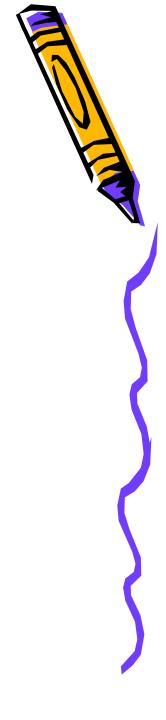
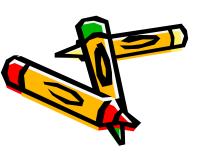
#### 1/28/15

 How does the digestive system maintain homeostasis?

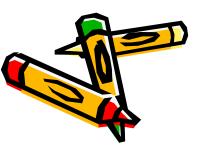






### Function of the digestive system

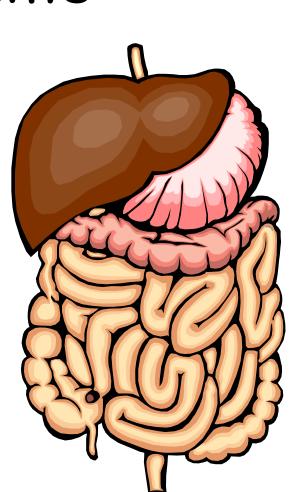
- Breaks down food
- Removes nutrients from food so our body can use



### Components

- Esophagus
- Stomach
- Small Intestine
- Large Intestine
- · Gall bladder
- Liver
- Pancreas

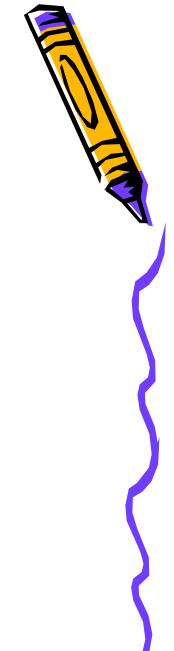


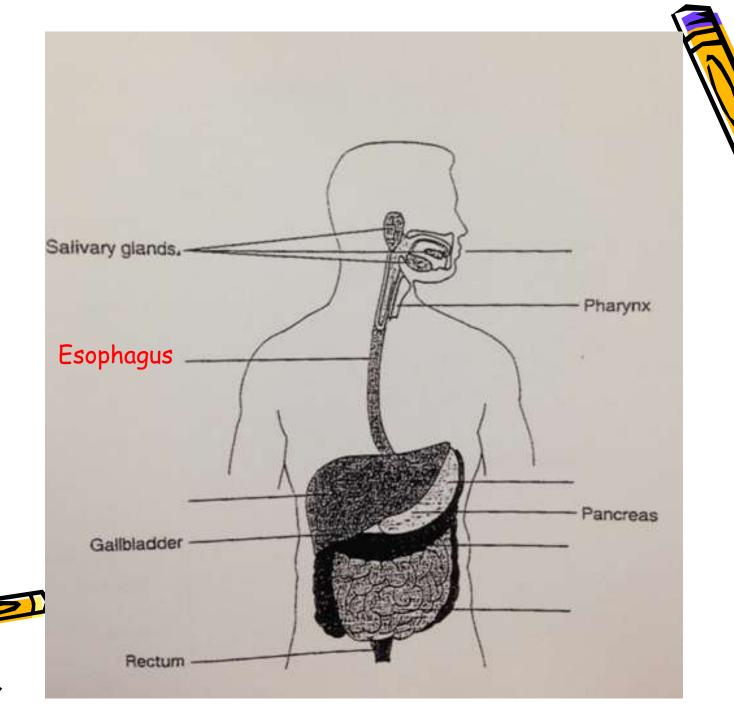


# Esophagus

- the tube that connects your mouth and your stomach
- Moves food by squeezing muscles down- (like a toothpaste tube) called peristalsis



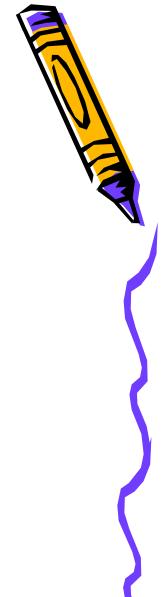




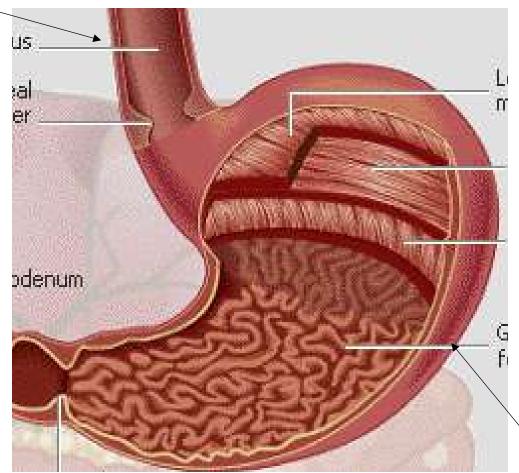
## Stomach

- A stretchy bag that holds your food after you eat
- The acid (ph 2) and churning helps to break food into smaller pieces so your body can use it for energy and nutrition
- Just under the edge of the left side of your rib cage





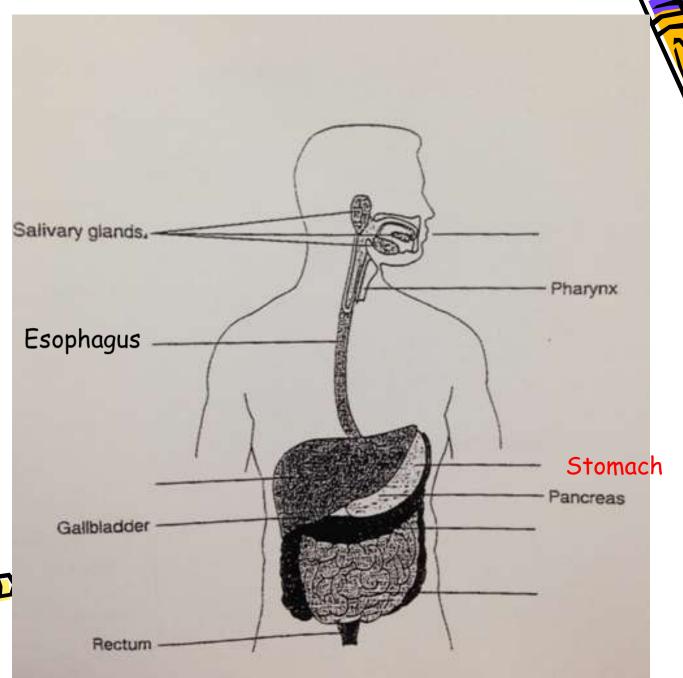
### Esophagus

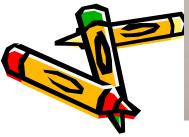




Notice the texture inside!!

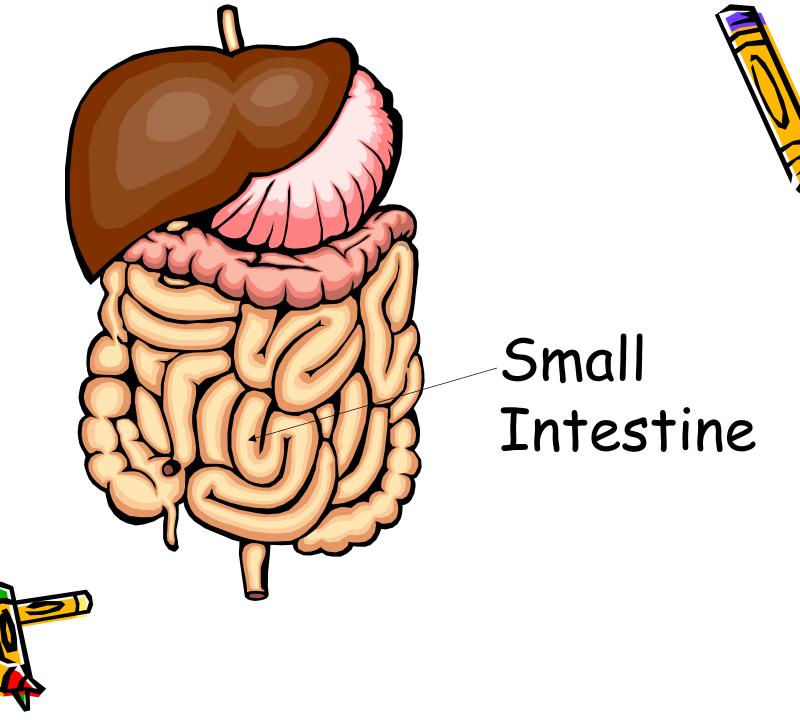
Stomach

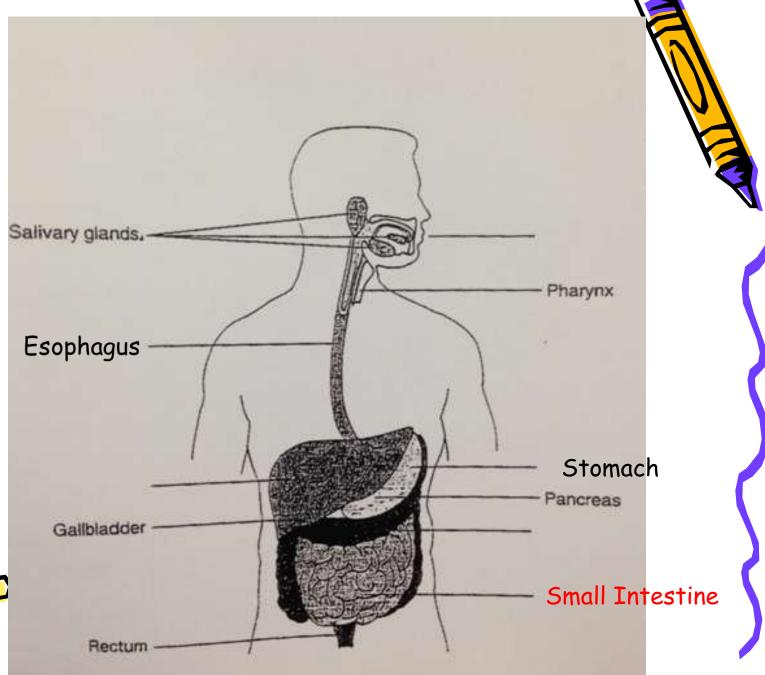




## Small Intestine

- Tube that is 20 feet long.
- Begins with duodenum
- Continues to digest food, removing nutrients from food
- Intestinal walls are very textured to create more surface area for absorption.
- Food stays in your small intestine for 4 to 8 hours
  - Moves food through peristalsis!







## 2 Types of digestion

#### 1. Chemical:

- A. Mouth (saliva),
- B. Stomach (HCl)
- C. Small intestine (bile)

#### 2. Mechanical:

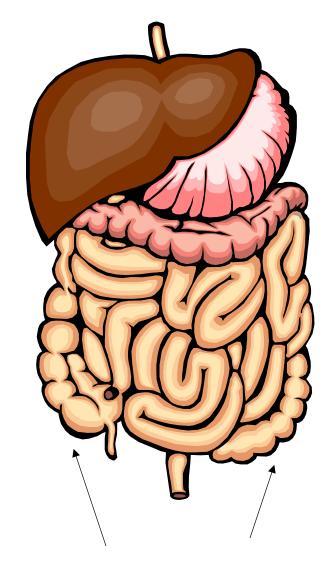
- A. Mouth (teeth grinding)
- B. stomach (muscles churning)



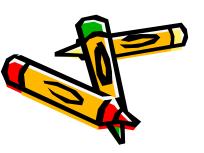


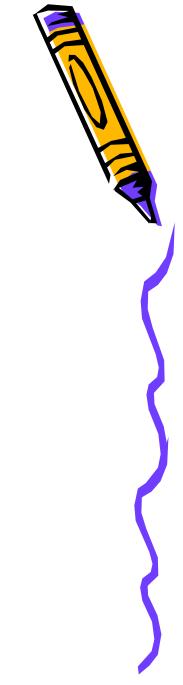
## Large Intestine

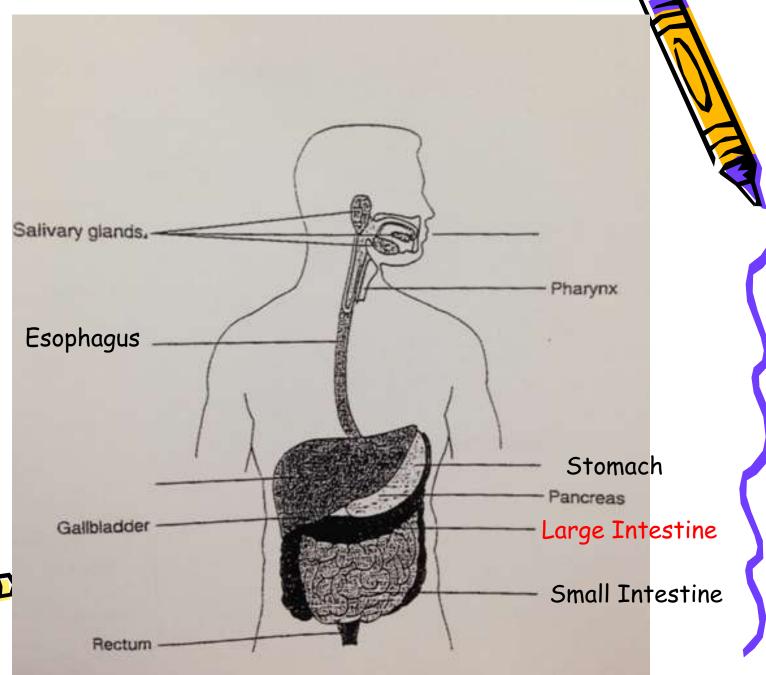
- Tube that is 5 feet long
- Gets waste from small intestine, removes water & makes vitamin K here.
- Bacteria help in the process of breakdown (see they are our friends!)
  - Waste stays for 10 to 12 hours



Large Intestine



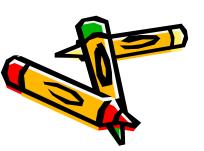


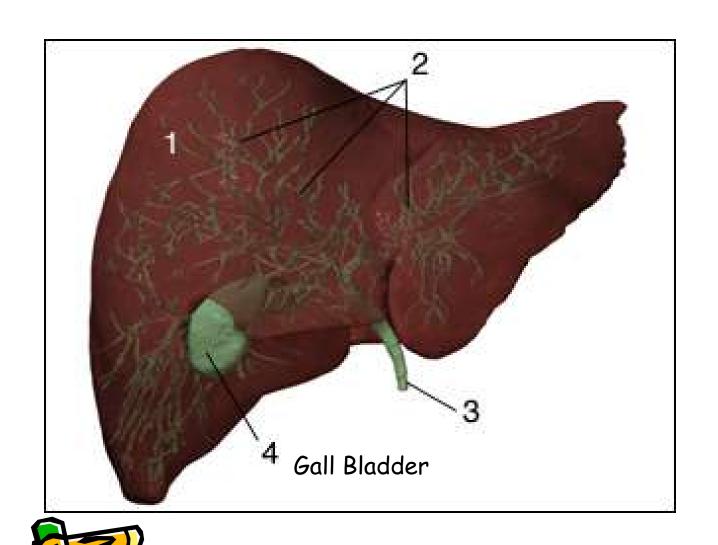


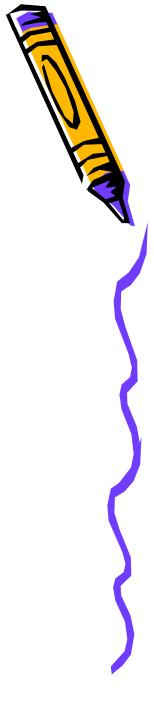


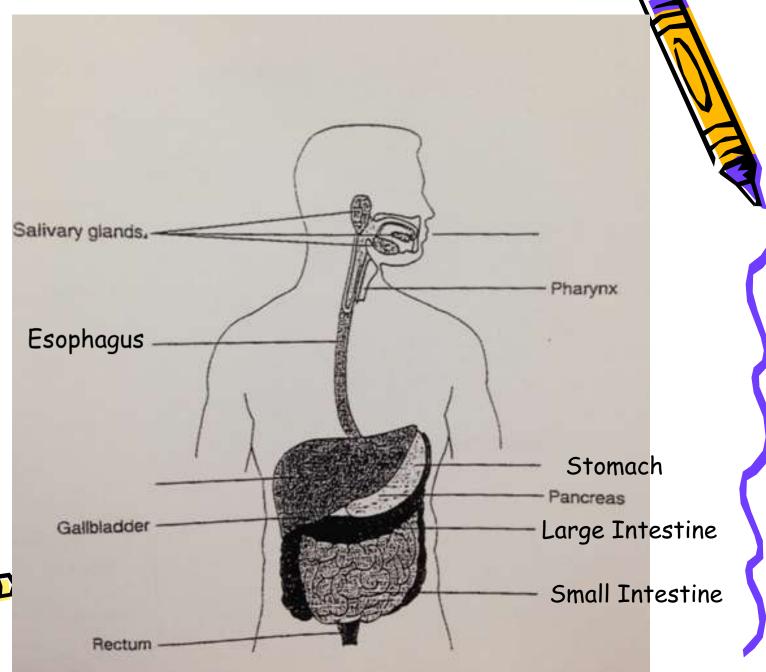
## Gall Bladder

- Storage tank for bile (a greenishyellow liquid) that helps your body break down and use fats
- Very small- about the size of a golf ball & green from the bile
- · Located under your liver
- · Shaped like a pear





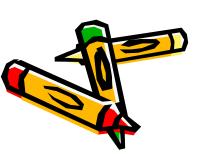


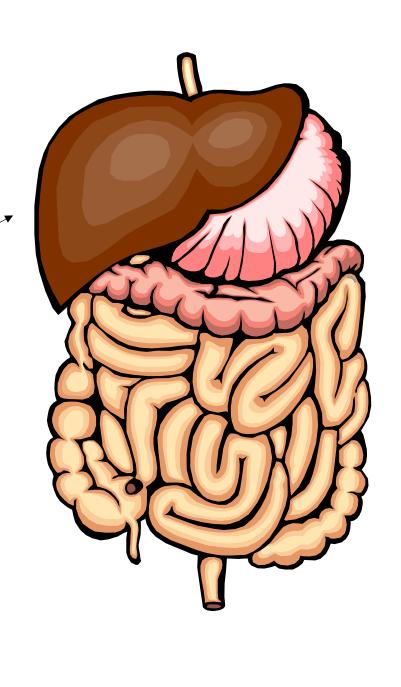




# Liver

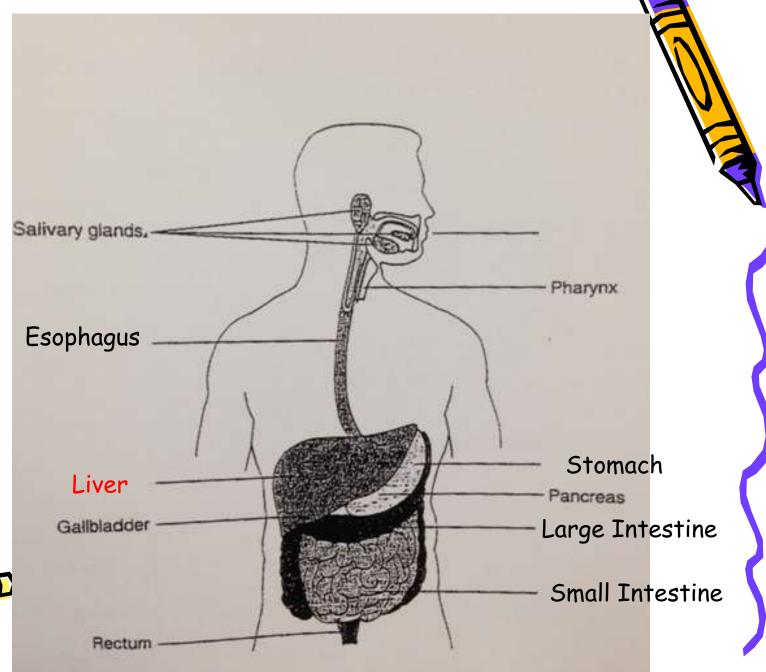
- · Factory for antibodies and bile
- Stores vitamins and sugars until your body needs them
- Eliminates poisons from your body by filtering.







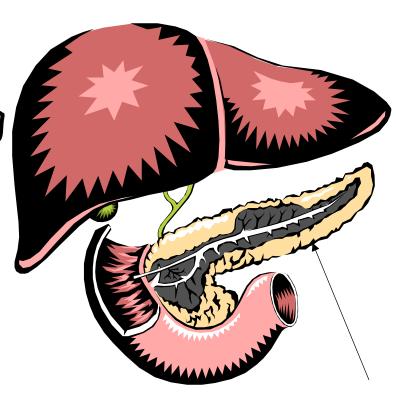


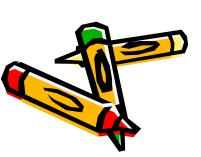




## Pancreas

- Helps you digest food by breaking down sugars
- Produces insulin to control blood sugar levels





Pancreas

## Healthy Habits

Eat foods

 that are high
 in fiber like
 fruits and
 vegetables





· Drink plenty of water





 Chew your food completely before you swallow



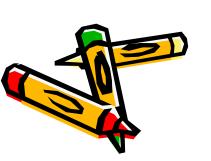




### Avoid foods high in fat

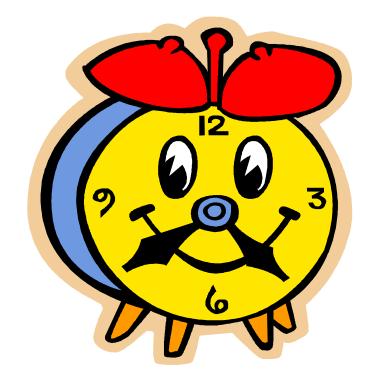


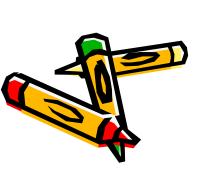


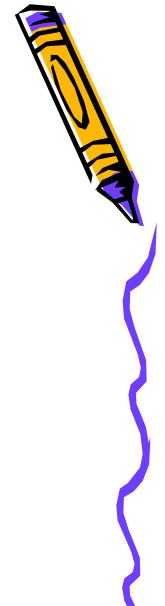


## Interesting Facts

 Food is in your digestive system for about 24 hours

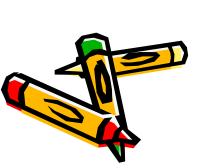






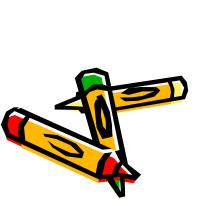
 Your stomach stretches when you eat like a balloon being filled with air

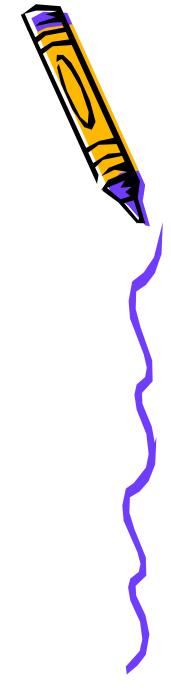




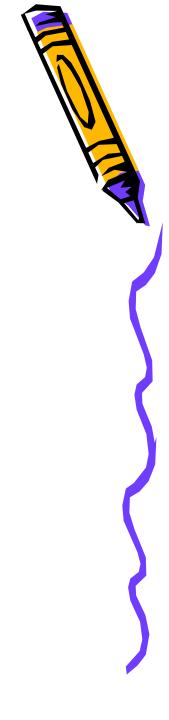


 You have a trap door called the epiglottis to cover your windpipe when you swallow.
 When this malfunctions, you choke!





 Your stomach mashes your food the way a baker kneads dough for bread.







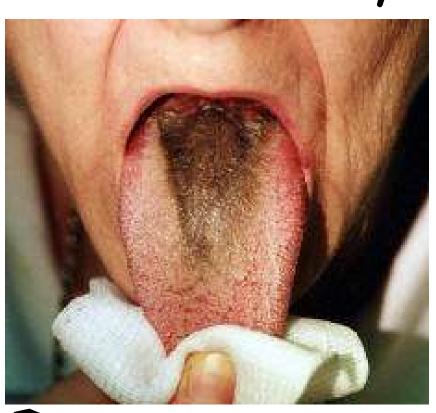
### When good organs go bad: Cirrhosis of the liver







# When good tissues go bad: "Hairy Tongue"



This occurs when the taste buds fail to slough off. It can be caused by using too much mouthwash/ listerine strips.



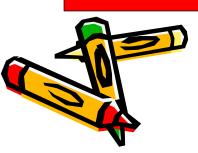
# Summary

#### **Functions**

- Digests food
- Absorbs nutrients for the body

#### Components

- Esophagus
- Stomach
- · Small intestine
- Large intestine
- Pancreas
- Liver
- · Gall Bladder



# Summary

### Healthy Habits

- Eat high fiber foods
- Drink lots of water
- · Chew food well
- · Avoid high-fat foods

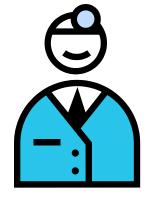


#### Career Connection

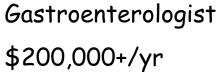
 What careers relate to the digestive system?



Dietician \$30,000+/yr



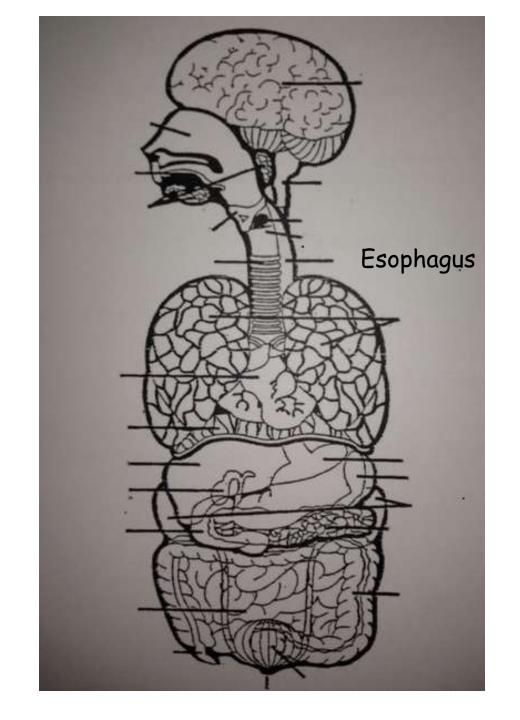
Dental Tech \$27,000

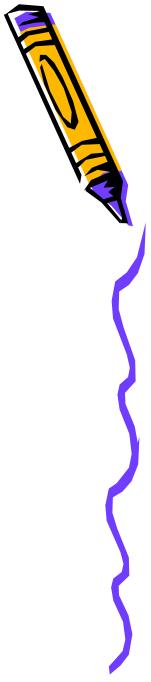




Food Taster \$21,000









### Works Cited



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· My Body: Teacher Created Materials

