

**GENERAL CERTIFICATE OF SECONDARY EDUCATION
DESIGN AND TECHNOLOGY**

A524

Food Technology

Technical Aspects of Designing and Making

Candidates answer on the question paper.

OCR supplied materials:

None

Other materials required:

None

**Friday 28 January 2011
Afternoon**

Duration: 1 hour 15 minutes



Candidate forename		Candidate surname	
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Centre number						Candidate number				
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INSTRUCTIONS TO CANDIDATES

- Write your name, centre number and candidate number in the boxes above. Please write clearly and in capital letters.
- Use black ink. Pencil may be used for graphs and diagrams only.
- 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. Additional paper may be used if necessary but you must clearly show your candidate number, centre number and question number(s).
- Answer **all** the questions.
- Do **not** write in the bar codes.

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 **60**.
- Your Quality of Written Communication is assessed in questions marked with an asterisk (*).
- This document consists of **12** pages. Any blank pages are indicated.

Section A

Answer all questions.

1 Fig.1 shows a packet of muffins.

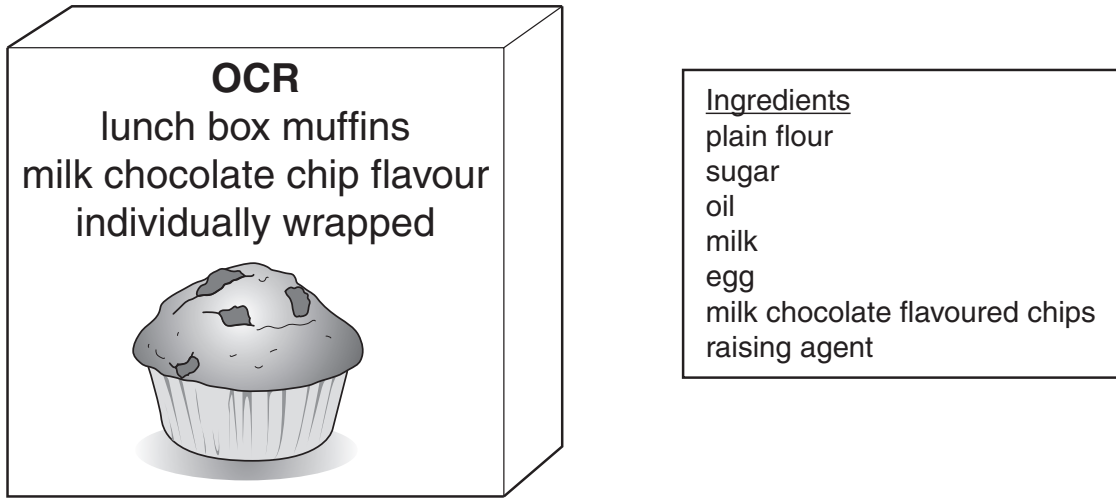


Fig. 1

(a) State one target group for the muffins shown in Fig. 1.

State one reason for your choice.

Target group.....

Reason for choice..... [2]

(b) The Eatwell Plate is a guide to healthy eating.

State two ways of changing the ingredients shown in Fig.1 so that the muffins meet the guidance of the Eatwell Plate.

Change 1

Change 2 [2]

(c) State two quality control checks that could be carried out during the manufacture of the muffins.

1

.....

2

..... [2]

(d) Give **two** reasons why manufacturers carry out market research when they are designing a new product.

Reason 1

.....

Reason 2

..... [2]

(e) Explain why new products are made in a test kitchen before large scale production takes place.

.....

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.....

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..... [4]

[Total: 12]

2 Fig. 2 shows a newspaper headline.

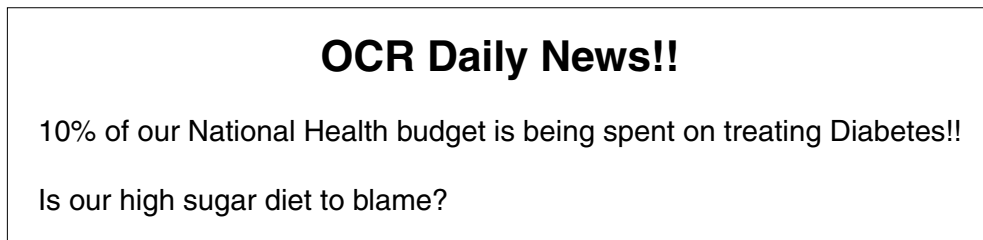


Fig. 2

(a) (i) State **one** health problem other than diabetes linked with a high sugar diet.

..... [1]

(ii) State the function of sugar **in the diet**.

..... [1]

(b) State **one** type of sugar used to decorate cakes.

..... [1]

(c) Complete the table below by stating **one** function of sugar in each of the following products.

Give **one** different function for each.

Product	Function of sugar
Creamed cake	
Bread	
Fresh fruit salad	

[3]

3 The table below shows some of the nutritional content of **four** different cheeses.

Per 100g	Cheddar Cheese	Brie	Cream cheese	Cottage cheese
Energy (KJ)	1708.00	1323.00	1807.00	331.00
Energy (Kcal)	412.00	319.00	439.00	78.00
Protein (g)	25.50	19.30	3.10	13.30
Fat (g)	34.40	26.90	47.40	1.40
of which saturates	21.70	16.80	29.70	0.90
Water	36.00	48.60	45.50	80.20

(a) (i) Name the cheese with the highest protein content.

..... [1]

(ii) Name the cheese with the highest energy content.

..... [1]

(iii) Name **one** cheese that you would recommend to someone on a weight reducing diet.

..... [1]

(iv) Name **two** other nutrients found in cheese that are **not** listed in the table above.

1

2 [2]

(b) Most of the cheese that is bought in supermarkets is pre packaged.

State **three** pieces of information on a food label that is required by law.

1

2

3 [3]

(c) Describe how you would store a packet of cheese after it has been opened.

.....

 [2]

(d) Give **two** changes that take place when cheese is cooked.

1

.....

2

..... [2]

[Total: 12]

Section B

Answer **all** questions.

4 Fig. 3 shows a jar of homemade blackberry jam.



Fig. 3

(a) (i) State **one** nutrient found in blackberries.

..... [1]

(ii) Give **one** reason why a person would make their own blackberry jam.

..... [1]

(b) Blackberry jam is made commercially by batch production.

State **two** advantages to the manufacturer of using batch production.

1

.....

2

..... [2]

5 (a) A manufacturer wants to develop a new luxury dessert.

The design specification for the luxury dessert includes:

- lower in fat
- attractive in appearance
- part of a cultural promotion
- suitable for freezing.

Use labelled sketches and/or detailed notes to design a new luxury dessert which meets the specification.

Do not draw any packaging.

(b) Give **two** ways that the manufacturer could promote the new luxury dessert.

1

.....

2

..... [2]

(c*) Discuss why a manufacturer would want to develop lower in fat products.

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..... [6]

[Total: 12]

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