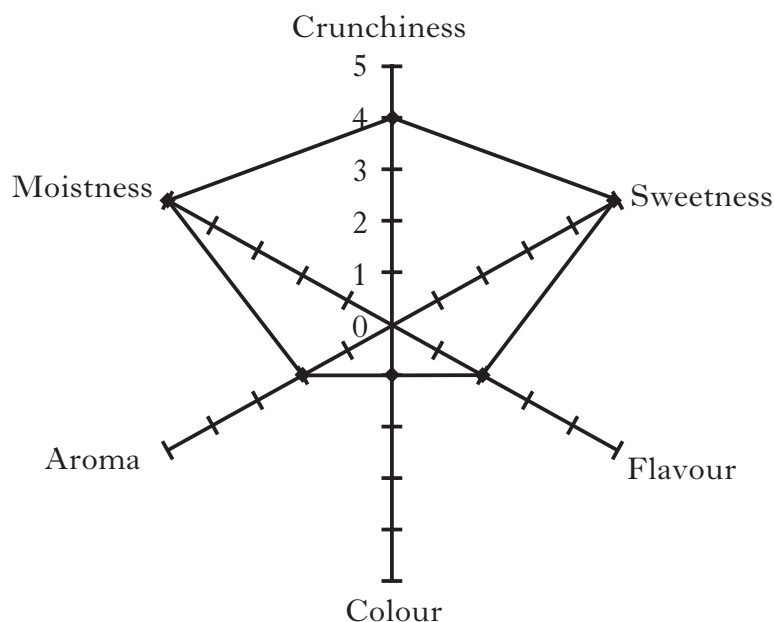
<i>Nutrient content of a day's meals eaten by an overweight 8 year old male</i>							
<i>Energy</i>		<i>Protein</i> (g)	<i>Vitamin B1</i> (mg)	<i>Phosphorous</i> (mg)	<i>Vitamin A</i> (µg)	<i>Saturated fat</i> %	<i>Iron</i> (mg)
(MJ)	(kcal)						
9.26	2211	32.0	0.6	500	398	19	6.2

<i>Reference Nutrient Intake for Selected Nutrients in the UK (per day) for males aged 7–10 years</i>				
<i>Protein</i> (g)	<i>Vitamin B1</i> (mg)	<i>Phosphorous</i> (mg)	<i>Vitamin A</i> (µg)	<i>Iron</i> (mg)
28.3	0.7	450	500	8.7

<i>Estimated Average Requirement for Energy in the UK (per day) for males aged 7–10 years</i>	
<i>Energy</i>	
MJ	kcal
8.24	1970

[Turn over

2. (a) Identify and explain **three** stages in the development of a celebration cupcake. 6 KU
- (b) The star profile shows the results of testing a celebration cupcake. Evaluate the suitability of this celebration cupcake for toddlers. 5 EV



- (c) Explain how **each** of the following may influence consumer choice of food.
- (i) Available income 2 KU
 - (ii) Nutritional knowledge 2 KU
- (d) Evaluate the usefulness to the consumer of the following information found on a food label.
- (i) Bar code
 - (ii) Recycling
 - (iii) Date mark 3 EV
- (e) Explain the protection offered to consumers by the Consumer Protection from Unfair Trading Regulations 2008 (CPRs). 2 KU
- (20)**

3. (a) Evaluate the nutritional suitability of the following meal for an athlete.
- Beef chilli
 - Baked potato
 - Rhubarb crumble and custard
- 4 EV
- (b) Explain the use of disassembly in food manufacture. 4 KU
- (c) Using Hazard Analysis Critical Control Point (HACCP) explain **one** control measure for **each** of the following stages below in the production of a prawn mayonnaise sandwich.
- (i) Delivery of ingredients
 - (ii) Storage of ingredients
 - (iii) Preparation of ingredients
 - (iv) Packaging
- 4 KU
- (d) Evaluate online shopping as a method of purchasing food. 4 EV
- (e) Explain how **each** of the following ingredients used in baking affect the finished product.
- (i) Sugar
 - (ii) Liquid
- 4 KU
- (20)

[Turn over for Question 4 on *Page eight*

- | | <i>Marks</i> |
|--|--------------|
| 4. (a) Explain four benefits of breastfeeding. | 4 KU |
| (b) Evaluate each of the following foods to the consumer. | |
| (i) Organic foods | |
| (ii) Genetically modified foods (GM) | 4 EV |
| (c) Identify and explain three functional properties of eggs. | 6 KU |
| (d) Evaluate each of the following technological developments to the consumer. | |
| (i) Fat replacers | |
| (ii) Functional foods | 4 EV |
| (e) Explain the protection offered to the consumer by the Sale and Supply of Goods Act 1994. | 2 KU |
| | (20) |

[END OF QUESTION PAPER]