

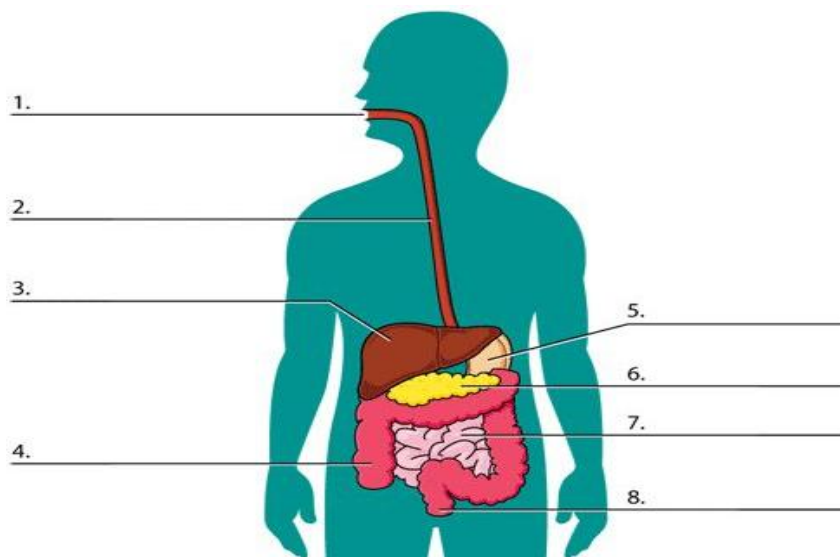
**The Digestive System**

**Digestion:** is the process by which nutrients are broken down into simple molecules that can be absorbed into the bloodstream.

<b>Chemical</b>	<b>Physical (Mechanical)</b>
Using ENZYMES	Chewing / Grinding (MOUTH) Churning the food (STOMACH & OESOPHAGUS)

**Functions of the digestive system:**

1. Food is broken down into smaller pieces
2. Nutrients are absorbed into the bloodstream to be used by the body
3. Waste is egested



**Juices in the digestive system (contain ENZYMES)**

1. Stomach → GASTRIC juice	2. Mouth → Saliva
3. Pancreas → pancreatic juice	4. Intestine → intestinal juice

**Chemical Digestion:**

Enzyme	Substrate	Product
1. Amylase	Starch	Maltose (or Glucose)
2. Pepsin	Protein	Amino acids

Parts of the digestive system	Function
<b>1. Mouth</b>	Physical digestion – teeth Chemical digestion – salivary amylase
<b>2. Oesophagus</b>	Food from mouth → stomach PERISTALSIS – wave like muscular contractions
<b>3. Stomach</b>	Physical digestion – churns Chemical digestion → pepsin converts protein into amino acids pH 2
<b>4. Small intestine</b>	Bile made in the liver flows into the intestine – EMUSLIFY fats. Absorption of nutrients - villi to increase absorption
<b>5. Large intestine</b>	Small intestine → anus Absorbs water + eliminates waste

**How to maintain a healthy digestive system?**

Increase intake of fibre – RDA 30g, Drink lots of water – RDA 8 glasses,  
Reduce alcohol consumption, Visit doctor with stomach complaints e.g. stomach ulcers