

# Anatomy & Physiology: THE DIGESTIVE SYSTEM

► The **digestive system** breaks food down into usable components and expels waste.

## TERMS

**accessory organs:** provide additional functions to aid the digestive tract in the digestion and absorption of nutrients

**anus:** opening of the rectum through which solid waste leaves the body

**bile:** substance that breaks down fat macronutrients

**bolus:** the mass of partially digested food as it travels through the esophagus into the stomach

**carbohydrates:** provide energy to cells, form cell structures

**chemical digestion:** the alteration of food into different substances

**chyme:** the mixture of food and digestive juices that moves from the stomach to the small intestine

**colon:** the longest part of the intestine, where water is reabsorbed

**defecation:** the excretion of solid waste through the anus

**digestion:** the process of diffusing nutrients digested from the food throughout the body for use in cellular respiration and energy production

**digestive tract:** the central tube through which food travels

**esophagus:** transports food from the throat to the stomach

**extracellular digestion:** ingesting food at the mouth and excreting it at the anus

**gallbladder:** stores and concentrates bile to break down fat macronutrients

**ingestion:** the process of taking in food

**large intestine:** organ where remaining water and nutrients are absorbed; compacts and stores remaining waste material until excretion

**lipids:** provide long-term storage, provide energy to cells

**liver:** produces bile; detoxifies digested toxins; extracts nutrients from blood before it moves to other parts of the body

**mechanical digestion:** the physical breaking down of food

**pancreas:** produces chemicals to decrease small intestine acidity and to break down fats, proteins, and carbohydrates

**peristalsis:** muscular contractions that produce waves to move food from one point to another

**pharynx (throat):** moves food from the mouth to the esophagus during swallowing

**proteins:** synthesize DNA, transport materials, provide fibrous structure, produce enzymes

**rectum:** organ located at the end of the large intestine where solid waste is stored before excretion

**saliva:** fluid released in the mouth during mastication (chewing) with enzymes that begin breaking down food

**small intestine:** organ where the majority of digestion and absorption occurs

**villi:** structures with multiple folds that line the small intestine, allowing maximum absorption of nutrients

## PARTS OF THE DIGESTIVE SYSTEM

