

# DIGESTIVE SYSTEM: ANATOMY & PHYSIOLOGY

Reference Chart: Human Biology Focus: Mechanical & Chemical Breakdown

ORGAN / PART	KEY PROCESS	PRIMARY FUNCTION	SECRETIONS / ENZYMES
Mouth	Ingestion	Mechanical breakdown via mastication; bolus formation.	Salivary Amylase (starch breakdown), Lingual Lipase.
Esophagus	Propulsion	Peristalsis moves food to stomach via the cardiac sphincter.	Mucus (lubrication).
Stomach	Digestion	Chyme production; protein denaturation via high acidity.	Pepsin, Hydrochloric Acid (pH 1.5-3.5), Gastrin.
Small Intestine	Absorption	Primary site of nutrient absorption into the bloodstream.	Trypsin, Lactase, Sucrase, Maltase, Peptidase.
Liver	Metabolism	Bile production; detoxification; glycogen storage.	Bile salts (emulsification of fats).
Gallbladder	Storage	Stores and concentrates bile for release into duodenum.	Concentrated Bile.

<b>ORGAN / PART</b>	<b>KEY PROCESS</b>	<b>PRIMARY FUNCTION</b>	<b>SECRETIONS / ENZYMES</b>
<b>Pancreas</b>	<b>Secretion</b>	Neutralizes stomach acid; breaks down all macromolecules.	Lipase, Amylase, Protease, Sodium Bicarbonate.
<b>Large Intestine</b>	<b>Elimination</b>	Water reabsorption; electrolyte balance; vitamin K synthesis.	Mucus; Symbiotic Bacterial Flora.

End of Chart - For Educational Use Only