

# The Digestive System

**Purpose:** to convert food particles into simpler macromolecules that can be absorbed into the bloodstream and used by the body

**Major Organs and their Functions:**

**Mouth** – to chew and grind up food

-- saliva also begins the chemical breakdown

**Esophagus** – pipe connecting mouth to stomach

**Stomach** – secretes an extraordinarily strong acid (pH = 2) that leads to breakdown of food

-- once the food is broken down in the stomach and mixed with digestive juices, it is called **chyme**

**Pancreas** – produces the hormone insulin that regulates blood sugar levels

-- also help neutralize stomach acid

**Liver** – produces bile, which breaks down fats in foods

**Gallbladder** – pouch-like organ that stores bile for future use

**Small Intestine** – after digestion is complete, the chyme enters the small intestine where it is absorbed into the bloodstream

-- the chyme is propelled along by folded surfaces called **villi**, on the intestine

**Large Intestine** – removes water from the chyme and gets the waste ready for excretion

# Image of the Digestive System

