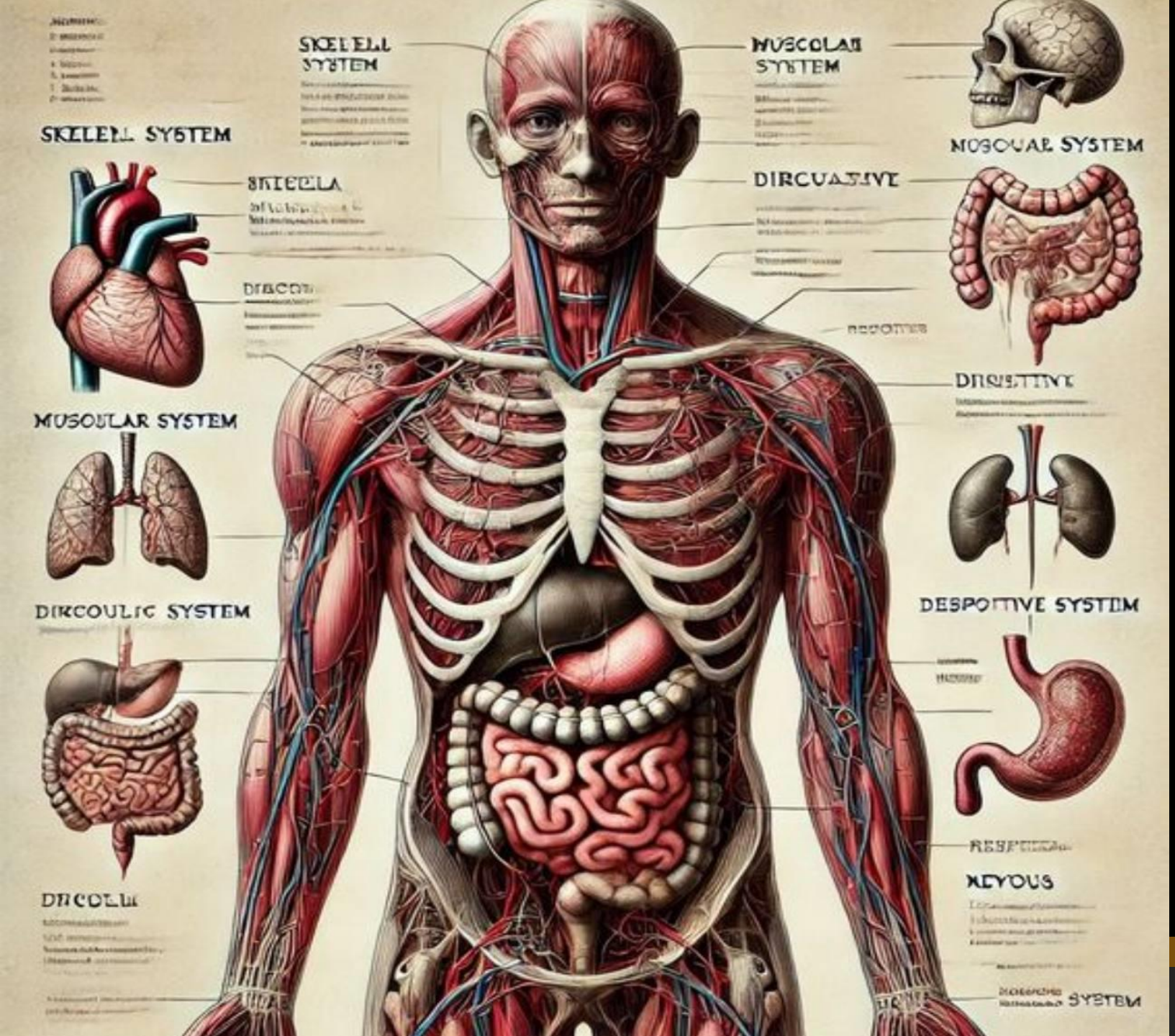
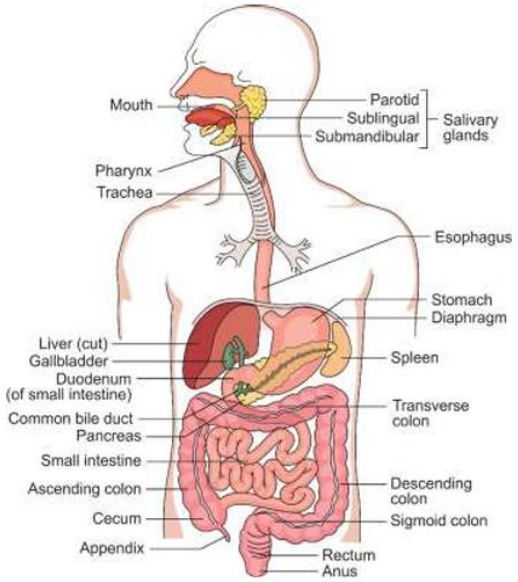


Medical Terminology Lecture 5

THE DIGESTIVE SYSTEM

The Digestive System

The digestive system is composed of continuous a tract beginning with the oral cavity and ending at the anus. This tract, called the alimentary canal or the gastrointestinal (GI) tract, is complemented by accessory organs that convert food and fluids into a form that permits the body to absorb nutrients. The GI tract is divided into two sections: the upper GI tract, which consists of the oral cavity (mouth), oesophagus, and stomach, and the lower GI tract, which consists of the intestines. The three main functions of the digestive system are digestion, absorption, and elimination.



how digestive systems work

How can missing teeth or poor mastication affect the later stages of digestion shown in this video?”

What would happen to digestion if the mouth didn’t produce saliva?”

The Upper Gastrointestinal Tract

Digestion Begins in the Upper GI Tract

-Digestion begins in the mouth where food is broken down by

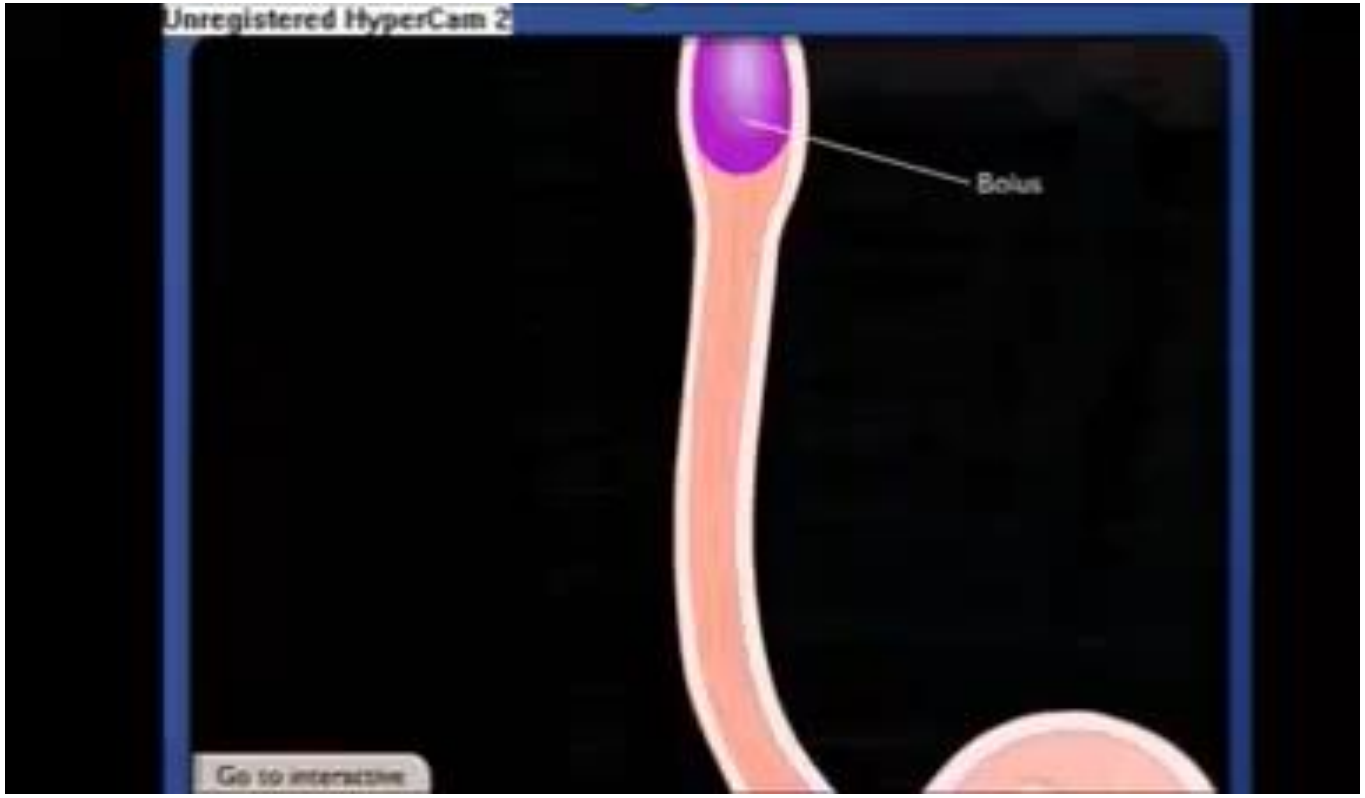
-mastication (chewing).

Saliva produced by salivary glands moistens the food.

-Food moves from the pharynx to the esophagus, lubricated by mucus and carried down by peristalsis.

-The cardiac sphincter is a ring-like muscle that controls the flow of food from the esophagus into

the stomach.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Bolus
Go to interactive

The Upper Gastrointestinal Tract

The Role of the Stomach & Next Steps of Digestion

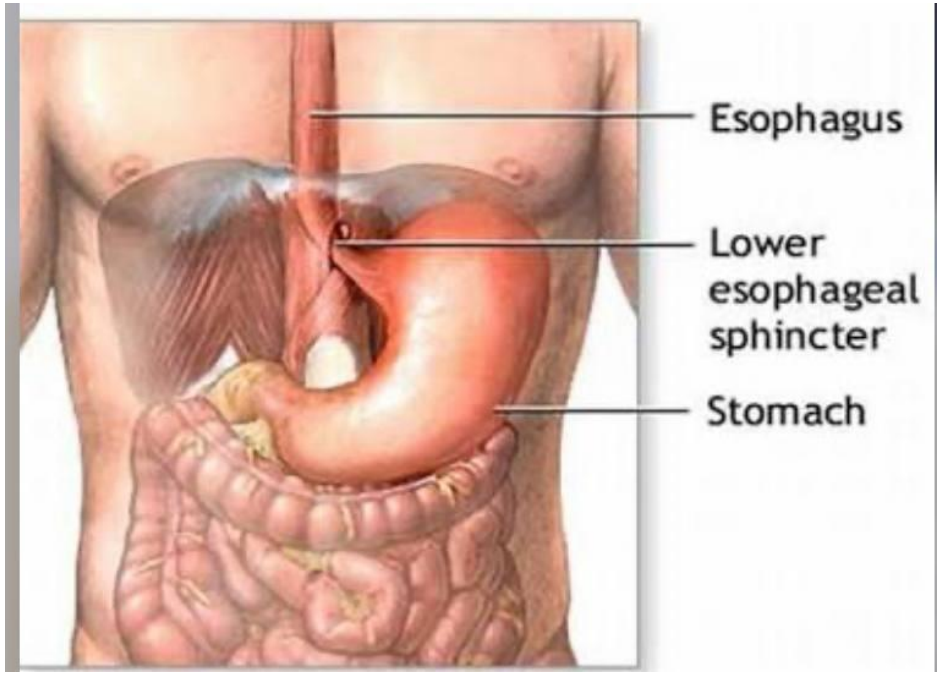
-The stomach stores food

temporarily.

-Acid and enzymes break down proteins, fats, and carbohydrates.

Partially digested food (chyme) moves

to the duodenum.



The Lower Gastrointestinal Tract

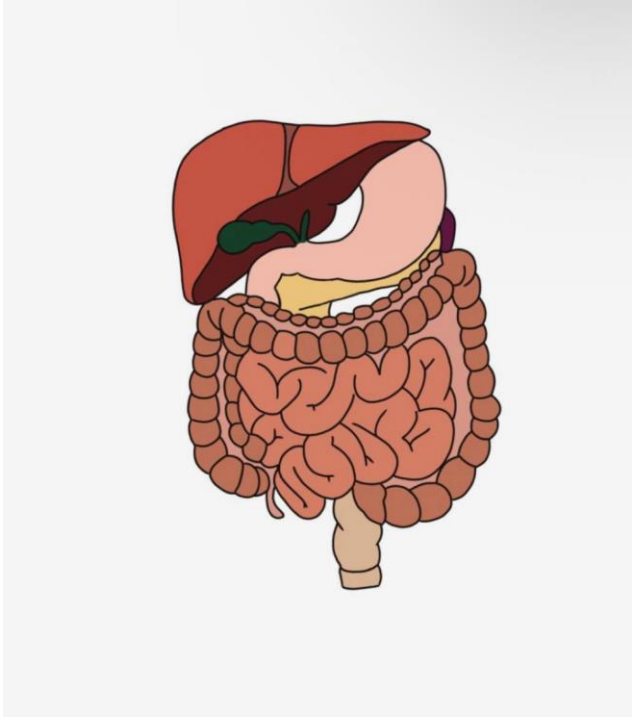
The lower GI tract begins with the small intestine, which extends from the pyloric sphincter to the first part of the large intestine. Although it is approximately 20 feet in length, it is called the small intestine because it has a smaller diameter than the large intestine.The small intestine is divided into three sections: the duodenum, jejunum, and ileum. From the duodenum, chyme moves into the jejunum and then into the ileum. The ileocecal sphincter regulates the flow of contents from the ileum into the cecum, which is the first part of the large intestine.

Accessory Organs

The salivary glands, liver, gallbladder, and pancreas, although not

part of the alimentary canal, play a key role in the digestive process and

are referred to as accessory organs of the digestive system.



Accessory Organs

Salivary Glands

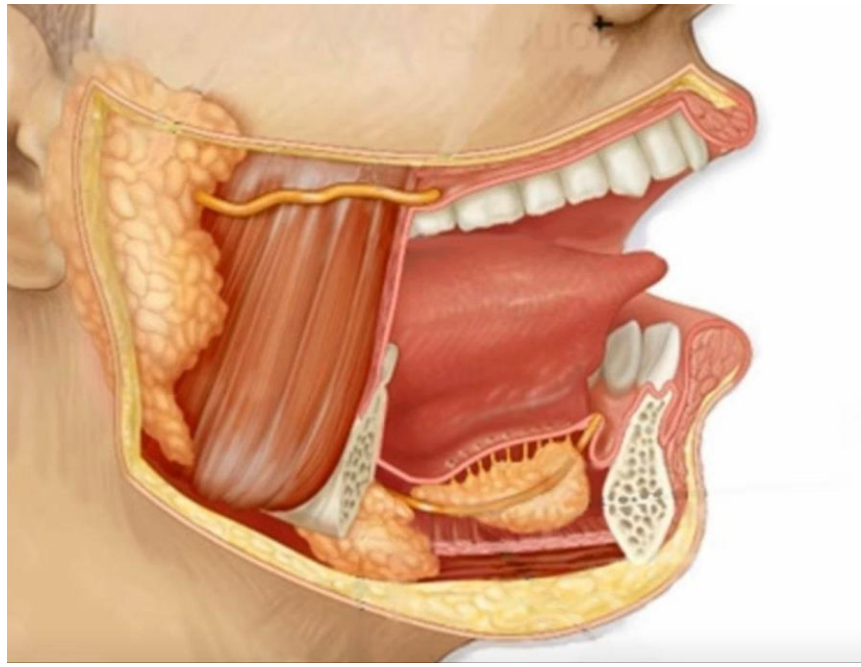
The senses of taste and smell stimulate the salivary glands to secrete

saliva,

a watery liquid that contains enzymes that begin the digestive

process. Saliva also helps eliminate bacteria in the mouth and keeps the

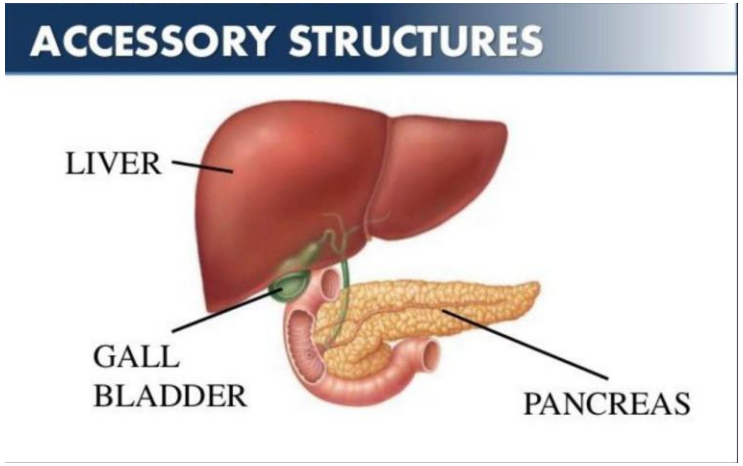
teeth and tongue clean.



Accessory Organs

Liver

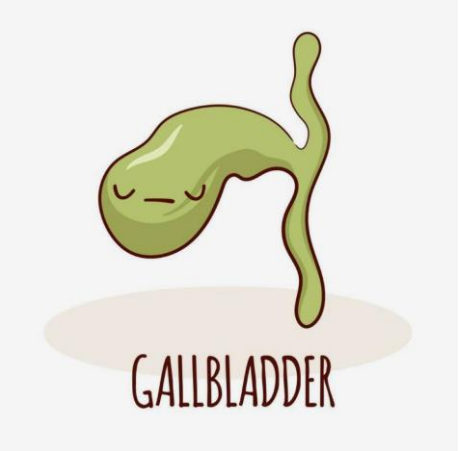
The liver, located in the upper right quadrant of the abdomen under the dome of the diaphragm, plays many important roles in digestion, metabolism, and detoxification of harmful substances. One of its main digestive functions is the manufacture and secretion of bile. Our bodies need bile to process fats before they are released into the bloodstream. Once bile is produced in the liver, it travels down the common bile **duct** to the gallbladder for storage.



Accessory Organs

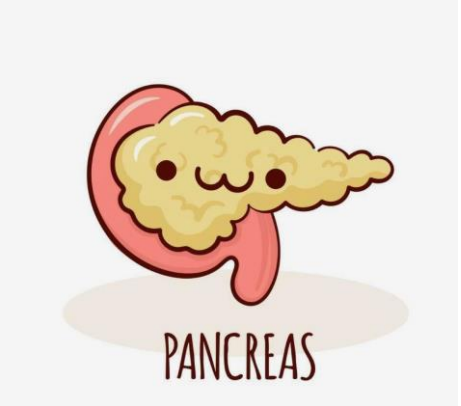
Gallbladder

Although the liver produces and recycles bile, the gallbladder, which is located in a depression under the liver, stores, condenses, and delivers the bile to the small intestine. The gallbladder is also sometimes referred to as the cholecyst.

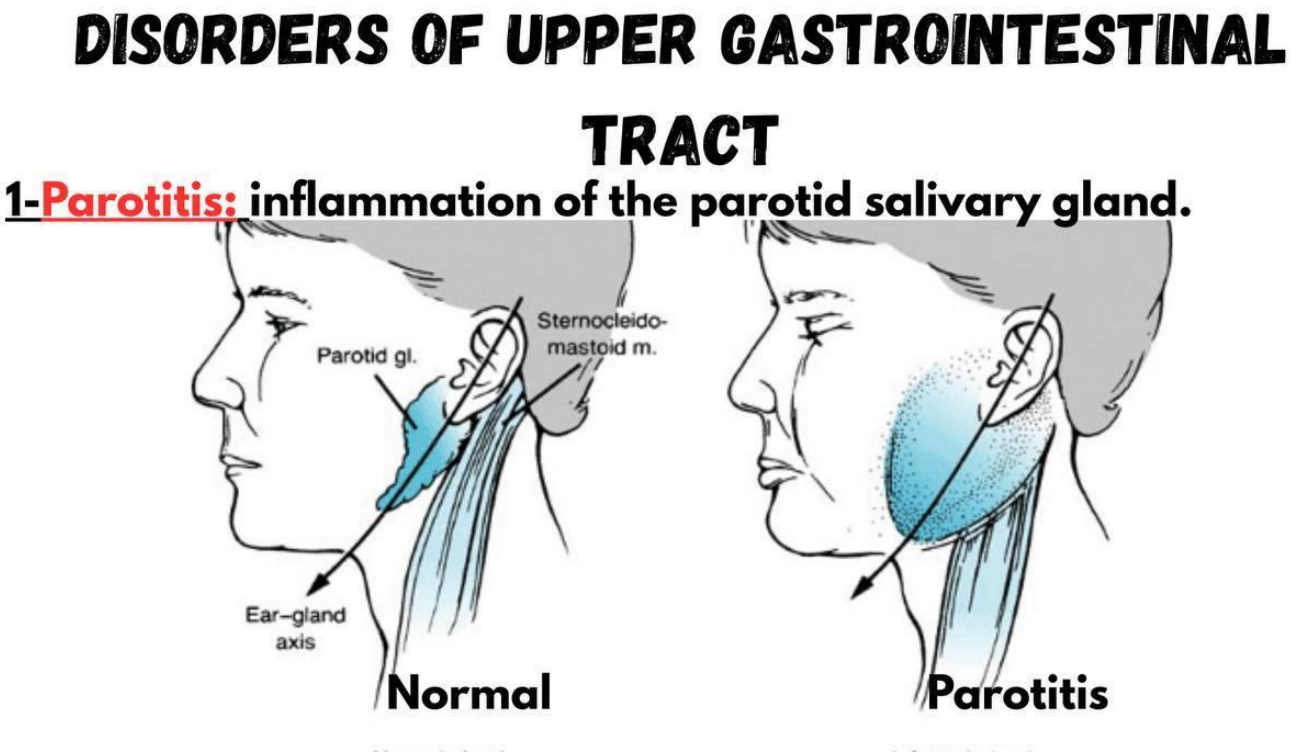


Pancreas

The pancreas is an elongated feather-shaped organ that lies posterior to digestive enzymes that aid in processing carbohydrates and fats in foods as well as secreting hormones directly into the bloodstream.

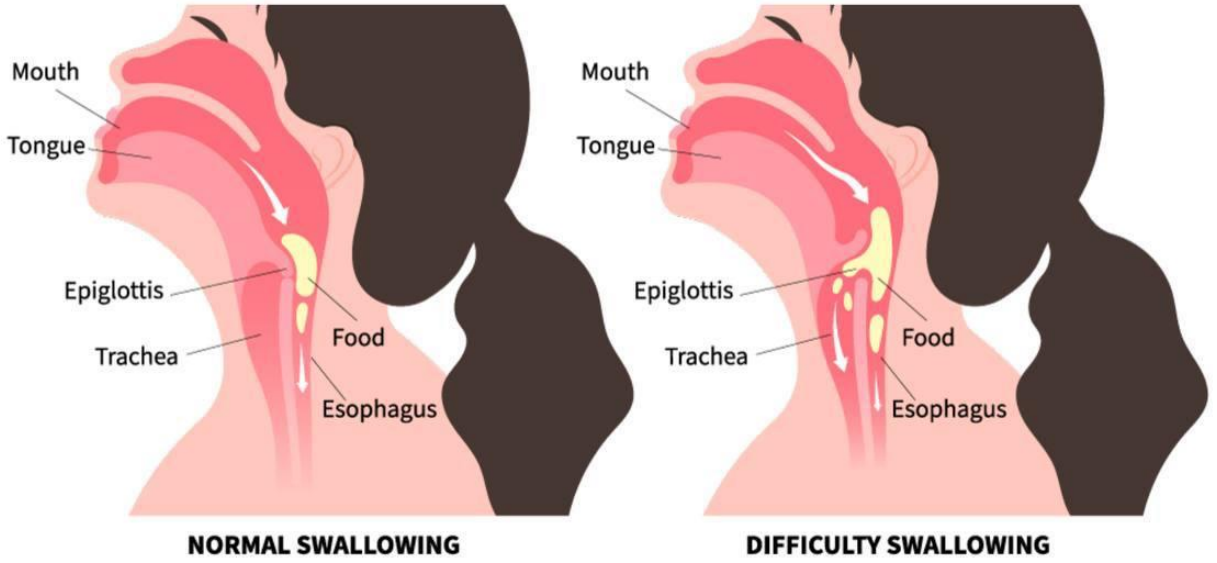


Disorders of the Upper Gastrointestinal Tract



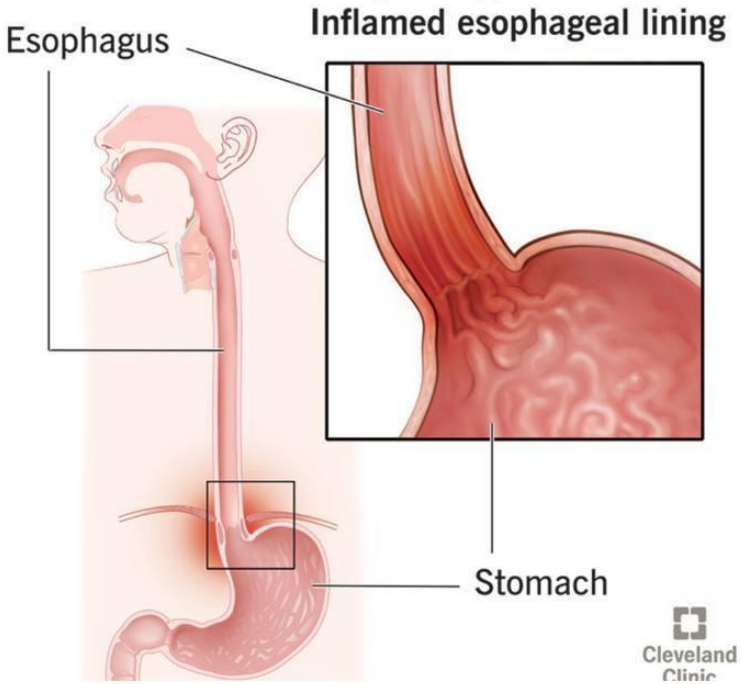
Disorders of the Upper Gastrointestinal Tract

2-Dysphagia: difficulty in swallowing.



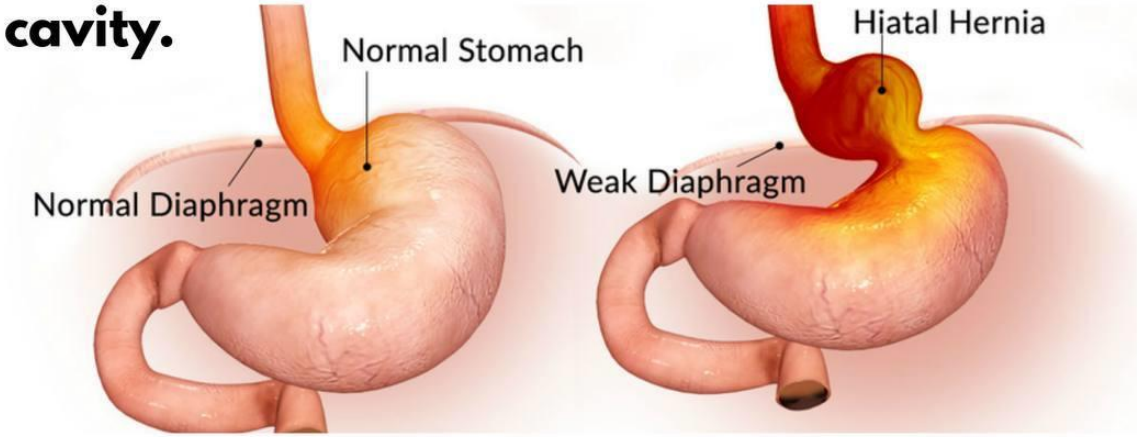
Disorders of the Upper Gastrointestinal Tract

3-Esophagitis: inflammation of the esophagus.



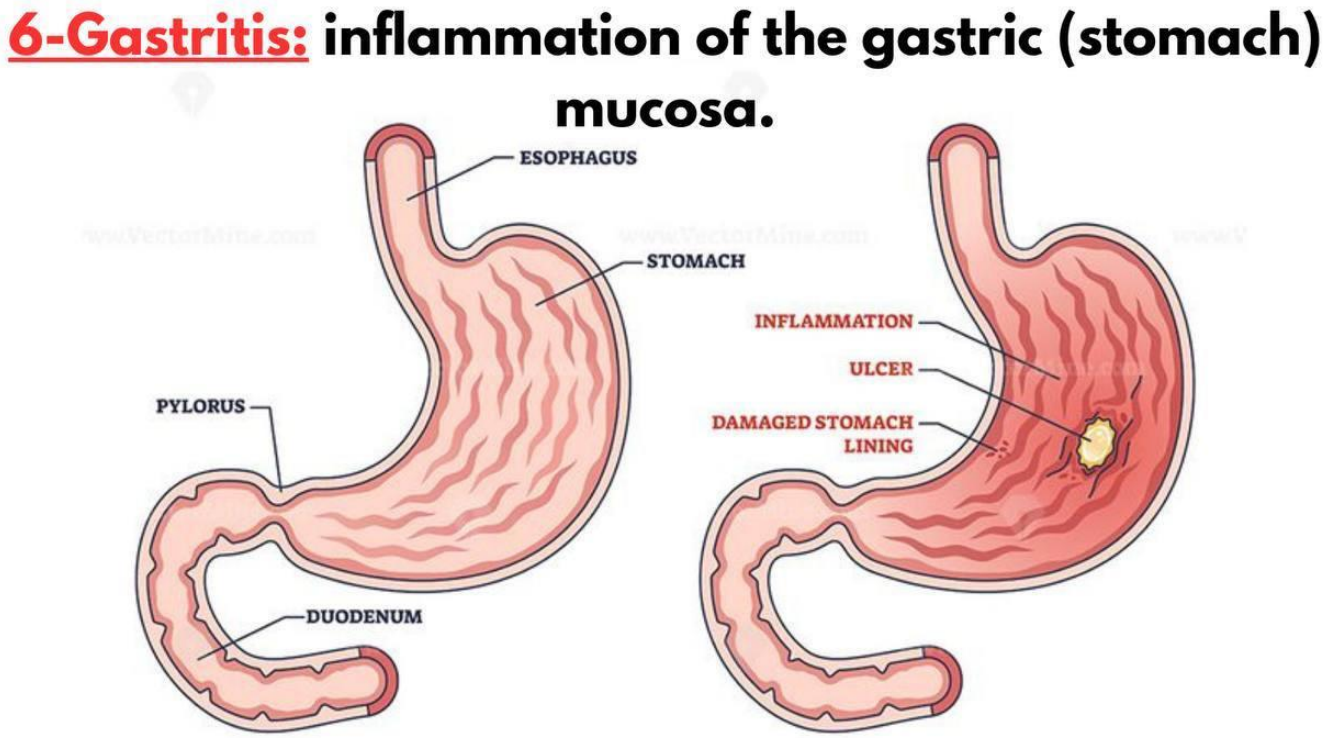
Disorders of the Upper Gastrointestinal Tract

4-Hiatus hernia: protrusion of the stomach into the thoracic cavity.

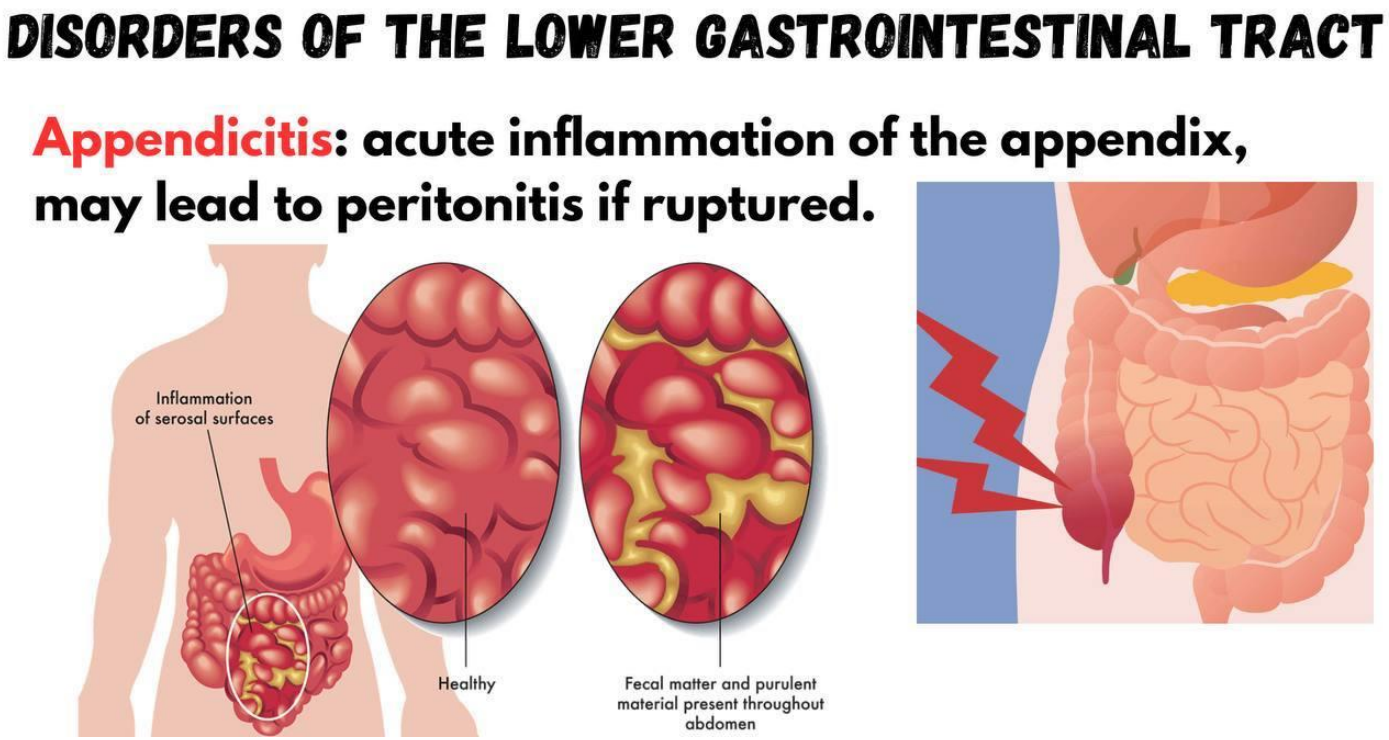


5-Gastroesophageal reflux disease (GERD): backward flow of stomach acid into the esophagus.

Disorders of the Upper Gastrointestinal Tract

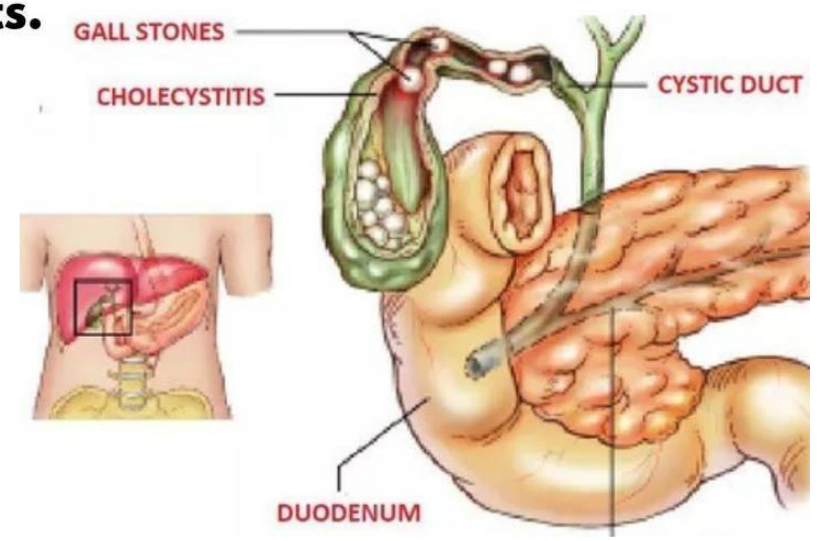


Disorders of the Lower Gastrointestinal Tract



Disorders of the Lower Gastrointestinal Tract

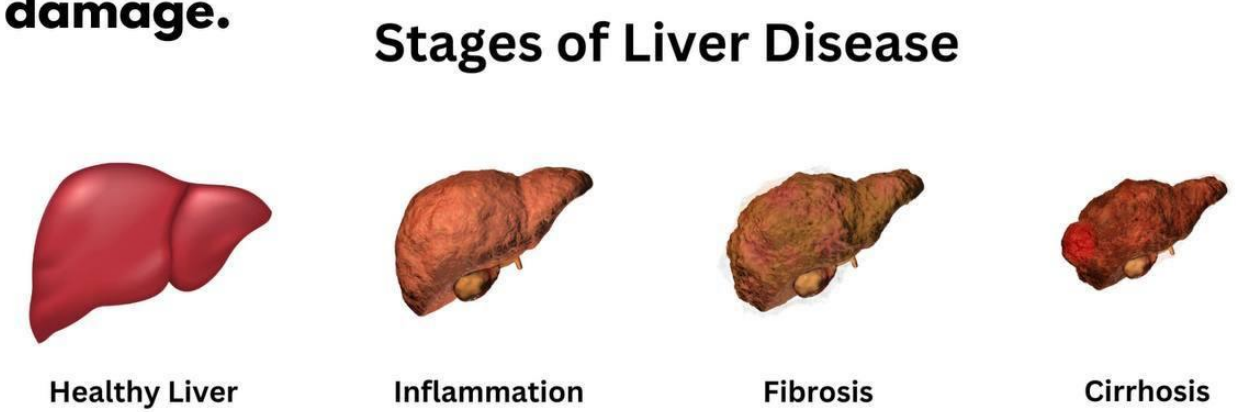
Cholelithiasis: presence of gallstones in the gallbladder or bile ducts.



Cholecystitis: inflammation of the gallbladder.

Disorders of the Lower Gastrointestinal Tract

Hepatitis: inflammation of the liver.
Cirrhose: chronic liver disease with permanent damage.

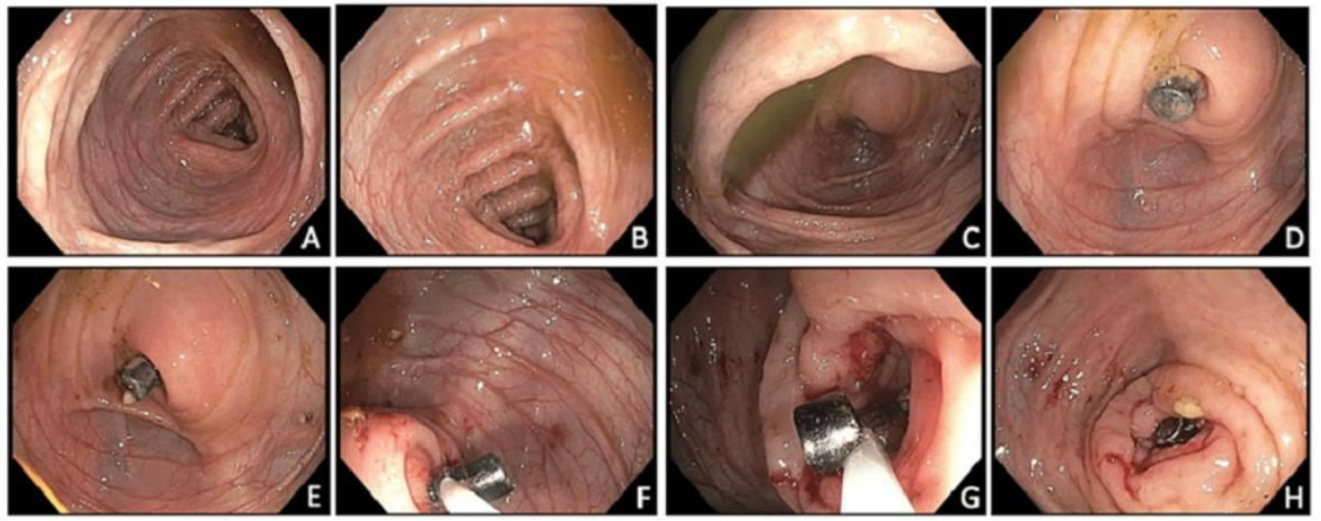


Jaundice: yellow discoloration of the skin and eyes, usually due to liver disease.

Disorders of the Lower Gastrointestinal Tract

Colonoscopy: visual examination of the colon using a colonoscopy

Disorders of the Lower Gastrointestinal Tract



Colonoscopy images: (A) transverse colon, (B) ascending colon, (C) cecum, (D-E) appendiceal orifice, and (F-H) unsuccessful attempted removal of magnets with snare

Thank You

Baneen Mustafa
Maryam Fadhel
Zahraa sataar
Yaqeen Atheer
Noor Diaa