



General Certificate of Education
Advanced Subsidiary Examination
June 2010

Health and Social Care

HC05

Unit 5 Nutrition and Dietetics

Friday 21 May 2010 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 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

Marina is a 52-year-old female. Her diet is high in non-starch polysaccharides (NSP), but low in fats. She has been advised to change her diet by increasing her intake of unsaturated fats. Explain the likely effects on Marina if she continues to eat a diet which is

- 0 1** high in NSP (3 marks)
- 0 2** low in fats. (3 marks)
- 0 3** Name **two** different types of food high in NSP. (2 marks)
- 0 4** To which group of macronutrients does NSP belong? (1 mark)
- 0 5** Explain what is meant by unsaturated fat and how it differs from saturated fat. (4 marks)
- 0 6** Suggest why Marina is recommended to increase her intake of unsaturated fat rather than saturated fat. (2 marks)

Question 2

Mark is a 13-year-old male. His typical dietary intake of three food components is shown in the table below. The Dietary Reference Values (DRVs) for males aged 12–14 years are also shown.

Food Component	Mark's typical daily intake	Dietary Reference Values Males 12–14 years
Vitamin B3 (Niacin)	17 mg	16 mg
Vitamin C	20 mg	25 mg
Calcium	641 mg	700 mg

- 0 7** What conclusions can be drawn about Mark's typical daily intake of the three food components. (3 marks)
- 0 8** Explain the likely effects on Mark if his intake of the three food components remains at these levels. (6 marks)
- 0 9** Explain why water is essential in the diet. (3 marks)
- 1 0** Outline the value of phytochemicals in the diet. (3 marks)

Question 3

Explain the dietary implications of:

- 1 1** an individual deciding to be a vegan (2 marks)
- 1 2** having a very physically active lifestyle. (3 marks)
- 1 3** Outline what is meant by coeliac disease. Include in your answer how it affects dietary intake. (3 marks)

Explain why the following food additives are used

- 1 4** emulsifiers (2 marks)
- 1 5** preservatives. (2 marks)
- 1 6** What is meant by the nutritional values of foods? (3 marks)

Question 4

A study of food allergies caused by four different foods gave the following results.

Food allergy	Reported cases
Seafood	690
Peanuts	330
Eggs	120
Milk	135

- 1 7** What conclusions can be drawn from the data in the table above? (4 marks)
- 1 8** Suggest **three** different reasons why there is a variation in the numbers of reported cases from the four foods studied. (3 marks)

Explain how the following precautions help reduce the risk of food poisoning when preparing food:

- 1 9** tying hair back (2 marks)
- 2 0** removing rings from fingers (2 marks)
- 2 1** reheating food thoroughly. (2 marks)
- 2 2** The young and the elderly are two groups who are at high risk from food poisoning. Name **two** other groups who are also at high risk. (2 marks)

END OF QUESTIONS

There are no questions printed on this page