8.11: Cecum and large intestine

Similar to the stomach, the cecum and large intestine have a wide variation in size, shape and function in domestic species. In species such as the cat, the cecum is small and relatively inconspicuous, whereas species such as the horse and rabbit have large, well-developed ceca. This is largely attributed to function: the horse and rabbit are hindgut fermenters. Regardless of the functional and gross anatomic variations, the mucosas of the cecum and large intestine of most species are histologically similar.

Unlike the small intestine, the cecal and large intestinal mucosa lack villi. Instead, the mucosa is composed of densely arranged straight tubular glands (colonic glands). Colonic glands are lined by enterocytes and goblet cells (see small intestine) with a much higher density of goblet cells than in the small intestine. The base (crypts) of the glands are analogous to the small intestinal crypts of Lieberkuhn and epithelial proliferation occurs in this population of epithelial cells.

Similar to the ileal Peyer’s patches, the cecum and large intestine contains abundant, well-organized lymphoid tissue in the mucosa.

The rectal mucosa is similar to the large intestine in histologic appearance.

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**FIGURE(S):** Colon