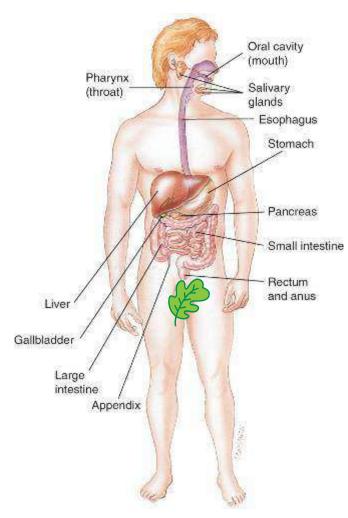


Chapter 8

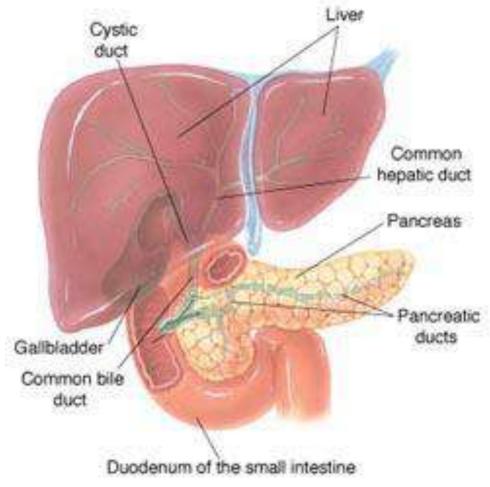
The Digestive System Part 1

Overview of Structures, Combining Forms, and Functions

Major Structures and Accessory Organs of the Digestive System



Accessory Digestive Organs



Mouth

- Primary Function
 - Begins preparation of food for digestion.
- Related Combining Forms
 - or/o
 - stomat/o

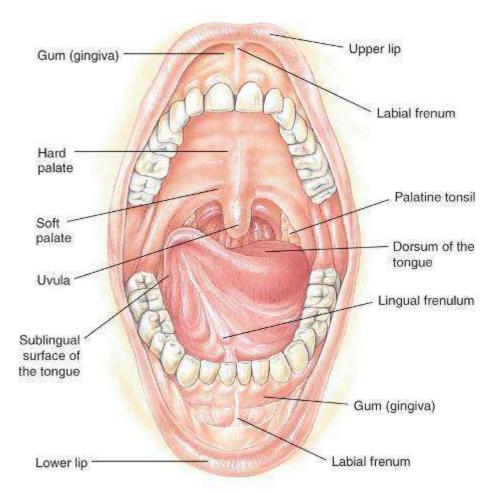
Structures of the Tongue and Oral Cavity

Teeth

- Deciduous dentition
- Permanent dentition
- Crown
- Enamel
- Root
- Pulp
- Odonti
- Gingiva

The Tongue

Papillae



Lips

- •Labia
- •Cheil/o

Palate

- Hard palate
- Soft palate
- Rugae
- •Uvula

Salivary glands

- Parotid
- Sublingual
- Submandibular



Pharynx

Primary Function

- Transports food from the mouth to the esophagus.
- Epiglottis closes the entrance to the trachea to prevent food from entering the lungs, allowing food to move safely from the pharynx to the esophagus.

Related Combining Form

– pharyng/o

Esophagus

Primary Function

- Transports food from the pharynx to the stomach.
- Lower esophageal sphincter ringlike muscle that controls the flow between the esophagus and stomach.

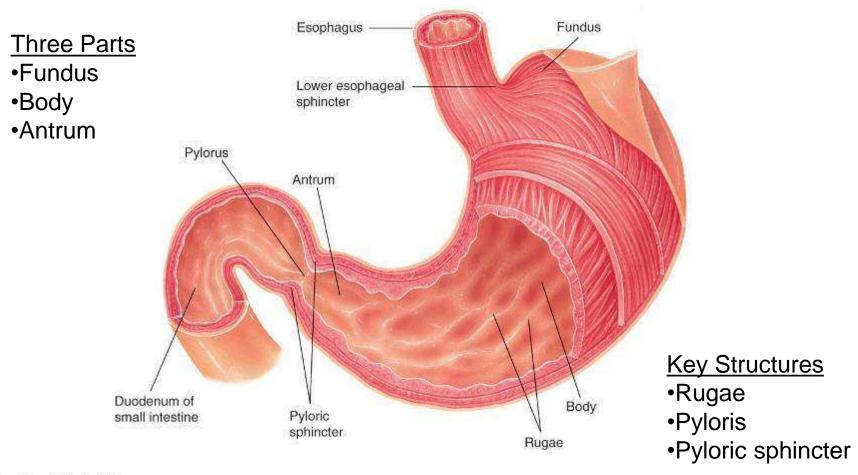
Related Combining Form

esophag/o

Stomach

- Primary Functions
 - Breaks down food and mixes it with digestive juices.
- Related Combining Form
 - gastr/o

Structures of the Stomach



Small Intestines

Primary Functions

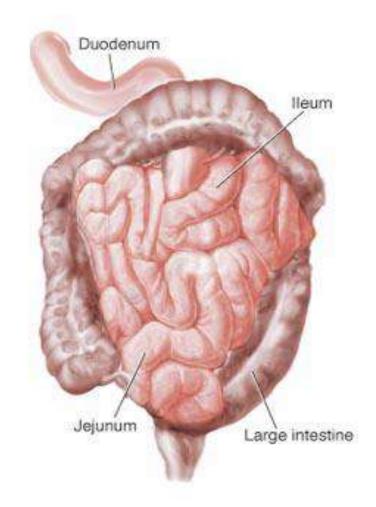
- Completes digestion and absorption of most nutrients.
- Coiled organ up to 20 feet in length.
- Known as the small intestine because of its smaller diameter compared with the large intestine.

Related Combining Form

enter/o

Parts of the Small Intestine

- •Duodenum 1st part
- •Jejunum middle part
- •lleum last part, connects to large Intestine
- •lleocecal sphincter controls flow from small intestine and large intestine



Liver

Primary Function

- Secretes bile and enzymes to aid in the digestion of fats.
- Removes excess glucose from blood and stores it as glycogen.
- Destroys old red blood cells, removes poisons from blood.
- Bilirubin is released by the liver.
- Secretes bile
- Common hepatic duct
- Cystic duct

Related Combining Form

hepat/o

Gallbladder

Primary Functions

- Stores bile and releases it to the small intestine as needed.
- Common bile duct
- Cystic bile duct

Related Combining Form

– cholecyst/o

Pancreas

Primary Functions

- Secretes digestive juices and enzymes into small intestine as needed.
- Pancreatic juices leave via pancreatic ducts to the duodenum.

Related Combining Form

pancreat/o

Large Intestines

- Primary Functions
 - Absorbs excess water.
 - Prepares solid waste for elimination.
- Related Combining Forms
 - col/o, colon/o

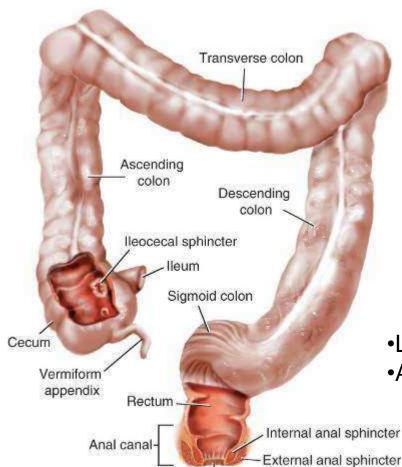
Structures of the Large Intestine

The Cecum

Appendix

The Colon

- Ascending colon
- Transverse colon
- Descending colon sigmoid colon



Anus

The Rectum

 Last division of large intestine, ends at anus.

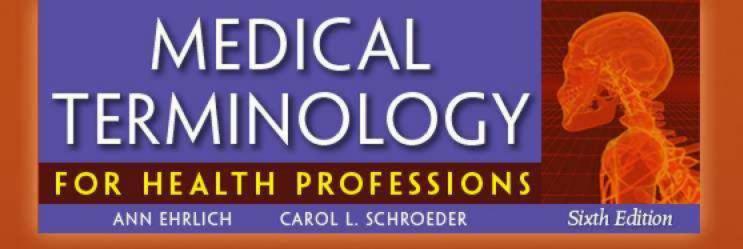
The Anus

- Lower opening
- Anal sphincter muscles



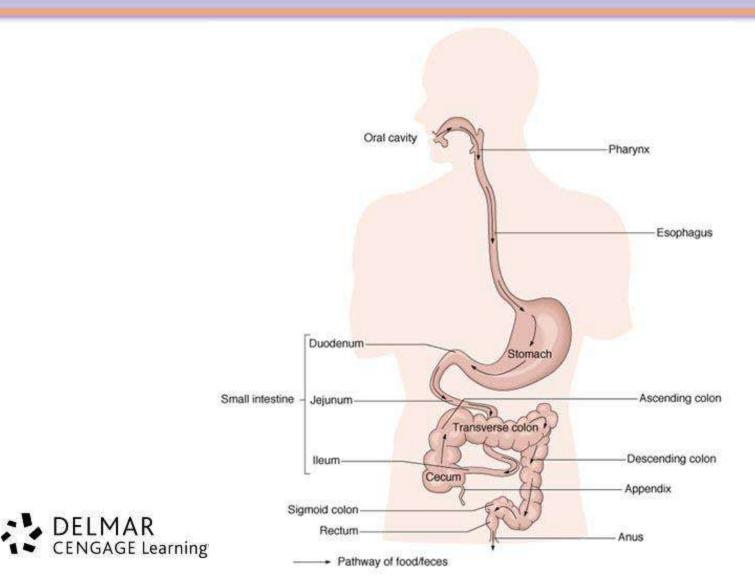
Rectum and Anus

- Primary Function
 - Controls the excretion of solid waste.
- Related Combining Forms
 - an/o
 - proct/o
 - rect/o



Chapter 8 The Digestive System Part 2

Digestion

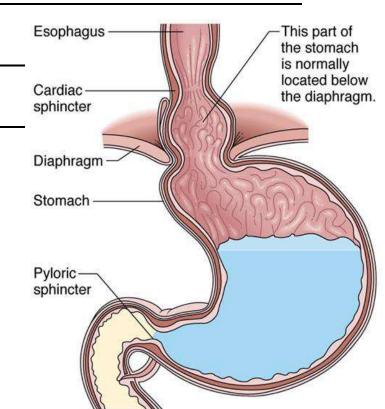


Dental Diseases

- Dental caries: cavities
- Dental plaque: plaque
- Periodontis: Inflammation of tissues that support teeth
- Gingivitis: Inflammation of gums
- Halitosis: Bad breath
- Temporomandibular disorders (TMD): Disfunction of joint

Esophagus Disorders

- Dysphagia: Difficulty swallowing
- Esophageal reflux: Stomach contents come up esophagus
- Pyrosis: heartburn
- Hiatal hernia: <u>Can cause</u> pyrosis and reflux





Stomach Disorders

- Gastritis: Inflammation of stomach
- Gastroenteritis: Inflammation of stomach and intestines
- Gastro-
 - -rrhea: Excessive flow of gastric secretions
 - -rrhexis: Rupture of the stomach

Peptic Ulcers

- > Often caused by the bacteria Helicobacter pylori
- Gastric ulcers: Found in stomach

• Duodenal ulcers: Found in duodenum (sm intest)

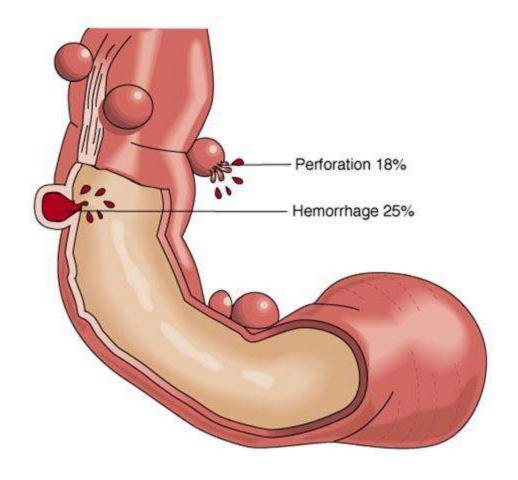
• Perforating ulcers: Erosion through organ

Digestion Disorders

- Eructation: belching
- Dyspepsia: indigestion
- Emesis: vomit
- Hematemesis: Vomit blood
- Nausea: Urge to vomit
- Regurgitation: Return of swallowed food to mouth

Intestinal Disorders

- Colorectal cancer
- Diverticulitis
 - Diverticulum



Inflammatory Bowel Diseases

- Colitis: Inflammation of the colon
- Enteritis: Inflammation of intestines
- Ileitis: Inflammation of ileum
- Spastic colon (IBS): Impaired mobility
- Crohn's disease
 Chronic autoimmune
 disorder resulting in
 scarring and thickening of
 intestinal walls

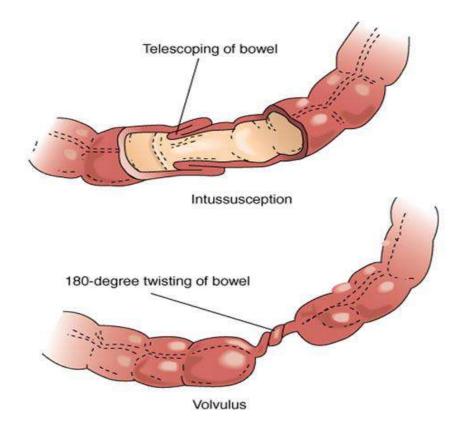




Intestinal Obstructions

- Ileus: Peristalsis stops temporarily
- Strangulating obstruction: Blood flow cut off
- Volvulus: twisting of the sm

 Intestines causing an obs
- Intussusception
- Inguinal hernia:
 Bowel in groin area





Infectious diseases of the Intestine

- Amebic dysentary: Amoeba bloody, watery stools with pain, fever, dehydration
- Botulism: Bacteria food poisoning characterized by paralysis; often
 fatal
- Cholera: Bacteria severe diarrhea, vomiting and dehydration; can be fatal
- E. coli: Bacteria watery diarrhea that becomes bloody; usually no fever
- Salmonella: Bacteria severe diarrhea, nausea, vomiting with high fever
- Typhoid fever: Bacteria headache, delirium, cough, watery diarrhea, rash, high fever

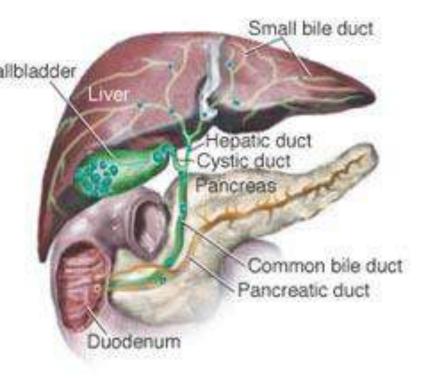
Liver Disorders

- Cirrhosis: Destruction of the structure & function of the liver
- Hepatomegaly: Enlarged liver
- Hepatorrhexis: Rupture of the liver
- Jaundice: Yellow skin
- Hepatitis
 - Hep A: Contaminated food vaccine available
 - Hep B: Spread through blood/body fluids vaccine
 - Hep C: Spread through blood/body fluids no vaccine

Gallbladder Disorders

- Biliary calculus: Gall stone
- Cholecystitis: Inflammation of the gallbladder
- Cholelithiasis:

Presence of gallstones Gallbladder or bile ducts



Diagnostic Procedures

- Hemoccult: Test for blood in stool
- Abdominal CT / CT Scan: Computed tomography cross section of tissues
- Anoscopy: View anal canal and lower rectum
- Barium swallow: Upper GI series barium used to make structures visible
- Barium enema: Lower GI series

Barium Enema

Radiographic study to examine the digestive system. Barium is used as a contrast medium to make these structures visible

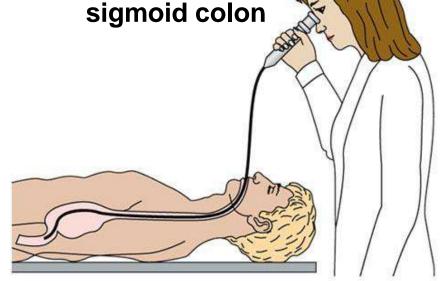




Endoscopy

- Colonoscopy: Visual examination of colon
- Gastrointestinal endoscopy: Examination of esophagus, stomach and duodenum
- Proctoscopy: Examination of rectum and anus

Sigmoidoscopy: Examination of rectum and sigmoid colo



Ostomies

- An artificial opening between an organ and the outside of the body.
 - Allows for waste removal



- **≻**Colonostomy
- **≻**Gastrostomy
- >Ileostomy





Enteral Feeding

Gastrotomy

• Nasogastric tube (NGt)







