

OGUN DIGICLASS

CLASS: SECONDARY SCHOOL

SUBJECT: BIOLOGY

**TOPIC: THE HUMAN ALIMENTARY CANAL
AND DIGESTION OF FOOD IN MAN**



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OBJECTIVES



Define Digestion.



Define alimentary canal



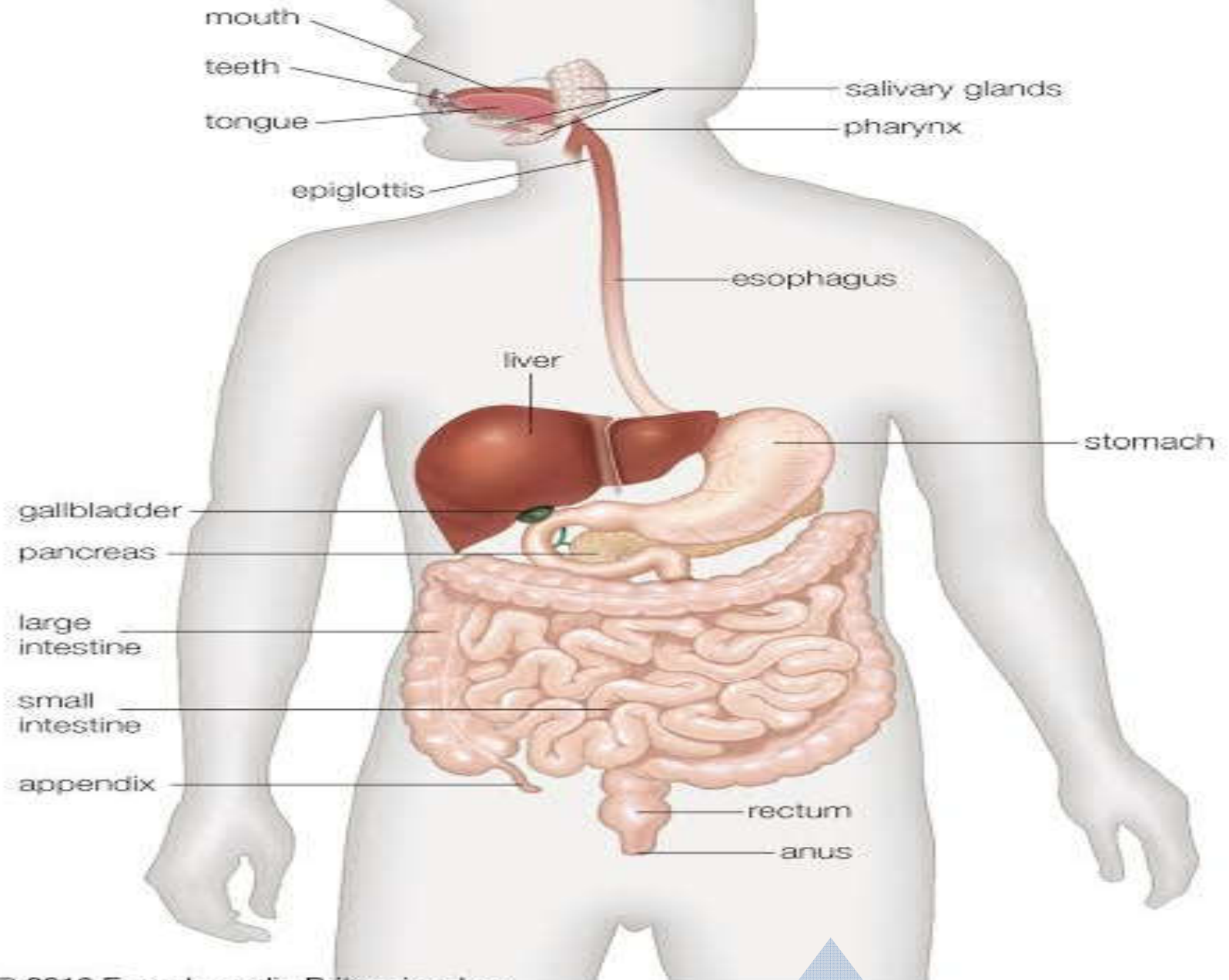
Name the organs that constitute the alimentary canal of humans with their functions



THE HUMAN ALIMENTARY CANAL AND **DIGESTION OF FOOD IN MAN**

Digestion is the breakdown of large molecules of food into simple and absorbable form for use by animals.

Alimentary canal is the passage along which food passes through the body from mouth to the anus during digestion.



PARTS OF HUMAN ALIMENTARY CANAL

Mouth

Pharynx

Oesophagus

Stomach

Duodenum

Small
intestine

Large
intestine

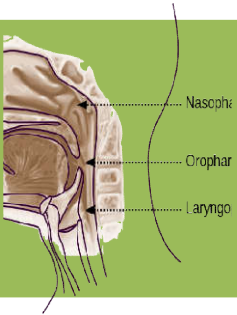
Rectum

Anus

FUNCTIONS OF THE PARTS OF HUMAN ALIMENTARY CANAL



Mouth: Contains teeth, tongue, salivary gland. Salivary gland secretes saliva which contains the enzyme, ptyalin. Ptyalin converts cooked starch to maltose in the mouth.

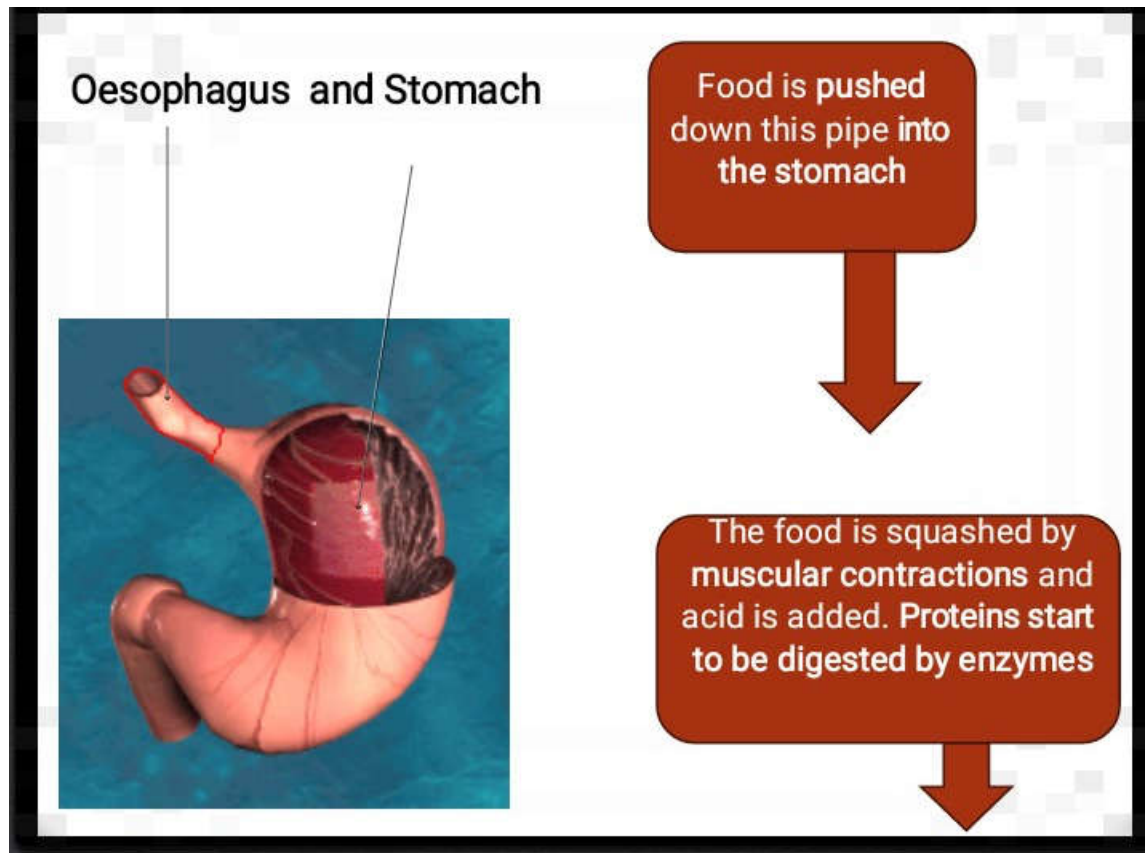


Pharynx: This is the passage of food from the mouth to the oesophagus.

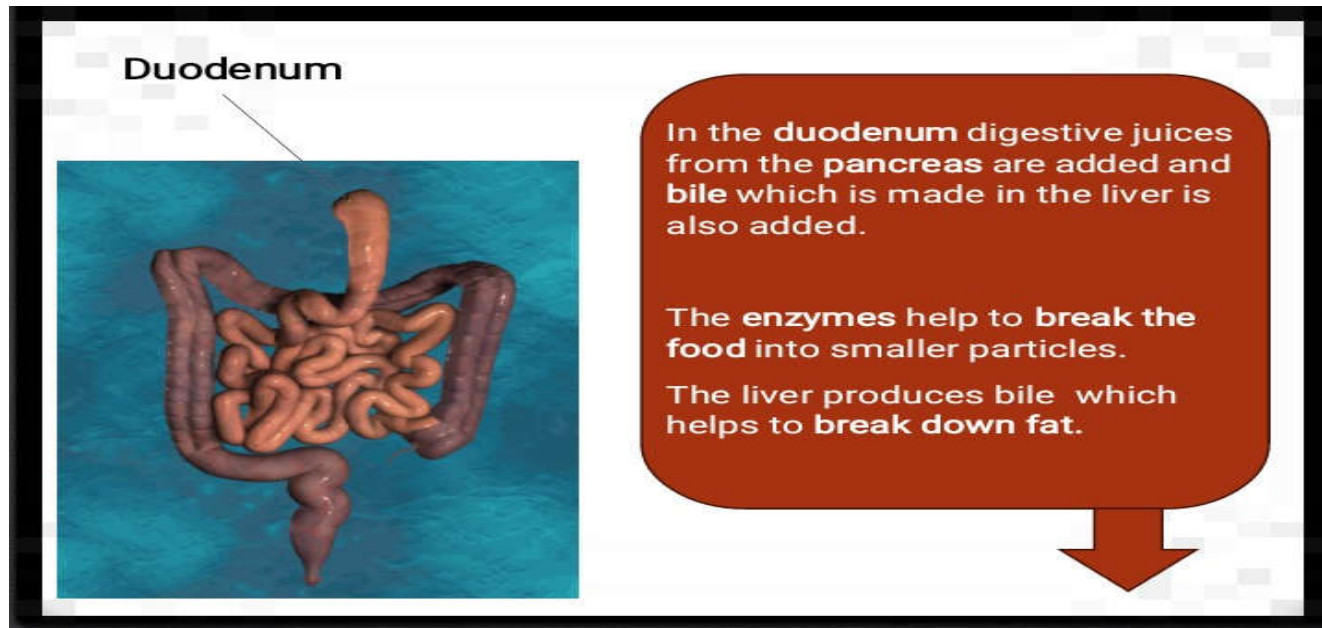


Oesophagus/gullet: For swallowing food by peristaltic movement into the stomach.

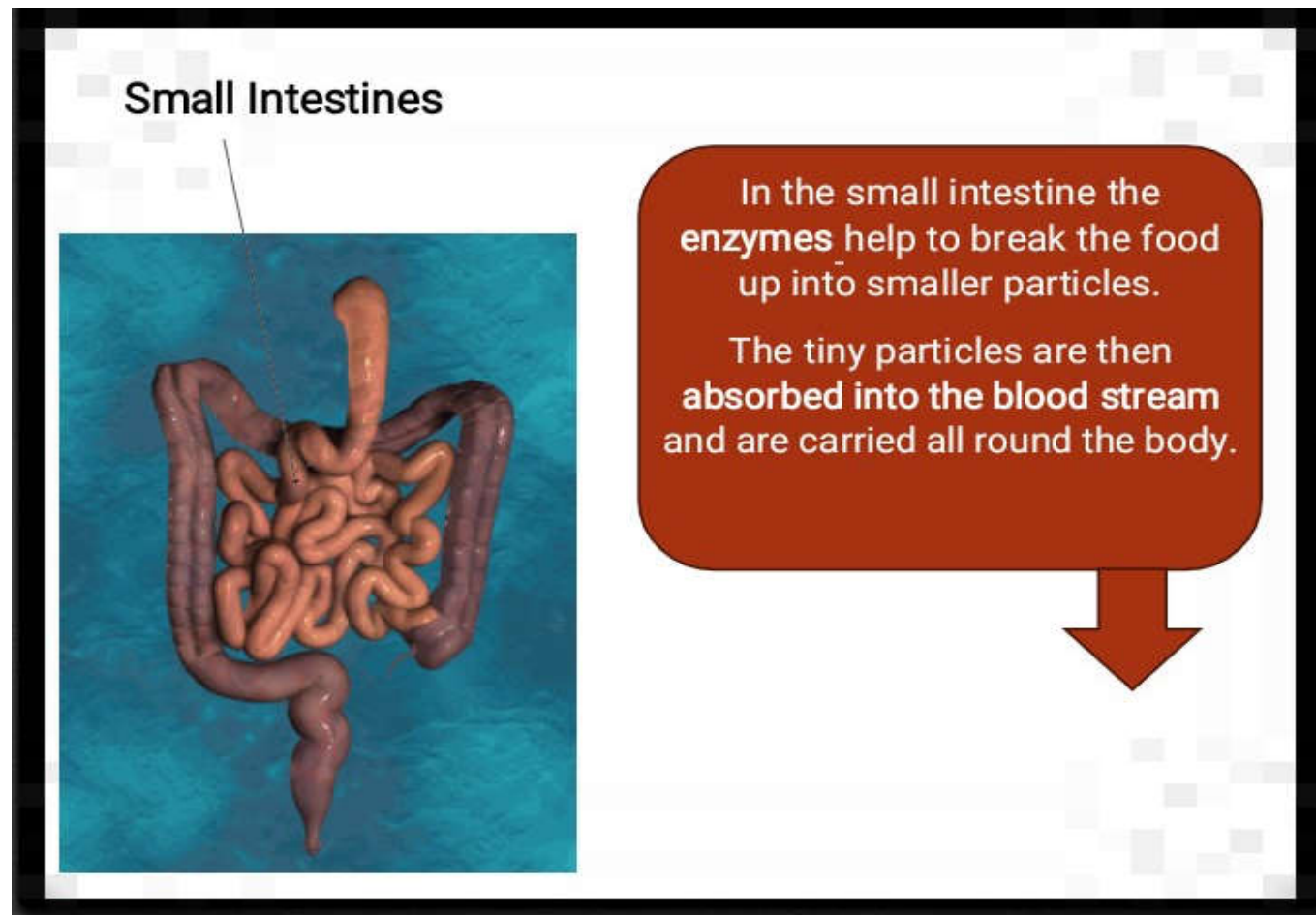
4.) **Stomach**: Stores food temporarily, secretes HCl and gastric juice which contains the enzyme, renin in baby and enzyme pepsin in adult which help in the digestion of protein.



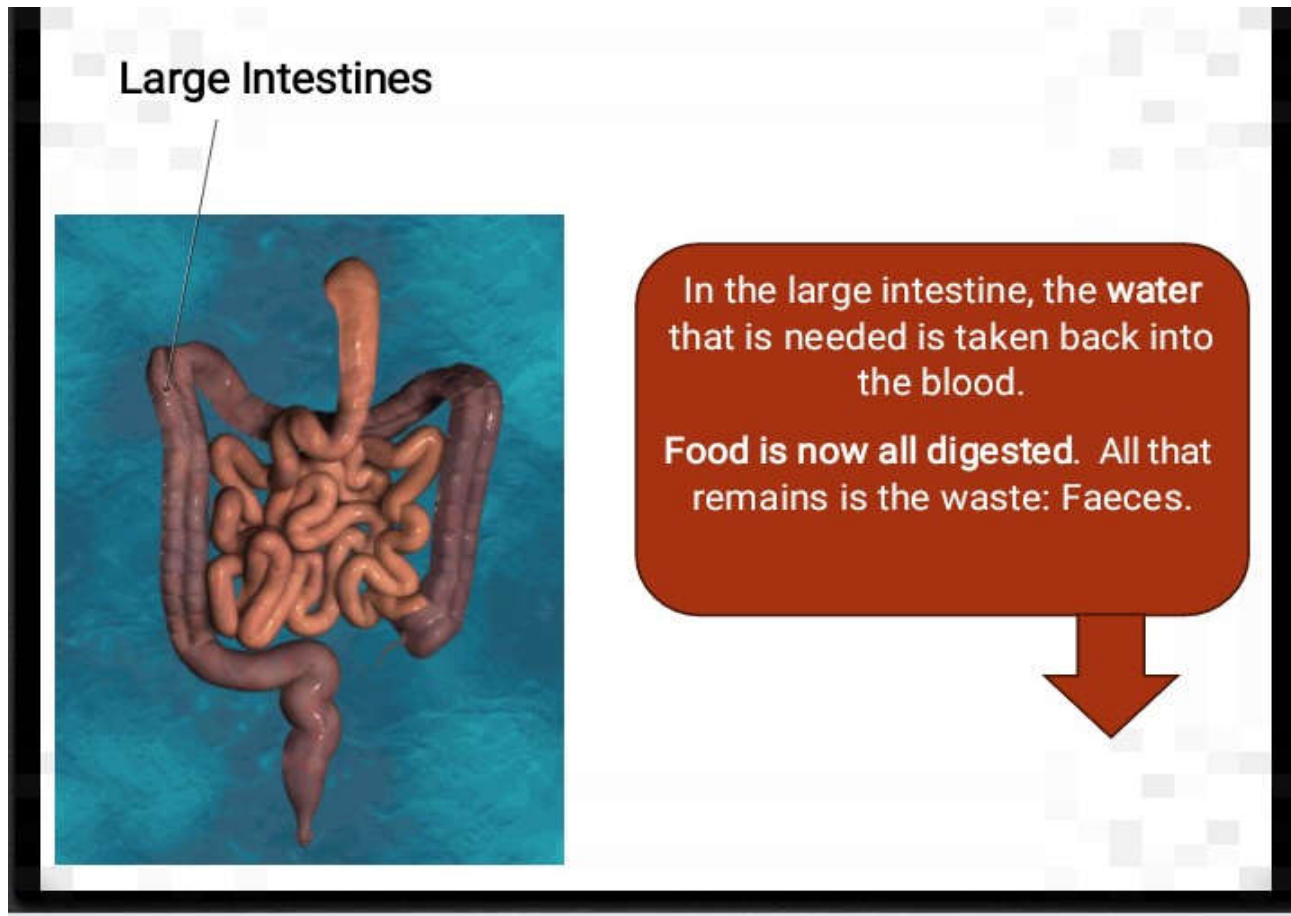
5.) Duodenum: Pancreas is connected to duodenum. The pancreas secretes pancreatic juice which contains three enzymes i.e. Lipase, Amylase and Trypsin. Bile is also secreted into the duodenum by liver for emulsification of fats.



6.) **Small intestine**: The intestinal wall secretes juice which contains enzymes (sucrase, maltase, erepsin, lipase, and lactase) for completion of digestion of food. Absorption of digested food also takes place in the small intestine.



7.) Large intestine: It absorbs water from undigested food back into the blood.



Large Intestines



In the large intestine, the **water** that is needed is taken back into the blood.

Food is now all digested. All that remains is the waste: Faeces.



8.) **Rectum**: It Stores undigested food temporarily.

The End Of Your Food



Rectum

Anus

The solid waste or Faeces is stored in the rectum before passing out of the body through the anus.

9.) Anus: For egestion of faeces.

The End Of Your Food



The solid waste or Faeces is stored in the rectum before passing out of the body through the anus.

Rectum

Anus

Question

- i. Describe the role of pancreatic juice in the digestion of carbohydrate and proteins in a mammal. [WASSCE 2005 3c]
- ii. Explain why glucose is taken by an athlete ready for a race rather than cornmeal. [2000 3b]

ASSIGNMENT

Describe the role of the following in mammalian nutrition:

- i. Teeth
- ii. Tongue
- iii. Saliva
- iv. Stomach