

General Certificate of Education
January 2006
Advanced Subsidiary Examination



**HEALTH AND SOCIAL CARE
Unit 5 Nutrition and Dietetics**

HC05

Wednesday 25 January 2006 9.00 am to 10.30 am

For this paper you must have:

- an 8-page answer book

You may use a calculator.

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 marked.

Information

- The maximum mark for this paper is 60.
- The marks for questions are shown in brackets.
- You are reminded of the need for good English and clear presentation in your answers. Quality of Written Communication will be assessed in answers written in continuous prose.

Answer **all** questions.

Each question carries 15 marks.

1 Mark is fourteen years old and his diet is unbalanced. He does not eat enough protein food, but eats too much food with high sugar content. He does not drink enough water.

- (a) Explain the likely effects on Mark's health if he continues to eat too much food with high sugar content. *(6 marks)*
- (b) Give three different reasons why Mark should eat more protein foods. *(3 marks)*
- (c) Give two functions of water in the diet. *(2 marks)*
- (d) What is the basic chemical composition of proteins? *(4 marks)*

2 Alex reads a food label which lists different food additives. These include a preservative, an antioxidant and an emulsifier.

- (a)
 - (i) Give one different reason why each of the additives named above might be included in the food. *(3 marks)*
 - (ii) Name one other type of food additive. *(1 mark)*
- (b) Alex's typical daily intake of three micro nutrients and the appropriate Dietary Reference Values for a female of her age are shown below.

	Alex's typical daily intake	Dietary Reference Values
Vit B1 (mg)	0.4	0.9
Vit C (mg)	26	25
Iron (mg)	5	15

- (i) What conclusions can be drawn about Alex's daily intake from the information in the table? *(3 marks)*
- (ii) Explain how the intake of these three micro nutrients at these levels might affect Alex. *(8 marks)*

3 Gender is one factor which is considered when determining nutritional requirements for different client groups.

- (a) Give two other factors which should also be considered and explain how these have an effect on nutritional requirements. *(6 marks)*
- (b) Outline how each of the following has implications for diet:
- (i) choosing to be a vegan; *(3 marks)*
 - (ii) Jewish religious beliefs; *(3 marks)*
 - (iii) food intolerance caused by coeliac disease. *(3 marks)*

4 A study of a food poisoning outbreak caused by E.coli gave the results in the table below.

Number of food poisoning cases	Cause of E.coli contamination
38	Poor hygiene practices
11	Cross-contamination from raw to cooked food
12	Storage of food at too warm a temperature
36	Not cooking food thoroughly

- (a) What conclusions can be drawn from the information in the table? *(4 marks)*
- (b) Explain how hand washing minimises the risk of food poisoning. *(3 marks)*
- (c) Young children are one client group who are at high risk from food poisoning. Suggest two other client groups who are also at high risk from food poisoning. *(2 marks)*
- (d) Explain why the following food regulations are important wherever food is prepared:
- (i) not using food beyond its shelf life; *(3 marks)*
 - (ii) not smoking in food preparation areas. *(3 marks)*

END OF QUESTIONS

There are no questions printed on this page