



- Stomach is composed of the following:

• **Cardia:**

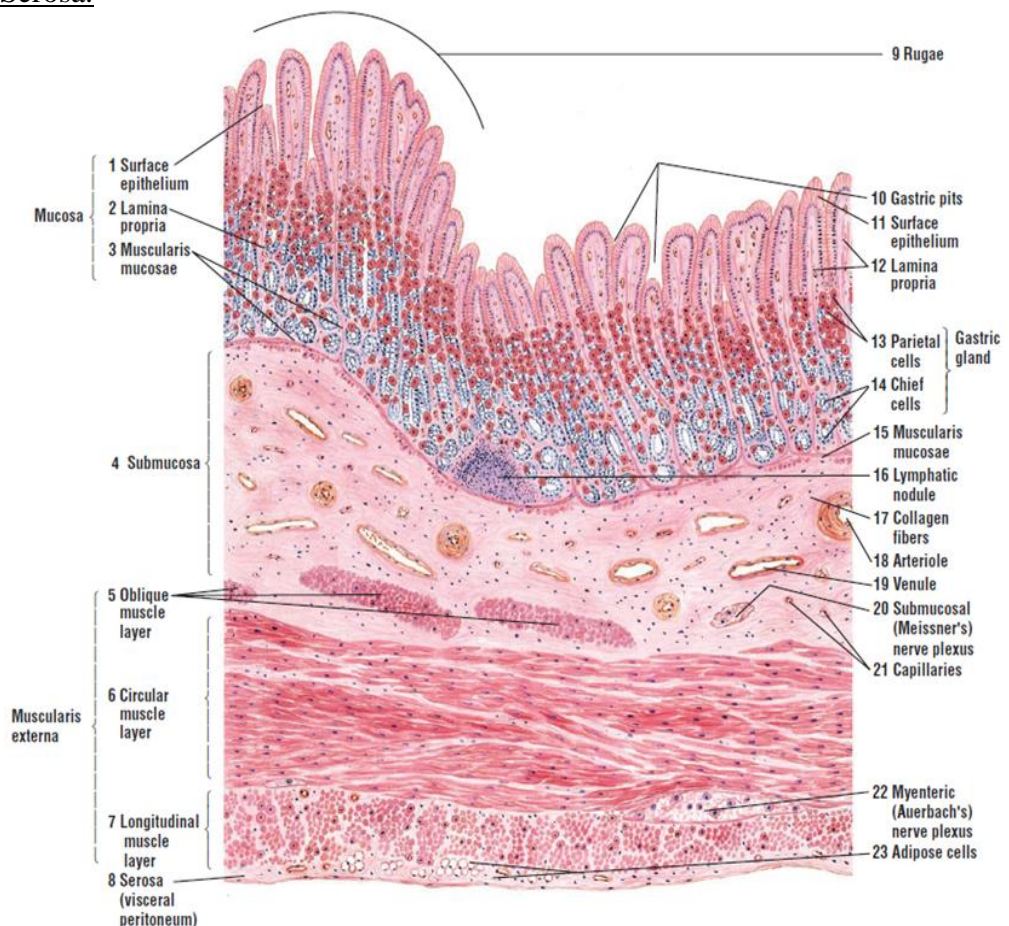
- ✓ Mucosa: the epithelium is mucus secreting simple columnar. **Cardiac glands (which secrete mucus) are found in the lamina propria.** The muscularis mucosae is of two layers (inner circular & outer longitudinal).
- ✓ Submucosa: dense connective tissue with blood vessels and submucosal plexuses.
- ✓ Muscularis externa: myenteric plexuses are found.
- ✓ Serosa.

• **Fundus & body:**

- ✓ Mucosa: the epithelium is mucus secreting simple columnar with **shallow gastric pits. Gastric glands are found between the lamina propria.** Gastric glands are composed of many cell types (parietal & mucous neck cells in the upper portion + chief zymogenic cells in the lower portion). The muscularis mucosae is of two layers (inner circular & outer longitudinal).
- ✓ Submucosa: no glands. Dense connective tissue with blood vessels and submucosal plexuses.
- ✓ Muscularis externa: **inner oblique, middle circular & outer longitudinal muscle fibers. Myenteric plexuses are found.**
- ✓ Serosa.

• **Pylorus:**

- ✓ Mucosa: the epithelium is mucus secreting simple columnar with **deep gastric pits. Pyloric glands (which secrete mucus) are found in lamina propria.**
- ✓ Submucosa: no glands. Dense connective tissue with blood vessels and submucosal plexuses.
- ✓ Muscularis externa: **thickening of the circular smooth muscle to form the pyloric sphincter.**
- ✓ Serosa.





- **Duodenum:**

- **Mucosa:** it is composed of villi. These villi are lined with simple columnar epithelium with brush border & goblet cells. Intestinal glands are found in the lamina propria. The muscularis mucosa separates the mucosa from the underlying submucosa.
- **Submucosa:** duodenal (Brunner) glands are found. In addition there are blood vessels & submucosal plexuses.
- **Muscularis externa:** composed on inner circular & outer longitudinal smooth muscle fibers between them are the myenteric plexuses.
- **Serosa.**

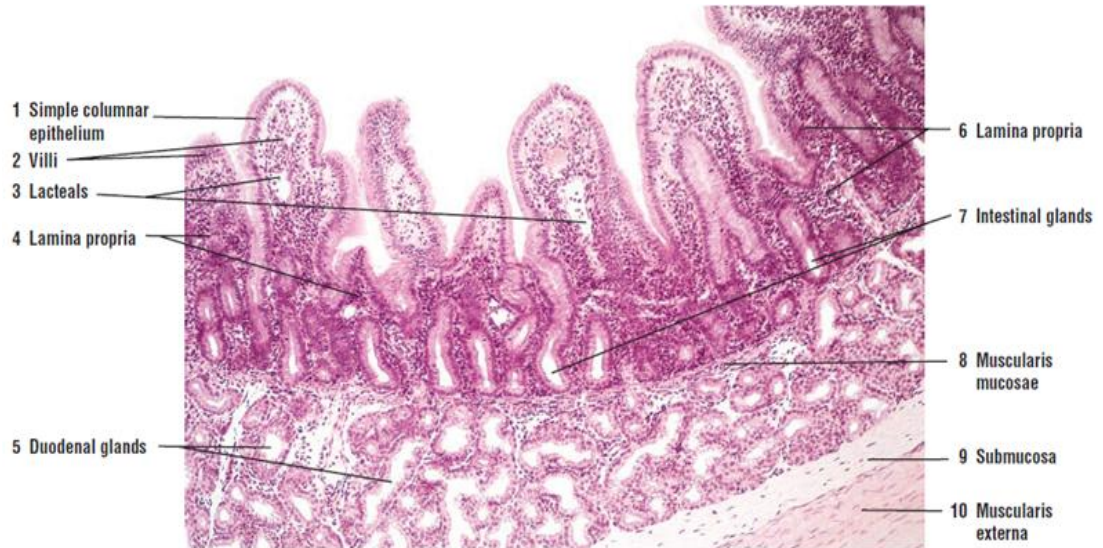


FIGURE 13.2 ■ Small intestine: duodenum (transverse section). Stain: hematoxylin and eosin. ×25.