

Digestive System Worksheet

Name Class Date

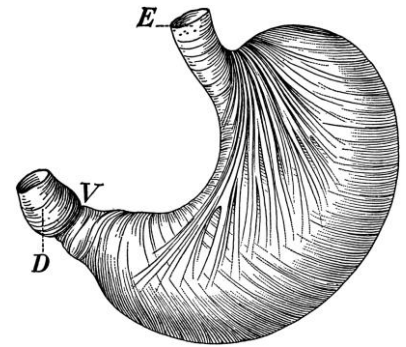
Digestive system

Digestion starts in the mouth. Salvia glands in the mouth release an enzyme called amylase which is part of a family of enzymes called carbohydrase. They break down complex carbohydrates into simple sugars like glucose for use to absorb in the small intestine.

Stomach

The stomach is a **bag of muscle** that churns the food. The stomach releases two things. Firstly it releases a type of enzyme that breaks down protein called '**protease**'.

Secondly it releases **hydrochloric acid** so the pH is about 2-3. The acid is NOT to break down food but to make the enzymes work faster. The acid is also powerful enough to kill germs that cause disease (pathogens) which stops use getting sick.

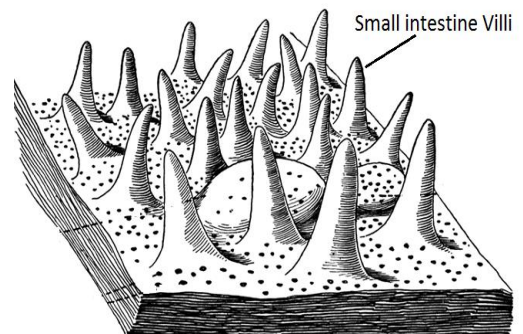


Small Intestine

The small intestine is where the nutrients are absorbed into the blood stream. The nutrients getting the blood stream through the **villi** that are like fingers coming out of the walls of the intestine. These fingers help **increase the**

surface area so more nutrients are absorbed more quickly.

The pancreas organ makes and releases digestive juices containing enzymes (Carbohydrase, protease and lipase) into the small intestine.



Bile

Bile is a yellow green alkali liquid made by the **liver** but stored and then released into the **small intestine** by the **gall bladder**. It has two jobs. 1) Increases pH so the small intestine is alkali not acidic so enzymes work better. 2) To break down fat/lipids so they can be digested.

Digestive System Worksheet

Name Class Date

Questions

1 Link each organ with its function in the digestive system:

Pancreas

Organ where water passes back into the body,
leaving solid waste

Stomach

Organ where food is churned with digestive juices
and acids

Small intestine

Organ that makes and releases digestive juices
containing enzymes to break down your food

Large intestine

Organ where small digested molecules are
absorbed into the bloodstream

(3 marks)

a What is the role of saliva in the digestive system

.....
.....

(2 mark)

b Describe reason why the stomach contains acids.

.....
.....

(2 mark)

2 Bile plays an important role in digestion.

a Describe the journey of bile..

.....

(2 mark)

b State the food component that bile digests.

.....

(1 mark)

c Describe the differences in conditions (pH) of the stomach and small intestine.

.....
.....

(2 mark)

d What is the name of enzymes that break down protein?

.....

(1 mark)

e What effect would there be if we had no large intestine?

.....

(2 mark)

.....