**MATRIC NUMBER : 16/MHS06/010**

 **MLS 408 ASSIGNMENT**

**In a tabular form only, compare and contrast sections of the Gastrointestinal tract.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **SIMILARITIES BETWEEN ALL THE SECTIONS**  **OF THE GASTROINTESTINAL TRACT**They all aid in the :* Digestion of food
* Secretion of digestive juices
* Absorption of water, salts, vitamins and end products of food digestion
* Excretion of waste products
* Lined by a mucous membrane

**DIFFERENCES :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/N** | SECTIONS OF THE  GIT | GENERALFUNCTIONS | EPITHELIAL  LINING |  STRUCTURE | DISEASES |
|  |  |  |  |  |  |
| **1.** | Oral Cavity | Food particles are mixed with saliva, which lubricates them and initiates their digestion. | Mucous membrane (the oral mucosa) consisting of a stratified squamous epithelium, which may or may not be keratinized, and an underlying connective tissue layer, the lamina propria. | Oral Cavity Definition, Anatomy, Functions, Diagram | * Tooth decay
* Oral cancer
* Gum disease
 |
| **2.** | Esophagus |  Transports food from the pharynx to the stomach. | Stratified squamous epithelium and has a prominent muscularis mucosa and thick muscularis externa. The muscularis externa of the esophagus is unique in that it transitions from striated to smooth muscle over the length of the tube. | **Esophageal Cancer - Types, Risk factors, Symptoms, Diagnosis ...** | * GERD (gastroesophageal reflux disease).
* heartburn,
* Esophageal cancer, and
* Eosinophilic esophagitis
 |
| **3.** | Stomach | The site where food is mixed with gastric juice and reduced to a fluid mass called chime. | The inner surface of the stomach is lined by a mucous membrane known as the **gastric mucosa** which contains the glands and the gastric pits.. Simple columnar **epithelium**, lamina propria, and the muscularis mucosa. | The structure of the human stomach Royalty Free Vector Image | * Gallstones
* Celiac Disease
* Crohn's Disease
* Ulcerative Colitis
* Irritable Bowel Syndrome
* Hemorrhoids
* Diverticulitis
 |  |
| **4.** | Small Intestine | Responsible for the continued digestion and absorption of the GI tract contents. | Simple columnar epithelium which consists primarily of absorptive cells (enterocytes), with scattered goblet cells and occasional enteroendocrine cells.  | **Structure of the small intestine** | * + Bleeding.
	+ Celiac disease.
	+ Crohn's disease.
	+ Infections.
	+ Intestinal cancer.
	+ Intestinal obstruction.
	+ Irritable bowel syndrome.
	+ Ulcers, such as peptic ulcer.
 |
| **5.** | Large Intestine | Absorbs water and concentrates waste material that is formed into feces. | Simple columnar **epithelium**. Instead of having the evaginations of the small **intestine** (villi), the **large intestine** has invaginations (the **intestinal** glands). | Easy Notes On 【Large Intestine】Learn in Just 4 Minutes ... | * Hirschsprung's disease
* Constipation
* Diarrhea
 |
| **6.** | Rectum | Stores the feces. |  The mucosa has the typical intestinal epithelium with simple columnar enterocytes and numerous goblet cells. At the anal transitional zone the columnar epithelium flattens more and more and eventually becomes stratified squamous non-keratinized epithelium. | Rectum: Anatomy, histology, function | Kenhub | * Irritable bowel syndrome,
* Constipation,
* Hemorrhoids,
* Anal fissures,
* Abscess,
* Colitis,
* Polyps and
* Colon cancer.
 |
| **7.** | Anal canal | Feces pass out of the rectum, through the anus, and out of the body | The anal canal is mainly lined by stratified [squamous epithelium](https://www.sciencedirect.com/topics/medicine-and-dentistry/squamous-epithelium).At its upper end, the anal canal is lined by [columnar epithelium](https://www.sciencedirect.com/topics/medicine-and-dentistry/columnar-epithelium) identical to that of the rectum.  This changes to a non-keratinizing stratified squamous type at the level of the pectinate (or dentate) line. | Perineum – Anal Triangle - ppt video online download | * Anal fissure
* Peri-anal abscess
* Acutely prolapsed thrombosed piles
* Peri-anal haematoma.
 |

 |