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**