

GASTROINTESTINAL TRACT FUNCTIONS

Organ / Part	Primary Functions
Mouth & Salivary Glands	Ingestion, mechanical breakdown (mastication), and initial chemical digestion of carbohydrates via amylase.
Esophagus	Transport of food bolus from the pharynx to the stomach via peristalsis.
Stomach	Chemical breakdown of proteins via pepsin; mechanical churning; secretion of gastric acid (HCl) to kill bacteria.
Small Intestine	Primary site of chemical digestion and nutrient absorption (carbohydrates, lipids, amino acids).
Pancreas (Accessory)	Production of digestive enzymes (lipase, protease) and bicarbonate to neutralize stomach acid.
Liver & Gallbladder	Production and storage of bile for the emulsification and digestion of fats.
Large Intestine	Absorption of water and electrolytes; synthesis of vitamins by gut flora; formation of feces.

Organ / Part	Primary Functions
Rectum & Anus	Temporary storage of waste and controlled elimination (defecation).