Centre Number

Candidate Number

cea
Rewarding Learning

ADVANCED SUBSIDIARY (AS)
General Certificate of Education
2019

Nutrition and Food Science

Assessment Unit AS 1
assessing
Principles of Nutrition

MV24

[SNF11]
WEDNESDAY 15 MAY, MORNING

Time

1 hour 30 minutes, plus your additional time allowance.

Instructions to Candidates

Write your Centre Number and Candidate Number in the spaces provided at the top of this page and on the Answer Booklet provided.
Answer **all** questions in Section A and **two** questions from Section B.
Write your answers to Section A in the Question Paper. Write your answers to Section B in the Answer Booklet provided.
Use the treasury tag provided to attach your Answer Booklet to the Question Paper at the end of the examination.

Information for Candidates

The total mark for this paper is 80.

Quality of written communication will be assessed in Questions **8–10**.

Figures in brackets printed at the end of each question indicate the marks awarded to each question or part question.

Section A

Answer **all** questions in the spaces provided.

1 **(a)** Circle **one** food from the list below which is a source of free sugars in the diet.
[1 mark]

grapes

honey

milk

carrots
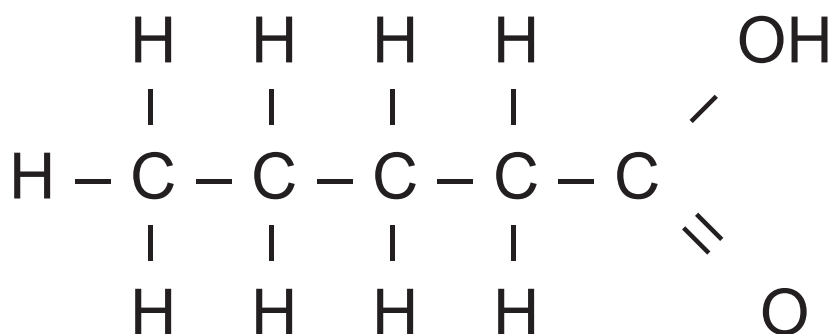
(b) Explain the term free sugars.
[3 marks]

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2 **(a)** Identify the following type of fatty acid. [1 mark]

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        H    H    H    H          OH
        |    |    |    |         ╱
  H – C – C – C – C – C
        |    |    |    |         ╲╲
        H    H    H    H          O
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(b) Name **one** type of fatty acid consumers are advised to decrease in the diet and describe its effect on blood cholesterol levels.   [3 marks]

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(c) Explain **two** key functions of fat as a nutrient.   [4 marks]

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3 (a) Comment on the following recommendations for fish consumption during pregnancy. [4 marks]

Type of fish	Recommendations during pregnancy
Oily fish	Limit to two portions a week
Marlin, shark and swordfish	Do not eat

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(b) Explain the importance of calcium for adult women. [4 marks]

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[Turn over

4 **(a)** Suggest **two** reasons why infants may suffer from dehydration.   [2 marks]

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(b) Summarise the nutritional benefits of consuming milk for teenagers.
[4 marks]

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(c) Describe the effects of water intoxication in the body.   [3 marks]

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5 (a) Analyse the data below and suggest reasons for the increasing figures.
[6 marks]

Reference Nutrient Intakes (RNI) for Iron		
Age	Male (mg/day)	Female (mg/day)
4–6 years	6.1	6.1
7–10 years	8.7	8.7
11–18 years	11.3	14.8

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(b) Identify **two** valuable food sources of non-haem iron.   [2 marks]

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(c) State **two** factors that inhibit the absorption of iron.   [2 marks]

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6 **(a)** Describe the nutritional need for zinc in teenage years. [3 marks]

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(b) Explain why vitamin B_{12} deficiency is more likely to occur in older adults.
[5 marks]

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(c) Summarise the possible effects of an excessive intake of sodium on health. [2 marks]

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(d) State **two** symptoms of a deficiency of vitamin B$_2$ in the diet.   [2 marks]

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7 Explain the functions of magnesium and suggest **two** valuable food sources.
[5 marks]

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Section B

Quality of written communication is assessed in this section.

Answer **two** out of three questions from this section.

Write your answers in the Answer Booklet provided.

8   Describe the needs of a school-age child (5–12 years) in relation to energy and explain how to achieve these needs through healthy food choices.   [12 marks]

9   Compare the nutritional value and health benefits of fish and pulses.   [12 marks]

10 Discuss the nutritional significance of starchy carbohydrates.   [12 marks]

This is the end of the question paper

SOURCES:

Q3(a) .....© Adapted from: https://www.nutrition.org.uk/healthyliving/nutritionforpregnancy/what-not-to-eat.html?start=3

Q5(a) .....© Crown copyright 2010. Science Advisory Committee on Nutrition, Iron and Health

For Examiner's use only	
Question Number	Marks
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
Total Marks	

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