

Human Digestive system

- * One-way passage for ingested food-called the gastrointestinal tract (or GI tract)
- * GI tract is hollow tube with an opening at each end
- * Accessory organs assist in digestive functions
- * Peristalsis is muscular contractions that move food along the GI tract

THE MOUTH (Oral Cavity)

1. structure.
 - includes teeth, tongue, openings of the salivary glands
2. function.
 - a. teeth cause physical changes-break food up, so to expose to a larger surface area
 - b. salivary glands secrete saliva-which contains the enzyme salivary amylase
 - this enzyme begins digestion of starch, a carbohydrate
 - c. tongue- helps mix chewed food with saliva and moves food to back of mouth for swallowing

THE ESOPHAGUS

1. structure
 - muscular tube that connects mouth to stomach
2. function.
 - swallowing moves food into esophagus
 - Peristalsis of muscular walls moves food down to stomach

THE STOMACH

1. structure.
 - muscular sac
 - lining contains gastric glands
 - glands secrete enzymes and hydrochloric acid (HCl)
2. function.
 - mix food with digestive juices
 - enzyme gastric protease begins digestion of protein
 - HCl provides proper pH

THE SMALL INTESTINE

1. structure.
 - long, coiled tube of small diameter
 - lining contains intestinal glands
 - glands secrete digestive enzymes into intestine
 - partially digested food enters from stomach
2. Accessory functions.
 - a. -liver secretes bile
 - bile stored in gall bladder, passes through duct into the intestine
 - b. pancreas secretes pancreatic juice, including enzymes that break down lipids, proteins and carbohydrates