# Digestive System

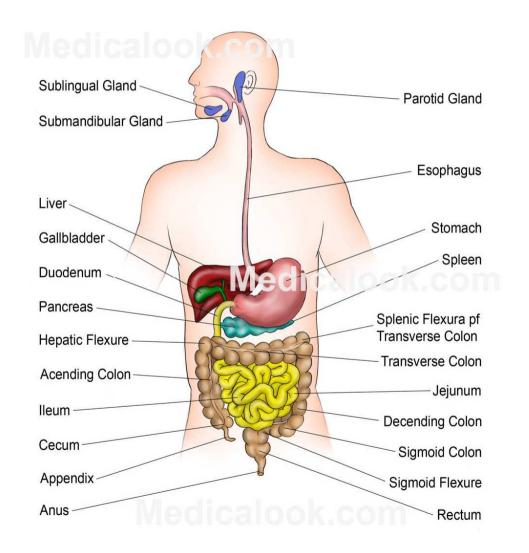
EQ: How is the food you eat broken down so your body can use it?

#### 3 Main Functions

- a. <u>Digestion</u> breakdown of foods within stomach and intestines for use by body's cells
- b. <u>Absorption</u> passage of digested food from digestive tract into blood
- c. <u>Elimination</u> body's expulsion of undigested food or body wastes.

# The Digestive Process

- 4 sections
  - I. Mouth
  - 2.Throat
  - 3. Stomach
  - 4. Intestines

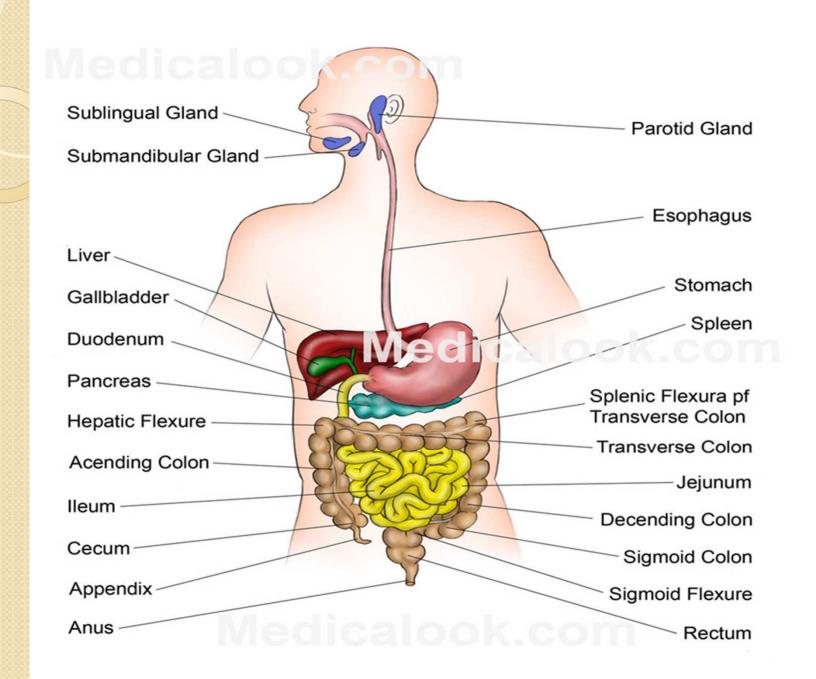


#### The Digestive Process - Mouth

- a. <u>Teeth</u> break food you eat into smaller pieces
- b. <u>Mastication</u> the process of chewing
- c. <u>Saliva</u> is produced by salivary glands. Saliva contains an enzyme that breaks down food in the mouth <u>Amylase</u>.
- d. <u>Tongue</u> shapes and prepares food for swallowing

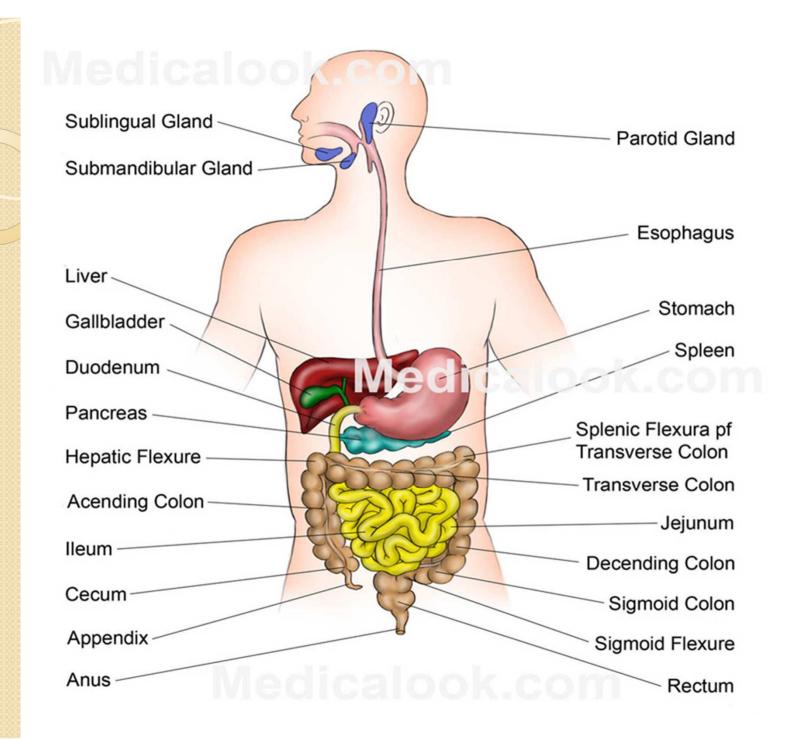
# The Digestive Process – The Throat

- a. <u>The uvula</u> small flap of tissue at the back of the throat that prevents food from going to the nasal passages
- b. <u>The epiglottis</u> flap of tissue which covers the throat, preventing food from entering your airways.
- c. When food is swallowed, it enters the esophagus a 10 inch tube that connects the throat to the stomach
- d. <u>Peristalsis</u> series of involuntary muscle contractions that move food through the digestive system



### The Digestive Process - Stomach

- a. <u>Stomach</u> hollow sac-like organ connected to the esophagus
- b. Functions:
  - digests food with gastric juices
  - moves food into small intestine
- c. Converts food into <u>chyme</u> a creamy mixture of food and gastric juices.

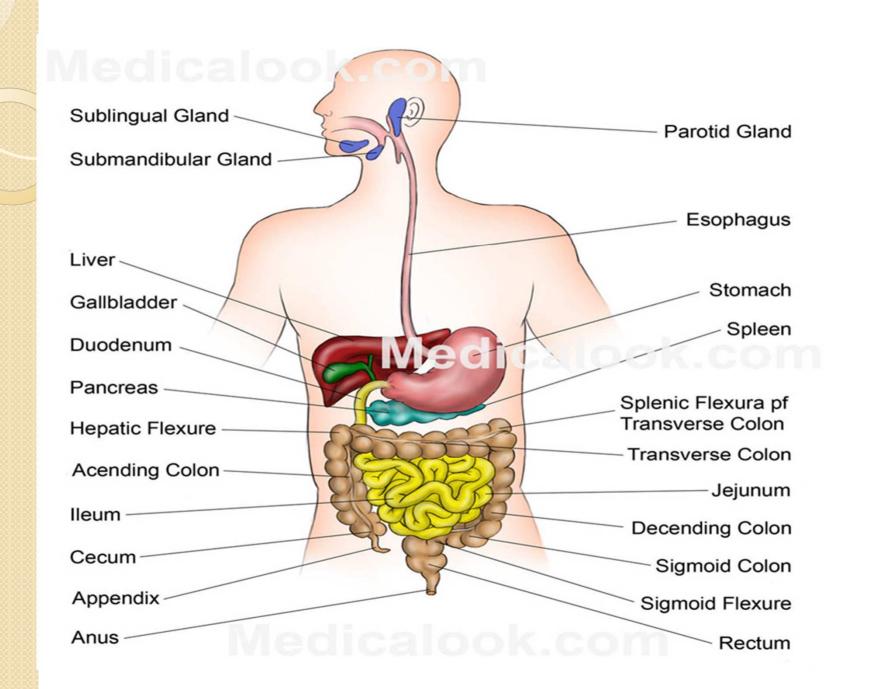


#### The Digestive Process - Intestines

- a. from the stomach, food moves into small intestines
  - 20-23 feet long, I inch in diameter
  - This is where most of the nutrients from food are absorbed into the body!!!
- b. inner lining contains <u>villi</u> tiny fingerlike projections that help absorb nutrients

### The Digestive Process - Intestines

- c. any unabsorbed material goes from the small intestine into the <u>large intestine</u>
- d. here water is absorbed; helps to eliminate waste
- e. undigested food passes through the large intestine; or the **colon**
- f. exited through the anus



# Helpers of the Digestive System

I. It is important to note food DOES NOT pass through these organs!

#### 2. Pancreas

a. produces enzymes to help break down food

b. produces insulin to help regulate blood sugar levels

# Helpers of the Digestive System

#### 3. Liver

- a. produces bile
- b. Bile a green fluid that helps breakdown fats

#### 4. Gallbladder

a. small pouch which stores the bile

#### LEFT SIDE ACTIVITY

 Draw a body and trace the path food travels through the digestive system. Label all parts and explain what is occurring in each of the parts.