

Al-Mustaqbal University College
Department of Pharmacy
First Stage
Medical Terminology
Lecture: 4



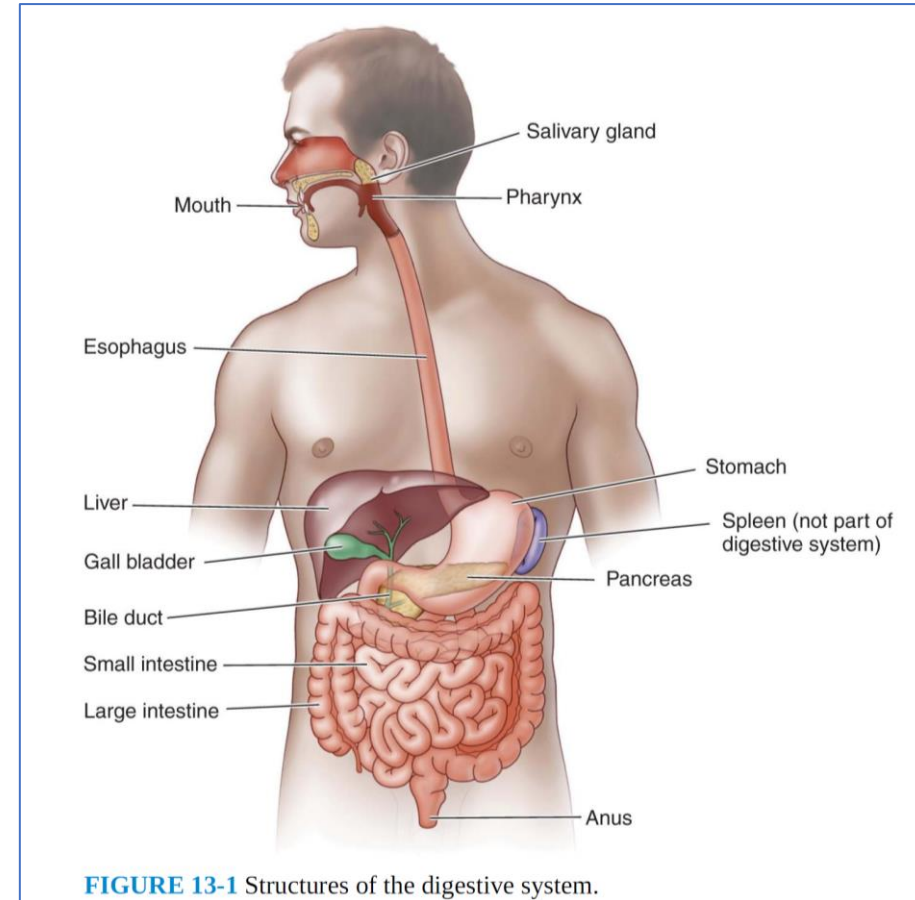
GASTROINTESTINAL TRACT

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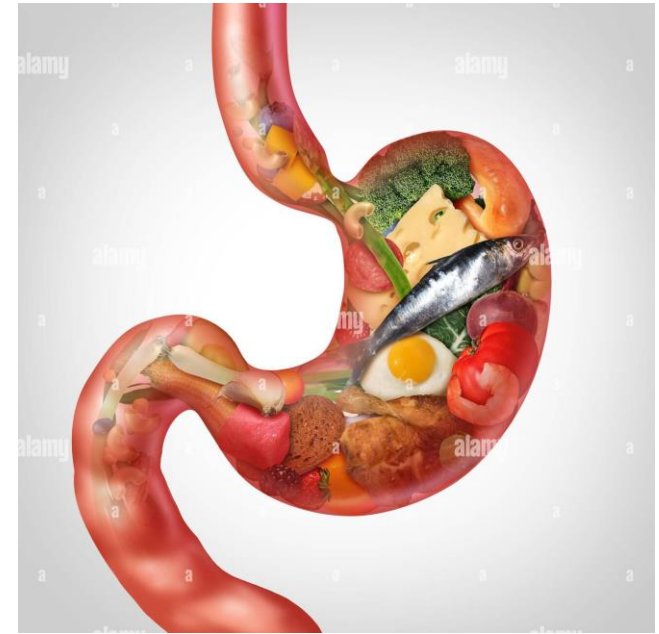
GASTROINTESTINAL TRACT

- **GIT** is responsible for **digestion** and **elimination**.
- It has two major components:
 1. **Alimentary canal** (also called the GI tract) that includes: the mouth, pharynx, esophagus, stomach, intestines, rectum, and anus.
 2. **Accessory GI organs** that include: the liver, gallbladder, biliary duct system, and pancreas.



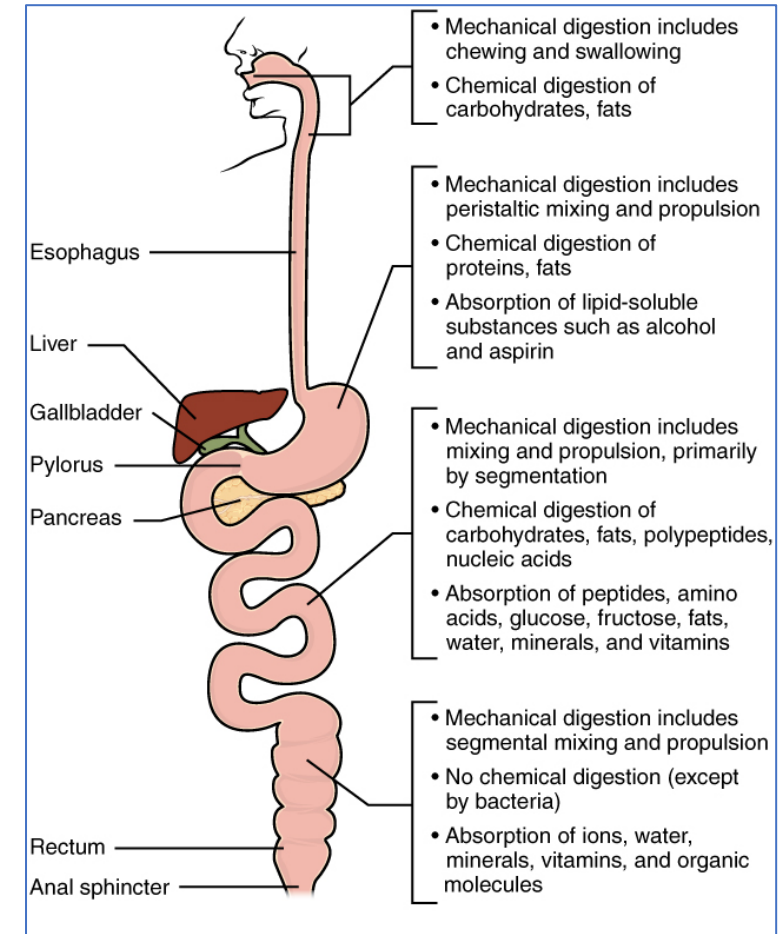
GASTROINTESTINAL TRACT

- The two **major functions** for both of the alimentary tract, and the accessory organs, are:
 1. **Digestion:** the breakdown of food into simple chemicals that can be absorbed into the bloodstream and transported through the peristalsis (the rhythmic contraction and relaxation of smooth muscle) to push the digestion product down word.
 2. **Elimination:** the expulsion of waste products from the body through defecation.



GASTROINTESTINAL TRACT

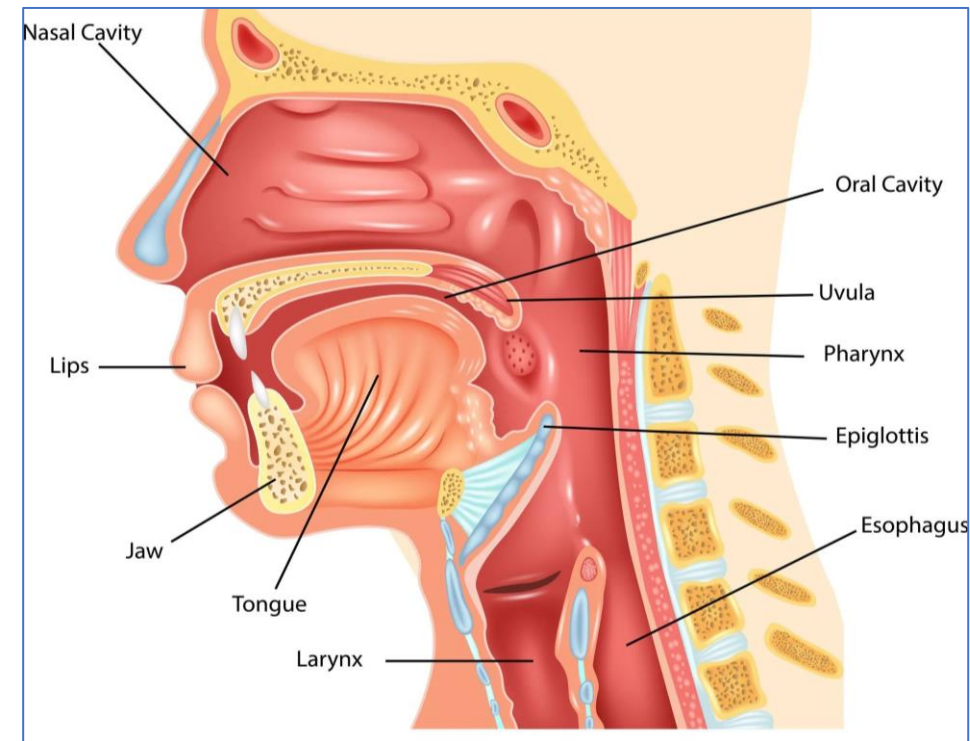
- **Digestion** process has **two** divisions, a **mechanical** and **chemical** division.
- The **mouth** initiates the mechanical breakdown of food.
- While the chemical part of digestion is mediated by the **digestive** secretions to create the so called **chyme**.



MAJOR ORGANS OF THE DIGESTIVE TRACT

1. The Mouth (Oral Cavity)

- **Digestion** begins in the mouth (oral cavity), where food is broken apart by **mastication**, which is a technical term for **chewing**.
- A slightly **acidic** fluid called **saliva** is produced by the salivary glands.
- Saliva **moistens** the food and forms a **bolus**, a small ball of masticated food that is **pushed** back and downward with the **tongue**.



MAJOR ORGANS OF THE DIGESTIVE TRACT

2. The pharynx, or throat:

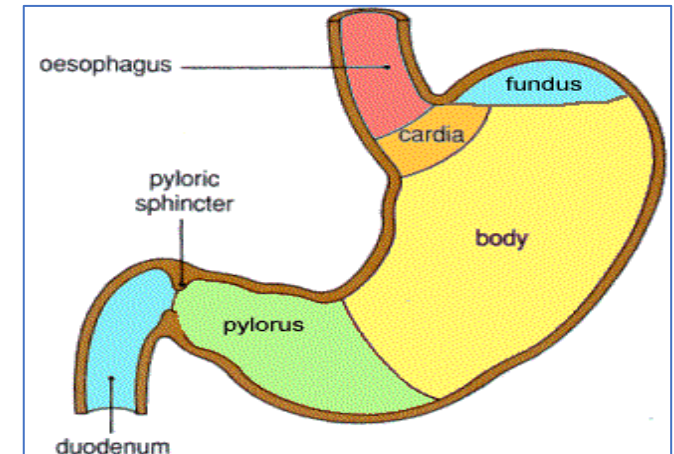
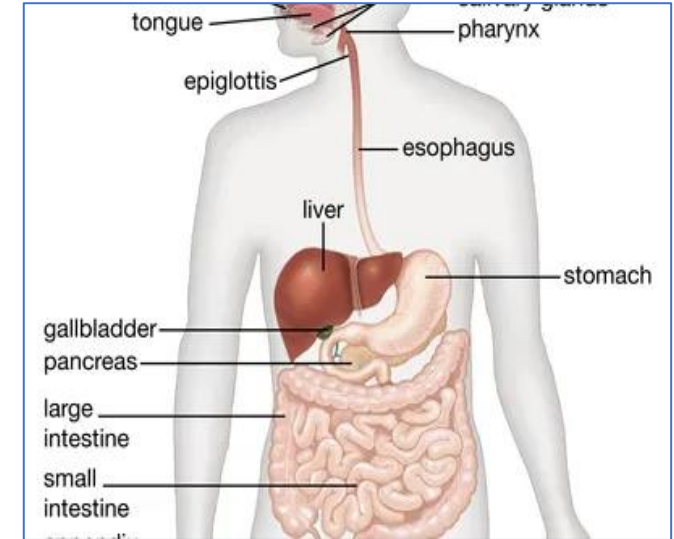
- It is a **cavity** extending from the base of the **skull** to the **esophagus**.

3. Esophagus:

- It is a hollow, muscular **tube** that extends from the **pharynx** to the **stomach**.

4. Stomach:

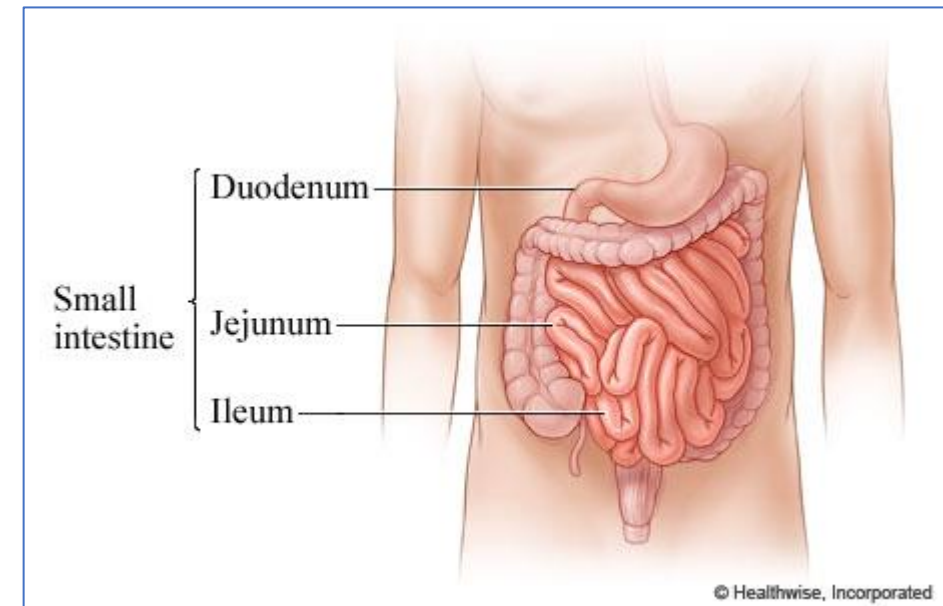
- It is a **muscular** structure in the **upper left** part of the abdominal cavity, just **below** the **diaphragm**.
- It has **four main** regions: the **cardia**, the **fundus**, the **body**, and the **pylorus**.



MAJOR ORGANS OF THE DIGESTIVE TRACT

5. Small intestine:

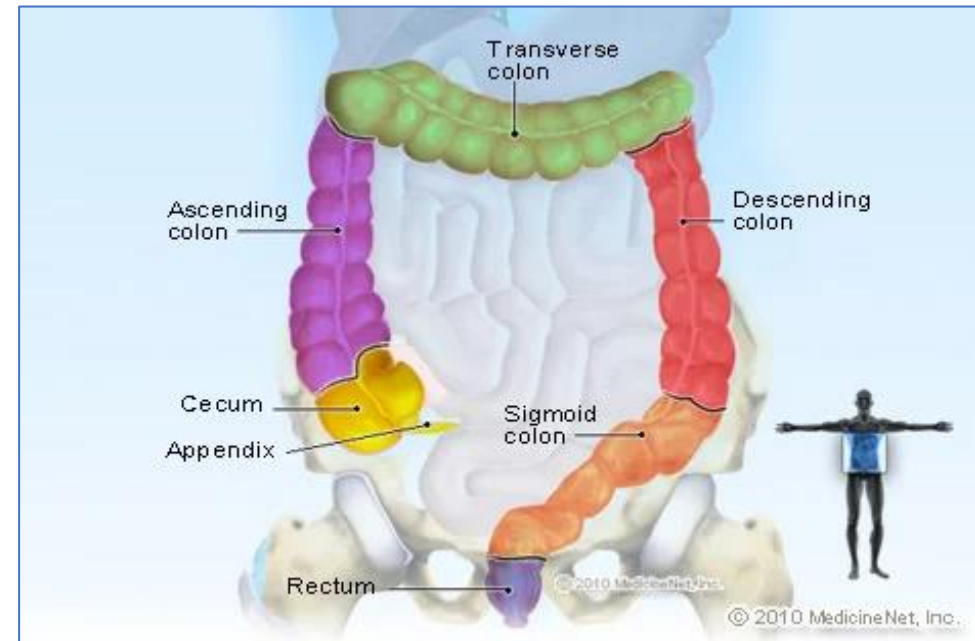
- Intestines After mixing food with gastric secretions, the stomach breaks it down into **chyme**, a semifluid substance, and then moves the gastric contents into the intestines.
- Which consists of the **small** intestine and the **large** intestine.
- **Small** intestine is composed of **three** major divisions: the duodenum, the jejunum, and the ileum.



MAJOR ORGANS OF THE DIGESTIVE TRACT

6. Large intestine:

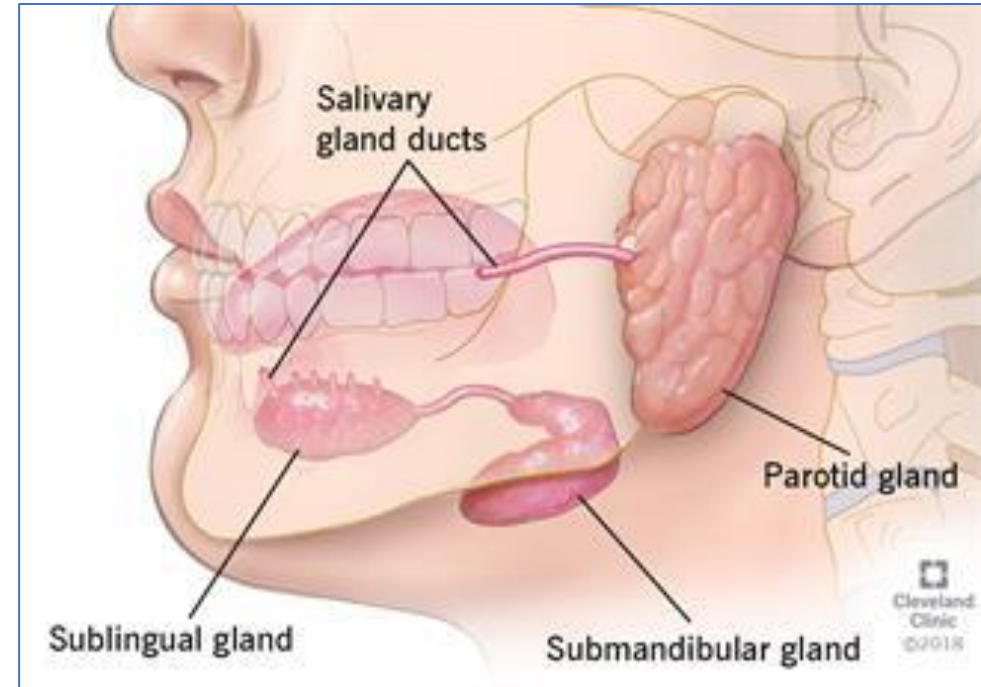
- The large intestine extends from the **ileocecal valve** (the valve between the ileum of the small intestine and the first segment of the large intestine) to the **anus**.
- It **absorbs** water, **secretes** mucus, and **eliminates** digestive wastes.
- It has **six** segments: the cecum, the ascending colon, the transverse colon, the descending colon, the sigmoid colon, and the rectum, the last few inches of the large intestine, terminates at the anus.



ACCESSORY ORGANS OF THE DIGESTIVE TRACT

1. Salivary glands:

- I. **Parotid:** located at the side of the face in front of and below the external ear.
- II. **Submandibular:** located, as the name indicates, beneath the mandible, or lower jaw.
- III. **Sublingual:** located, as the name indicates, under the tongue.



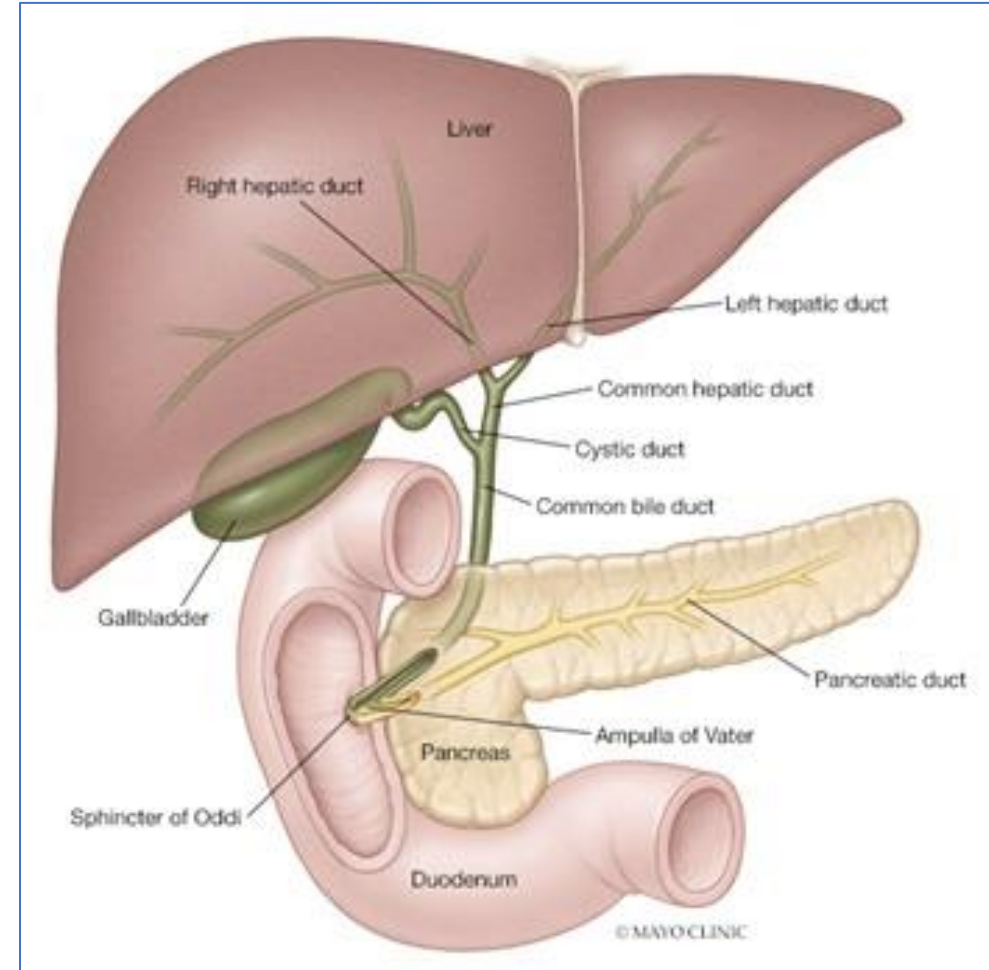
ACCESSORY ORGANS OF THE DIGESTIVE TRACT

2. Gallbladder:

- It is a **pear-shaped** organ that's found under the liver.

3. The pancreas:

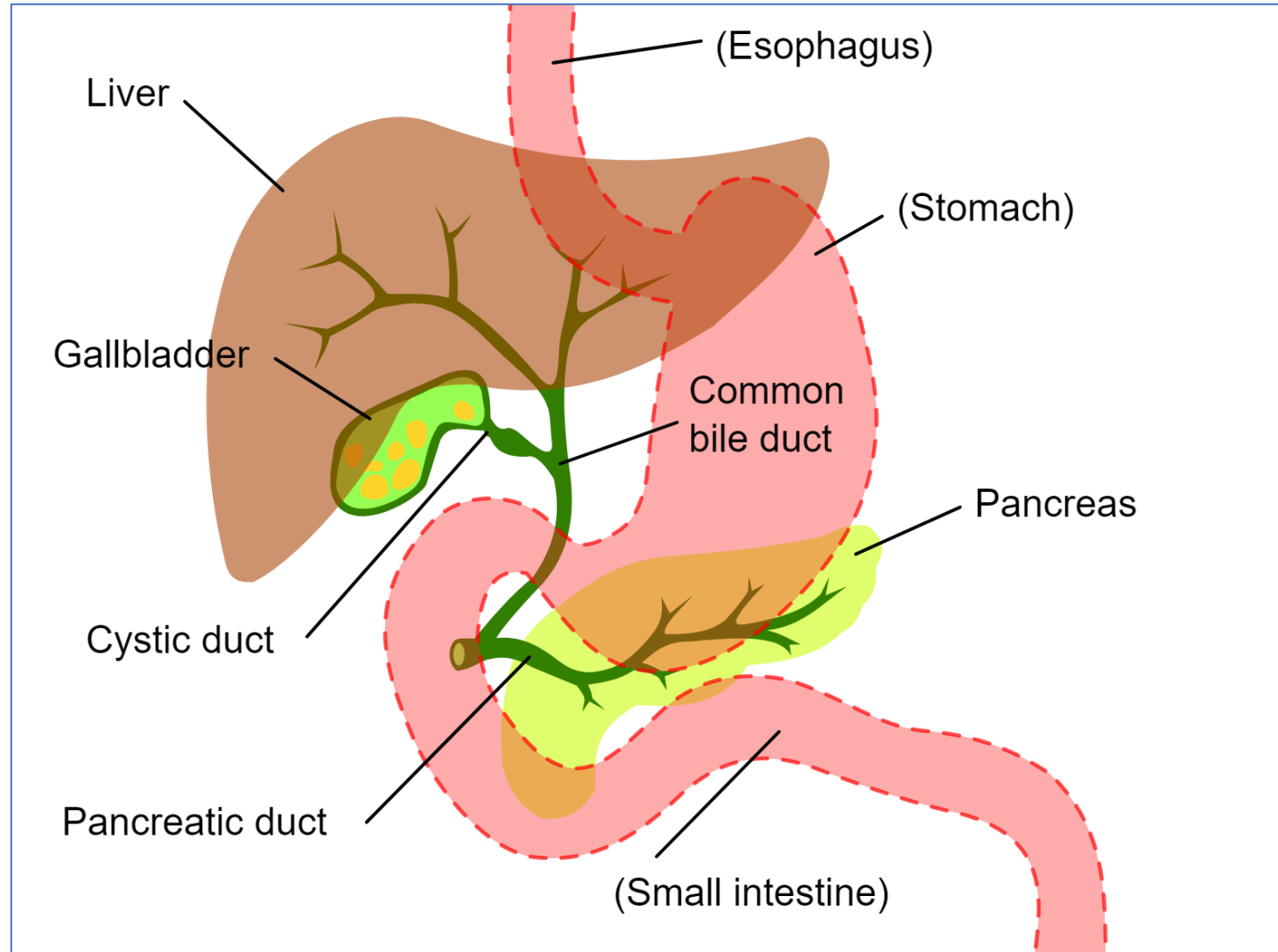
- It lies behind the stomach, and contains two cell types:
 1. **Endocrine cells**, from which hormones are secreted into the blood.
 2. **Exocrine cells**, from which enzymes are secreted through ducts to the digestive system.



The biliary system (biliary tract or biliary tree)

- Is a system of **ducts**, and **organs** (including the liver, gallbladder, and pancreas).
- It is associated with structures that function to produce, store, secrete, and transport bile.
- Once food has gone through the initial process of digestion in the stomach, it moves into the **duodenum** (the first segment of the small intestine).
- **Bile and other digestive secretions** travel into the **duodenum** via the biliary tract's system of bile ducts.
- These continue the **digestive process** by breaking down food so its nutrients can be absorbed.

The biliary system (biliary tract or biliary tree)



MAJOR TERMS ASSOCIATED WITH GIT PROBLEMS

| Term | Meaning |
|---------------------|--|
| Anorexia | Is a loss of appetite |
| Ascites | Refers to the abnormal accumulation of serous fluid in the peritoneal cavity. |
| Cachexia | Is a profound state of overall ill health and malnutrition characterized by weakness and leanness. |
| Colic | Is acute abdominal pain. |
| Constipation | Refers to a decreased passage of stools. |
| Diarrhea | Is rapid movement of fecal material. |
| Steatorrhea | A large amount of fat in the feces that is foul smelling and floats. |
| Dyspepsia | Is gastric discomfort, such as fullness, heartburn, bloating, and nausea, that occurs after eating |

MAJOR TERMS ASSOCIATED WITH GIT PROBLEMS

| Term | Meaning |
|--------------------------------|---|
| Dysphagia | Is difficult or painful swallowing. |
| Emesis | Is an expulsion of the stomach contents by vomiting |
| Melena | Is black, tarry stools, a common sign of upper GI bleeding. |
| Polyphagia | Is consuming abnormally large amounts of food |
| Polydipsia | Is chronic, excessive thirst |
| Esophagitis | Is the inflammation of the mucous membrane that lines the esophagus |
| Gastroesophageal reflux | Refers to the backflow of gastric or duodenal contents into the esophagus |
| Gingivitis | Is an inflammation of the gums. |
| Glossitis | Is an inflammation of the tongue |

ACCESSORY ORGANS DISORDERS

| Term | Meaning |
|-----------------------|--|
| Appendicitis | Is an inflammation of the appendix |
| Cholengitis | An inflammation of the bile duct system |
| Cholelithiasis | Is the presence of solid concretions in the gallbladder. |
| Cholecystitis | Inflammation of the gallbladder |
| Cholestasis | A blockage of bile ducts, caused mainly by gall stones. |

PHARYNGEAL AND ESOPHARYNGEAL SURGERIES

| Term | Meaning |
|-------------------------|--|
| Abdominocentesis | Surgical puncture of the abdomen by a needle to withdraw fluids |
| Gastrostomy | Is the creation of a hole into the stomach to insert an feeding tube |
| Laparotomy | Is a surgical opening of the abdomen |
| Colostomy | Bowel surgery that creates an opening between the colon and the abdominal wall through which feces are expelled. |

RADIOLOGIC AND IMAGING TESTS

| Term | Meaning |
|--|--|
| Cholangiogram | Is an X-ray of the gallbladder and biliary duct system. |
| Abdominal computerized tomography (CT) scan | A technique that uses radiographic to produce an image of the cross section of tissue. |
| Abdominal magnetic resonance imaging (MRI) | An MRI is a procedure used to produce an image by the creation of a magnetic field to give detailed information about the gastrointestinal system. |
| Colonoscopy | Is an endoscopic examination of the colon. |
| Laparoscopy | Is an endoscopic examination of the interior of the peritoneal cavity. |



**THANK YOU FOR
YOUR ATTENTION**

