

Digestive System Anatomy

You should be able to identify the following structures and organs in the human models and in figures and diagrams.

Mouth and Pharynx

Hard palate	Parotid duct
Soft palate	Nasopharynx
Uvula	Oropharynx
Sublingual gland	Epiglottis
Parotid gland	
Submandibular glands	

Esophagus

Cardiac and pyloric sphincters

Stomach

Cardia	Cardiac sphincter
Fundus	Pyloric sphincter
Pylorus	Greater and lesser omenta
Greater curvature	Rugae
Lesser curvature	

Small intestine

Duodenum	Villi
Common bile duct	Mesentery
Hepatopancreatic ampulla	Jejunum
Hepatopancreatic sphincter	Ileum
Plicae circulares	Ileocecal valve

Liver and gall bladder

Lobe	Common hepatic duct
Falciform ligament	Cystic duct
Hepatic portal vein	

Pancreas

Pancreatic duct
Observe spleen in close proximity to pancreas

Large Intestine

Cecum	Sigmoid colon
Appendix	Rectum
Ascending colon	Anus
Transverse colon	Haustra
Descending colon	Internal and external anal sphincters

Digestive system histology

Identify the following structures and features of the digestive tract using the lab manual atlas, lab electronic resources, and prepared microscope slides.

Tooth

enamel
dentine
pulp cavity

Salivary glands

Secretory units: mucous cells and serous demilunes
Duct

Esophagus

Mucosa: stratified squamous epithelium, lamina propria, muscularis mucosae.
Submucosa: esophageal glands may be visible.
Muscularis externa: there will probably be a combination of smooth and skeletal muscle.
Adventitia: note that esophagus has no serosa.

You should be able to ID a slide of the gastroesophageal junction.

Stomach

Mucosa: simple columnar epithelium, note goblet cells; gastric pits; lamina propria.
- gastric glands: note general area where mucous neck cells, parietal cells, chief cells, enteroendocrine cells are present
- lamina propria
- muscularis mucosae
Submucosa
Muscularis externa: view oblique, circular, longitudinal smooth muscle layers.
Serosa

Small intestine

Mucosa: villi, simple columnar epithelium, goblet cells, intestinal crypt; note lamina propria with capillaries and lacteals
Submucosa: Peyer's patches and duodenal glands
Muscularis externa: circular and longitudinal smooth muscle layers

Liver

Lobule: central vein, triad region.
Hepatocytes
Sinusoids: try to ID Kupffer cell.

Pancreas

Acini

Ducts

Islets of Langerhans

Large intestine

Mucosa: simple columnar epithelium with large numbers of goblet cells; also should be able to differentiate from small intestine

Submucosa

Muscularis externa: circular and longitudinal smooth muscle layers.

Examine slide of colo-rectal junction noting the transition from simple columnar epithelium of mucosa to stratified squamous epithelium