

**OXFORD CAMBRIDGE AND RSA EXAMINATIONS  
GCSE**

**B003/01**

**HOME ECONOMICS**

**Food and Nutrition**

**Principles of Food and Nutrition**

**WEDNESDAY 10 JUNE 2015: Afternoon**

**DURATION: 1 hour 30 minutes**

**plus your additional time allowance**

**MODIFIED ENLARGED 24pt**

<b>Candidate forename</b>		<b>Candidate surname</b>	
-------------------------------	--	------------------------------	--

<b>Centre number</b>						<b>Candidate number</b>				
--------------------------	--	--	--	--	--	-----------------------------	--	--	--	--

**Candidates answer on the Question Paper.**

**OCR SUPPLIED MATERIALS:**

**None**

**OTHER MATERIALS REQUIRED:**

**None**

**READ INSTRUCTIONS OVERLEAF**

## **INSTRUCTIONS TO CANDIDATES**

**Write your name, centre number and candidate number in the boxes on the first page. Please write clearly and in capital letters.**

**Use black ink. HB pencil may be used for graphs and diagrams only.**

**Answer ALL the questions.**

**Read each question carefully. Make sure you know what you have to do before starting your answer.**

**Write your answer to each question in the space provided. If additional space is required, you should use the lined pages at the end of this booklet. The question number(s) must be clearly shown.**

## **INFORMATION FOR CANDIDATES**

**The number of marks is given in brackets [ ] at the end of each question or part question.**

**The total number of marks for this paper is 80.**

**Your quality of written communication is assessed in the questions marked with an asterisk (\*).**

**Any blank pages are indicated.**

**BLANK PAGE**

**1 Flavoured milk drinks are popular with children.**

**Read the product details and nutritional information below:**

**PRODUCT DETAILS**

**Flavoured milk drink**  
**No artificial sweeteners or flavours**  
**Made using skimmed milk**  
**Keep refrigerated**

**NUTRITIONAL INFORMATION**

<b>TYPICAL VALUE</b>	<b>PER 100 ml</b>
<b>Energy</b>	<b>260 kJ/60 kcal</b>
<b>Protein</b>	<b>3.1 g</b>
<b>Carbohydrates</b>	<b>9.5 g</b>
<b>Fat</b>	<b>1.2 g</b>
<b>Fibre</b>	<b>Trace</b>
<b>Sodium</b>	<b>0.005 g</b>
<b>Calcium</b>	<b>15% RDA (120 mg)</b>

**Answer the following questions referring to the product details and nutritional information.**

- (a) (i) State how much fat is provided in 100 ml of the flavoured milk drink.**

\_\_\_\_\_ **[1]**

- (ii) What do the initials 'RDA' stand for?**

\_\_\_\_\_  
\_\_\_\_\_ **[1]**

- (iii) What percentage (%) of the RDA of calcium is provided by 100 ml of the flavoured milk drink?**

\_\_\_\_\_ **[1]**

- (iv) Identify TWO reasons why calcium is needed in a child's diet.**

**1** \_\_\_\_\_

\_\_\_\_\_

**2** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_ **[2]**

- (v) State how the flavoured milk drink should be stored.**

\_\_\_\_\_ **[1]**

[illegible]

**(c) Identify three types of milk that do not need to be stored in a refrigerator.**

**1** \_\_\_\_\_

\_\_\_\_\_

**2** \_\_\_\_\_

\_\_\_\_\_

**3** \_\_\_\_\_

\_\_\_\_\_

**[3]**

**Milk drinks can be fortified.**

**(d) What is meant by the term ‘fortified’?**

\_\_\_\_\_

\_\_\_\_\_ **[1]**

**(e) Describe two ways food labelling could be useful for the consumer.**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**[4]**

**[TOTAL: 20]**

**2 Fried battered fish and chips are a popular choice for a take-away meal.**

**(a) Give ONE reason why fish is deep fried in batter.**

---

---

[1]

**(b) Identify THREE ways deep fried battered fish and chips could be changed to meet current healthy eating guidelines.**

1

---

---

2

---

---

3

---

---

[3]

**(c) (i) Identify the THREE main ingredients of batter.**

1

---

---

2

---

---

3

---

---

[3]



**(ii) Identify TWO other dishes that use batter.**

**1** \_\_\_\_\_  
\_\_\_\_\_

**2** \_\_\_\_\_  
\_\_\_\_\_

**[2]**

**(iii) Describe what happens to the following when a batter is cooked:**

**The liquid** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**The protein** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**The starch** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**[6]**

**[TOTAL: 15]**

**3\* Some people choose to become a vegetarian.**

**Describe why someone may choose to become a vegetarian.**

**Explain how a vegetarian could ensure they have a balanced diet.**

**[15]**

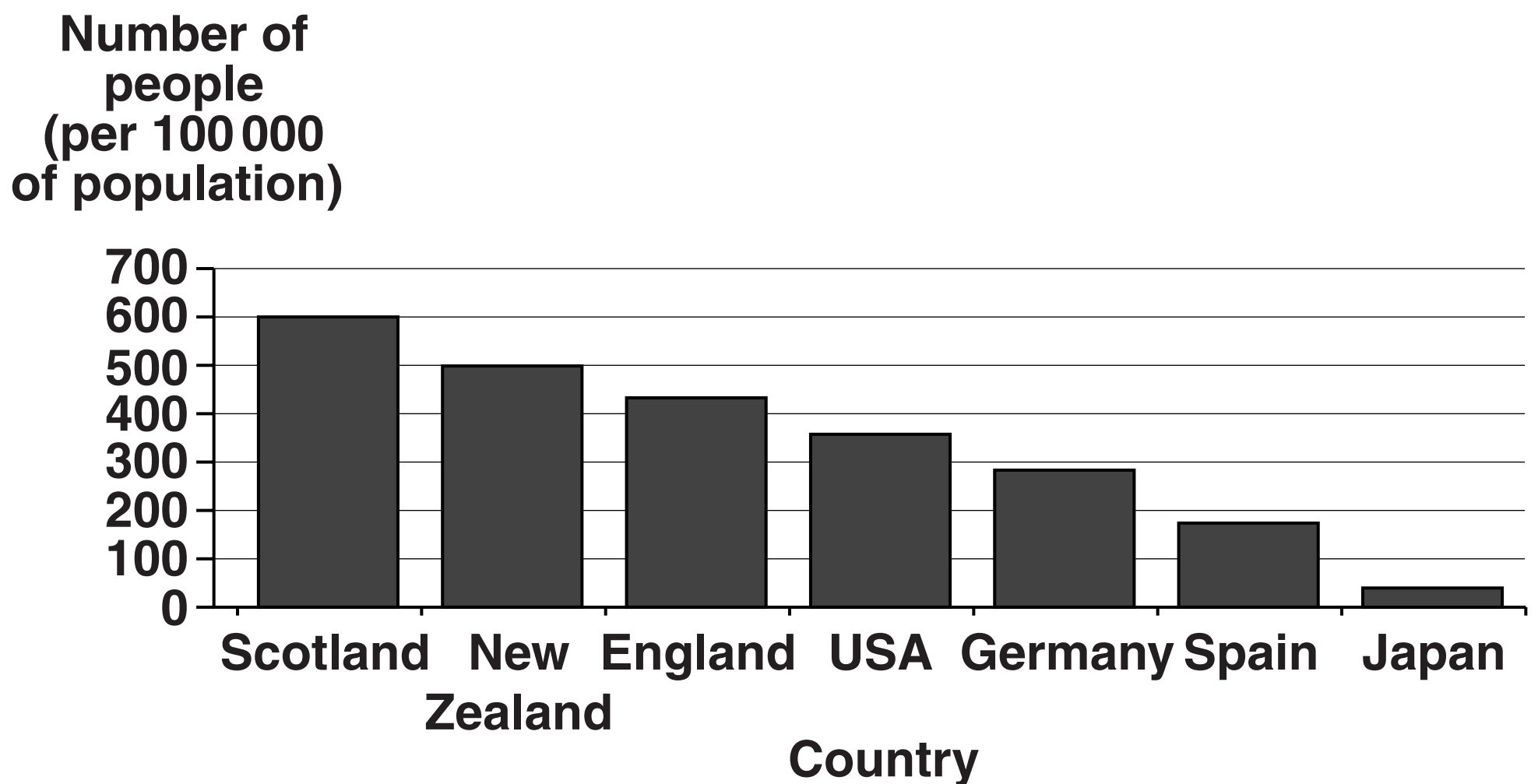
This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

[illegible]

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

**4 Coronary heart disease (CHD) is one of the major diet related health issues.**

**The graph below shows the total number of people with coronary heart disease (CHD) per 100 000 of the population, in 7 countries.**



**(a) (i) Identify which country has the lowest number of people (per 100 000 of population) with coronary heart disease (CHD).**

\_\_\_\_\_ **[1]**

**(ii) State the number of people (per 100 000 of population) with coronary heart disease (CHD) in New Zealand.**

\_\_\_\_\_ **[1]**

**(b) Describe FOUR ways people could change their diet to reduce the risk of developing coronary heart disease (CHD).**

**1** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**2** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**3** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**4** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**[8]**

The eatwell plate shows the food portions needed for good health.

(c) Identify TWO food groups found on the eatwell plate.

1 \_\_\_\_\_

\_\_\_\_\_

2 \_\_\_\_\_

\_\_\_\_\_

[2]

(d) Other than coronary heart disease (CHD), identify THREE major diet related health issues.

1 \_\_\_\_\_

\_\_\_\_\_

2 \_\_\_\_\_

\_\_\_\_\_

3 \_\_\_\_\_

\_\_\_\_\_

[3]

[TOTAL: 15]

**5 Micro-organisms can have positive and negative effects on food.**

**(a) State TWO qualities a consumer may look for when buying fruit and vegetables.**

**1** \_\_\_\_\_

**2** \_\_\_\_\_ **[2]**

**(b) Identify TWO products that use micro-organisms in food production.**

**1** \_\_\_\_\_

**2** \_\_\_\_\_ **[2]**

**(c) Give THREE conditions that slow or stop the growth of micro-organisms.**

**1** \_\_\_\_\_

**2** \_\_\_\_\_

**3** \_\_\_\_\_ **[3]**

**(d) Identify TWO bacteria that could cause food poisoning.**

**1** \_\_\_\_\_

**2** \_\_\_\_\_ **[2]**



**(e) Describe THREE different ways to reduce the risk of food poisoning when preparing, cooking and storing meat.**

**1** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**2** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**3** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**[6]**

**[TOTAL: 15]**

**END OF QUESTION PAPER**

### ADDITIONAL ANSWER SPACE

**If additional answer space is required, you should use the following lined page(s). The question number(s) must be clearly shown in the margins.**

[illegible]







### Copyright Information

OCR is committed to seeking permission to reproduce all third-party content that it uses in its assessment materials. OCR has attempted to identify and contact all copyright holders whose work is used in this paper. To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced in the OCR Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download from our public website ([www.ocr.org.uk](http://www.ocr.org.uk)) after the live examination series.

If OCR has unwittingly failed to correctly acknowledge or clear any third-party content in this assessment material, OCR will be happy to correct its mistake at the earliest possible opportunity.

For queries or further information please contact the Copyright Team, First Floor, 9 Hills Road, Cambridge CB2 1GE.

OCR is part of the Cambridge Assessment Group; Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.

