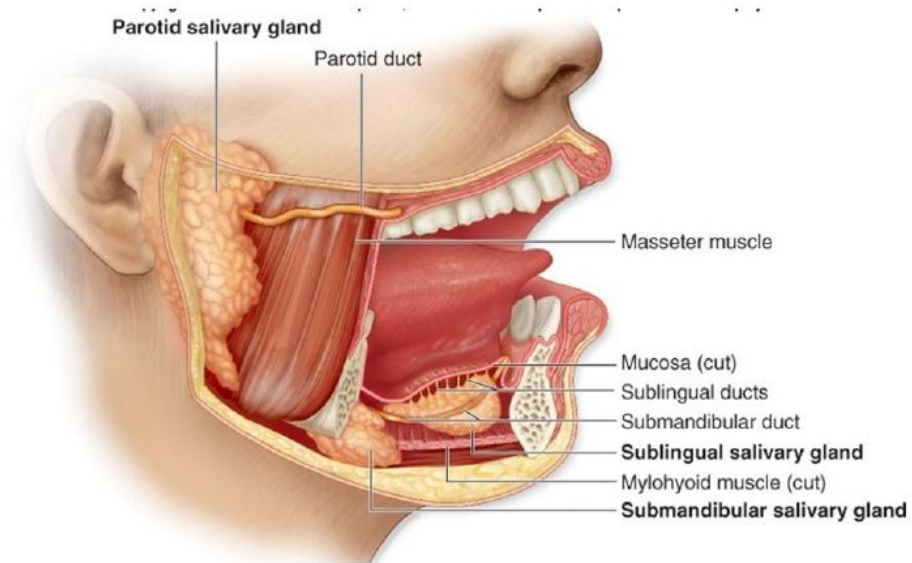


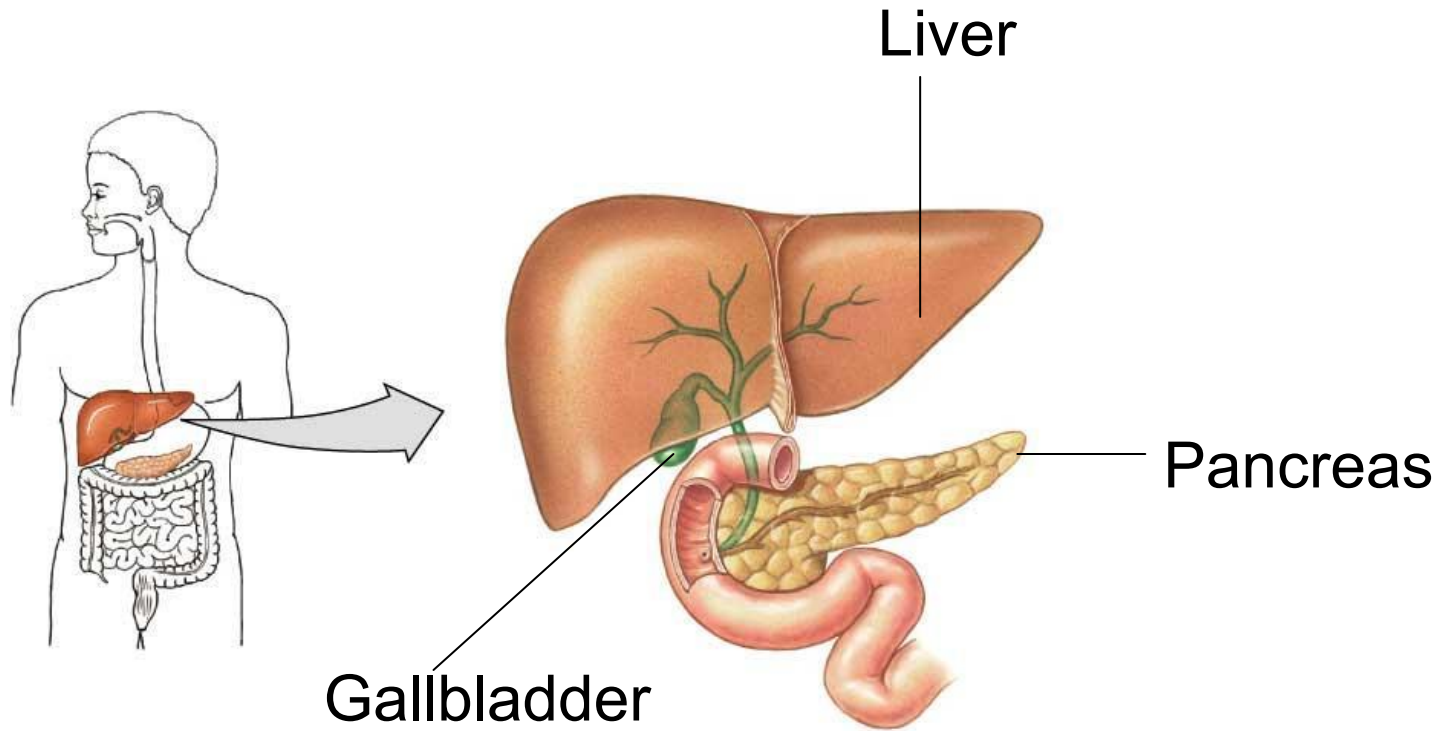
The Digestive System

Accessory Organs

Salivary Glands

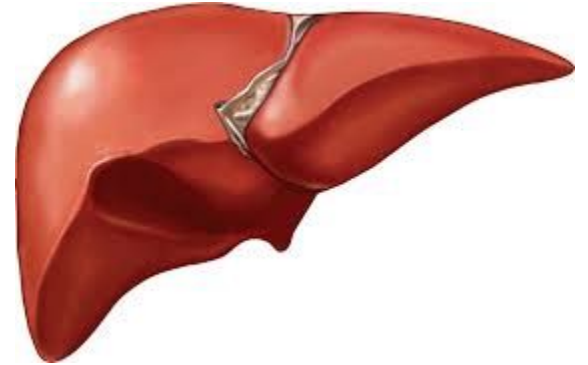
- 3 main salivary glands in your mouth release saliva
- Saliva contains the enzyme amylase which breaks down starch into maltose and glucose





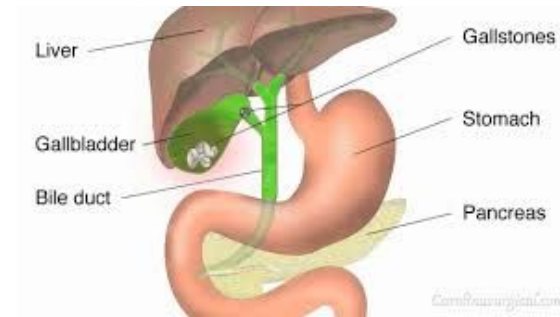
Liver

- Produces bile
 - Bile breaks down fats
- Liver filters the blood
 - Extracts toxins and prepares nutrients for circulation
- Stores glucose as glycogen



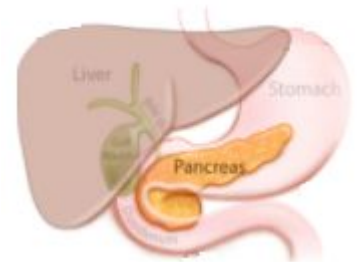
Gallbladder

- Found on underside of the liver
- Stores and concentrates bile from liver
- When fats enter duodenum, duodenum releases hormone CCK
 - CCK tells gallbladder to send bile to duodenum to digest fats



Pancreas

- When chyme enters small intestine, duodenum releases hormone secretin
 - Secretin tells pancreas to release sodium bicarbonate
 - Neutralizes chyme and makes small intestine basic
- Also secretes digestive enzymes that work best at high pH
 - Lipases (fats), proteases (proteins) and carbohydrases (carbohydrates)
- Secretes insulin to regulate blood sugar



Enzyme or secretion	Secreted/ Produced By	Present and Active In	Nutrient acted upon (if applicable)
Pepsin	Stomach	Stomach Only active at low pH	Protein
Bile	Liver	Stored in gallbladder Active in small intestine	Fats
Amylase	Salivary Glands	Mouth/Saliva	Starch
HCl	Stomach	Stomach	provides the proper pH for pepsin
Carbohydrase	Pancreas	Small Intestine	Carbohydrates
Lipase			Fats
Protease			Proteins