



General Certificate of Education
Advanced Subsidiary Examination
January 2011

Health and Social Care

HC05

Unit 5 Nutrition and Dietetics

Friday 14 January 2011 9.00 am to 10.30 am

For this paper you must have:

- a 12-page answer book.

Time allowed

- 1 hour 30 minutes

Instructions

- Use black ink or black 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 your answer book. Cross through any work you do not want to be marked.

Information

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

Answer **all** questions.

There are 15 marks for each question.

Question 1

Gina is 15 years old. She eats large portions of chips every day. She has been advised to eat some fish to improve her diet.

- 0 | 1** Name the **two** macronutrients found in chips. *(2 marks)*
- 0 | 2** Give **one** different benefit Gina gains from each of the macronutrients found in chips. *(2 marks)*
- 0 | 3** Briefly explain why eating large portions of chips every day may cause Gina health problems. *(3 marks)*
- 0 | 4** Evaluate the suggestion that Gina should eat some fish to improve her diet. The quality of written communication will be assessed in this question. *(8 marks)*

Question 2

- 0 | 5** Ralph is 25 years old. His typical daily intake of two food components is shown in the table below. The Dietary Reference Values (DRVs) for males aged 19–50 years old are also shown.

Food components	Ralph's typical daily intake	Dietary Reference Values Males 19–50 years
Vitamin B1 (Thiamine)	0.6 mg	1.0 mg
Phosphorus	450 mg	800 mg

Explain the likely effects on Ralph if his intake of vitamin B1 and phosphorus remains at these levels. *(6 marks)*

- 0 | 6** Explain why Ralph needs Non Starch Polysaccharides (NSP) in his diet. *(4 marks)*
- 0 | 7** Ralph's age and gender affect his nutritional needs. Give **one** other factor which would affect his nutritional needs. *(1 mark)*
- 0 | 8** Using an example, outline how the factor you gave in **0 | 7** would have an effect on Ralph's nutritional needs. *(2 marks)*
- 0 | 9** Name a food which is a good source of vitamin B1. *(1 mark)*
- 1 | 0** Name a food which is a good source of phosphorus. *(1 mark)*

Question 3

- 1 | 1** Explain the dietary implications of being gluten intolerant. (3 marks)
- 1 | 2** Explain the dietary implications of following Hindu religious beliefs. (3 marks)
- 1 | 3** There is evidence to suggest that phytochemicals are an important part of the diet. Outline what is meant by phytochemicals. (3 marks)
- 1 | 4** Give **two** different benefits of having phytochemicals in the diet. (2 marks)
- 1 | 5** Explain why antioxidants are added to foods. (2 marks)
- 1 | 6** Explain why food colouring is added to food. (2 marks)

Question 4

- 1 | 7** A year long study of food poisoning in two different parts of the UK in 2007 produced the following data.

Age Groups (years)	Number of reported cases	
	Town A	Town B
0–11	43	22
12–64	20	12
65+	48	25

Discuss the data in terms of the possible reasons for the similarities and differences in numbers of reported cases of food poisoning.

The quality of written communication will be assessed in this question. (9 marks)

- 1 | 8** Explain how not smoking when preparing food helps prevent food poisoning. (3 marks)
- 1 | 9** Explain how regularly decontaminating dishcloths helps prevent food poisoning. (3 marks)

END OF QUESTIONS

There are no questions printed on this page