

Objective : Be able to answer questions

8.4 Review

Review question 1/ page 110

Q1.

a. E

b. C

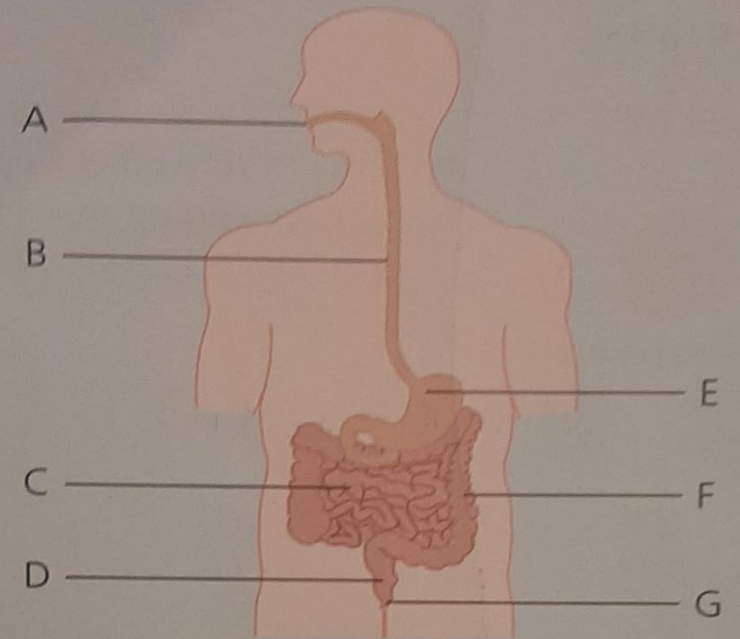
c. B

d. A

e. F

8.4

1 Write the correct letter from the diagram for each of the following parts of the alimentary canal.



Review question 2/ page 110

Q2

- a. Stomach.
- b. Gullet.
- c. Large intestine.
- d. Stomach.
- e. Mouth.
- f. Small intestine.

- 2 Name the part of the alimentary canal that fits each of the following descriptions.
- a contains strong acid to help kill the micro-organisms in food
 - b its muscular walls use peristalsis to help deliver food to the stomach
 - c absorbs a lot of water to produce solid waste from the food we eat
 - d mixes food with enzymes that break down protein
 - e grinds lumps of food up and mixes it with saliva
 - f where nutrients are absorbed into the bloodstream

Review question 3/ page 110

Q3.


a. They grind and chew food into smaller pieces (mechanical digestion). This increases its surface area so enzymes can break down the large molecules in the food more easily.

b.

1. Saliva makes food slippery so it can pass more easily down your gullet.

2. It also contains amylase to break down starch into smaller sugar molecules.

3 Digestion begins at the mouth.



a Explain how teeth aid digestion. [2]

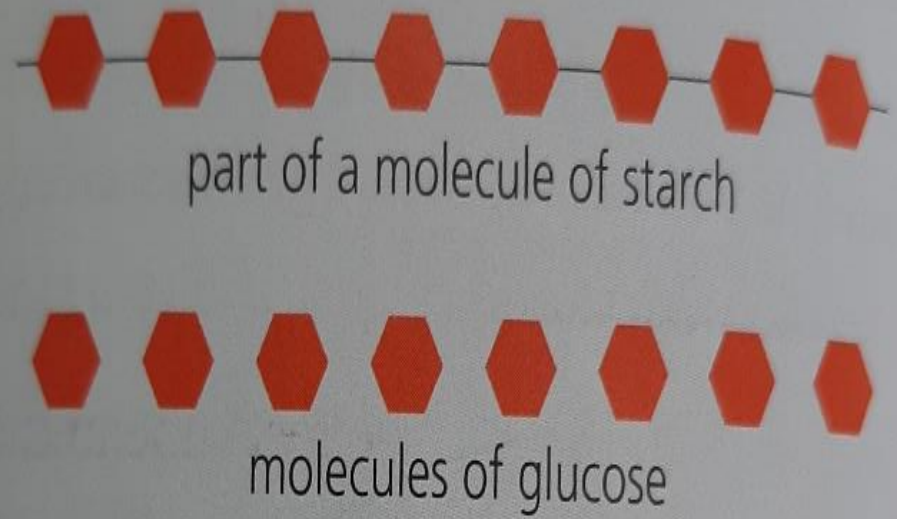
b Give two ways in which saliva aids digestion. [1]

110

Review question 4/ page 110

Glucose molecules are small so can pass directly into your blood and be taken straight to cells for respiration. Starch molecules must be broken down by enzymes in the mouth and small intestine before the glucose molecules are released and can be absorbed into your blood and this takes longer.

4 Many sports drinks contain glucose. Athletes can also get energy from starch in their diets.



H.W

part of a molecule of starch

molecules of glucose

Explain why glucose molecules can provide energy more quickly than starch. [2]

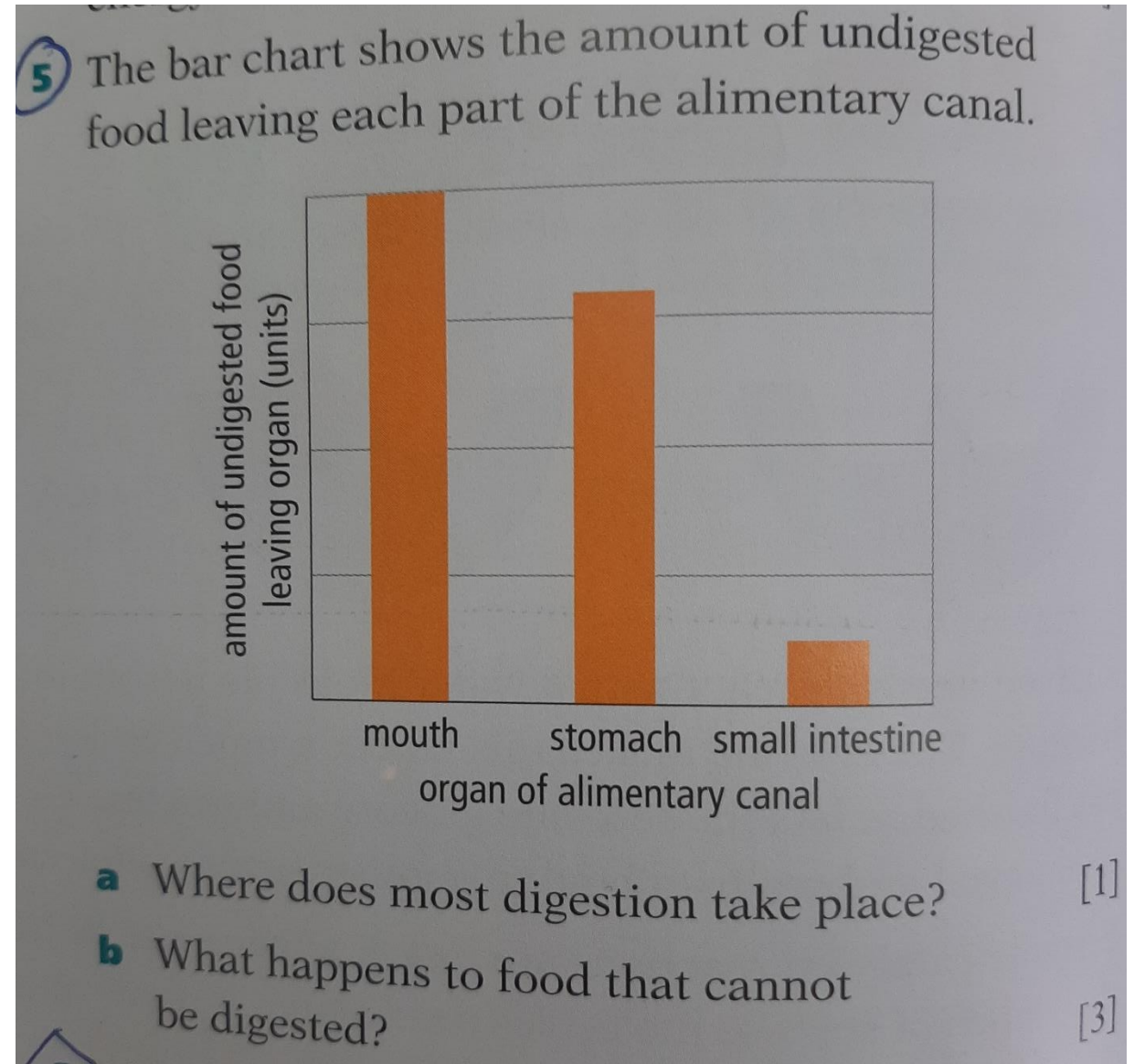
Review question 5/ page 110

Q5.

- The small intestine.
- Undigested food (fibre) passes into your large intestine.

The large intestine absorbs water to make fibre more solid.

Fibre is stored in your rectum as part of your faeces.



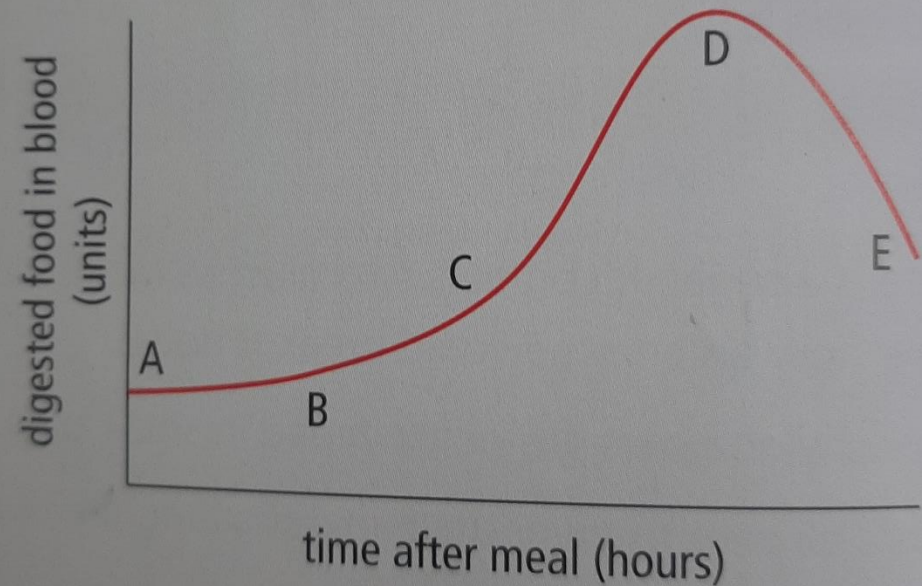
Review questions 7/ page 110

Q7.

a. B

b. D

7 The graph shows how the amount of digested food in the blood leaving the small intestine changed after a student ate a meal.



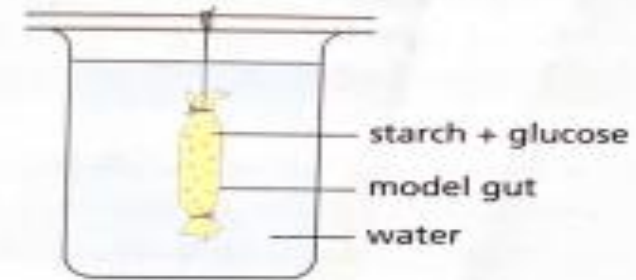
Choose the correct part of the graph for each of the following.

- a Food begins to enter the small intestine. [1]
- b Food begins to enter the large intestine. [1]

Question 9 /page 111

- Glucose molecules are small enough to pass through the walls of the model gut and into the beaker.
- Starch molecules are too big to pass through the walls of the model gut. They would have to be broken down into glucose by enzymes first.
- The starch was broken down into glucose molecules by the amylase (enzyme/carbohydase) in the saliva.
- Blood.

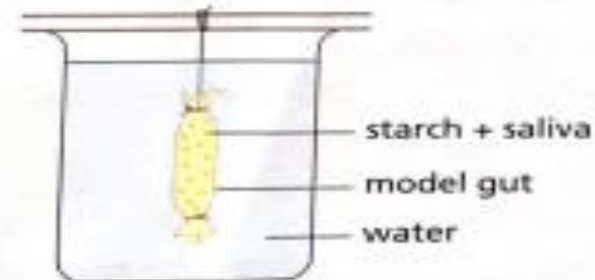
- 9 A mixture of starch and glucose solution was placed in a model gut in a beaker of water.



After 30 minutes the water in the beaker was tested for starch and glucose. Only glucose was present.

- Suggest how glucose got out of the model gut. [1]
- Suggest why no starch was detected in the water. [2]

In a second experiment the model gut was filled with starch and saliva.



After 30 minutes the water in the beaker was tested for starch and glucose. Glucose was present but not starch.

- Explain what happened to the starch. [2]
- In the model, what does the water in the beaker represent? [1]