

CAMBRIDGE INTERNATIONAL EXAMINATIONS
General Certificate of Education
Advanced Subsidiary Level and Advanced Level

FOOD STUDIES

9336/01

Paper 1

October/November 2003

3 hours

Additional Materials: Answer Booklet/Paper

READ THESE INSTRUCTIONS FIRST

If you have been given an Answer Booklet, follow the instructions on the front cover of the Booklet.
Write your Centre number, candidate number and name on all the work you hand in.
Write in dark blue or black pen.
You may use a soft pencil for any diagrams or rough working.
Do not use staples, paper clips, highlighters, glue or correction fluid.

Answer **four** questions.

Section A

Answer **two** questions.

Write your answers on the separate Answer Booklet/Paper provided.

Section B

Answer **two** questions.

Write your answers on the separate Answer Booklet/Paper provided.

At the end of the examination, fasten all your work securely together.

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

You are reminded of the need for good English and clear presentation in your answers.

Section A

Answer **two** questions from this section.

- 1 (a) Carbohydrates, fats and proteins provide the body with energy. Discuss the composition of these nutrients and explain the processes leading to the release of energy from each of them. [15]
- (b) Explain the functions of the following nutrients in the production of energy:
- (i) iron;
 - (ii) thiamin, riboflavin and nicotinic acid. [5]
- (c) Consider factors which limit the body's supply of iron and vitamins from the B group. [5]
- 2 (a) Compare the structure of saturated and unsaturated fats. [7]
- (b) Explain the terms:
- (i) trans fatty acids; [1]
 - (ii) cis fatty acids; [1]
 - (iii) essential fatty acids. [2]
- (c) Discuss the link between fats and coronary heart disease. [6]
- (d) Give advice on the role of fat in a healthy diet. [8]
- 3 (a) State and explain the nutritional contribution of vegetables in the diet. [15]
- (b) Discuss other factors which make vegetables important in family meals. [10]
- 4 Water and NSP [Non-Starch Polysaccharide - dietary fibre] are not classified as nutrients because they are not digested by the body. They are both essential for good health.
- (a) (i) Define the term 'water balance'. [2]
- (ii) Explain the functions of water in the body and discuss the results of a deficiency. [11]
- (b) (i) Define the term 'NSP'. [1]
- (ii) Explain the functions of NSP in the digestive system. [3]
- (iii) Suggest reasons for an insufficient supply of NSP in the diet. Discuss the effects of a poor intake of NSP on the body. [8]

Section B

Answer **two** questions from this section.

- 5 (a) Describe different types of wheat flour and discuss their uses. [12]
- (b) Explain:
- (i) the changes which occur in flour during breadmaking; [5]
 - (ii) the role of yeast in breadmaking. [5]
- (c) Explain how the preparation time required for breadmaking can be reduced. [3]
- 6 (a) (i) Discuss the nutritional value of milk. [8]
- (ii) Explain how the diet of a six month old child can be adapted to include nutrients which are lacking in milk. [4]
- (b) (i) Outline the advantages of breast feeding. [4]
- (ii) Discuss problems which could be associated with the use of formula milk. [4]
- (c) Children in developing countries may suffer from Marasmus and kwashiorkor. Discuss the causes and effects of these deficiency diseases. [5]
- 7 (a) Microwave ovens are often used in meal preparation.
- (i) Explain how a microwave oven heats food. [4]
 - (ii) Discuss the advantages and disadvantages of owning a microwave oven. [8]
- (b) State and explain **three** other methods of conserving fuel when cooking. [6]
- (c) Convenience foods can be used to save time and energy when preparing meals. Discuss problems associated with the regular use of convenience foods. [7]
- 8 (a) Discuss the variety of uses of sugar in food preparation. [10]
- (b) What problems can be associated with the consumption of sugar? [6]
- (c) Describe and explain the effect of moist heat on sugar. [4]
- (d) Write an informative account on sugar substitutes and their use. [5]

