Matric number:16/mhs06/025

**Similarities:**

* The oral cavity,esophagus and the anal canal are lined straitified squamous epithelium while the stomach,small intestine and large intestine are line by simple columnar epithelium.
* The protective mucosa is characterized by stratified squamous epithelium.It is found in the oral cavity,esophagus and the anal canal.
* The absorbtive mucosa is found both in the small and large intestine.
* Both the oral cavity and the esophaguses have straitified squamous epithelium which is non-keratinized.
* Both the esophagus and the anal canal has skeletal muscle.
* Glands are present within the mucosa of both the stomach and that of the intestine.

**Differences Of The GIT**

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| --- | --- | --- | --- | --- |
|  | MUCOSA | SUBMUCOSA | MUSCULARIS | SEROSA |
| **Oral Cavity** | Epithelial lining ; Alamina propria of loose connective tissues rich in blood,lymph vessles and smooth muscle cells.Straitified squamous keratinized or non-keratinized epithelium (anucleated). | Dense connective tissues with many blood and lymph vessels and may also contain salivary glands | Contains smooth muscle cells divide into 2 layers;internal(Circular) and external(longitudinal).  | Thin layer of loose connective tissue rich in blood and lymph vessels and adipose and single squamous covering epithelium(mesothelium). |
| **Esophagus** |  Straitified squamous epithelium,non-keratinized | Small mucus glands  | Smooth and skeletal muscle.Connective tissue of the submucosa consist of mostly collagenous fiber with smooth elastic fibers and submucosa sero-mucous glands. | Adventitia Smooth muscle |
| **Stomach**  | Secretory mucosa(surface mucous cells),simple columnar epithelium and it is thrown into evolution called gastric folds and gastric glands. | Nerve plexus,smooth connective tissue. | Outer and inner smooth muscle(longitudinal,circular and oblique),myenteric plexus.  | connective tissue,Mesoderm |
| **Small Intestine**  | Simple columnar epithelium;Absorbtive mucosa contains the crypts and the villi,glands are also present here | Glands are present, irregular connective tissue,intestinal villi,crypt,lamina propria  | Capillaries,smooth muscle (inner circular,outer longitudinal) | Smooth membrane consisting of thin layers of cells, |
| **Large intestine** | Simple columnar epithelium with brush borders and different goblet cells,Absorbtive and protective mucosa specializes in water absorption and mucous secretion,no villi but has crypt which are straight and unbranched and largely with goblet cells | Intestinal glands | Smooth muscle | Adventitia connective tissue  |
| **Anal Canal** | Straitified squamous epithelium (keratinized) and has somatic ending,it is cuboidal in the transitional zone and above it.Skeletal muscle present | Columnar zone ;the lumen has folds of mucous membranes.extensive plexus of hemorrhoidal vessels. | Inner circular muscularis externa. | Outer Adventitia. |