

HUMAN DIGESTIVE SYSTEM

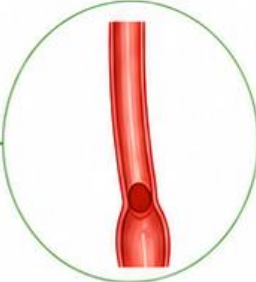
DIGESTIVE SYSTEM FLOW

1. MOUTH



- Teeth cut, tear and grind food.
- Saliva moistens food and begins **starch digestion**.
- Salivary amylase enzyme acts on starch.
- Tongue mixes food and helps in swallowing.
- Soft mass of food is called **bolus**.

2. OESOPHAGUS



- Connects mouth to stomach.
- Food moves through **peristalsis**.
- Peristalsis: Rhythmic muscular movements that push food forward.

3. STOMACH



- Stores and churns food.
- **HCl** provides acidic medium and kills many harmful microbes.
- Pepsin begins **protein digestion**.
- Food changes into semi-liquid called **chyme**.

4. SMALL INTESTINE



- Main site of **digestion and absorption**.
- Receives **bile** from liver (helps in fat emulsification).
- Receives **pancreatic juice** (contains enzymes).
- Intestinal juice completes digestion.
- **Villi** increase surface area for absorption.
- Digested nutrients pass into **bloodstream**.

5. LARGE INTESTINE



- Absorbs **water** and some salts.
- Undigested material becomes solid.
- Faeces are formed.

6. RECTUM



- Temporarily stores faeces.

7. ANUS



- Removes faeces from the body.
- Removal of undigested food is called **egestion**.

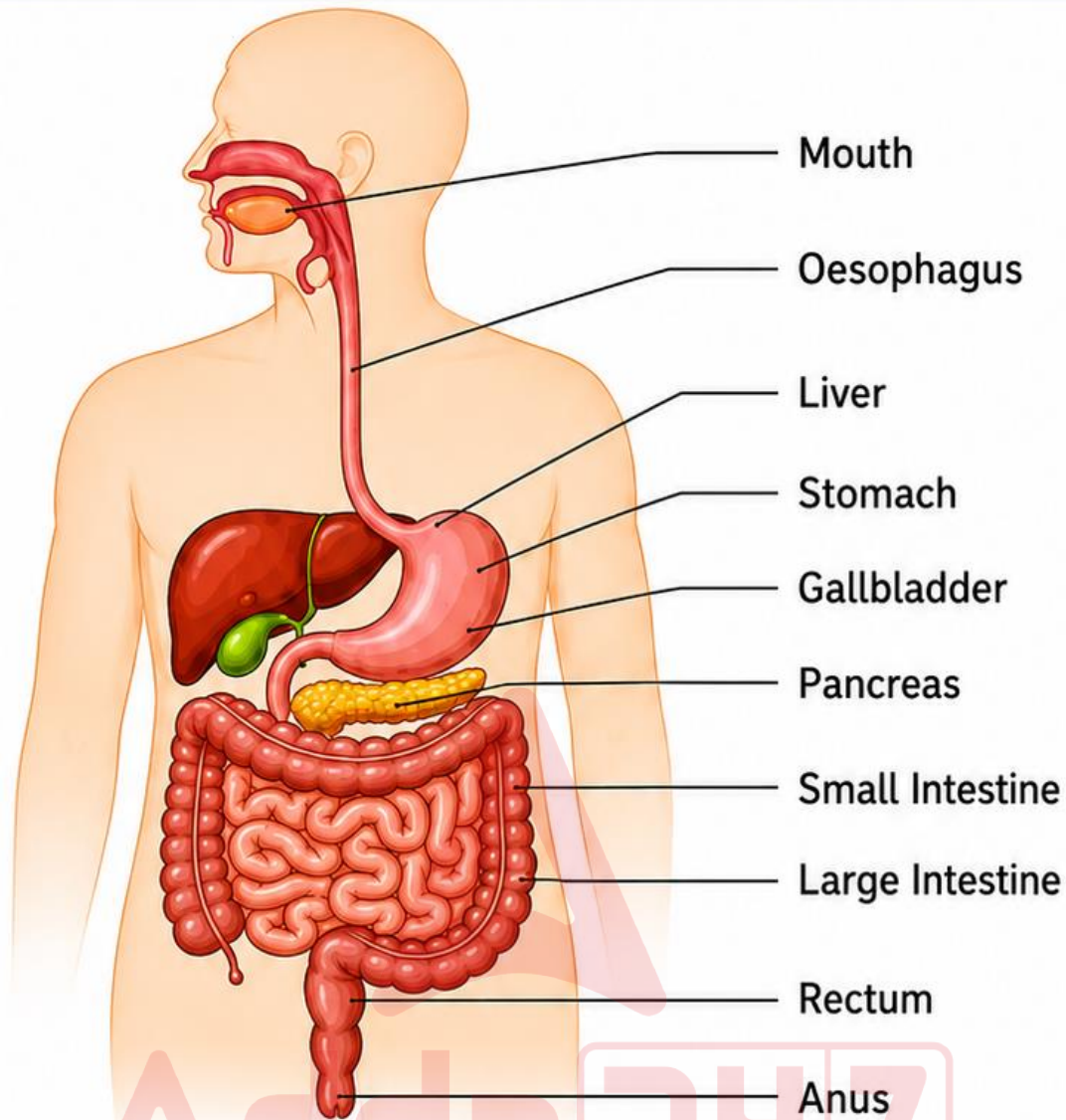


Good digestion leads to good health.



Eat healthy, stay healthy!

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IMPORTANT FACTS

- ★ Bile does **NOT** digest food directly, it helps in emulsification of fats.
- ★ Protein digestion begins in the **stomach**.
- ★ Maximum digestion and absorption take place in the **small intestine**.
- ★ Water absorption takes place in the **large intestine**.
- ★ Movement of food is by **peristalsis**.
- ★ Digestive **enzymes** break complex food into simple substances.
- ★ RTE Act, 2009 ensures good **nutrition** and health for children.

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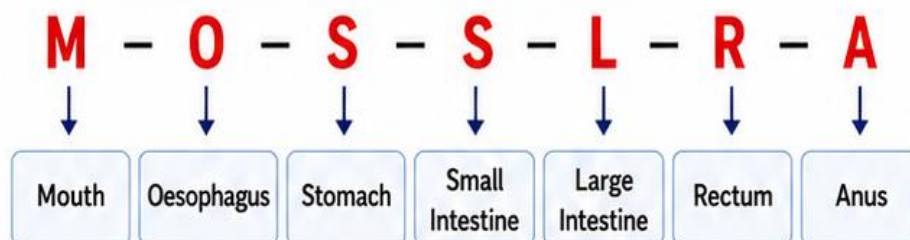
ACCESSORY ORGANS AND THEIR FUNCTIONS

Organ	Function
 Liver	Produces bile which helps in the emulsification of fats.
 Gallbladder	Stores and concentrates bile.
 Pancreas	Produces pancreatic juice (enzymes like trypsin, amylase, lipase).
 Villi (in small intestine)	Increase surface area for absorption of nutrients.

FOOD NUTRIENTS & THEIR DIGESTION

Nutrient	Where Digestion Begins	Where Digestion Completes	Absorbed In
 Carbohydrates	Mouth	Small Intestine	Small Intestine
 Proteins	Stomach	Small Intestine	Small Intestine
 Fats	Small Intestine	Small Intestine	Small Intestine
 Vitamins	–	–	Small Intestine
 Minerals	–	–	Small Intestine
 Water	–	–	Large Intestine

EASY MEMORY TRICK



M – Mouth
O – Oesophagus
S – Stomach
S – Small Intestine

L – Large Intestine
R – Rectum
A – Anus



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