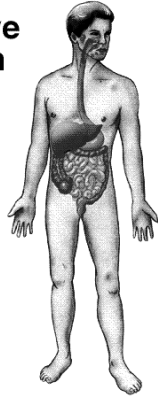


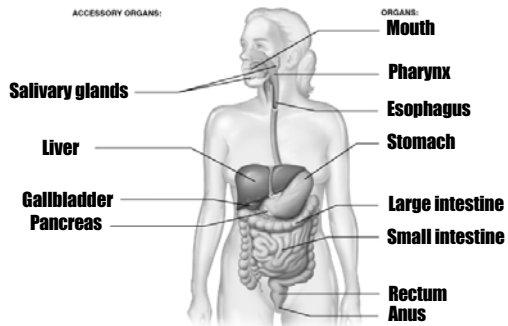
Digestive System



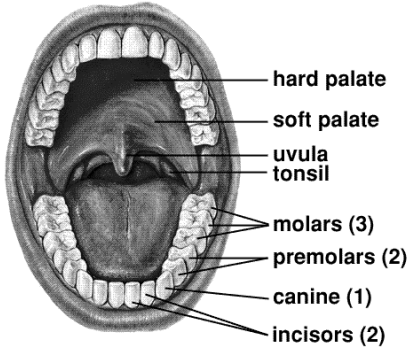
Digestive Processes

- Ingestion
- Mechanical digestion
- Chemical digestion
- Absorption
- Defecation

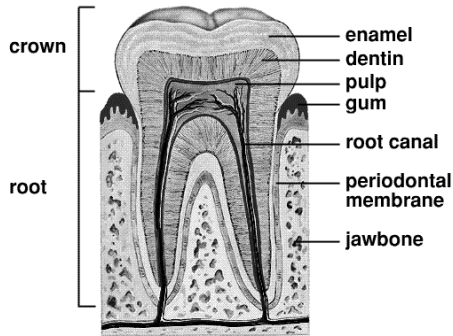
Digestive System



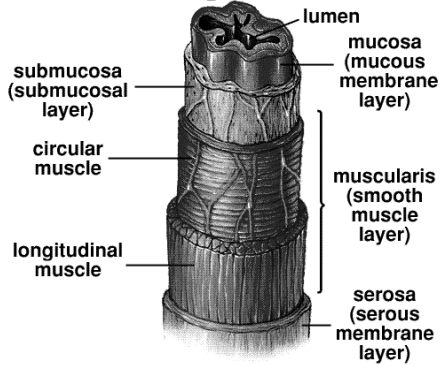
Mouth and Teeth



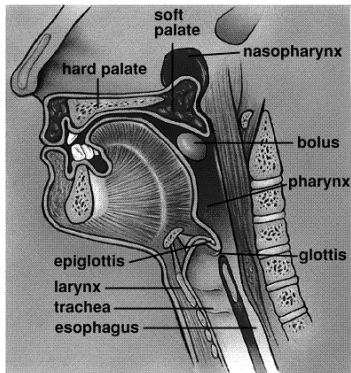
Anatomy of a Tooth



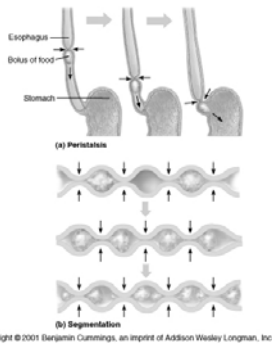
Wall of Digestive Tract



Swallowing

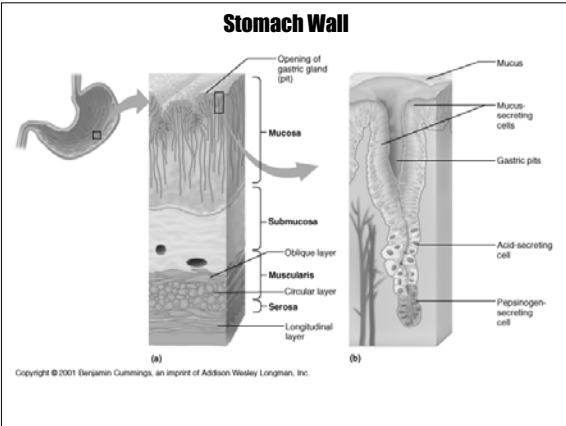


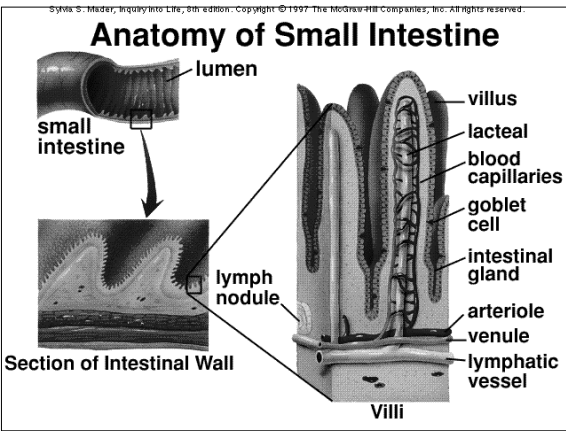
Peristalsis



Stomach

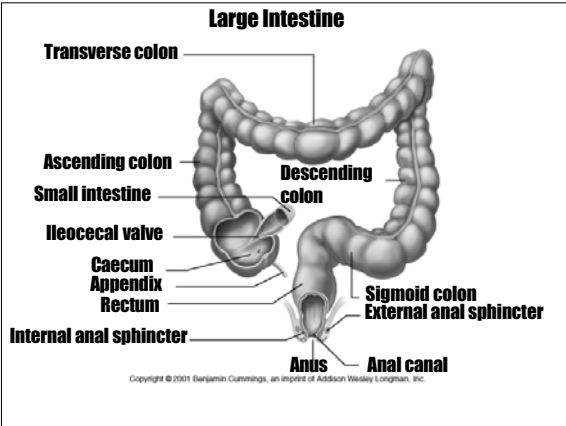
- Cardiac sphincter
- Fundus
- Body
- Pylorus
- Pyloric sphincter

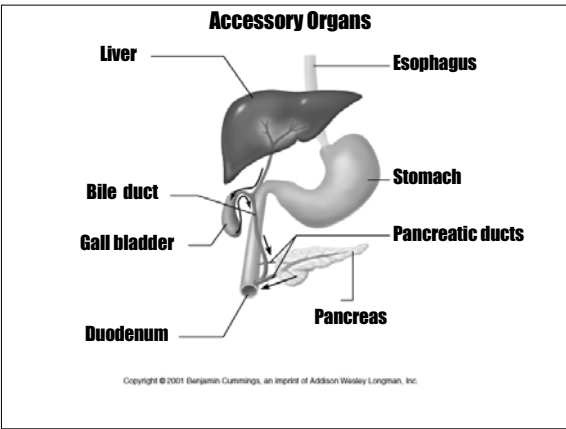


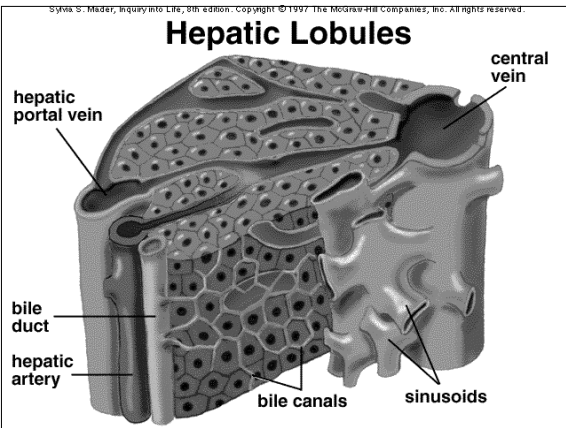


Small Intestine

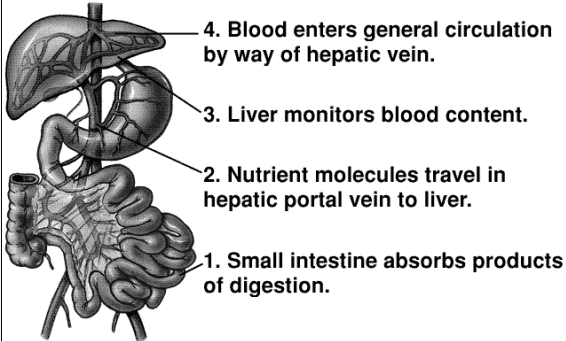
- Duodenum
- Jejunum
- Ileum







Hepatic Portal System



4. Blood enters general circulation by way of hepatic vein.
3. Liver monitors blood content.
2. Nutrient molecules travel in hepatic portal vein to liver.
1. Small intestine absorbs products of digestion.

Nutrients

- **Carbohydrates**
 - Polysaccharides > disaccharides > monosaccharides
 - Starch > maltose > glucose
- **Proteins**
 - Polypeptides > peptides > amino acids
- **Lipids**
 - Triglycerides > fatty acids + glycerol

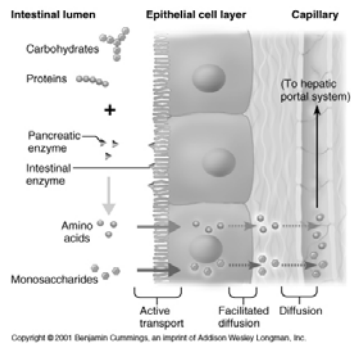
Digestive Enzymes

- **Salivary amylase - salivary gland - starch**
- **Pepsin - stomach - protein**
- **Trypsin - small intestine - protein**
- **Lipase - small intestine - lipids**
- **Pancreatic amylase - small intestine - starch**

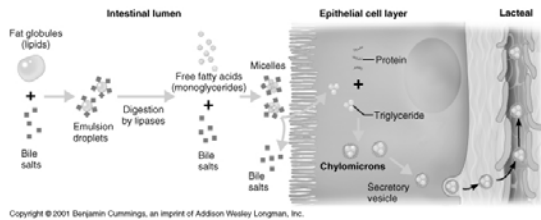
Enzyme Secretion Regulation

- **Neural**
 - **Physical presence of food**
 - **Stretching, smell, taste, thinking about food**
- **Hormonal**
 - **Specific types of food molecules**

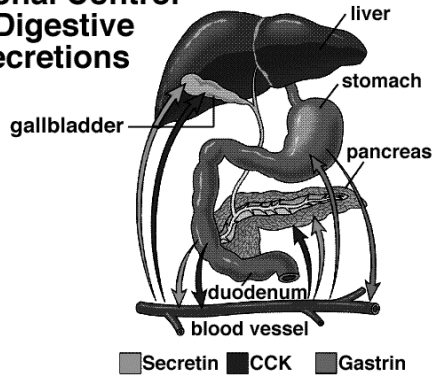
Small Intestine Absorption

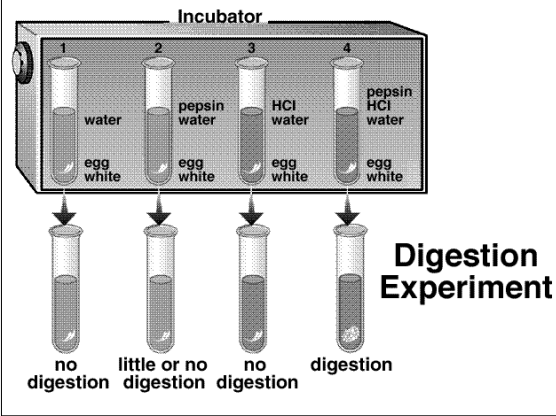


Fats in the Small Intestine

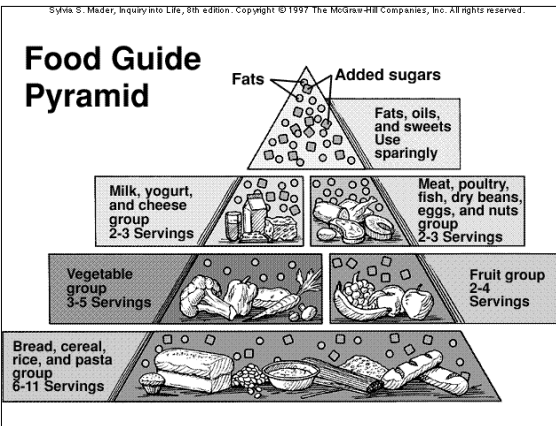


Hormonal Control of Digestive Secretions





Food Guide Pyramid



The End.
