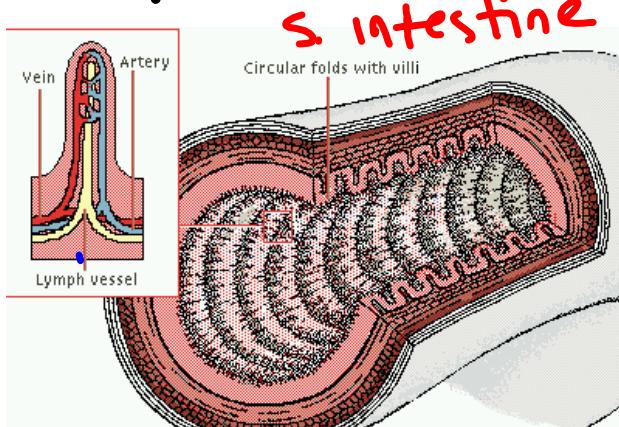
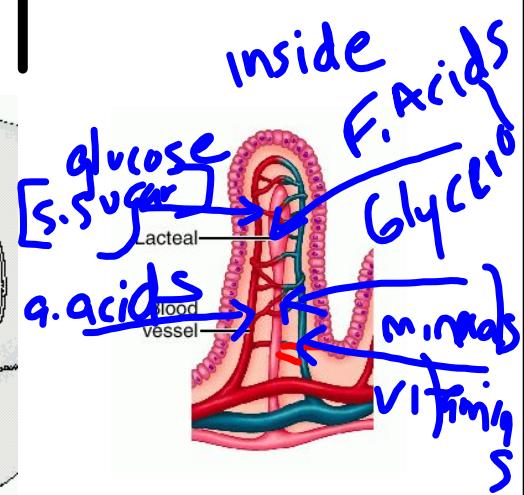


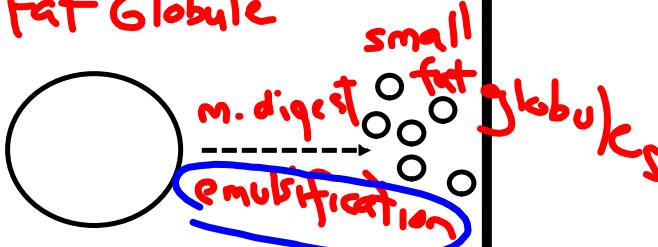
Structure	Function	Enzyme/Secretions
5. Stomach	<p>1. Chemical Digestion of <u>Protein</u> begins here.</p> <p>2. Temporarily <u>Stores</u> <u>food</u></p> <p>3. <u>Hydrochloric Acid</u> secreted. <u>HCl</u></p> <p>a) creates <u>optimum pH</u> for gastric protease (<u>Pepsin</u>)</p> <p>b) helps kill <u>Bacteria</u></p>	gastric <u>protease</u> <u>Pepsin</u> <u>Hydrochloric Acid</u> <u>Mucus</u> protects against enzymes digesting the wall of the stomach
6. Small Intestine	<p>1. Digestion is <u>Completed</u> here (Fats, Carbs, and Proteins)</p> <p>2. <u>Absorption</u> of nutrients through the <u>villi</u> [tiny projections in S. intestine] into the <u>bloodstream</u> [<u>Capillaries</u>]</p>	<u>Lipases (Lipid)</u> Amylases (<u>Carb</u>) Proteases (<u>Proteins</u>)

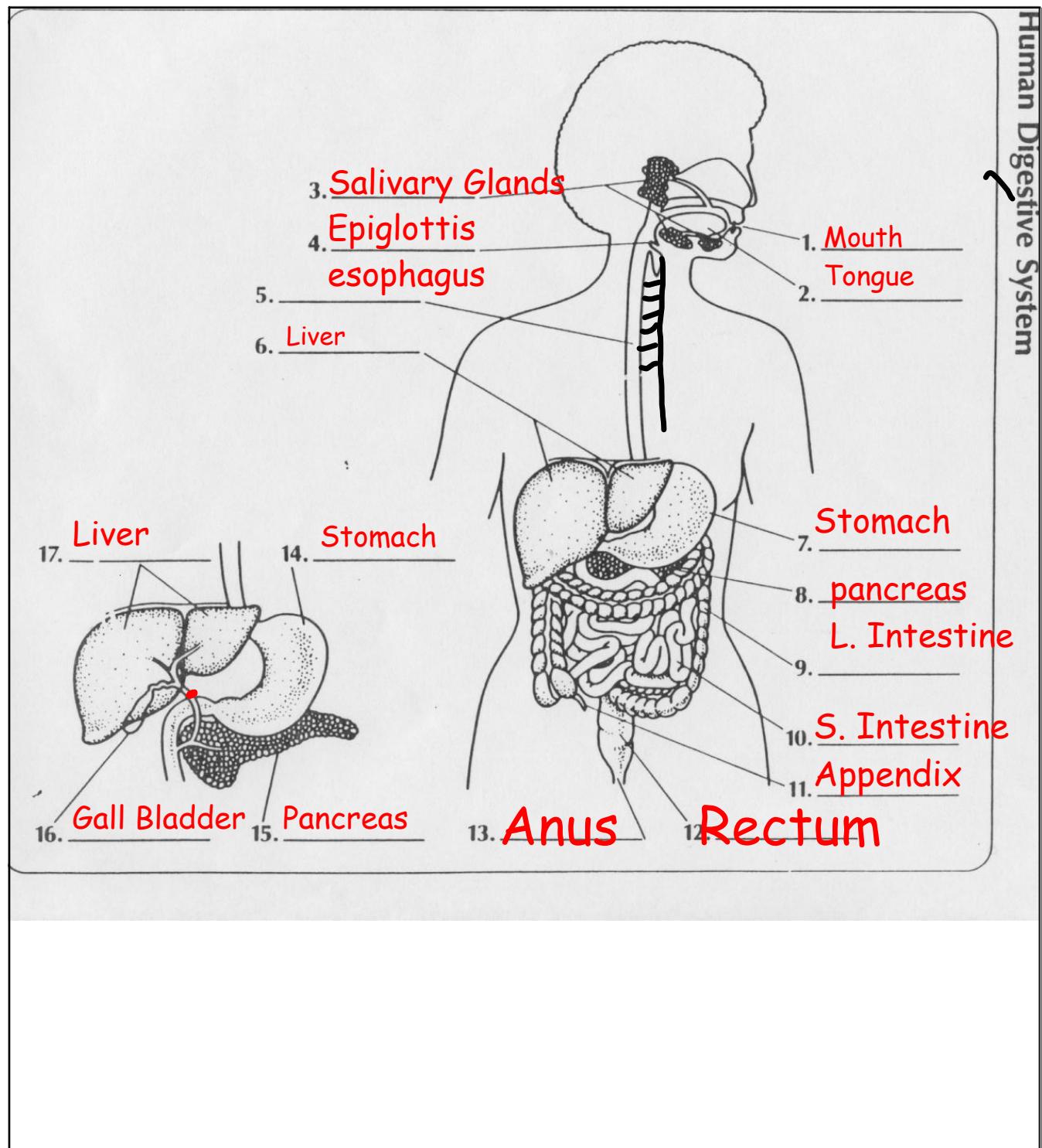



Structure	Function	Enzymes/Secretions
7. Large Intestine Colon	Absorbs <u>Water</u> and <u>Vitamins</u> (made from bacteria) from undigested materials to form the <u>Feces</u>	None
8. Rectum	<u>Stores</u> feces temporarily.	None
9. Anus	Feces <u>exit</u> the Alimentary Canal	None

ALIMENTARY (Food Canal) Tube

① Mouth → pharynx → Esophagus → Stomach →
 Anus ← Rectum ← L. Intestine ← S. intestine ←

Accessory Organs		
Organ	Function	Action takes place
Salivary Glands	<p>1. Produce <u>Saliva</u> contains <u>Salivary amylase</u></p> <p>a) digests <u>Carbs</u> <u>into Sugars</u></p>	<u>Salivary Amylases</u> works in the <u>Mouth</u>
Liver	<p>secretes <u>Bile</u> which <u>physically breaks</u> down fat.</p> <p>(<u>Emulsification</u>)</p> <p>Fat Globule</p>  <p>m. digest</p> <p>emulsification</p>	<u>Bile</u> works in the <u>s. intestine</u>
Gall Bladder	<u>Stores Bile</u>	<u>Bile</u> works in the <u>s. intestine</u>
Pancreas	<p>Produces Pancreatic Juice which contains</p> <p><u>Lipase, Amylase, Protease</u></p>	Pancreatic Juice works in the <u>s. intestine</u>

Human Digestive System

Disorder	Characteristics
Ulcer	Sore in stomach or S. intestine
Constipation	Too much water reabsorbed in L. intestine - feces become hard
Diarrhea	too little water is reabsorbed in L. intestine Too little water is removed from the feces.
Appendicitis	Infected appendix
Gall Stones	form "stones" from materials in Bile - they get stuck causing pain as they move into S. intestine.
Lactose Intolerance	can't digest milk products
Heartburn	- missing Lactase acid from the stomach gets pushed up into the esophagus causing a burning sensation

Attachments

Digestive System Overview 2.mov

Lipids__Fats_and_Oils.asf