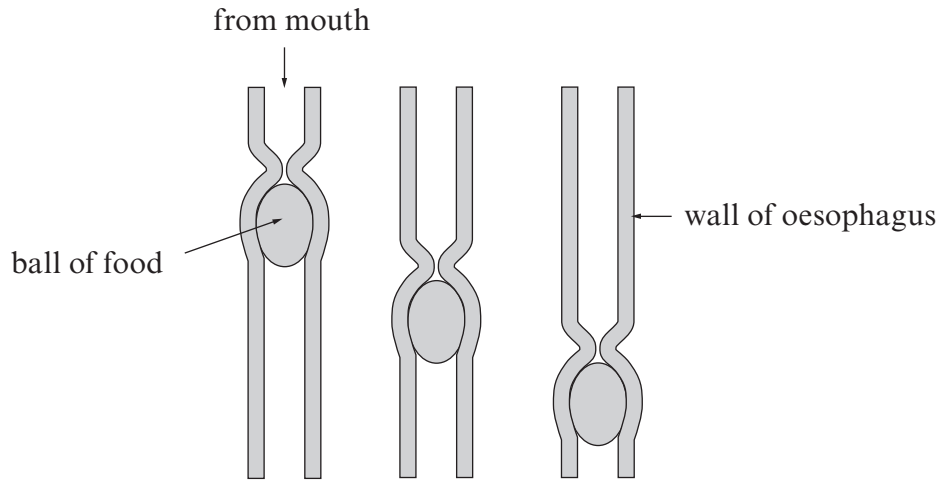


Biology 1.3 - Digestion & Digestive System in Humans - Foundation Tier

Question 1.

Examiner
only

The diagram shows a ball of food moving along the oesophagus (gullet).



(a) What name is given to this process? [1]

(b) Explain how the ball of food is moved along the oesophagus. [2]

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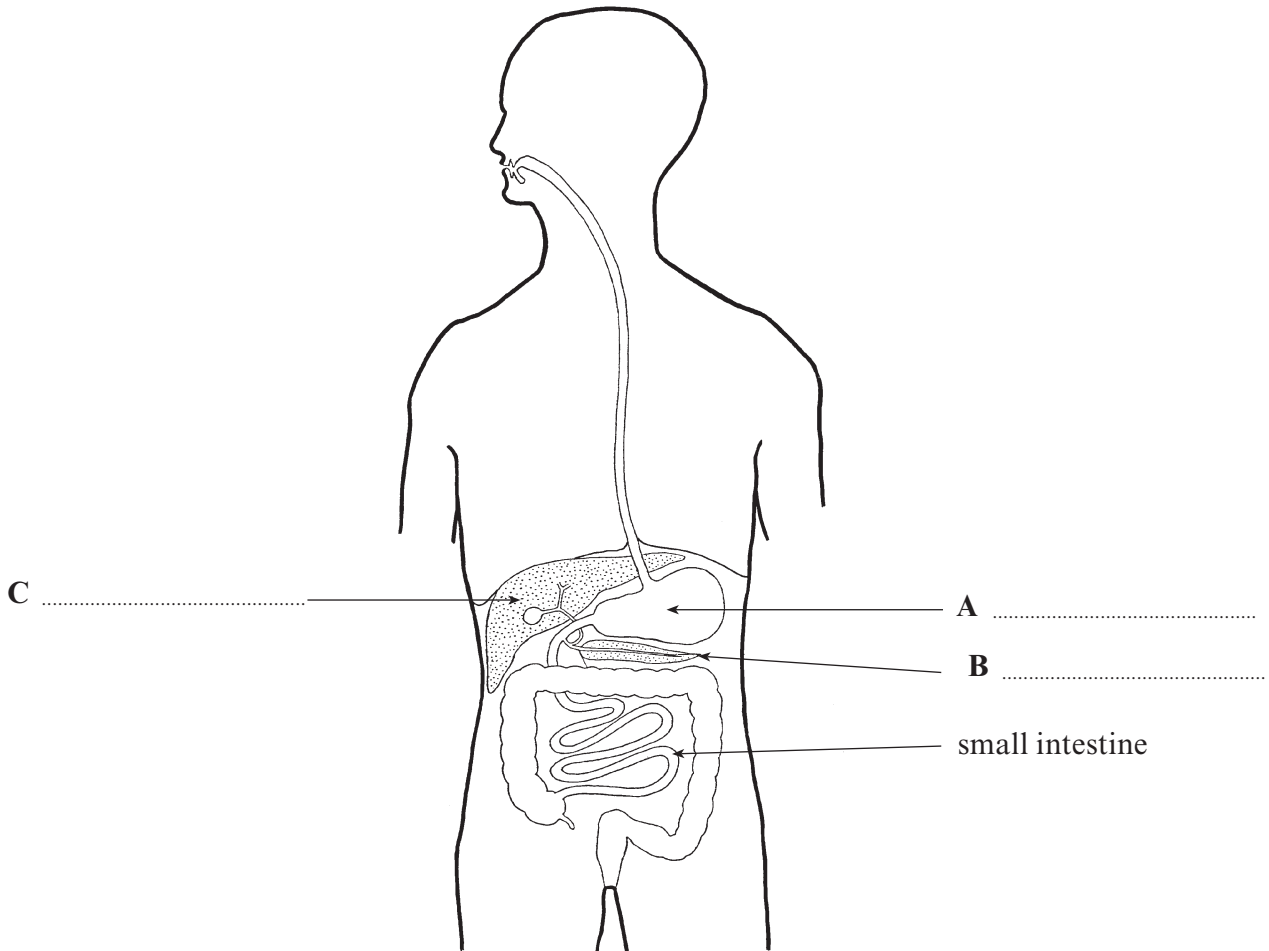
3

Question 2.

(a) Label **A**, **B** and **C** on the diagram of the human digestive system shown below.

[3]

Examiner only



(b) Complete the table below by writing your answers on the dotted lines

[3]

Digestion in the small intestine

Substance digested	Enzyme	Digested product(s)
.....	carbohydrase	glucose
fats	fatty acids and

(c) Which solution would be used to identify protein in a sample of food? Underline the correct answer below. [1]

Benedict's solution

Biuret solution

bicarbonate solution

Question 3.

Describe fully the processes involved in the chemical breakdown of food containing **fat** from the time it leaves the stomach. [6 QWC]

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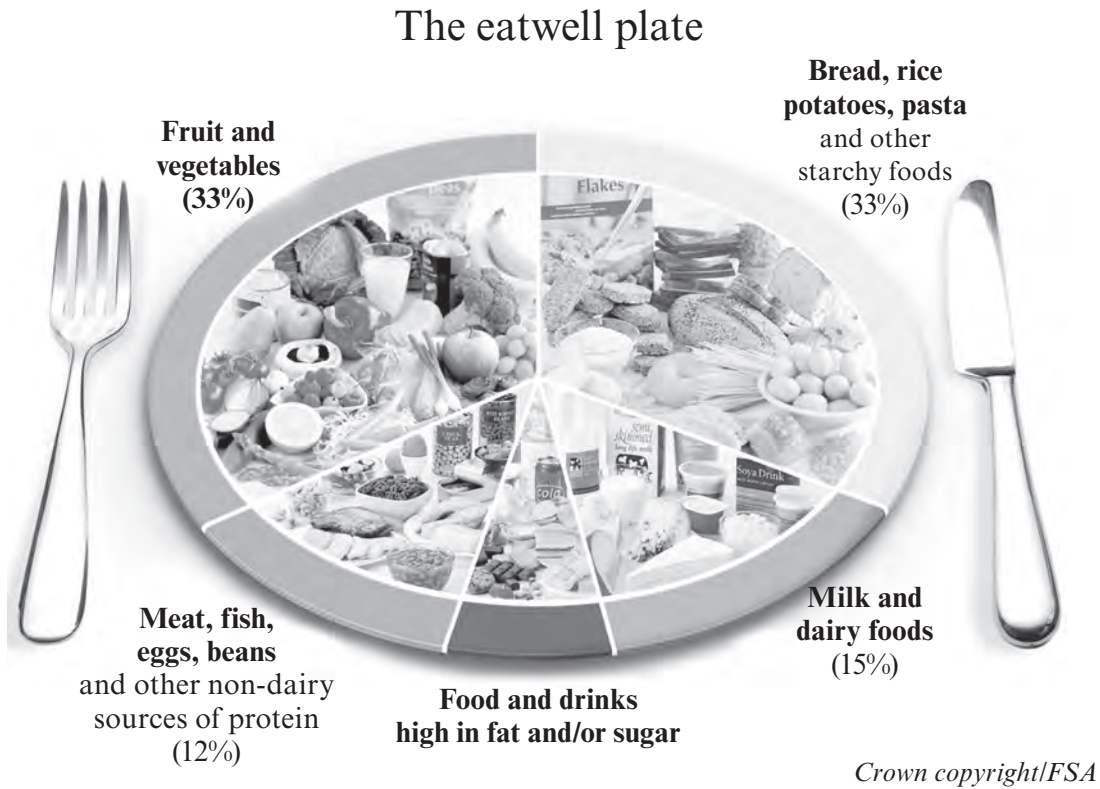
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Question 4.

Examiner only

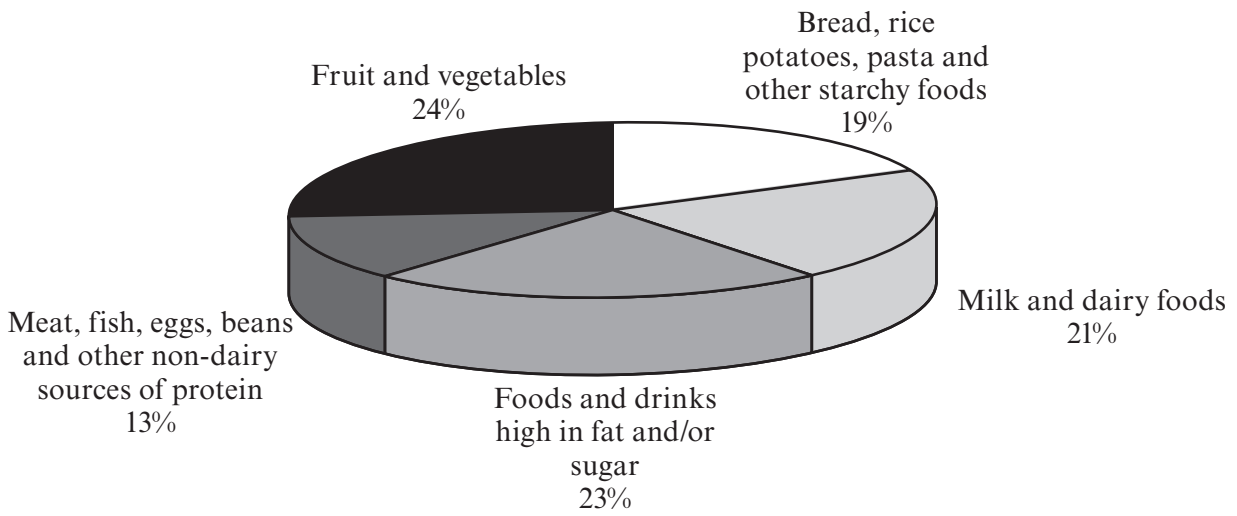
- (a) The eatwell plate shows the types and percentages of foods that we should eat for a healthy diet.



Calculate the percentage of the eatwell plate that should come from **Foods and drinks high in fat and/or sugar**. Show your working. [2]

Answer %

(b) The chart below shows the percentages of different types of food bought at the shops.



Crown copyright/FSA

Which **three** types of food are bought in greater percentages than shown in the eatwell plate? Tick (✓) the three boxes. [1]

Meat, fish, eggs

Fruit and vegetables

Bread, rice, potatoes, pasta

Milk and dairy foods

Foods and drinks high in fat and/or sugar

(c) The table below shows the fat content of a meal.

Food	Fat content (g)
Doner kebab	50.2
Mayonnaise	11.5
Packet of crisps	11.5
Doughnut	13.3
Total	86.5

The Guideline Daily Amount of fat for an average female is 70g.
Calculate the excess fat content of this meal.

[1]

Answer g

(d) Why do food labels often give information on fat content **per 100g of food**?

[1]

(e) Explain why it is unhealthy to eat too much fat.

[2]

(f) Give **one** use for fat in the human body.

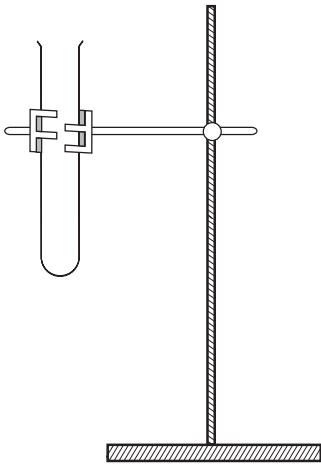
[1]

Question 5.

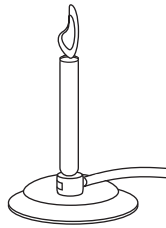
Describe how the apparatus and materials shown below could be used to compare the energy content of two different food samples A and B. [6 QWC]

Examiner only

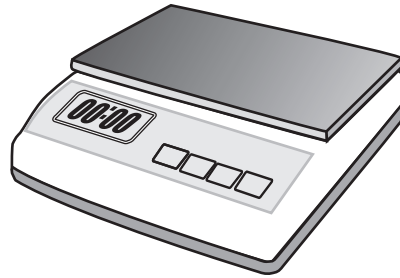
stand and boiling tube



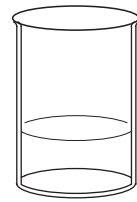
lit Bunsen burner



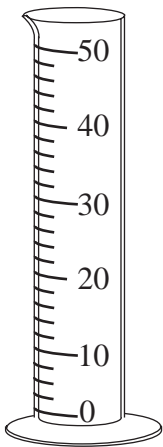
digital balance



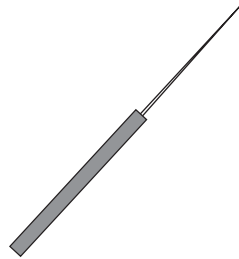
beaker of water



50 cm³ measuring cylinder



mounted needle with wooden handle



thermometer



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Examiner
only

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