

Large Intestine

The large intestine is a long, thick tube that absorbs water and contains symbiotic bacteria that aid in the breaking down of wastes to extract some small amounts of nutrients.

Digestive System Physiology

The mouth and stomach are responsible for ingestion and storage of food, which allows the body to eat more than it can process at one time.

The digestive system secretes around 7 liters of fluids per day, including saliva, mucus, hydrochloric acid, enzymes, and bile. These fluids help to digest food chemically and protect the body from bacteria.

Mixing and Movement

The digestive system uses 3 main processes to move and mix food: swallowing, peristalsis, and segmentation. Swallowing, peristalsis, and segmentation help to increase the absorption of nutrients by mixing food and increasing its contact with the walls of the intestine.

Digestion begins with the chewing of food by the teeth, continues with the muscular mixing of food by the stomach and intestines, and ends with the pancreas secreting pancreatic juice, which breaks down fats, carbohydrates, proteins and nucleic acids into smaller molecules.

Once food has been reduced to its building blocks, the body begins to absorb it. The small intestine is involved in the absorption of water and vitamins B and K.

The final function of the digestive system is the excretion of waste. Defecation is controlled by the conscious part of the brain.

Digestive Disorders

Common digestive disorders include gastroesophageal reflux disease, cancer, irritable bowel syndrome, lactose intolerance and hiatal hernia. The most common symptoms of digestive disorders include bleeding, bloating, constipation, diarrhea, heartburn, pain, nausea and vomiting.