

Digestive System

A long tube with attachments that breakdown food, absorb nutrients and eliminate unused food. The food travels through the tube by a process called **peristalsis**. **Peristalsis** is a series of muscular contractions that occur automatically when you swallow your food.

Functions of the Digestive System:

1. Ingestion - the gathering and insertion of food products into the oral cavity
2. Digestion - the breakdown of complex molecules into simple molecules
3. Absorption - absorbing the simple molecules into the body
4. Excretion - removal of undigested food

Two types Digestion

1. Mechanical - chewing and muscular contractions that mix the food around
2. Chemical - several enzymes (chemicals) that use chemical reactions to break large molecules into simpler molecules

The Tube of Digestion

1. Mouth (Teeth, Tongue)
2. Salivary glands - adds water and enzymes
3. Uvula - Flap of tissue that prevents food from going up into your nasal cavity
4. Pharynx
5. Epiglottis - flap of tissue that covers the trachea when you swallow - prevents food from entering your lungs
6. Esophagus - mucus lined muscular tube
7. Stomach - muscular bag that produces acid and enzymes to breakdown food
8. Small intestine - very long and narrow muscular tube - absorbs nutrients
9. Appendix - small sac attached to large intestine - no purpose - can get infected
10. Large intestine - wide muscular tube - absorbs water - lots of good bacteria
11. Rectum - storage of waste before elimination
12. Anus - end of tube - kept closed by a circular ring of muscles

Attachments to the Digestion Tube

1. Liver

- a. Chemical modification of absorbed nutrients
- b. Produces bile to help digest fat

2. Gall Bladder

- a. Stores bile
- b. Releases the bile when the stomach pushes the food into the small intestine

3. Pancreas - releases enzymes into the small intestine to chemically breakdown food - sugar balance