



GD GOENKA PUBLIC SCHOOL

SECTOR-48 GURUGRAM

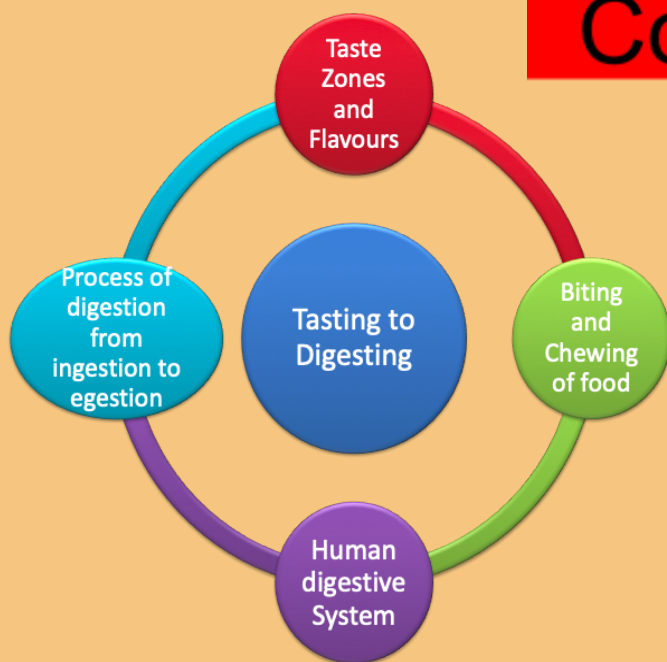
CLASS - V

SUBJECT- E.V.S

CH – FROM TASTING TO DIGESTING {HANDOUT}

\*\*\*\*\*

# Concept Notes



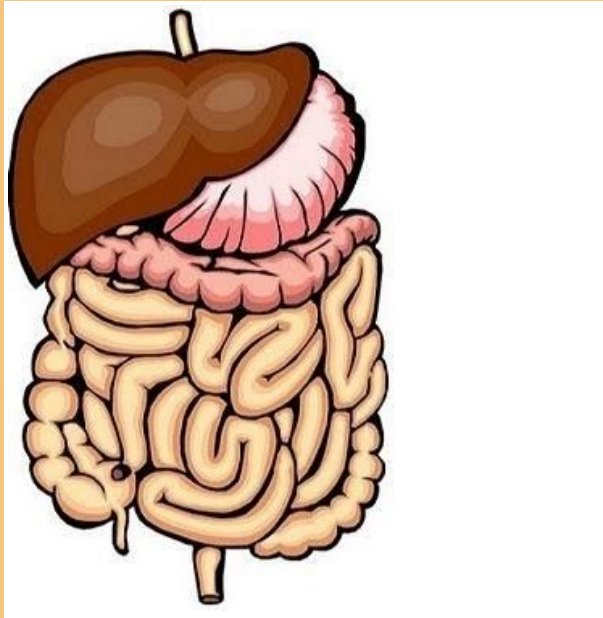
MINDMAP -1

1. **Taste buds:** they are sensory organs that are found on your tongue and allow you to experience tastes that are sweet, salty, sour, and bitter. An average person has about 10,000 taste buds and they're replaced every 2 weeks.



Different Taste zones

2.



**Digestion is the process of converting complex food into simpler form so that it gets assimilated in the body and provides energy and nutrients to the body. It involves:**

- **Ingestion**
- **Digestion**
- **Absorption**
- **Assimilation**
- **Egestion**

**The five steps of nutrition in correct sequence are:**

**1) Ingestion** - It includes the processes that take place while the food is in the mouth (such as chewing and grinding) and swallowing of the food - which sends it onward down the digestive tract.

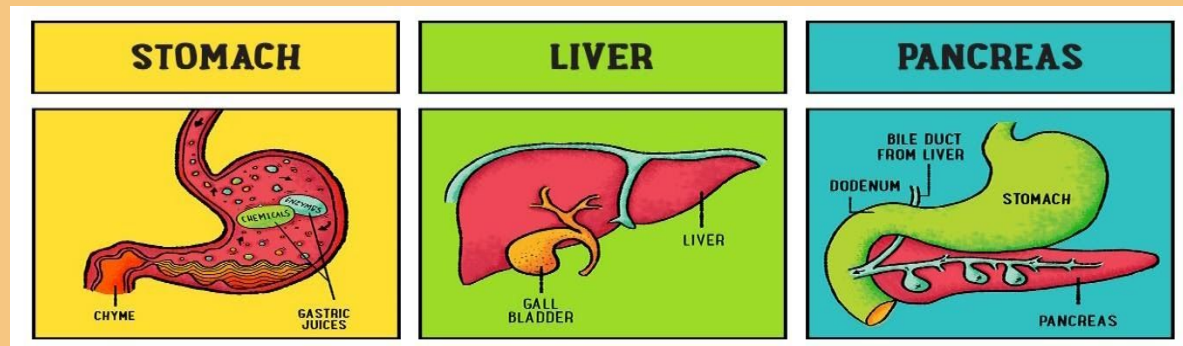
**2) Digestion** - It is the process of breaking down food into simpler substances that can then be absorbed and assimilated into the tissues of the body.

**3) Absorption** - The digested food is absorbed into the bodily fluids from the alimentary canal. The process of absorption takes place in the small intestine with the help of villi (they are minute finger-like processes lined against the walls of the small intestine).

**4) Assimilation** - the process by which chemicals from food are taken into the cells of the body after digestion and absorption. The food is absorbed by blood is transported to various parts of the body by the blood vessels.

**5) Egestion** - the process of removing the undigested food material from the body through the anus.

# DIGESTIVE SYSTEM



- We eat food to get energy.
- The food we eat cannot be absorbed directly. It needs to be digested.

## MINDMAP -1

### MOUTH

- Teeth chew and grind the food.
- Saliva changes starch into sugar

### Food Pipe

- Carries food from mouth to stomach

### Small Intestine

- Digestion is completed and food is absorbed

### Large Intestine

- Absorption of water takes place here.

### Liver

- Secretes digestive juice called bile, helps in digestion of Fats.

### Pancreas

- Secretes digestive juices in small intestine, helps in digestion of carbohydrates, proteins and fats.

### Anus

- Undigested solid waste is passed out as stool.

## Stomach

- Food is churned and mixed with gastric juices



## POINTS TO PONDER

- **Bolus:** a small rounded sticky substance. Especially of chewed food at the moment of swallowing.
- **Peristalsis:** it is a process of contraction and relaxation of the muscle around parts of the alimentary canal. In the oesophagus, **peristalsis** pushes the ball of food down the oesophagus. The smooth muscle of the oesophagus contracts and relaxes in sequence, and this pushes the ball of food down the oesophagus.
- **Bile:** It is a yellow-green fluid that is made by the liver, stored in the gallbladder. It helps in the digestion of fat.

## ORS { ORAL REHYDRATION SOLUTION}

- During sport events, players are given a glass of glucose water {glucose dissolved in water} to give them instant energy.
- When a person is suffering from dehydration or weakness due to illness, stress or surgery, a glucose solution is directly injected into the



patient's blood through a drip. This is called **glucose drip**. It gives instant energy to the patient.

**Mouth:** The mouth is the beginning of the digestive tract. In fact, digestion starts here as soon as you take the first bite of a meal. Chewing breaks the food into pieces for easy digestion, while saliva mixes with food to begin the process of breaking it down into a form that your body can absorb and use.

**Throat:** Also called the pharynx, the throat is the next destination for food you've eaten. From here, food travels to the oesophagus or swallowing tube.

**Stomach:** The stomach is a sac-like organ with strong muscular walls. In addition to holding the food, it's also a mixer and grinder. The stomach secretes various digestive juices that continue the process of breaking down the food. When the food leaves the stomach, food takes the form of a liquid or a paste. From there the food moves to the small intestine.

**Small Intestine:** Most of the nutrients are absorbed in small intestine, here food is further broken down by enzymes which are released from the pancreas and bile from the liver. Anything which is left in the small intestine moves to the large intestine which is known as colon.

**Large Intestine:** It is much wider and shorter than small intestine. It absorbs water from the food wastes and carries it to kidneys. This water from the kidneys goes out of our body as urine. The remaining solid waste goes out of the body as stool.



\*\*\*\*\*

### ORS { ORAL REHYDRATION SOLUTION}

- ❑ During sport events, players are given a glass of glucose water {glucose dissolved in water} to give them instant energy.
- ❑ When a person is suffering from dehydration or weakness due to illness, stress or surgery, a glucose solution is directly injected into the patient's blood through a drip. This is called **glucose drip**. It gives instant energy to the patient.