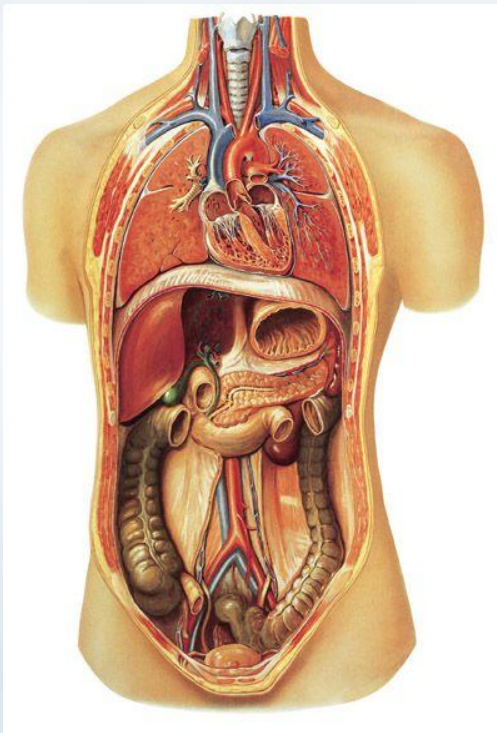
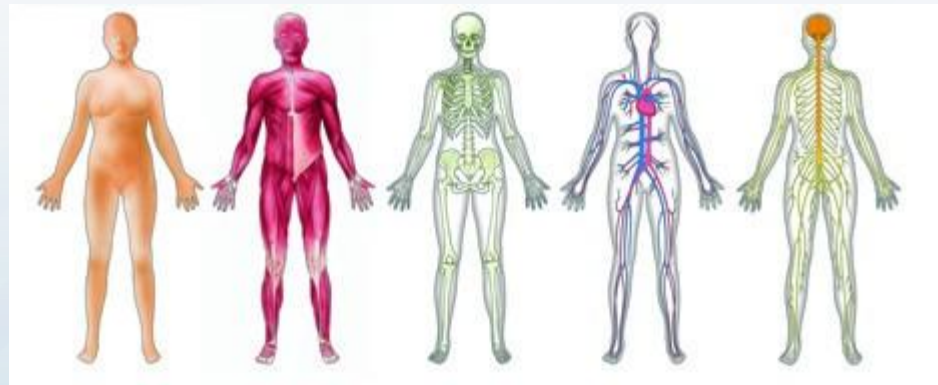


# 8. Nutrition, breathing and circulation



## 2. THE DIGESTIVE SYSTEM (I)

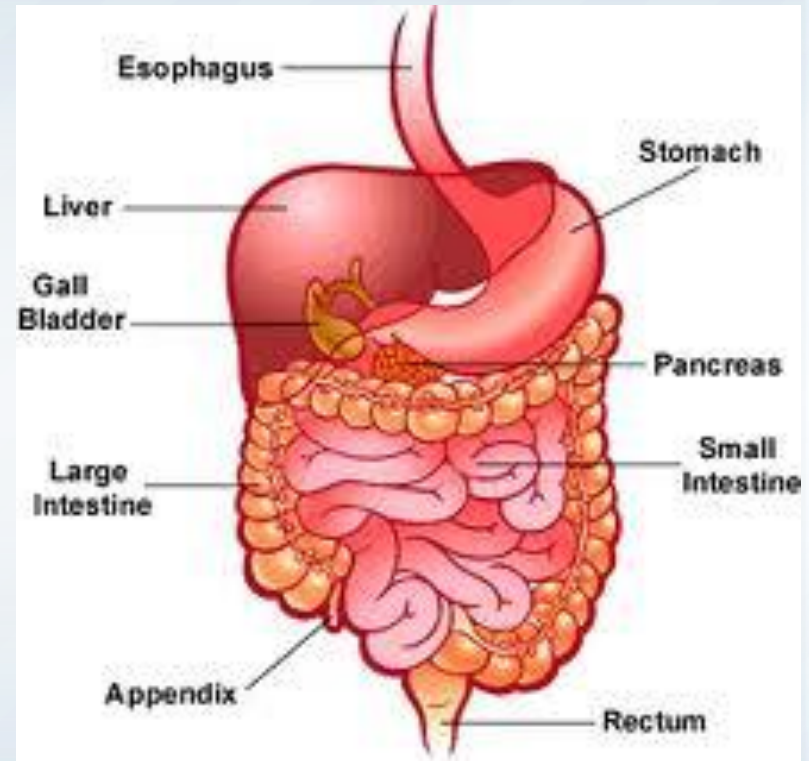


Third Cycle – 6th course

## 2. The digestive system (I)

### DIGESTIVE SYSTEM

Is the group of organs that **digest food**, **absorb nutrients** and **expel undigested waste**.



It contains the **ALIMENTARY CANAL** and the **DIGESTIVE GLANDS**.

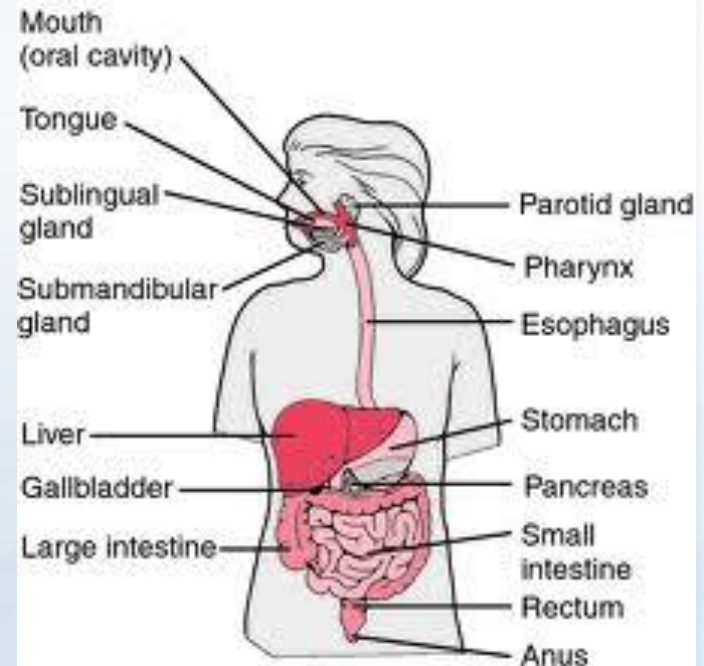
# 2. The digestive system (I)

## THE ALIMENTARY CANAL

Is a **long tube** that runs through the body.

It consists of several organs:

1. The **mouth**
2. The **pharynx** (or throat)
3. The **oesophagus**
4. The **stomach**
5. The **small intestine**
6. The **large intestine**
7. The **anus**



## 2. The digestive system (I)

### DIGESTIVE GLANDS

- ✓ Our **DIGESTIVE GLANDS** produce **DIGESTIVE JUICES** and release them inside the alimentary canal.
- ✓ Some digestive glands are microscopic. They are found on the walls of the **stomach** and **small intestine**.
- ✓ Other digestive glands are bigger. They release their juices into the alimentary canal through small tubes.
- ✓ The **salivary glands** produce saliva, the **liver** produces bile, and the **pancreas** produces pancreatic juices.

A **GLAND** is an **organ** that **produces substances** that our body needs.

## 2. The digestive system (I)



**1. What are the three functions of the digestive system?**

**2. What do the salivary glands, the liver and the pancreas produce?**

## 2. The digestive system (I)

### DIGESTION

- ✓ Is the process of **transforming the food** we eat **into the nutrients** for our body.
- ✓ Digestion starts in the mouth, moves into the stomach and continues in the small intestine.
- ✓ After food is completely digested, our body **absorbs** the nutrients.
- ✓ These **nutrients pass into the blood.**

# 2. The digestive system (I)

## TYPES OF DIGESTION

### MECHANICAL DIGESTION

✓ We **chew** our **food** **into small pieces** in the **mouth**. Muscles in our body move the food into the stomach and intestines.

### CHEMICAL DIGESTION

✓ **Digestive juices** from the glands **convert our food into nutrients** for our body to absorb.



## 2. The digestive system (I)



**3. What is digestion?**

**4. Which are the two types of digestion?  
Explain them.**

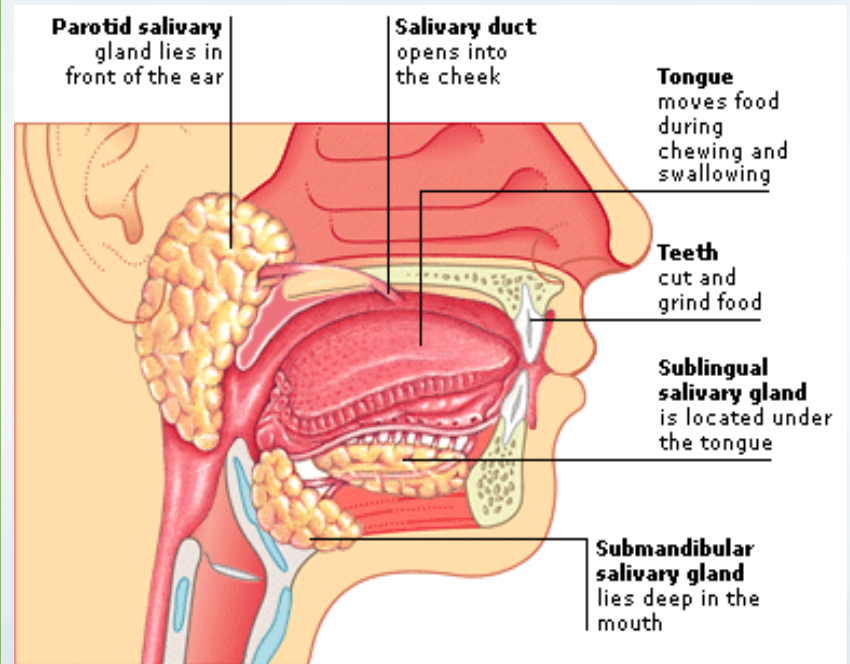


# 3. The digestive system (II)

The mouth is made of:

1. **Teeth** which we use to **chew** food.
2. The **tongue** which is made of **muscles** that move our food around the mouth and mix it with saliva.
3. Three pairs of **salivary glands** that make **saliva**. Saliva is a **digestive juice** that softens our food and starts the process of digestion.

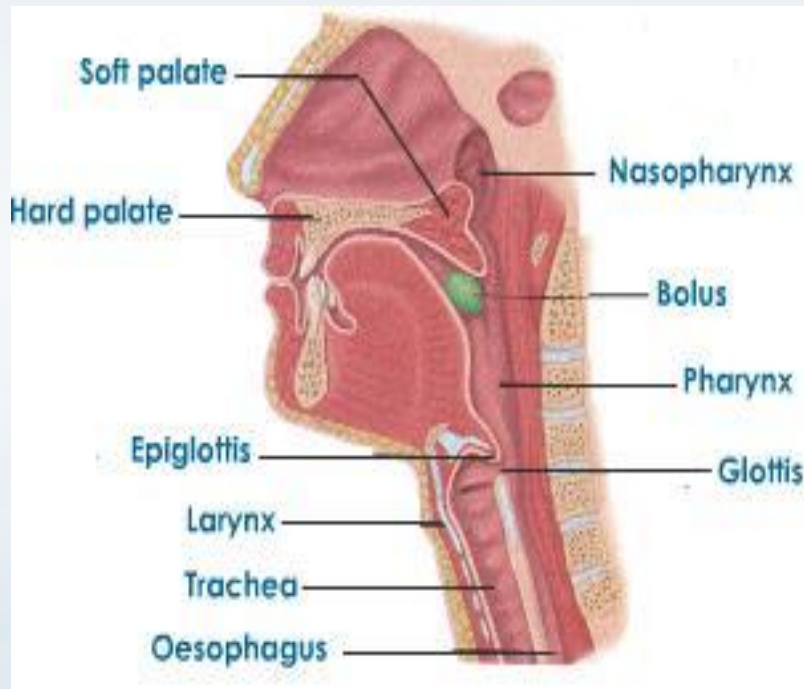
## THE MOUTH



The **mouth** is the opening to the **alimentary canal**.  
We use our **jaw** to open and close our mouths.

# 3. The digestive system (II)

## From the mouth to the stomach



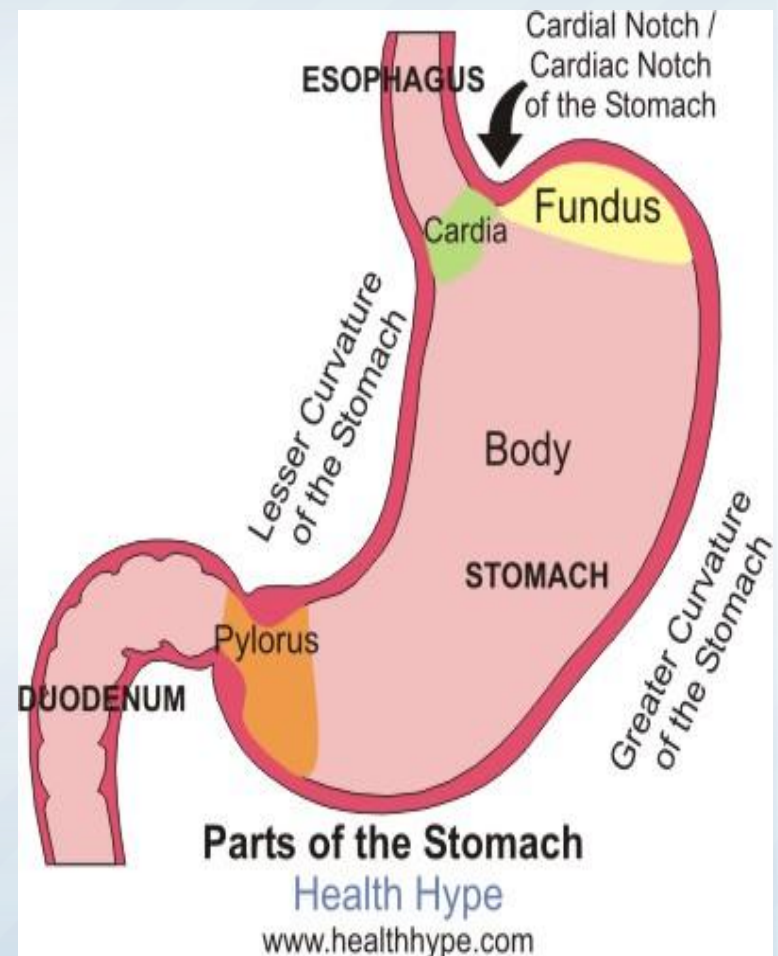
1. After we have chewed our food the tongue pushes it from the mouth to the **pharynx**.
2. In the pharynx the alimentary canal and the **respiratory tract** separate.
3. From the pharynx, food moves down the **oesophagus**.

The oesophagus is a **muscular tube** that leads to the **stomach**.

# 3. The digestive system (II)

✓The **stomach** is shaped like a bag. It has microscopic digestive glands that manufacture **gastric juices**. These juices are strongly acidic. They dissolve our food.

✓Food stays in our stomach for about **two hours**. The stomach muscles contract to mix the food with gastric juices and change the food into **pulp**. It then passes into the small intestine.



# 3. The digestive system (II)



**1. What does the mouth contain?**

**2. What happens to the food in the stomach?**

# 3. The digestive system (II)

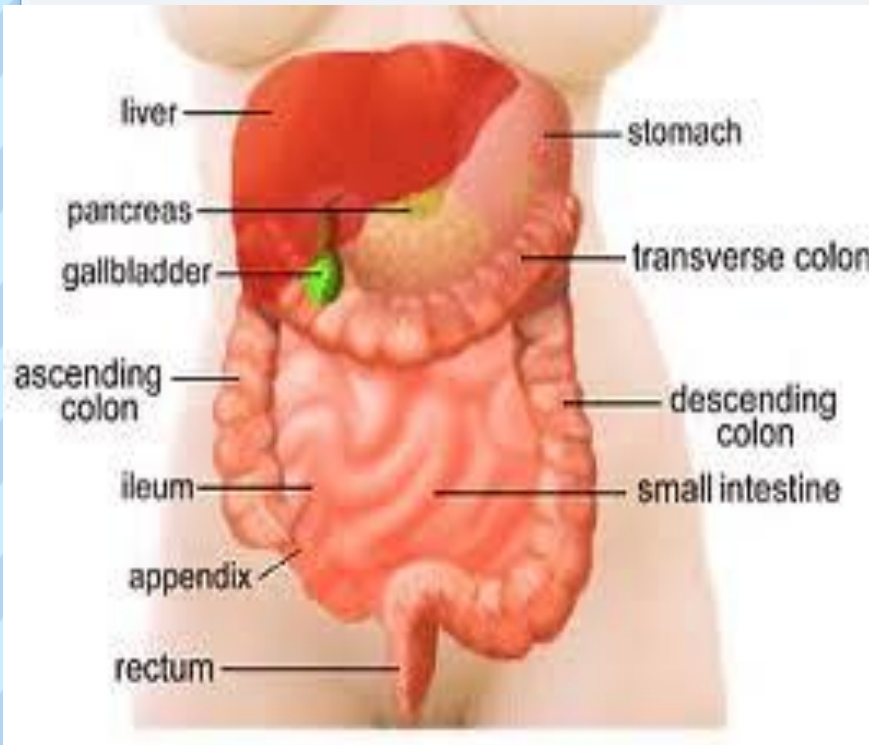
## The small intestine

- The small intestine is a **long narrow tube** connected to the stomach.
- It contains glands that produce **intestinal juices**.
- Your **liver** and **pancreas** also produce digestive juices. These juices are released into the small intestine.
- The inside of the small intestine is covered by a membrane containing small **blood vessels**.
- Nutrients from digestion are very small and they can *pass through* this membrane into the blood vessels.

This process is called **intestinal absorption**.

# 3. The digestive system (II)

## The large intestine



- The substances in the food pulp that are not useful for our body pass into the **large intestine**.
- It is **wider** and **shorter** than the small intestine.
- The large intestine absorbs most of the water from the food pulp and the digestive juices.
- This pulp becomes solid and is expelled from the body as **excrement**.



# 3. The digestive system (II)



**3. What is intestinal absorption?**

**4. Describe the function of the large intestine.**



# 3. The digestive system (II)

## ORAL HYGIENE



- **Microbes** live inside our mouth and consume the food left between our teeth.
- These microbes manufacture substances that produce cavities in our teeth. This is called **tooth decay**.
- To avoid tooth decay, it is important to brush our teeth after every meal and after eating sweet foods.