

General Certificate of Education
January 2007
Advanced Subsidiary Examination



HEALTH AND SOCIAL CARE
Unit 5 Nutrition and Dietetics

HC05

Tuesday 16 January 2007 9.00 am to 10.30 am

For this paper you must have:

- an 8-page answer book.

Time allowed: 1 hour 30 minutes

Instructions

- Use blue or black ink or ball-point pen.
- Write the information required on the front of your answer book. The *Examining Body* for this paper is AQA. The *Paper Reference* is HC05.
- Answer **all** questions.
- Do all rough work in the answer book. Cross through any work you do not want to be marked.

Information

- The maximum mark for this paper is 60.
- The marks for questions are shown in brackets.
- You will be marked on your ability to use good English, to organise information clearly and to use specialist vocabulary, where appropriate.

Answer **all** questions.

There are 15 marks for each question.

1 Cherie is eight years old. Her diet is low in non-starch polysaccharides (NSP).

- (a) (i) Explain the likely effects on Cherie's health if she continues to eat a diet low in non-starch polysaccharides. *(3 marks)*
- (ii) Suggest two different foods Cherie could eat to improve her diet. *(2 marks)*
- (b) (i) Name two different types of macronutrient that Cherie should have in her diet. For each type of macronutrient give a different reason why it should be included. *(4 marks)*
- (ii) Describe the basic chemical composition of the two macronutrients you named in (b)(i). *(6 marks)*

2 Freddie is a very active 24-year-old male. His typical daily intake of three micronutrients and the appropriate Dietary Reference Values (DRVs) for a very active male of his age are shown in the table below.

Micronutrient	Freddie's typical daily intake	Dietary Reference Values (DRVs) males 18–34 years
Vitamin B3 (Niacin)	10 mg	18 mg
Vitamin C	31 mg	30 mg
Calcium	300 mg	500 mg

- (a) (i) What conclusions can be drawn about Freddie's daily intake of the three micronutrients from the information in the table above? *(3 marks)*
- (ii) Explain how Freddie may be affected by the regular intake of each of the three micronutrients at these levels. *(9 marks)*
- (b) Freddie also requires Vitamin D.
Give one non-food source of Vitamin D. *(1 mark)*
- (c) Freddie's diet contains a regular intake of a variety of phytochemicals.
Give two different health benefits Freddie may gain from these phytochemicals. *(2 marks)*

3 Some individuals choose a vegetarian diet while others may choose a vegan diet.

(a) Explain what is meant by a:

(i) vegetarian diet

(2 marks)

(ii) vegan diet.

(2 marks)

(b) Outline how a person's dietary and nutritional needs may be affected by:

(i) pregnancy

(3 marks)

(ii) age

(3 marks)

(iii) diabetes.

(3 marks)

(c) Give two different examples of allergic reactions caused by foods.

(2 marks)

4 A study of food poisoning outbreaks produced the results shown in the table below.

Source of food poisoning	Reported cases	
	2003	2004
Chicken and turkey	50	26
Other meat and meat products	24	20
Shellfish/fish	5	6

(a) What conclusions can be drawn from the information in the table?

(7 marks)

(b) A residential care home for the elderly has a number of rules for staff preparing food for the residents.

Explain why staff who prepare food for the residents should obey each of the following rules:

(i) always wear clean overalls

(2 marks)

(ii) do not wear jewellery

(2 marks)

(iii) empty all rubbish daily from indoor bins to external covered bin.

(2 marks)

(c) The elderly are a vulnerable client group at high risk from food poisoning. Give two other high-risk client groups.

(2 marks)

END OF QUESTIONS

There are no questions printed on this page