

7. Human nutrition

7.1 Diet

Paper 1 and 2

Question Paper

Paper 1

Questions are applicable for both core and extended candidates

1 What is lacking in the diet of a person with scurvy?

- A calcium
- B iron
- C vitamin C
- D vitamin D

2 The table shows some of the nutrients found in yoghurt.

nutrient	content per 100 g of yoghurt/g
carbohydrate	6.90
protein	4.80
fat	1.50
calcium	0.16

One serving size of yoghurt is 150 g.

One of the nutrients in the yoghurt is required for healthy bones and teeth.

What is the mass of this nutrient in one serving of yoghurt?

- A 0.24 g B 2.25 g C 7.20 g D 10.35 g

- 3 The table shows vitamins that should be included in a balanced diet.

Which row shows the correct use in the body and food source for one of these vitamins?

	vitamin	use in body	food source
A	C	strengthens bones and teeth	sugar
B	C	resistance to disease	fish oil
C	D	strengthens bones and teeth	fish oil
D	D	resistance to disease	sugar

- 4 Which food is a good source of vitamin C?

- A** bread
- B** cheese
- C** chicken
- D** oranges

- 5 The haemoglobin concentration in the blood of a person is 80 g/dm^3 . The accepted normal concentration is 120 g/dm^3 or above.

Which substance may be lacking in their diet?

- A** calcium
- B** fats
- C** fibre
- D** iron

- 6 The lack of which component of a balanced diet will lead to the development of scurvy?

- A** calcium
- B** iron
- C** vitamin C
- D** vitamin D

- 7 The food label is from a packet of cereal.

The label can help someone who is concerned about their diet.

Nutrition	
Typical values	100 g contains
Energy	985 kJ 235 kcal
Fat	1.5 g
of which saturates	0.3 g
Carbohydrate	45.5 g
of which sugars	3.8 g
Fibre	2.8 g
Protein	7.7 g
Salt	0.5 g

A person eats 45 g of cereal.

One of the food types listed in the label can help prevent constipation.

How many grams of this food type does the person eat?

- A** 1.3g **B** 2.8g **C** 3.5g **D** 7.7g

- 8 What is the dietary importance of fibre in humans?

- A** for growth and repair of cells
B to help food move through the alimentary canal
C to maintain strong bones and teeth
D to provide energy

- 9 The table shows some different components in a balanced diet.

Which row correctly matches the components to the reasons why they are needed?

	vitamin D	water	fats
A	insulation	bone growth	to make haemoglobin
B	bone growth	transport	insulation
C	transport	to make haemoglobin	bone growth
D	to make haemoglobin	insulation	transport

- 10 Which food is the best source of vitamin C?

- A** bread
- B** meat
- C** milk
- D** oranges

- 11 What is the dietary importance of carbohydrates?

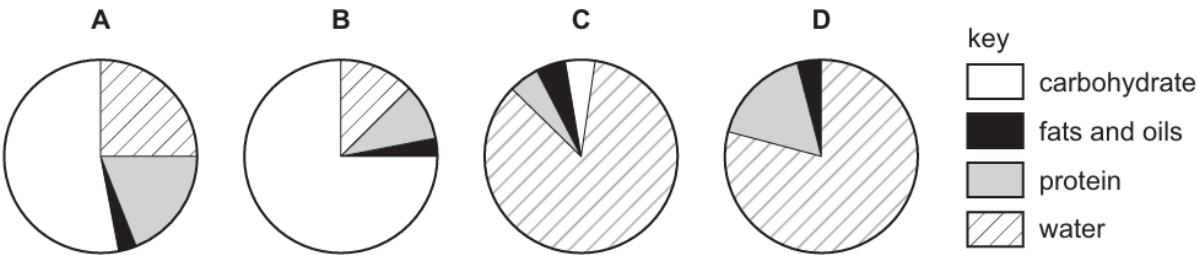
- A** to promote healthy bones and teeth
- B** to make fats
- C** to provide energy for the body
- D** to make proteins

- 12 Which substance found in a healthy diet helps to prevent constipation?

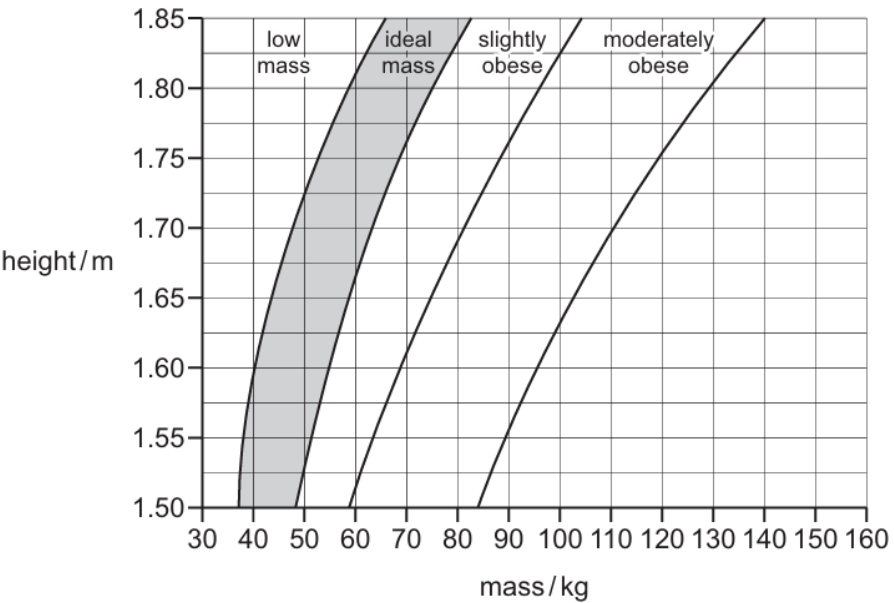
- A** fat
- B** fibre
- C** minerals
- D** vitamins

13 The pie charts show the composition of 100 g of four different foods.

Which food provides the most energy?



14 The chart is used to find a person's recommended mass.



For the data provided about body mass and height, which person would benefit most from the introduction of a calorie-controlled diet and regular exercise?

	body mass /kg	height /m
A	40	1.55
B	50	1.75
C	70	1.80
D	90	1.75

- 15 What is the result of a diet lacking iron?
- A bleeding gums
 - B poor wound healing
 - C reduced number of red blood cells
 - D weak bones and teeth
- 16 What is the best source of vitamin C in a balanced diet?
- A fish
 - B fruit
 - C meat
 - D rice

Paper 2

Questions are applicable for both core and extended candidates

- 17 Which substance found in a healthy diet helps to prevent constipation?
- A fat
 - B fibre
 - C minerals
 - D vitamins
- 18 Which components of a balanced diet are needed to make haemoglobin and to prevent scurvy and rickets?
- A carbohydrates and mineral ions
 - B carbohydrates and proteins
 - C mineral ions and vitamins
 - D vitamins and fibre
- 19 Which nutrient is lacking when a person has scurvy?
- A calcium
 - B iron
 - C vitamin C
 - D vitamin D

- 20 The haemoglobin concentration in the blood of a person is 80 g/dm^3 . The accepted normal concentration is 120 g/dm^3 or above.

Which substance may be lacking in their diet?

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