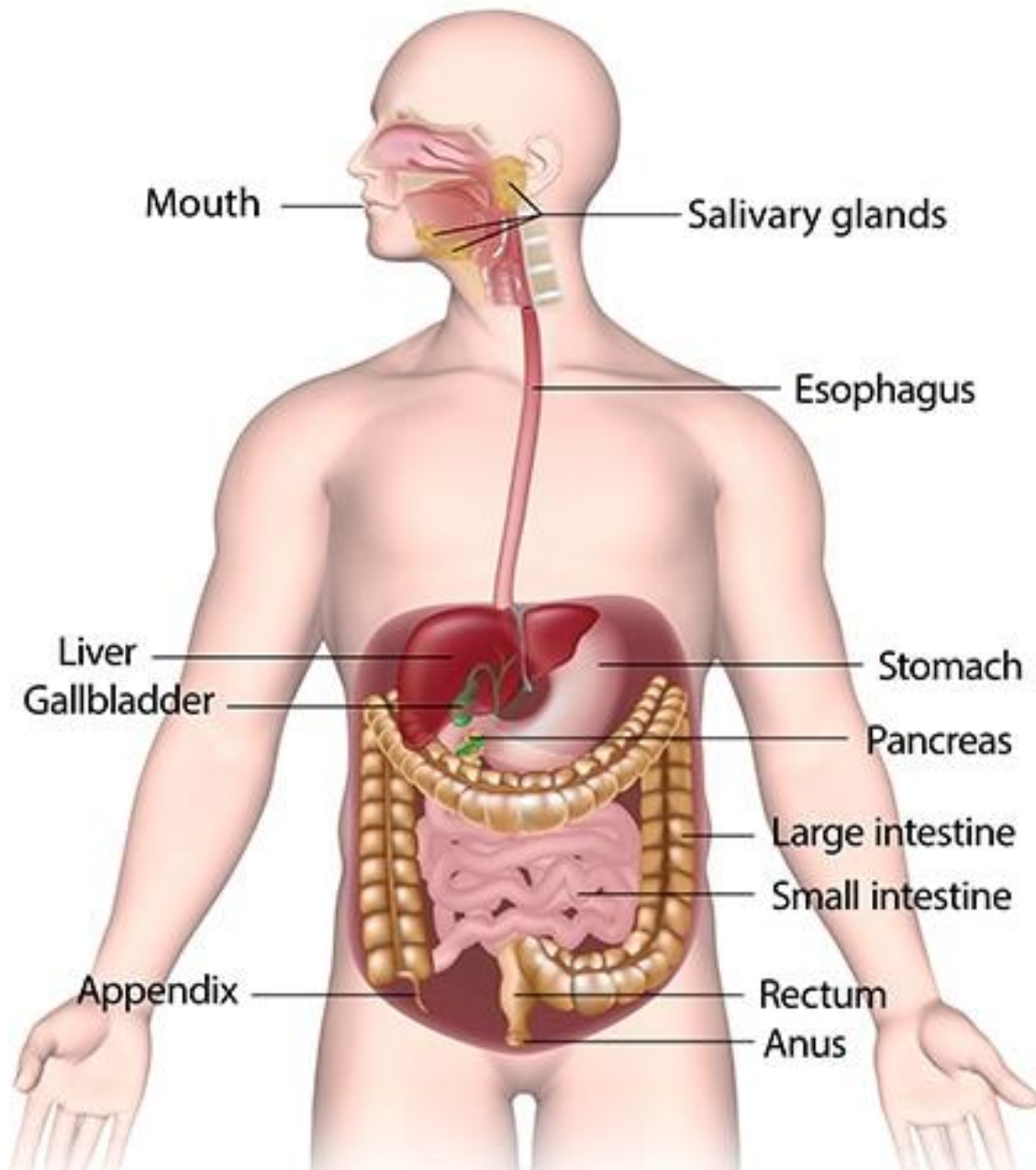


CHEMICAL TRANSFORMATION OF FOOD

The Digestive System



Food digestion:

- ✓ Ingestion and propulsion of food.
- ✓ Digestion of food.
- ✓ Absorption of nutrients.
- ✓ Elimination of fecal matter.

Mechanical Digestion / Transformation:

Physical breaking down of food into smaller parts.

NOTE!!

Proteins remain proteins, lipids remain lipids, and starch remains starch.

Chemical Digestion / Transformation:

Chemically breaking down food from complex molecule to simple molecules.

- Occurs due to the secretions from the digestive gland.

NOTE!!

- ✓ Starch becomes simple sugar.
- ✓ Proteins become amino acids.
- ✓ Lipids become fatty acids+ glycerol.

Digestive System



1. Digestive glands 2. Digestive tract

2.

1. Digestive Glands:

- ✓ Salivary glands (contain saliva)
- ✓ Pancreas (pancreatic juice)
- ✓ Liver (bile: stored in the gallbladder)
- ✓ Intestinal glands (intestinal juice)
- ✓ Stomach (gastric juice)

NOTE!!

Any juice secreted by a gland is made up of enzyme + water.

Role of Bile:

- ✓ Makes medium basic.
- ✓ Helps in separation of fat molecules into small fat molecules to help in digestion of lipids by lipase (enzyme)
- ✓ Bile secreted by the liver and stored in the gallbladder.