



Rewarding Learning  
**ADVANCED**  
 General Certificate of Education  
 2012

Centre Number

71

Candidate Number

## Health and Social Care

### Assessment Unit A2 15

*assessing*

#### Unit 15: Human Nutrition and Dietetics

[A6H71]

THURSDAY 14 JUNE, MORNING



A6H71

#### TIME

2 hours.

#### INSTRUCTIONS TO CANDIDATES

Write your Centre Number and Candidate Number in the spaces provided at the top of this page.

Write your answers in the spaces provided in this question paper.

Answer **all three** questions.

#### INFORMATION FOR CANDIDATES

The total mark for this paper is 100.

Quality of written communication will be assessed in questions **1(e)**, **2(e)** and **3(d)**.

Figures in brackets printed down the right-hand side of pages indicate the marks awarded to each question or part question.

For Examiner's use only

Question Number	Marks
1	
2	
3	

Total Marks

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1 (a) Complete the table below to include two functions and one source for each of the minerals.

Mineral	Functions	Source
Fluorine	1. _____ _____ 2. _____ _____	_____
Zinc	1. _____ _____ 2. _____ _____	_____
Magnesium	1. _____ _____ 2. _____ _____	_____

[9]

Examiner Only	
Marks	Remark

(b) Explain the importance of the following vitamins in the diet.

Vitamin A

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[2]

Vitamin C

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[2]

(c) The human body is nearly two thirds water. Experts recommend we drink 1–2 litres (6–8 glasses) of fluid per day.

*Source www.nutrition.org.uk healthy hydration guide Spring 2010*

Write down three functions of water in the human body.

1. \_\_\_\_\_ [1]
2. \_\_\_\_\_ [1]
3. \_\_\_\_\_ [1]

Examiner Only	
Marks	Remark

(d) Ray, aged 16, is a member of the school swimming team. He trains at the local gym three times a week.

Explain how each of the following factors may influence Ray's energy requirements.

Age

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[ 2]

Gender

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[2]

Physical activity levels

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[ 2]

Examiner Only	
Marks	Remark





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 \_\_\_\_\_ [15]

Examiner Only	
Marks	Remark

- 2 Tom is an active three-year-old. His typical daily intake of protein and calcium and dietary reference values (DRVs) for an infant are shown in the table below.

Nutrient	Tom's typical daily intake	DRVs per day 1–3 years
Protein	10g	14.5g
Calcium	330mg	350mg

*Adapted from © Science of Food: Introduction to Food Science, Nutrition and Microbiology by K B Sherringham and P M Gaman, published by Butterworth-Heinmann, 1996. Reproduced by permission of Taylor & Francis (UK)*

- (a) Using the information in the table above, discuss the long term effects on Tom's health of his current intake of protein and calcium.

Protein intake

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[3]

Calcium intake

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[3]

Examiner Only	
Marks	Remark



**(b)** Cheryl, Tom's mother, has been advised by the health visitor to give Tom foods rich in calcium and foods with a high vitamin D content.

Explain why Cheryl has been advised to combine these two nutrients.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ [2]

**(c)** Cheryl, aged 39, was advised by her GP to increase her daily intake of non starch polysaccharide (NSP).

Explain two functions of NSP.

1. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ [2]

2. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ [2]

Examiner Only	
Marks	Remark

**[Turn over**

(d) Cheryl does her weekly shopping after work on a Friday evening. She has three children; Sophia, aged 12, Liam, aged 7, who has coeliac disease and Tom.

Discuss how the following factors may influence Cheryl's food choices when doing her weekly shopping for the family.

Advertising

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[3]

Economic

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[3]

Knowledge

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[3]

Examiner Only	
Marks	Remark

(e) Cheryl’s father George, aged 63, lives alone. George does not see the point in cooking for only one person and frequently eats fast food and readymade meals. His diet includes excessive amounts of saturated fat, salt and sugar. Cheryl is concerned as George has gained a lot of weight and appears to be exceeding the number of alcohol units he is allowed in the week. As there is a history of coronary heart disease in the family Cheryl discussed her concerns with her GP. The GP gave Cheryl leaflets and website addresses that would offer George advice on how to reduce his risk of coronary heart disease.

Analyse the dietary advice that these sources may offer.

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Examiner Only	
Marks	Remark



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[ 12]

Examiner Only	
Marks	Remark

3 Meadowhill Residential Care Home for older people has reviewed its food hygiene practices in line with current food safety legislation. The care home is keen to ensure that all the kitchen staff are aware of the potential risks associated with food spoilage and food poisoning when storing, preparing and handling food.

(a) Explain three conditions bacteria need to grow.

1. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ [2]

2. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ [2]

3. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ [2]

Examiner Only	
Marks	Remark



(c) Meadowhill has a number of residents from a variety of cultural backgrounds.

Discuss how two different religious beliefs may influence the planning and preparation of meals at Meadowhill.

1. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ [3]

2. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ [3]

Examiner Only	
Marks	Remark







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**THIS IS THE END OF THE QUESTION PAPER**

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