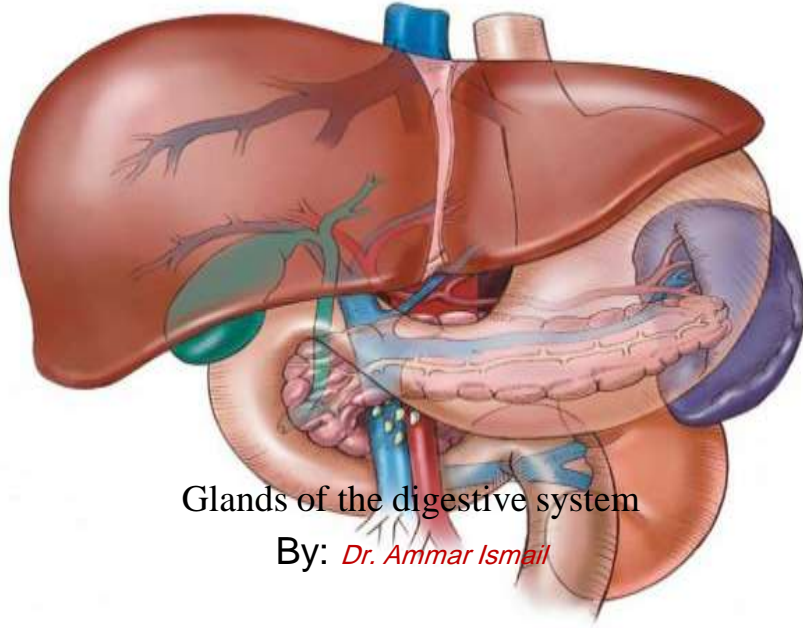


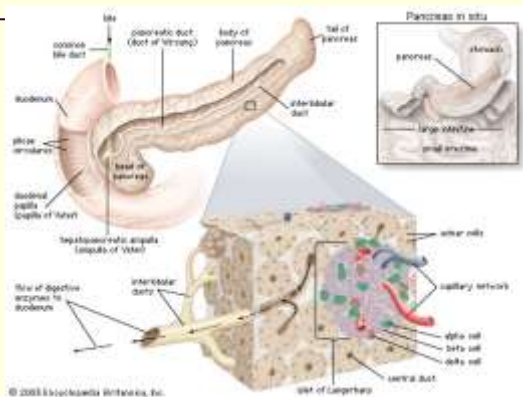
Histology



Pancreas

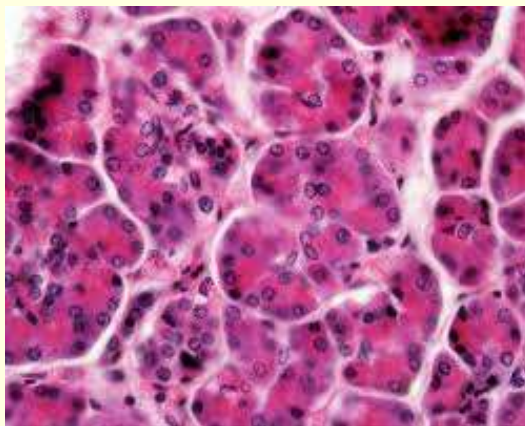
The pancreas is an exocrine gland that produces digestive juices(amylase, lipase ,trypsin) and an endocrine gland that manufactures hormones .

Its compound tubuloacinar gland surrounded by capsule which gives trabiculi to divides the parenchyma into lobules which contain two types of secretory unit.



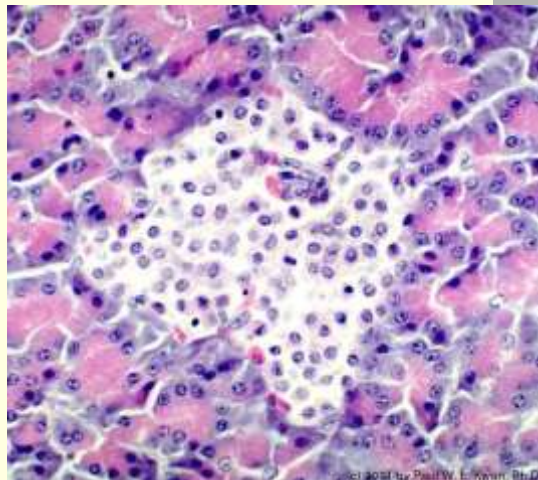
Pancreas

- *1 – Exocrine units : (acini)*
- *The pancreatic acini is spherical shape formed from cuboidal cells have central nuclei . the acini of pancreas have no basket cells (myoepithelial cells).*
- *The duct system of pancreas begins with in the center of acinus which open to the intercalated duct which composed of pale low cuboidal , intercalated ducts join each other to form larger interlobular ducts lined by stratified cuboidal epithelium and this lead to interlobular ducts , also these later duct connect into main pancreatic duct which join the common bile duct before opening in the duodenum .*



Pancreas

- 2 – Endocrine units :
- Its composed of spherical aggregates of cells , known as islets of langerhans, that are scattered among the acini . There are five cell types composing the islets of langerhans :Alpha , Beta , Delta , PP cells and G-cells These cells cannot be differentiated from each other by rotten histological examination . These five cells types responsible for synthesis, Insulin , Glacogon , somatostatine , Gastrin , pancreatic polypeptide .



Liver :

- *The liver is a largest gland in the body its surrounded by mesothelium .The connective tissue capsule extend into the gland and divided it into lobes and lobules . The parenchyma of liver is consist of epithelial cells of endodermal origin, the hepatocytes arranged in anastomosing rows separated by sinusoids converging on the central vein , the sinusoids are lined with fenestrated endothelial cells and macrophages (Kupffer cells).*
- *The bile is secreted by each hepatocytes into the bile canaliculi , that are lined with the plasma membrane of the hepatocytes between adjacent liver cells . Its flows from there the bile ducts are lined with cuboidal epithelium in the portal areas .*
- *Note : The smallest functional unite of liver is acini .*

