

10 What is a role of bile?

- A** It contains enzymes that digest starch.
- B** It emulsifies fats, increasing their surface area.
- C** It kills bacteria in food.
- D** It provides the optimum pH for pepsin activity.

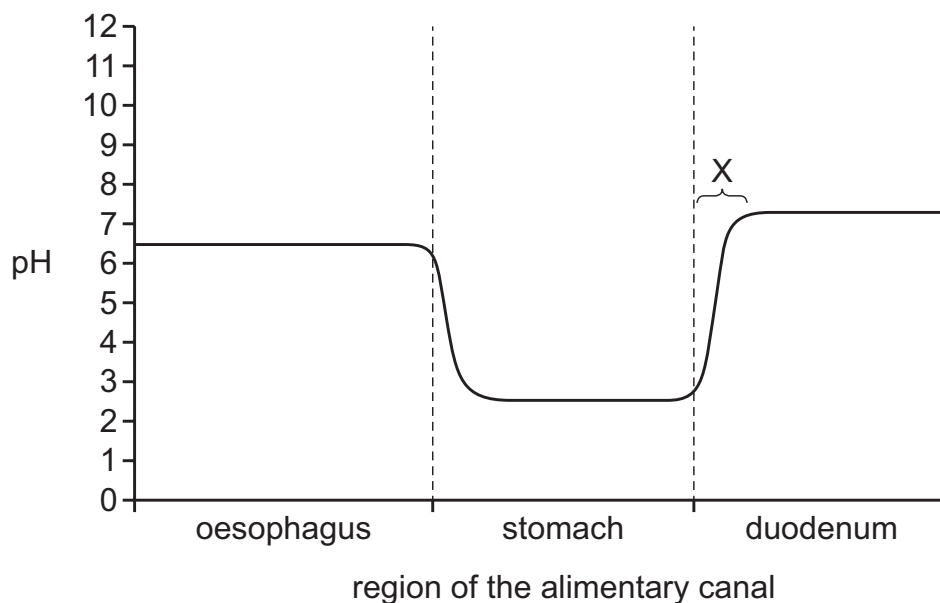
11 Where in the alimentary canal is the enzyme trypsin found and what are the products of the reaction trypsin catalyses?

	where trypsin is found	products
A	duodenum	amino acids
B	duodenum	fatty acids
C	ileum	proteins
D	stomach	amino acids

7 Which function is performed in the duodenum?

- A** assimilation
- B** digestion
- C** egestion
- D** ingestion

- 8 The graph shows the changes in pH in the oesophagus, stomach and duodenum.



Which substance causes the change in pH at the point labelled X?

- A** bile
- B** gastric juice
- C** glucagon
- D** trypsin
- 9 Which row names a small molecule and where that molecule is absorbed in the digestive system?

	name of the small molecule	small intestine	colon
A	amino acid	x	✓
B	glucose	x	✓
C	maltose	✓	x
D	water	✓	✓

key

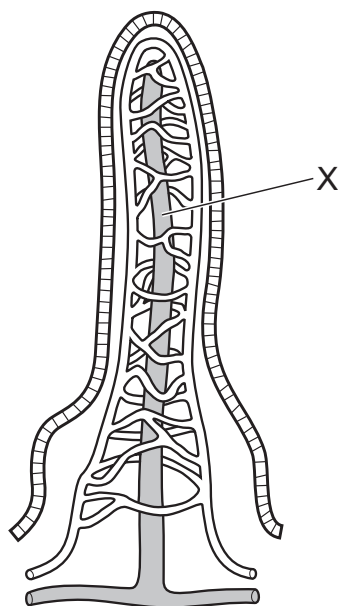
✓ = molecule is absorbed

x = molecule is **not** absorbed

- 11 What is an example of chemical digestion?

- A** breaking down starch into reducing sugars
- B** churning of food by muscular contractions of the stomach wall
- C** grinding of food by teeth
- D** mixing of food with bile

12 The diagram shows a villus.



Which row shows the name and function of the part labelled X?

	name	function
A	capillary	absorption of amino acids and glucose
B	capillary	absorption of fatty acids and glycerol
C	lacteal	absorption of amino acids and glucose
D	lacteal	absorption of fatty acids and glycerol

9 The table shows the recommended daily allowance (RDA) of some nutrients for young children.

The table also shows the masses of these nutrients eaten by a child in one day.

	mass of vitamin C / mg	mass of vitamin D / μ g	mass of iron / mg	mass of calcium / mg
RDA	50	10	11	260
mass eaten in one day	54	5	11	150

Which conditions will the child be at risk of developing if they consume the same diet for a long period of time?

- 1 anaemia (**not** having enough red blood cells)
- 2 rickets
- 3 scurvy

A 1, 2 and 3 **B** 1 and 2 only **C** 1 and 3 only **D** 2 only

10 Which term is used for the uptake and use of nutrients by cells?

- A** absorption
- B** assimilation
- C** egestion
- D** ingestion

11 What is the function of trypsin in digestion?

- A** It catalyses the breakdown of maltose in the mouth.
- B** It catalyses the breakdown of maltose in the small intestine.
- C** It catalyses the breakdown of protein in the small intestine.
- D** It catalyses the breakdown of protein in the stomach.