



Rewarding Learning  
**ADVANCED**  
 General Certificate of Education  
 2011

Centre Number

71	
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Candidate Number

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## Health and Social Care

### Assessment Unit A2 15

*assessing*

#### Unit 15: Human Nutrition and Dietetics

[A6H71]



WEDNESDAY 15 JUNE, AFTERNOON

#### 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(c)**, **2(c)** and **(d)**, and **3(c)** and **(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 by identifying a deficiency disease associated with each of the nutrients and listing two effects of the disease.

Nutrient	Deficiency disease	Effects of disease
Protein	_____ [1]	1. _____ _____ [1] 2. _____ _____ [1]
Thiamin (B1)	_____ [1]	1. _____ _____ [1] 2. _____ _____ [1]
Niacin	_____ [1]	1. _____ _____ [1] 2. _____ _____ [1]

Examiner Only	
Marks	Remark

(b) The table below shows the Department of Health (DoH) figures for Estimated Average Requirements (EARs) of energy for women.

Age	Females	
	MJ/day	Kcal/day
1–3 years	4.86	1165
7–10 years	7.28	1740
15–18 years	8.83	2110
19–50 years	8.10	1940
65–74 years	7.96	1900
Pregnancy (last 3 months)	+0.80	+200
Lactation	+1.90–2.40	+450–570

© Science of Food: Introduction to Food Science, Nutrition and Microbiology by P M Gamman & K B Sherrington, published by Routledge, 1996. Reproduced by permission of Taylor & Francis, Publishers.

(i) Identify the age group that has the lowest energy requirement.

\_\_\_\_\_ [1]

(ii) Explain two reasons why adolescents have the highest energy requirement.

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

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

Examiner Only	
Marks	Remark

(iii) Discuss why the recommended energy intakes are higher for women during pregnancy.

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[3]

Examiner Only	
Marks	Remark

(c)

According to official statistics a quarter of all adults in Northern Ireland are considered to be obese causing an estimated 450 deaths each year.

© BBC News@bbc.co.uk

(i) Discuss the health risks associated with obesity.

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[9]

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Marks	Remark



2 Andrea and Philip have three children, Joel, aged 9 months, Daniel, aged 13, and Sorcha, aged 17. Philip stays at home to look after Joel while Andrea has returned to work. Philip makes every effort to plan and prepare healthy, well-balanced meals for the children.

(a) Discuss the role of each of the following nutrients in Joel's diet.

Carbohydrate

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[3]

Water

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[3]

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[12]

(d) Andrea's mother Eileen, aged 77, has been diagnosed with osteoporosis. When discussing her mother's condition with the consultant, Andrea was informed that to reduce the risk of conditions such as osteoporosis an individual must ensure their diet is well-balanced and healthy throughout the lifecycle.

Discuss the effect diet may have on bone health.

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3 Reuben, aged 14, is currently staying at Collingrove Children's Home. His dad recently died and his mum, who is suffering from severe depression, is unable to care for him at present. Reuben is Jewish and follows the rules of his religion. The key workers, Aidan and Susan, assist with the weekly food shopping.

(a) Write down two rules the staff at Collingrove will need to consider when preparing food for Reuben.

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

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

(b) Discuss how each of the following factors could influence Aidan and Susan when food shopping for the children at Collingrove.

Advertising

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ [3]

Economic

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ [3]

Examiner Only	
Marks	Remark



Lined writing area with 25 horizontal lines.

Examiner Only	
Marks	Remark





**(d)** Sally-Ann and Barbara are lively energetic girls who have just started school. Their foster mother, Nicola, is given dietary advice by the health visitor.

Analyse the dietary advice the health visitor may have given Nicola.

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

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