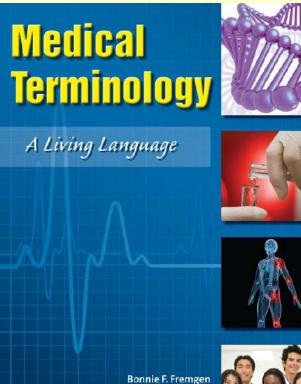
Medical Terminology **A Living Language**



Chapter 8

Digestive System



Medical Terminology: A Living Language, Fourth Edition Bonnie F. Fremgen and Suzanne S. Frucht

Suzanne S. Frucht

Multimedia Directory

Slide 16Digestive System Animation Slide 58Digestive System Exercise Slide 79Orthodontics Video Slide 84GERD Video Slide 109Sigmoidoscopy Video Slide 113Nasogastric Intubation Animation Slide 114Dieticians Video

Digestive System at a Glance

- Function of the Digestive System
 - Mechanical and chemical digestion of food
 - Absorption of nutrient molecules
 - Elimination of solid wastes

Digestive System at a Glance

Organs of the Gastrointestinal tract

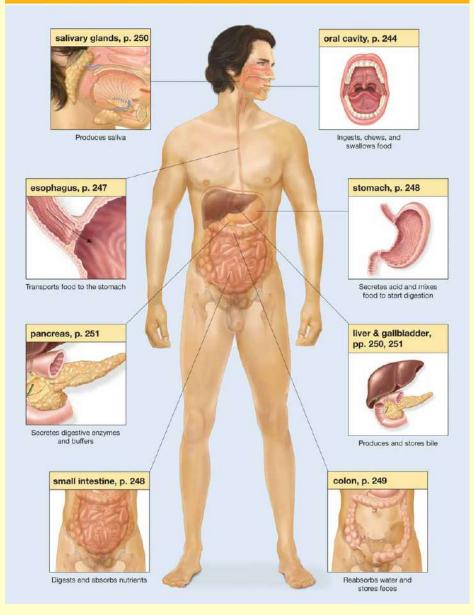
- Oral cavity
- Pharynx
- Esophagus
- Stomach
- Small intestine
- Colon

Digestive System at a Glance

- Accessory Organs
 - Pancreas
 - Liver
 - Gallbladder
 - Salivary glands

PEARSONMedical Terminology: A Living Language, Fourth EditionEducationBonnie F. Fremgen and Suzanne S. Frucht

Digestive System Illustrated



PEARSONMedical Terminology: A Living Language, Fourth EditionEducationBonnie F. Fremgen and Suzanne S. Frucht

an/oanus

- append/oappendix
- appendic/oappendix
- bar/oweight
- bucc/ocheek
- cec/ocecum
- chol/ebile, gall

PEARSONMedical Terminology: A Living Language, Fourth EditionEducationBonnie F. Fremgen and Suzanne S. Frucht

- cholangi/obile duct
- cholecyst/ogallbladder
- choledoch/ocommon bile duct
- col/ocolon
- colon/ocolon
- dent/otooth
- duoden/oduodenum

Medical Terminology: A Living Language, Fourth Edition Bonnie F. Fremgen and Suzanne S. Frucht

- enter/osmall intestine
- esophag/oesophagus
- gastr/ostomach
- gingiv/ogums
- gloss/otongue
- hepat/oliver
- ile/oileum

PEARSON *Medical Terminology: A Living Language,* Fourth Edition Education Bonnie F. Fremgen and Suzanne S. Frucht

- jejun/ojejunum
- Iabi/olip
- Iapar/oabdomen
- lingu/otongue
- Iith/ostone
- odont/otooth
- or/omouth

PEARSONMedical Terminology: A Living Language, Fourth EditionEducationBonnie F. Fremgen and Suzanne S. Frucht

- palat/opalate
- pancreat/opancreas
- pharyng/othroat, pharynx
- proct/oanus and rectum
- pylor/opylorus
- rect/orectum
- sialaden/osalivary gland
- sigmoid/osigmoid colon

Medical Terminology: A Living Language, Fourth Edition Bonnie F. Fremgen and Suzanne S. Frucht

Digestive System Suffixes

- emesisvomit
- –lithiasisstone
- orexiaappetite
- –pepsiadigestion
- –phagiaeat, swallow
- –prandialpertaining to a meal
- –tripsysurgical crushing

PEARSONMedical Terminology: A Living Language, Fourth EditionEducationBonnie F. Fremgen and Suzanne S. Frucht

Also called:

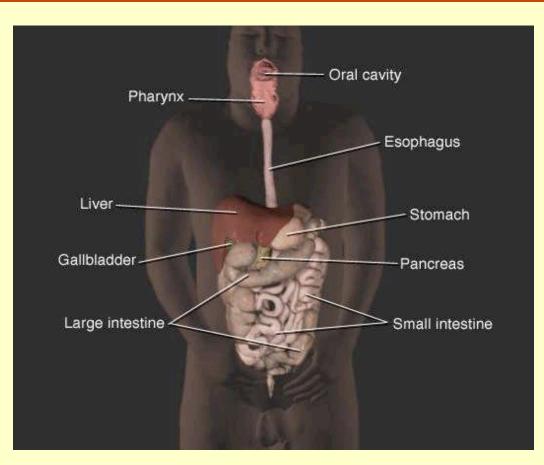
- Gastrointestinal system (GI)
- Gut
- Alimentary canal
- Approximately 30 feet of continuous muscular tube between mouth and anus

Organs of the continuous gut tube in order:

- Oral cavity
- Pharynx
- Esophagus
- Stomach
- Small intestine
- Colon (including rectum and anus)

- Accessory organs are connected to gut tube by ducts
- Include:
 - Salivary glands
 - Pancreas
 - Liver
 - Gallbladder

Digestive System Animation



Click here to view an animation of the digestive system.

PEARSON

Medical Terminology: A Living Language, Fourth Edition Bonnie F. Fremgen and Suzanne S. Frucht Back to Directory

- Three main functions of Digestive system
 - Digesting food
 - Absorbing nutrients
 - Eliminating waste

Digesting Food

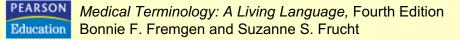
- Physical and chemical breakdown of large food particles
- Produces simple nutrient molecules
 - Glucose
 - Triglycerides
 - Amino acids

Absorbing Nutrients

- Simple molecules are absorbed from intestine
- Circulated through body by cardiovascular system
- Used for growth and repair of cells, tissues, and organs

Eliminating Waste

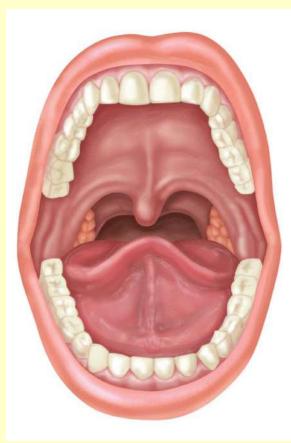
- Some ingested food cannot be digested or absorbed
- Expelled from body as solid waste
 - Feces



Oral Cavity

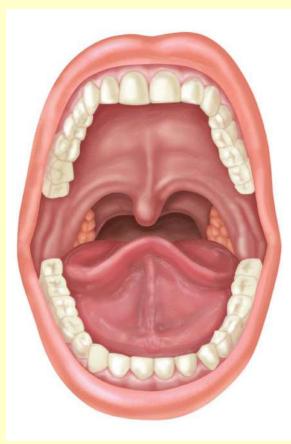
Roof is palate

- Hard bony anterior
- Soft flexible posterior
- Hanging down from soft palate is uvula
 - Speech production
 - Location of gag reflex



Oral Cavity

- Cheeks are lateral walls
- Lips are anterior opening
- Entire cavity lined with mucous membrane



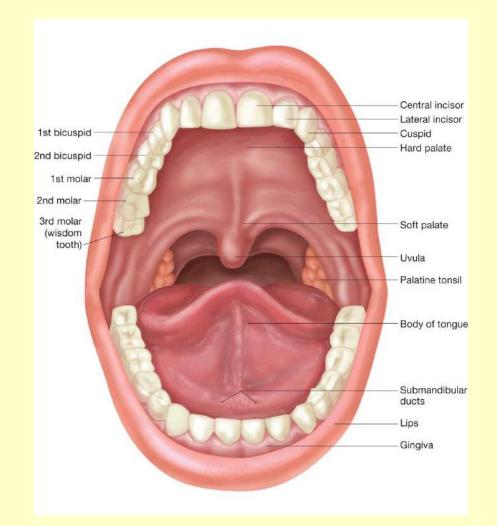


Figure 8.1 – Anatomy of the oral cavity.

PEARSONMedical Terminology: A Living Language, Fourth EditionEducationBonnie F. Fremgen and Suzanne S. Frucht

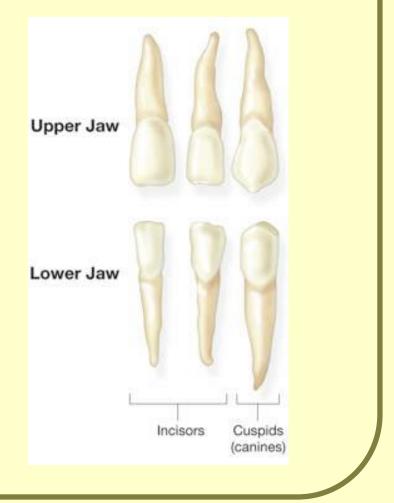
Oral Cavity

Digestion begins when food enters mouth Mechanically broken up by chewing Tongue moves food within mouth Mixes with saliva **Digestive enzymes** Lubricates Taste buds on tongue surface Detect bitter, sweet, salty, sour flavors

ARSON Medical Terminology: A Living Language, Fourth Edition ucation Bonnie F. Fremgen and Suzanne S. Frucht

Teeth

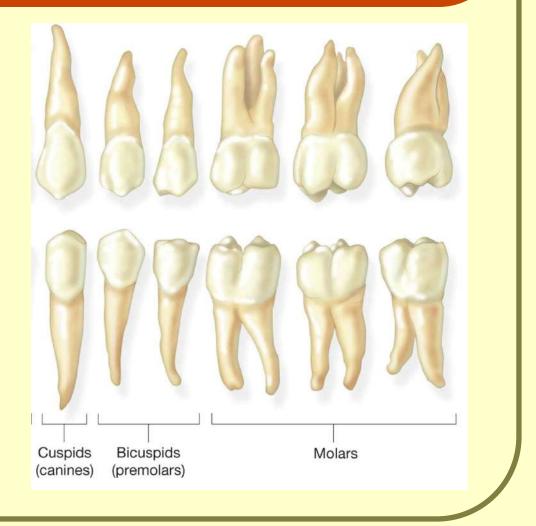
Cutting teeth Bite Tear Out Incisors Cuspids (canines)



PEARSONMedical Terminology: A Living Language, Fourth EditionEducationBonnie F. Fremgen and Suzanne S. Frucht

Teeth

 Grinding teeth
 Bicuspids (premolars)
 Molars
 Third molar is wisdom tooth



PEARSONMedical Terminology: A Living Language, Fourth EditionEducationBonnie F. Fremgen and Suzanne S. Frucht

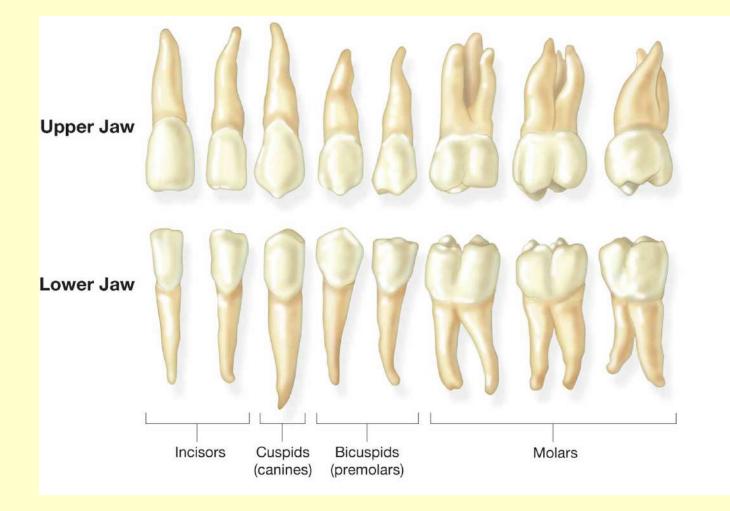
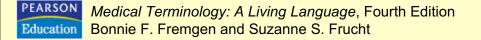


Figure 8.3A – The name and shape of the adult teeth.



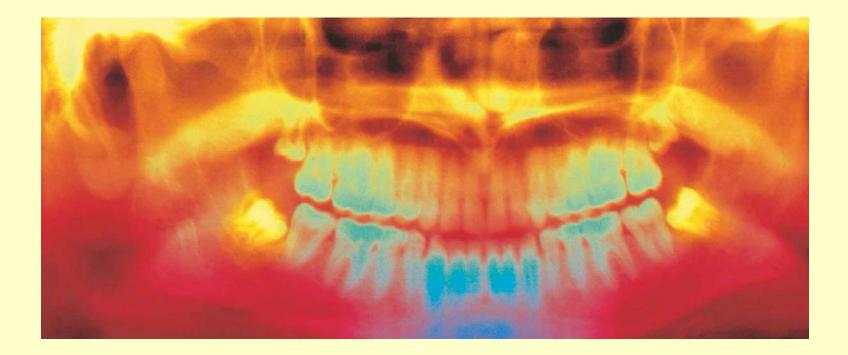


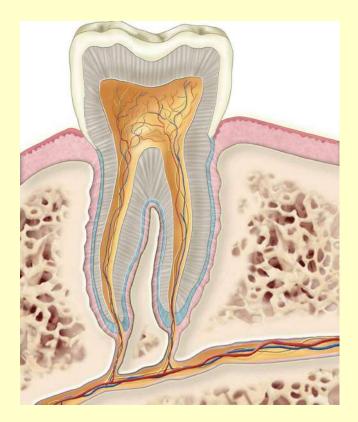
Figure 8.3B – Color enhanced X-ray of teeth showing four wisdom teeth that have not erupted. (Science Photo Library/Photo Researchers, Inc.)

PEARSONMedical Terminology: A Living Language, Fourth EditionEducationBonnie F. Fremgen and Suzanne S. Frucht

Tooth Structure

Gums

- Mucous membrane
 + connective tissue
- Seals off teeth in socket
- Tooth is divided into:
 - Crown above gum
 - Root below gum



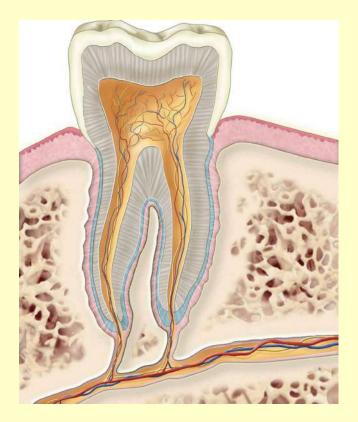
Tooth Structure

Enamel

Outer covering
In crown only
Hardest substance

Dentin

Under enamel
In crown and root
Bulk of tooth

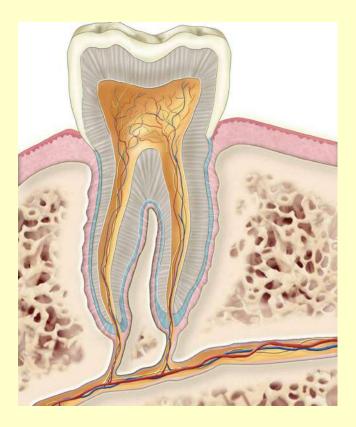


PEARSONMedical Terminology: A Living Language, Fourth EditionEducationBonnie F. Fremgen and Suzanne S. Frucht

Tooth Structure

Pulp cavity

- In crown and root canal
- Blood vessels, nerves
- Cementum and periodontal ligaments
 - Anchors root in jawbone



PEARSON

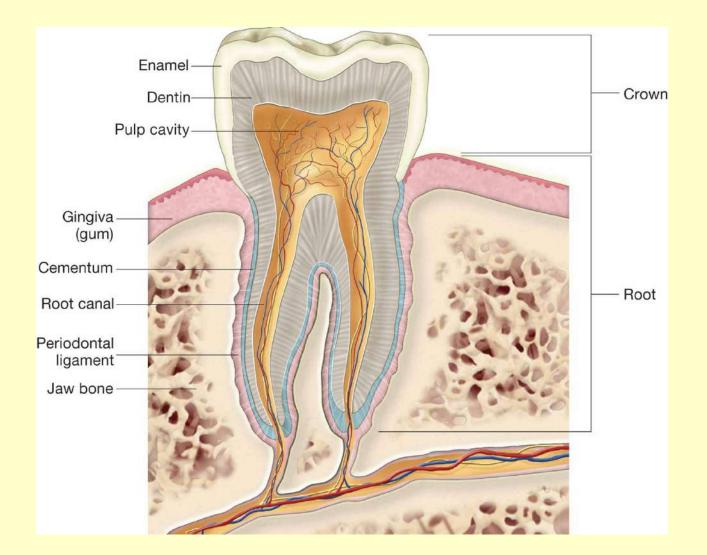
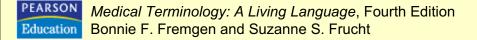


Figure 8.4 – Internal structures of the crown and root.



Humans Have 2 Sets of Teeth

Deciduous teeth

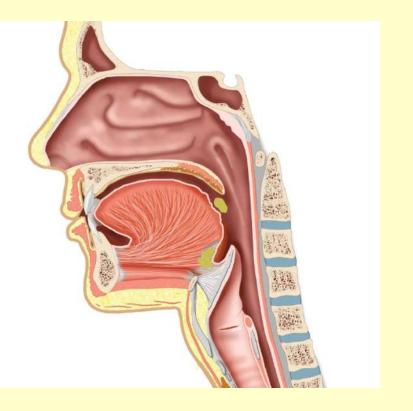
- First set, baby teeth
- 20 teeth erupt between ages 6 and 28 months

Permanent teeth

- Second set, adult teeth
- About 6 years of age, baby teeth fall out
- Replaced by 32 permanent teeth
- Process continues until 18-20 years of age

Pharynx

- Swallowed food enters oropharynx
- Proceeds down pharynx into laryngopharynx
- Epiglottis
 - Covers larynx and trachea
 - Shunts food away from lungs & into esophagus



PEARSONMedical Terminology: A Living Language, Fourth EditionEducationBonnie F. Fremgen and Suzanne S. Frucht

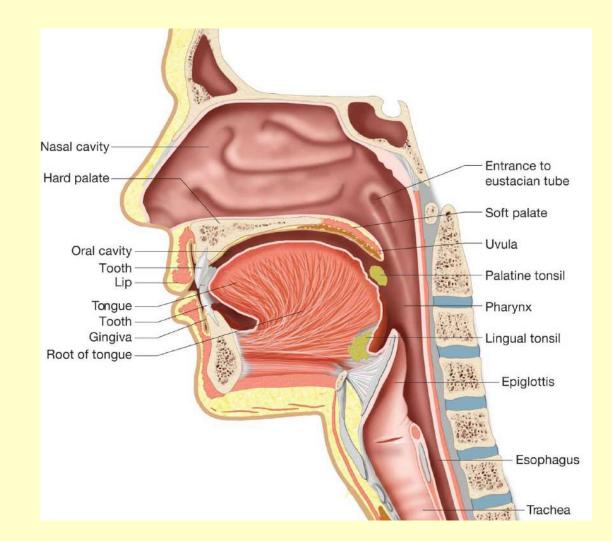


Figure 8.2 – Structures of the oral cavity, pharynx, and esophagus.

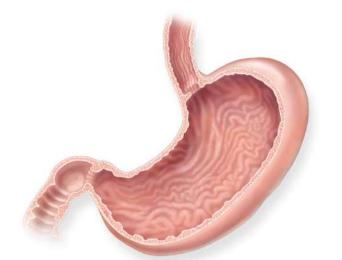
PEARSONMedical Terminology: A Living Language, Fourth EditionEducationBonnie F. Fremgen and Suzanne S. Frucht

Esophagus

- 10-inch long muscular tube
- Food enters from pharynx
- Delivered to stomach
- Propelled along by wavelike muscular movements
 - Called peristalsis
 - Pushes food through entire gut tube

The Stomach

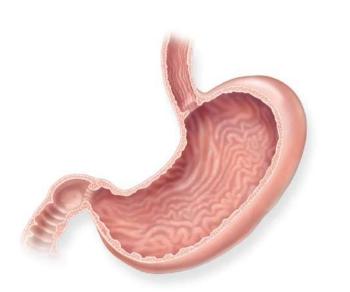
- J-shaped muscular organ
- Collects & churns food
 - Mixes it with
 hydrochloric acid
 (HCI)
- Forms chyme
 - Watery mix of food and digestive juices



PEARSONMedical Terminology: A Living Language, Fourth EditionEducationBonnie F. Fremgen and Suzanne S. Frucht

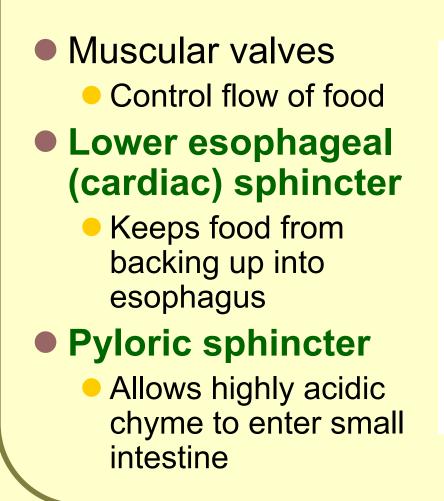
The Stomach

Three regions Fundus – upper Body – main Antrum – lower Rugae are folds in stomach lining Stretch out to allow stomach to expand with food



PEARSON Medical Terminology: A Living Language, Fourth Edition Education Bonnie F. Fremgen and Suzanne S. Frucht

Sphincters



Medical Terminology: A Living Language, Fourth Edition Bonnie F. Fremgen and Suzanne S. Frucht

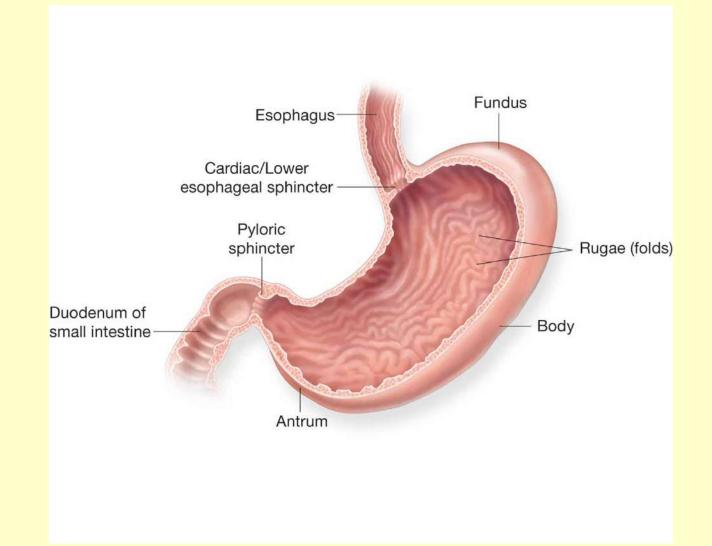
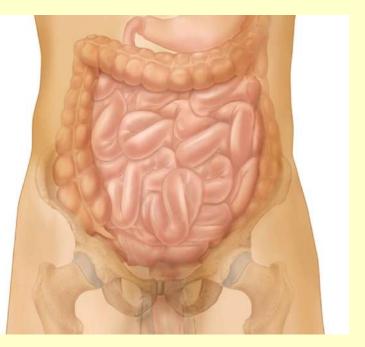


Figure 8.5 – The regions and internal structures of the stomach.

PEARSONMedical Terminology: A Living Language, Fourth EditionEducationBonnie F. Fremgen and Suzanne S. Frucht

Small Intestine

Longest portion of alimentary canal Averages 20 feet **Between pyloric** sphincter and colon Site of: Completion of digestion Majority of absorption



PEARSON Medical Terminology: A Living Language, Fourth Edition Education Bonnie F. Fremgen and Suzanne S. Frucht

Three Sections of Small Intestine

Duodenum

- First section about 10-12 inches long
- Starts at pyloric sphincter
- Jejunum
 - Second section about 8 feet long
- Ileum
 - Third section about 12 feet long
 - Connects to colon at ileocecal valve

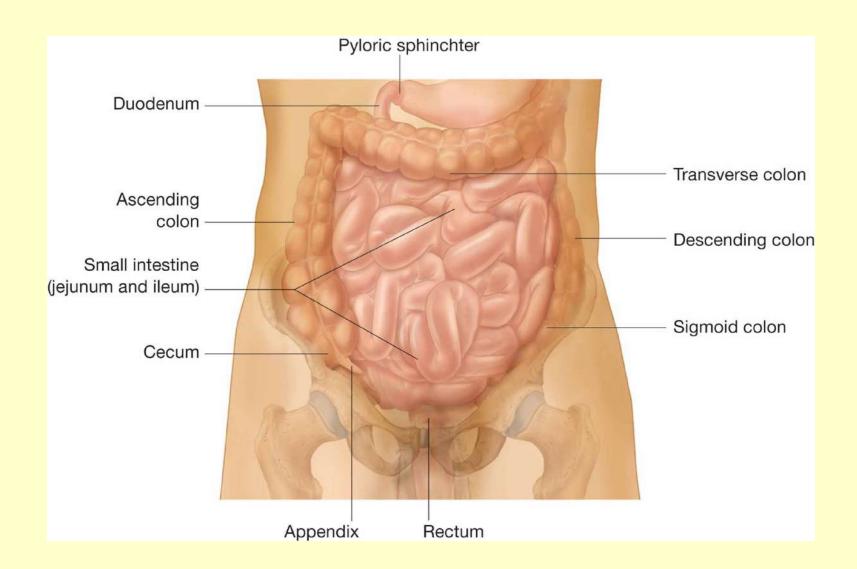


Figure 8.6 – The small intestine – duodenum, jejunum, ileum – begins at the pyloric sphincter and ends at the colon.

PEARSONMedical Terminology: A Living Language, Fourth EditionEducationBonnie F. Fremgen and Suzanne S. Frucht

Colon

5 feet long

- Extends from ileocecal valve to anus
- Fluid that remains after digestion and absorption enters colon
- Most is water and is reabsorbed into body
- Solid waste left over is feces
- Evacuated in bowel movements

Regions of the Colon

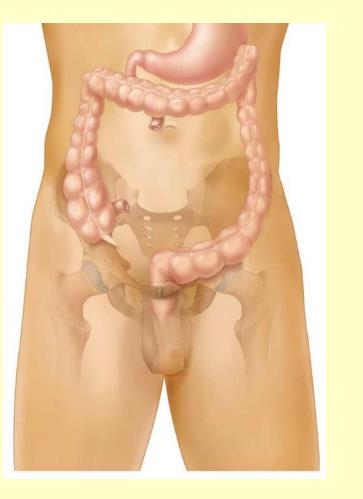
Cecum
Appendix
Ascending colon
Transverse colon
Descending colon
Sigmoid colon



PEARSONMedical Terminology: A Living Language, Fourth EditionEducationBonnie F. Fremgen and Suzanne S. Frucht

Rectum and Anus

- Rectum is area for storage of feces
- Leads to anus
 - External opening of alimentary canal
- Feces are evacuated
 Called defecation



Medical Terminology: A Living Language, Fourth Edition Bonnie F. Fremgen and Suzanne S. Frucht

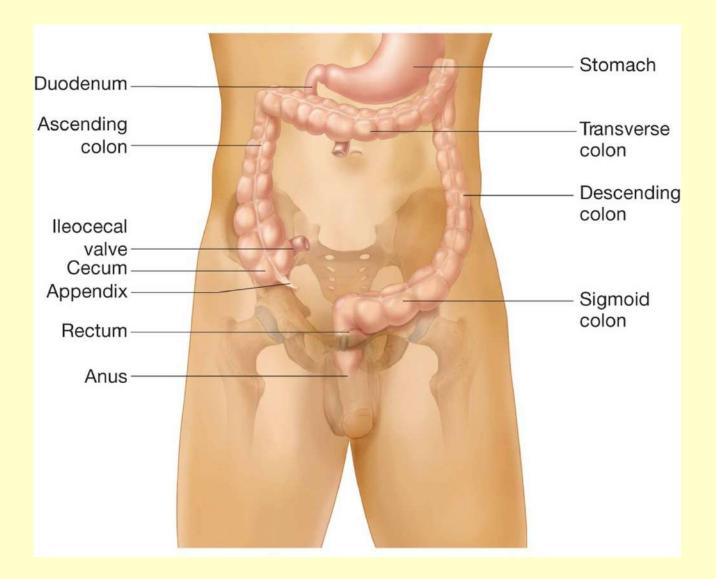
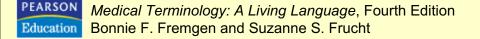


Figure 8.7 – The regions of the colon.



Accessory Organs

- Generally function by producing substances necessary for chemical breakdown of food
- Salivary glands
- Liver
- Gallbladder
- Pancreas

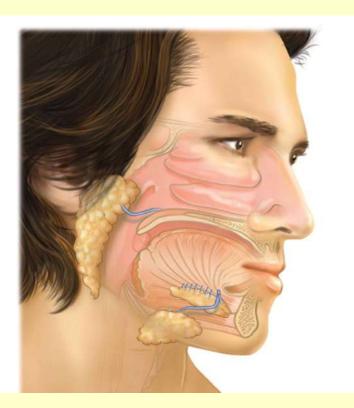
Salivary Glands

- Produce saliva
- Allows food to be swallowed without choking
- Saliva + food = bolus
- Contains amylase
 - Begins digestion of carbohydrates



Salivary Glands

Three pairs Parotid glands Sublingual glands Submandibular glands



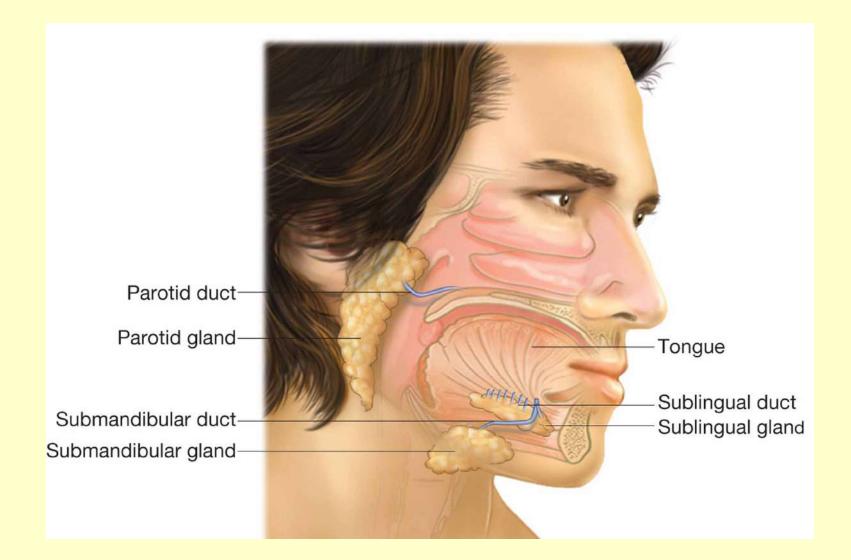
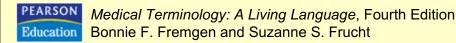


Figure 8.8 – The salivary glands, parotid, sublingual, and submandibular.





Located in right upper quadrant of abdomen

- Processes nutrients
- Detoxifies harmful substances
- Produces bile
 - Emulsification
 - Breaks up large fat globules into smaller droplets

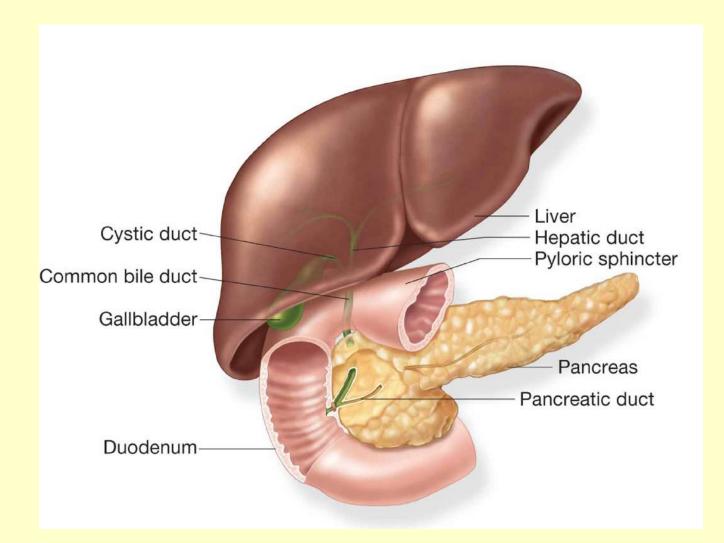
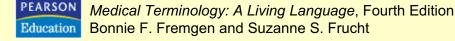
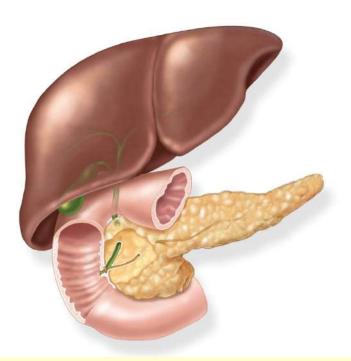


Figure 8.9 – The accessory organs of the digestive system: the liver, gallbladder, and pancreas.



Gallbladder

- Lies under liver
- Stores bile produced by liver
 - Hepatic duct
 - Cystic duct
- Common bile duct carries bile to duodenum



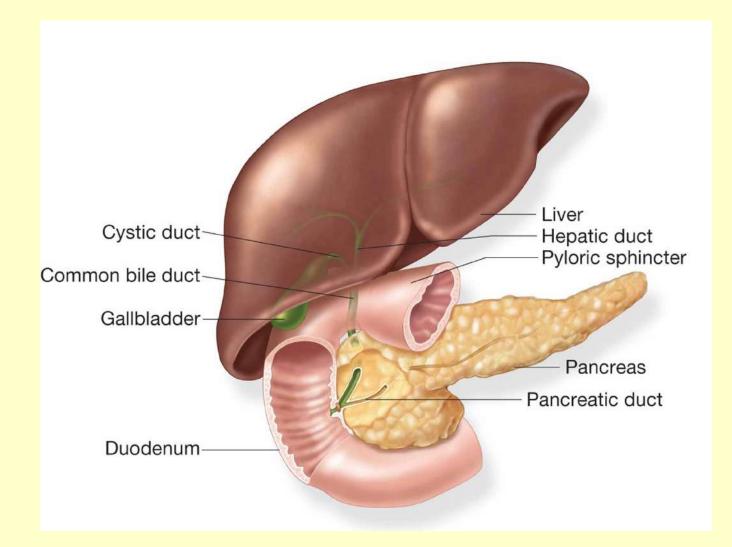
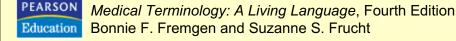
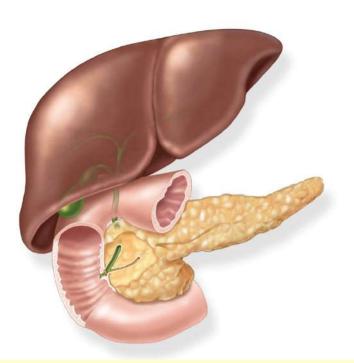


Figure 8.9 – The accessory organs of the digestive system: the liver, gallbladder, and pancreas.



Pancreas

- Digestive juices include:
 - Buffers neutralize acidic chyme
 - Enzymes digest carbohydrates, lipids, and proteins



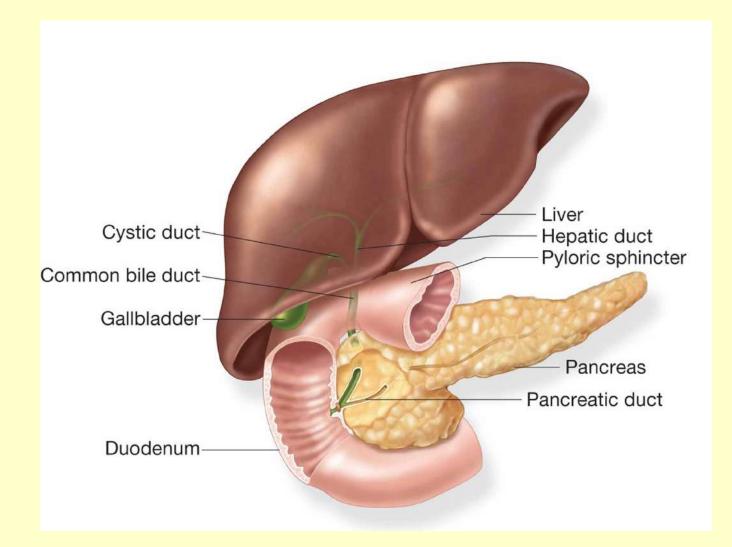
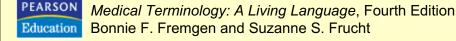
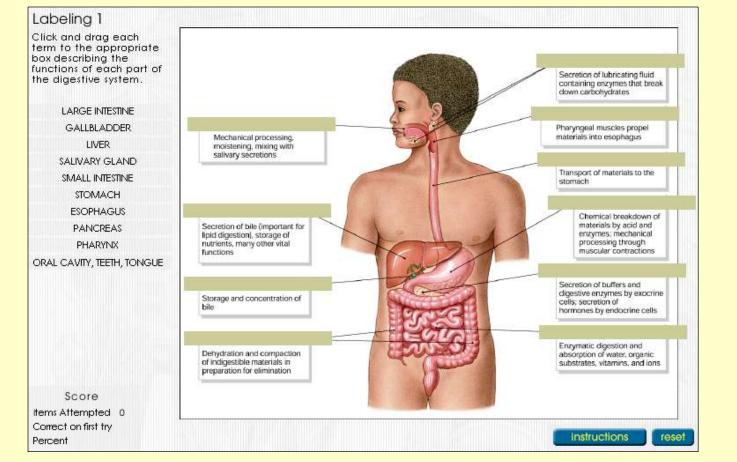


Figure 8.9 – The accessory organs of the digestive system: the liver, gallbladder, and pancreas.



Digestive System Exercise



Click here to review digestive system anatomy in a labeling activity.

PEARSON

Medical Terminology: A Living Language, Fourth Edition Back to Directory Bonnie F. Fremgen and Suzanne S. Frucht Education

Word Building with an/o & bucc/o

| –al | anal | pertaining to anus |
|------------|-------------|-------------------------------|
| | | |
| –al | buccal | pertaining to cheek |
| labi/o –al | labiobuccal | pertaining to lips and cheeks |
| | | |
| | | |
| | | |

Word Building with append/o & appendic/o

| -ectomy | appendectomy | surgical removal of appendix |
|------------------------|--|-----------------------------------|
| | | |
| –itis | appendicitis | inflammation of appendix |
| | | |
| | | |
| | | |
| | | |
| | | |
| SON Medical Terminolog | <i>y: A Living Language</i> . Fourth Edition | Copyright ©2009 by Pearson Educat |

Word Building with cholecyst/o & dent/o

| -ectomy | cholecystectomy | removal of gallbladder |
|---------|-----------------|-----------------------------|
| –gram | cholecystogram | X-ray record of gallbladder |
| –ic | cholecystic | pertaining to gallbladder |
| –algia | cholecystalgia | gallbladder pain |
| | | |
| | dental | pertaining to teeth |

| –al | dental | pertaining to teeth |
|--------|-----------|---------------------|
| –algia | dentalgia | tooth pain |

PEARSON Education

Word Building with col/o & colon/o

| -ectomy | colectomy | removal of colon |
|------------|------------|------------------------------|
| -ostomy | colostomy | new opening into colon |
| rect/o –al | colorectal | pertaining to colon & rectum |

| -scope | colonoscope | instrument to view colon |
|--------|-------------|--------------------------|
| –ic | colonic | pertaining to colon |

Word Building with duoden/o, enter/o, & esophag/o

| –al | duodenal | pertaining to duodenum |
|----------|----------------|---------------------------|
| • . | | |
| –ic | enteric | pertaining to intestine |
| –itis | enteritis | inflammation of intestine |
| –eal | esophageal | pertaining to esophagus |
| | | |
| -ectasis | esophagectasis | dilation of esophagus |
| | | |
| | | |

Word Building with gastr/o

| –algia | gastralgia | stomach pain |
|---------------------|--------------------|-------------------------|
| —ic | gastric | pertaining to stomach |
| enter/o –itis | gastroenteritis | inflammation of stomach |
| enter/o –ologist | gastroenterologist | stomach specialist |
| -malacia | gastromalacia | stomach softening |

PEARSON

Word Building with gastr/o

| nas/o –ic | nasogastric | pertaining to nose & stomach |
|-----------|-------------|------------------------------|
| -ostomy | gastrostomy | new opening into stomach |
| -scope | gastroscope | instrument to view stomach |
| –itis | gastritis | inflammation of stomach |
| -ectomy | gastrectomy | surgical removal of stomach |

Word Building with gingiv/o & gloss/o

| –al | gingival | pertaining to gums |
|-------|------------|--------------------|
| -itis | gingivitis | gum inflammation |

| –al | glossal | pertaining to tongue |
|-----------|-------------|----------------------------|
| hypo– –al | hypoglossal | pertaining to under tongue |

Word Building with hepat/o & ile/o

| –itis | hepatitis | inflammation of liver |
|-------|-----------|-----------------------|
| –oma | hepatoma | liver tumor |
| —ic | hepatic | pertaining to liver |

| –al | ileal | pertaining to ileum |
|---------|-----------|------------------------|
| -ostomy | ileostomy | new opening into ileum |

Word Building with jejun/o, lapar/o, & lingu/o

| –al | jejunal | pertaining to jejunum |
|--------------------------|------------------------------------|---------------------------------------|
| | | |
| -otomy | laparotomy | incision into abdomen |
| -scope | laparoscope | instrument to view inside colon |
| | | |
| subal | sublingual | pertaining to under the tongue |
| | | |
| | | |
| RSON Medical Terminology | : A Living Language, Fourth Editic | on Copyright ©2009 by Pearson Educati |

Word Building with odont/o, or/o, & palat/o

| orth/o –ic | orthodontic | pertaining to straight teeth |
|------------|---|--|
| | | |
| –al | oral | pertaining to mouth |
| | | |
| -plasty | palatoplasty | surgical repair of palate |
| | | |
| | | |
| | | |
| | | |
| | | |
| | A Living Language, Fourth Edition nd Suzanne S. Frucht | on Copyright ©2009 by Pearson Education, In Upper Saddle River, New Jersey 0745 All rights reserve |

Word Building with pancreat/o & pharyng/o

| –itis | pancreatitis | inflammation of pancreas |
|-------|--------------|--------------------------|
| –ic | pancreatic | pertaining to pancreas |

| –eal | pharyngeal | pertaining to pharynx |
|---------|----------------|----------------------------|
| –plegia | pharyngoplegia | pharynx paralysis |
| –plasty | pharyngoplasty | surgical repair of pharynx |

Word Building with proct/o & pylor/o

| –ptosis | proctoptosis | drooping rectum & anus |
|---------|--------------|------------------------------------|
| -logist | proctologist | rectum & anus specialist |
| –pexy | proctopexy | surgical fixation of rectum & anus |

| —ic | pyloric | pertaining to pylorus |
|-----|---------|-----------------------|
| | | |

Word Building with rect/o, sialaden/o, & sigmoid/o

| –al | rectal | pertaining to rectum | | |
|--------|---------------|---|--|--|
| | | | | |
| —itis | sialadenitis | inflammation of salivary glands | | |
| -scope | sigmoidoscope | instrument to view inside sigmoid colon | | |
| –al | sigmoidal | pertaining to sigmoid colon | | |
| | | | | |

Word Building with –emesis, –orexia, & -prandial

| hemat/o | hematemesis | vomit blood |
|---------|-------------|---------------------------------------|
| hyper- | hyperemesis | excessive vomiting |
| | | · · · · · · · · · · · · · · · · · · · |
| an– | anorexia | lack of appetite |
| dys– | dysorexia | abnormal appetite |

| post– | postprandial | pertaining to after a meal |
|-------|--------------|----------------------------|
|-------|--------------|----------------------------|

Word Building with –pepsia & –phagia

| brady- | bradypepsia | slow digestion |
|--------|-------------|-------------------|
| dys– | dyspepsia | painful digestion |

| а— | aphagia | lack of eating |
|-------|------------|-----------------|
| dys– | dysphagia | abnormal eating |
| poly– | polyphagia | too much eating |

| loss of appetite with other conditions; different from anorexia nervosa |
|--|
| collection of fluid in peritoneal cavity |
| inability to control defecation |
| dental appliance attached to adjacent teeth to replace missing teeth |
| loss of weight and wasting occurring during chronic disease |
| |



| constipation | difficult or infrequent defecation |
|---------------|--|
| crown | artificial tooth to replace original crown |
| dental caries | decay of tooth due to bacterial infection; tooth cavity |
| dentistry | prevention, diagnosis, and treatment of conditions involving teeth, jaw, and mouth |
| denture | partial or complete set of artificial teeth |
| diarrhea | frequent, watery bowel movements |

PEARSON

| emesis | vomiting |
|-------------------|---|
| gastroenterology | diagnosis and treatment of diseases of the digestive system |
| hematochezia | passing bright red blood in stools |
| implant | prosthetic device in jaw to anchor a tooth |
| internal medicine | diagnosis and treatment of diseases of internal organs |

PEARSON

| jaundice | yellow cast to skin; caused by deposit of bile pigment; often caused by liver disease |
|--------------|---|
| melena | passage of dark tarry stool, due to digested blood |
| nausea | urge to vomit |
| obesity | weight above healthy levels |
| orthodontics | correction of problems of tooth alignment |

Orthodontics Video



Click here to view a video on orthodontics.

PEARSON Education

Medical Terminology: A Living Language, Fourth Edition Bonnie F. Fremgen and Suzanne S. Frucht Back to Directory

| periodontics | treating conditions of the gums and area around teeth |
|---------------|--|
| polyp | tumor with a pedicle (stem) attachment; found on mucous membranes |
| proctology | diagnosis and treatment of diseases of anus and rectum |
| pyrosis | stomach acid splashing into esophagus; heartburn |
| regurgitation | backflow of stomach contents into mouth |



Oral Cavity Pathology

| aphthous ulcers | ulcers in the mouth; commonly called canker sores |
|-----------------|---|
| cleft lip | congenital anomaly where upper lip and jaw fail to fuse in the midline, leaving a gap |
| cleft palate | congenital anomaly where hard palate fails to fuse in the midline, leaving an opening into nasal cavity |

Oral Cavity Pathology

| herpes labialis | herpes simplex virus type 1 (HSV-1) infection; fever blisters or cold sores |
|------------------------|--|
| periodontal disease | disease of supporting structures around the teeth; especially the gums; most common cause of tooth loss |

Esophageal Pathology

| esophageal | varicose veins in the esophagus; |
|------------------|----------------------------------|
| varices | hemorrhaging occurs if rupture |
| gastroesophageal | acid from stomach flows backward |
| reflux disease | up into esophagus causing |
| (GERD) | inflammation and pain |

GERD Video



Click here to view a video on gastroesophageal reflux disease.

PEARSON Education

Medical Terminology: A Living Language, Fourth Edition Bonnie F. Fremgen and Suzanne S. Frucht Back to Directory

Stomach Pathology

| gastric carcinoma | malignant tumor in stomach |
|-------------------------------|---|
| hiatal hernia | protrusion of stomach through diaphragm into thoracic cavity; also called diaphragmatocele |
| peptic ulcer disease (PUD) | ulcer in the lower portion of esophagus, stomach, and/or duodenum; caused by high acid of stomach juices; may be a result of <i>Helicobacter pylori</i> infection |

PEARSON Education

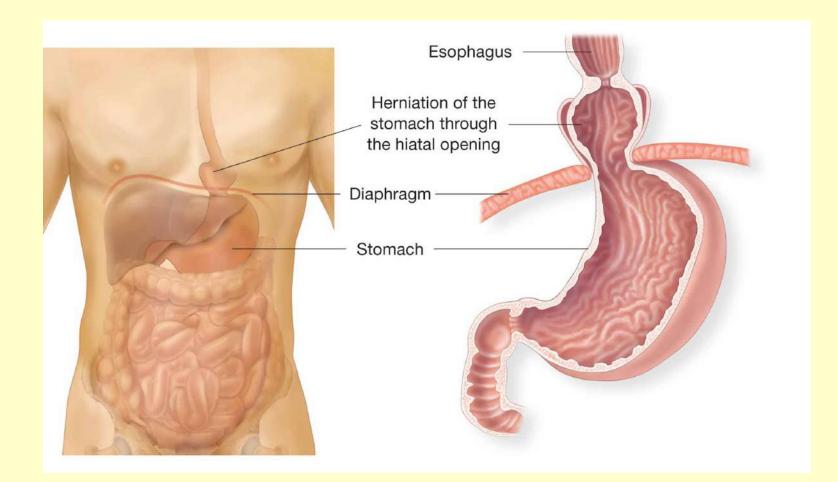
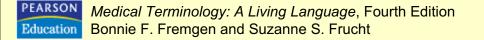


Figure 8.10 – A hiatal hernia or diaphragmatocele.



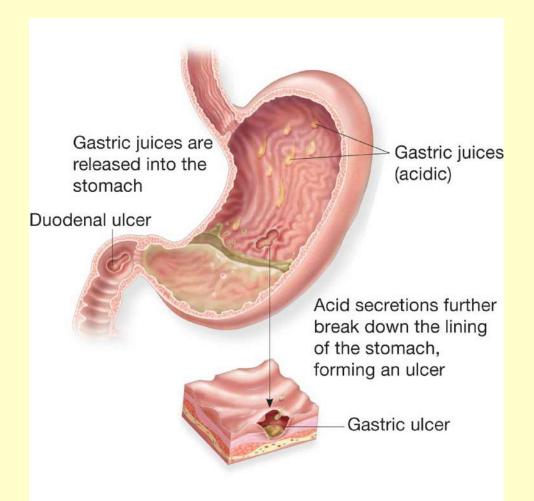


Figure 8.11A – The location and appearance of a peptic ulcer in both the stomach and the duodenum.

PEARSONMedical Terminology: A Living Language, Fourth EditionEducationBonnie F. Fremgen and Suzanne S. Frucht

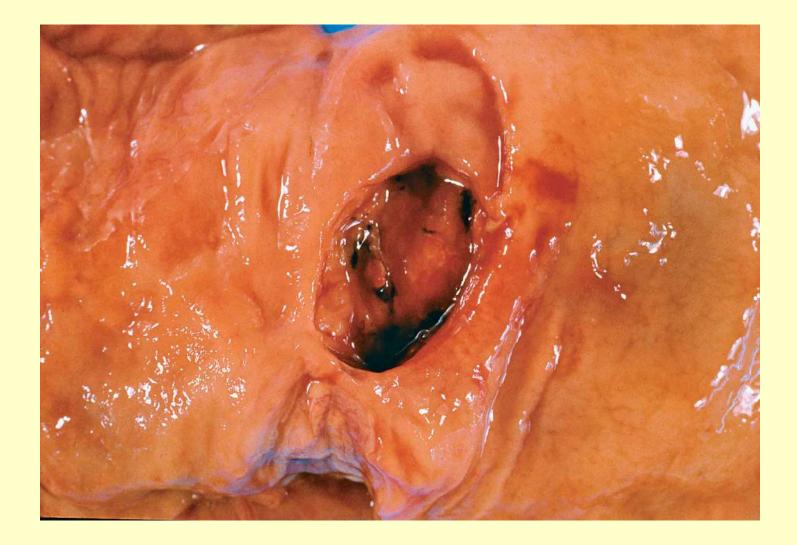


Figure 8.11B – Photomicrograph of a gastric ulcer. (Dr. E. Walker/Science Photo Library/Photo Researchers, Inc.)

PEARSONMedical Terminology: A Living Language, Fourth EditionEducationBonnie F. Fremgen and Suzanne S. Frucht

Small Intestine & Colon Pathology

| anal fistula | abnormal passageway from surface directly into rectum; around anal opening |
|-------------------------|--|
| colorectal carcinoma | malignant tumor in the colon or rectum |
| Crohn's disease | chronic inflammatory bowel disease, primarily in ileum and/or colon; results in scarring; also called regional ileitis |

Small Intestine & Colon Pathology

| diverticulitis | inflammation of a diverticulum, an outpouching off the colon; results from food being trapped inside |
|----------------|---|
| diverticulosis | condition of having diverticula, may lead to diverticulitis |
| dysentery | diarrhea with mucus and blood, severe abdominal pain, and fever; caused by contaminated food or water |

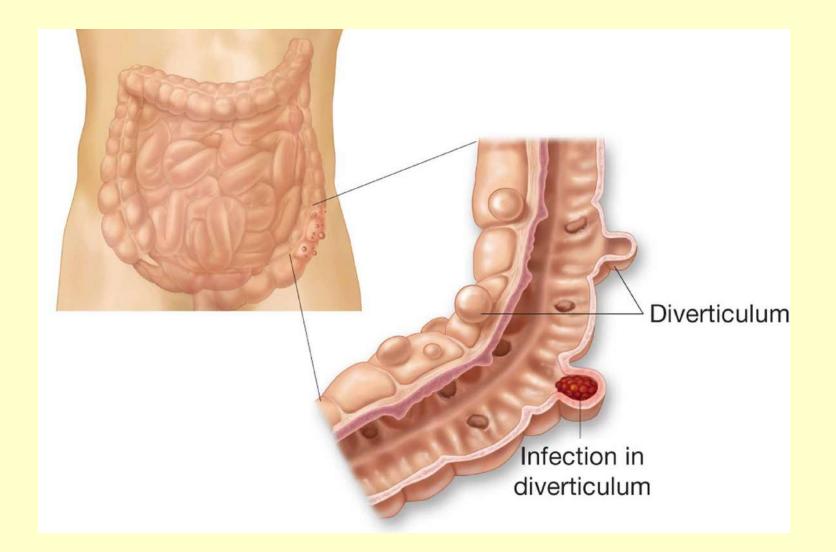


Figure 8.12 – Diverticulosis.

PEARSONMedical Terminology: A Living Language, Fourth EditionEducationBonnie F. Fremgen and Suzanne S. Frucht

Small Intestine & Colon Pathology

| hemorrhoids | varicose veins in the anal region |
|--------------------|--|
| ileus | severe abdominal pain, inability to defecate, abdominal distension; caused by intestinal blockage |
| inguinal hernia | protrusion of a loop of bowel through abdominal muscle and into groin region; may become incarcerated or strangulated if muscle pinches the loop of bowel |

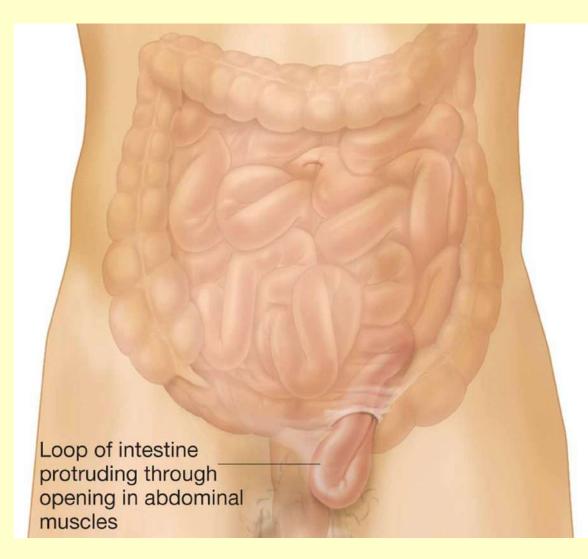


Figure 8.13 – An inguinal hernia.

PEARSONMedical Terminology: A Living Language, Fourth EditionEducationBonnie F. Fremgen and Suzanne S. Frucht

Small Intestine & Colon Pathology

| intussusception | one part of intestine slips or telescopes into another section |
|-----------------------------------|---|
| irritable bowel syndrome (IBS) | disturbance in function of intestine for unknown reason; causes abdominal cramping and alternating diarrhea and constipation; also called functional bowel syndrome |

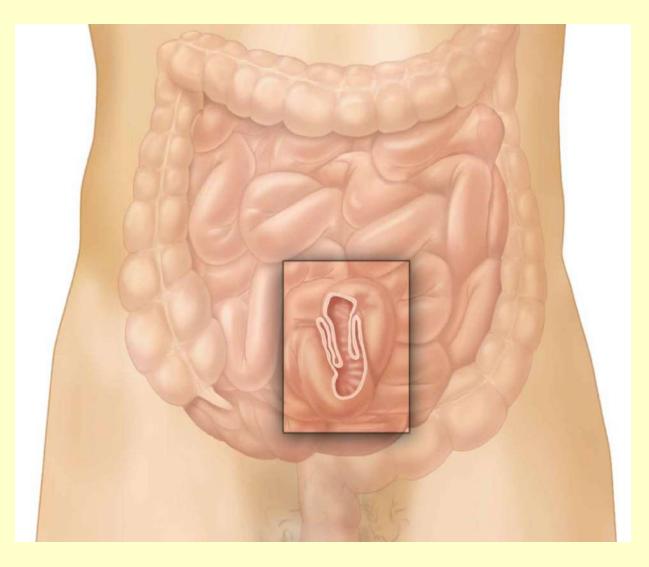


Figure 8.14 – Intussusception.

PEARSONMedical Terminology: A Living Language, Fourth EditionEducationBonnie F. Fremgen and Suzanne S. Frucht

Small Intestine & Colon Pathology

| polyposis | having polyps growing on the mucous membrane of the colon; may become cancerous |
|--------------------|---|
| ulcerative colitis | chronic inflammatory condition with numerous small ulcers on the lining of the colon; also called inflammatory bowel disease (IBD) |
| volvulus | bowel twists upon itself causing an obstruction |

PEARSON Education

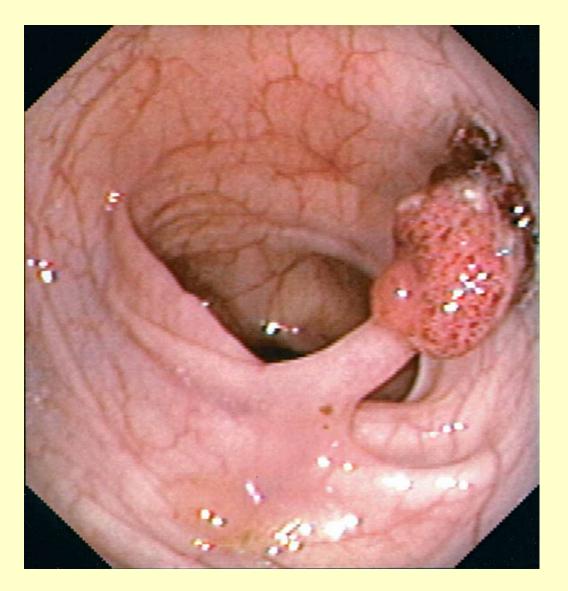


Figure 8.15 – Photograph showing a polyp in the colon. (ISM/Phototake NYC)

PEARSONMedical Terminology: A Living Language, Fourth EditionEducationBonnie F. Fremgen and Suzanne S. Frucht

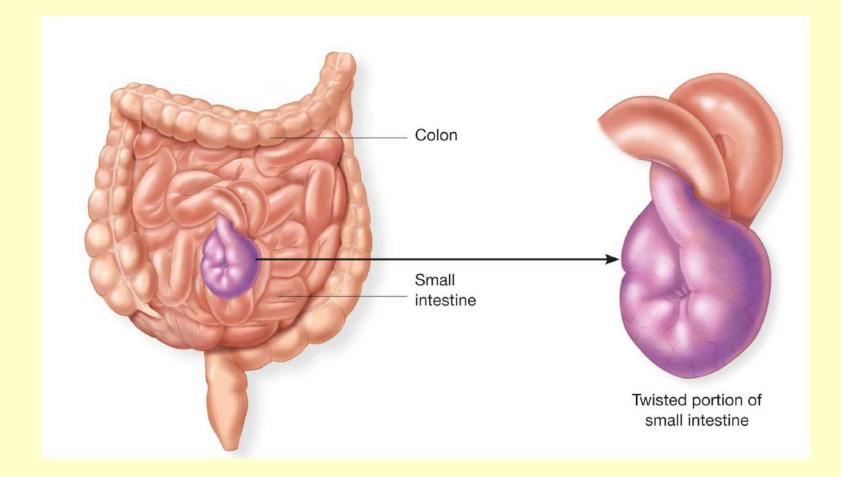


Figure 8.16 – Volvulus.

PEARSONMedical Terminology: A Living Language, Fourth EditionEducationBonnie F. Fremgen and Suzanne S. Frucht

Accessory Organ Pathology

| cholecystitis | inflammation of gallbladder; commonly caused by gallstones |
|----------------|--|
| cholelithiasis | presence of gallstones; may or may not cause symptoms |
| cirrhosis | chronic liver disease due to liver failure |
| hepatitis | inflammation of liver; usually due to a viral infection |

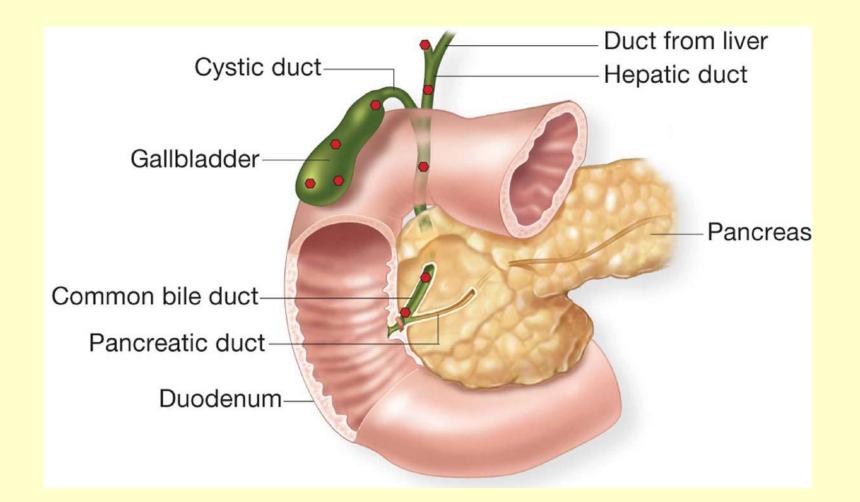


Figure 8.17A – Common sites for cholelithiasis.

PEARSONMedical Terminology: A Living Language, Fourth EditionEducationBonnie F. Fremgen and Suzanne S. Frucht



Figure 8.17B – A gallbladder specimen with multiple gallstones. (Martin Rotker/Phototake NYC)

PEARSONMedical Terminology: A Living Language, Fourth EditionEducationBonnie F. Fremgen and Suzanne S. Frucht

Clinical Laboratory Tests

| alanine transaminase (ALT) | normal enzyme in the bloodstream; increased levels indicate liver disease |
|------------------------------------|--|
| aspartate transaminase (AST) | normal enzyme in the bloodstream; increased levels indicate liver disease |
| fecal occult blood (FOBT) | examines feces for microscopic amounts of blood; also called hemoccult |



Clinical Laboratory Tests

| ova and parasites (O&P) | examination of feces for presence of parasites or their eggs |
|-------------------------------|--|
| serum bilirubin | determines amount of bilirubin in bloodstream; indicates liver disease |
| stool culture | culture of feces to look for presence of pathogenic bacteria |



Diagnostic Imaging

| bite-wing X-ray | X-ray of teeth with film holder held in the teeth |
|--|---|
| intravenous cholecystography | X-ray of gallbladder and bile ducts after intravenous injection of dye |
| lower gastrointestinal series (lower GI) | X-ray of colon and rectum after barium dye injected via an enema; also called a barium enema (BE) |



Figure 8.18 – Color enhanced X-ray of the colon taken during a barium enema.

(CNRI/Science Photo Library/Photo Researchers, Inc.)

PEARSONMedical Terminology: A Living Language, Fourth EditionEducationBonnie F. Fremgen and Suzanne S. Frucht

Diagnostic Imaging

| percutaneous transhepatic cholangiography (PTC) | X-ray of liver and bile duct after dye is injected directly into liver |
|--|---|
| upper gastrointestinal series (upper GI) | X-ray of esophagus, stomach, and duodenum after swallowing barium; also called barium swallow |

Endoscopic Procedures

| esophagogastro- duodenoscopy (EGD) | using a scope to view inside the esophagus, stomach, and duodenum |
|---|---|
| endoscopic retrograde cholangiopan- creatography (ERCP) | visual examine inside hepatic duct, common bile duct, and pancreatic duct; scope is inserted through anus and worked backwards through gut |

Endoscopic Procedures

| colonoscopy | visual examination inside of colon and rectum using a colonoscope |
|---------------|---|
| gastroscopy | visual examination inside of stomach using a gastroscope |
| laparoscopy | visual examination inside of abdominal cavity using a laparoscope |
| sigmoidoscopy | visual examination inside of sigmoid colon using a sigmoidoscope |

Sigmoidoscopy Video



Click here to view a video on sigmoidoscopy.

PEARSON Education

Medical Terminology: A Living Language, Fourth Edition Bonnie F. Fremgen and Suzanne S. Frucht Back to Directory

Additional Diagnostic Procedures

| paracentesis | insertion of needle into abdominal cavity to withdraw fluid |
|--------------|---|
| | |



Dental Procedures

| extraction | removing teeth |
|------------|---|
| root canal | drilling out of pulp cavity of a tooth; used to save a tooth that is badly infected |
| | |
| | |
| | |
| | |
| | |

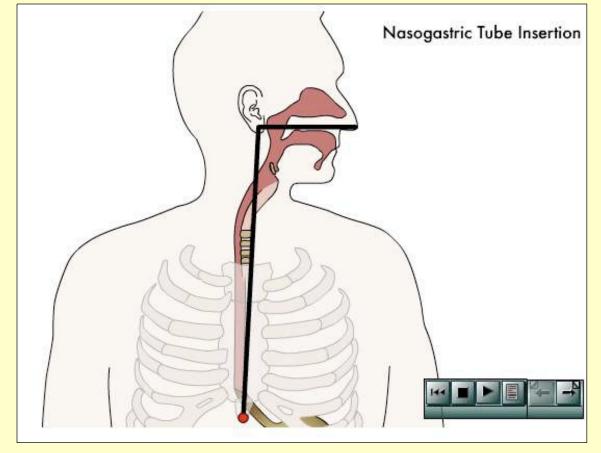
PEARSONMedical Terminology: A Living Language, Fourth EditionEducationBonnie F. Fremgen and Suzanne S. Frucht

Medical Procedures

| gavage | placing liquid nourishment directly into stomach via a nasogastric tube |
|--|--|
| lavage | washing out stomach using a nasogastric tube |
| nasogastric intubation (NG tube) | flexible catheter inserted into nose and down esophagus into the stomach |
| total parenteral nutrition (TPN) | providing 100% of patient nutrition; used when patient is unable to eat |



Nasogastric Intubation Animation



Click here to view an animation on nasogastric intubation.

PEARSONMedical Terminology: A Living Language, Fourth EditionEducationBonnie F. Fremgen and Suzanne S. FruchtBack to Directory

Dieticians Video

| (| Vegetabl | CO. CO. | | Fruits | |
|---------------|----------|----------|--------------------|------------------|--------|
| | ig E | lgG | | lgE | Ig0 |
| Alfaith | 4+ (1) | 0+ | Apple | 64 (G) | |
| Artichola | e. (3) | 1. | Apricot | 6+ (C) | 2+ |
| Asparagus | 94 (G) | 2. | Benene | - 0+ (C) | 1. |
| Avocado | 4 Q | 2- | Blueberry | 04 🔇 | 1. |
| Been sproot | Dr () | P+ (2) | Cantaloupe | Pr () | 9- 🔘 |
| Deet | \$4 (0) | 2. | Cherry | 0+ | 9+ 🔘 |
| Brocco4 | Pr (2) | 3+ | Coconut | 0 O | 0- 🕘 |
| Cabbage | 0. 0 | 1. | Granberry | 0+ 🔘 | 3+ |
| Cartol | 01 0 | 1. | Besps | 0+ 🕥 | 1+ |
| Coulifiower | 0+ 3 | 3+ | Grapehult | 0+ 🔘 | 1+ 5 |
| Gelery | 0+ () | 31 22 30 | Lamon | p. () | 9+ (1) |
| Cucumber | 0+ (G) | 1. | Nectarine | 0+ 🔘 | 24 |
| Garlio | 0+ (C) | 24 | Orange | 0. 📿 | 0+ 🔘 |
| Green pepper | 0+ | 4.0 | Ререуа | 0. (1) | 1. |
| Lettuce | 0. 3 | 19 | Peach | 04 C | 34 |
| Mushroom | 9+ 💮 | 24 | Pear | 0+ 🕥 | 24 |
| Olive | 0. () | ** | Pinasppie | 0- 🔘 | 1-1 |
| Onion | 1. 20 | 0.0 | Plum | 0- 00 | 1. |
| Pea | 0+ 🕑 | 0+ | Paspborry | G+ () | 1. |
| Potato, amost | 0+ 🔘 | Dr 🔘 | Strawberry | 8+ 🔘 | 1. |
| Potato, white | 0. 10 | 0. 3 | Watermelon | 0- 0 | * () |
| Spinach | 0+ 0 | 1. | 17 Nederlandsharme | A REAL PROPERTY. | |

Click here to view a video on registered dieticians.

PEARSON Education

Medical Terminology: A Living Language, Fourth Edition Bonnie F. Fremgen and Suzanne S. Frucht Back to Directory

| between two organs; like joining together two sections of colon |
|--|
| surgical procedures to treat morbid obesity; like stomach stapling |
| surgical crushing of a gallstone in the common bile duct |
| |

| colostomy | surgical creation of opening into some portion of colon through abdominal wall |
|---------------------------|--|
| diverticulectomy | surgical removal of diverticula |
| exploratory laparotomy | surgical procedure to examine the abdominal organs |

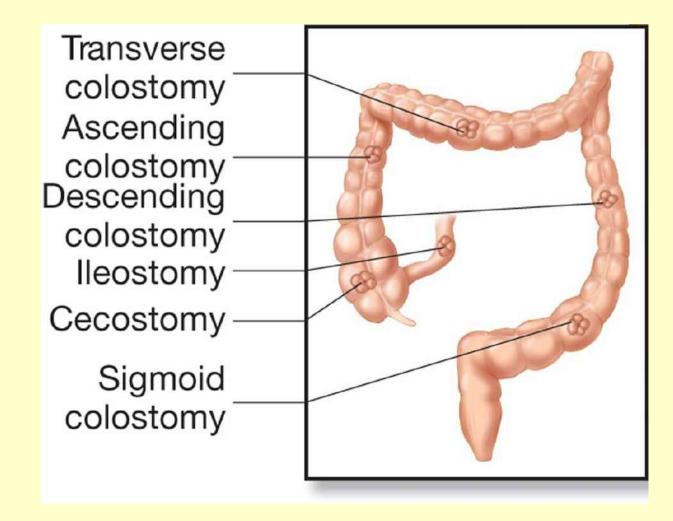


Figure 8.19A – The colon illustrating various –ostomy sites.

PEARSONMedical Terminology: A Living Language, Fourth EditionEducationBonnie F. Fremgen and Suzanne S. Frucht

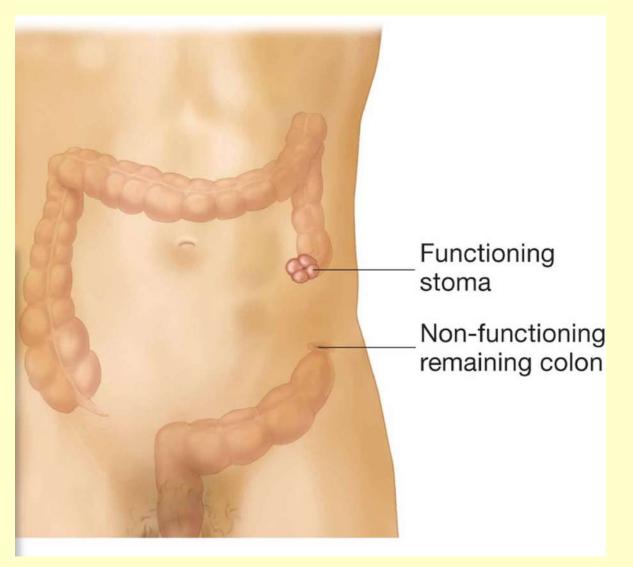
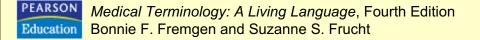


Figure 8.19B – Colostomy in the descending colon.



| fistulectomy | | removal of a fistula |
|------------------|-----------------|---|
| g | astric stapling | procedure to close off large section of stomach with rows of staples; results in much smaller stomach |
| hemorrhoidectomy | | surgical removal of hemorrhoids |

| hernioplasty | surgical repair of a hernia |
|---------------------------------|--|
| laparoscopic cholecystectomy | surgical removal of gallbladder through a laparoscopic incision |
| liver transplant | implantation of a donor liver |

Digestive System Pharmacology

| anorexiant | suppresses appetite to treat obesity | Adipost, Obezine |
|---------------|--------------------------------------|--------------------------|
| antacid | neutralizes stomach acid | Tums, Maalox, Mylanta |
| antidiarrheal | used to control diarrhea | Imodium, Lomotil |
| antiemetic | treats nausea and vomiting | Compazine, Phenergan |



Digestive System Pharmacology

| emetic | induces vomiting | Ipecac syrup |
|-------------------------------------|--|-----------------------------|
| H ₂ -receptor antagonist | blocks the production of stomach acid | Zantac, Pepcid, Tagament |
| laxative | stimulates a bowel movement | Senokot, Metamucil |
| proton pump inhibitor | blocks stomach's ability to secrete acid | Nexium, Prilosec |

| ас | before meals |
|-----|------------------------|
| ALT | alanine transaminase |
| AST | aspartate transaminase |
| Ва | barium |
| BE | barium enema |
| BM | bowel movement |
| BS | bowel sounds |

PEARSON

| _ | | | |
|---|------|---|--|
| | CBD | common bile duct | |
| | EGD | esophagogastroduodenoscopy | |
| | ERCP | endoscopic retrograde cholangiopancreatography | |
| | FOBT | fecal occult blood test | |
| | GB | gallbladder | |
| | GERD | gastroesophageal reflux disease | |
| | GI | gastrointestinal | |
| | | | |



| HAV | hepatitis A virus |
|-------|-----------------------------|
| HBV | hepatitis B virus |
| HCI | hydrochloric acid |
| HCV | hepatitis C virus |
| HDV | hepatitis D virus |
| HEV | hepatitis E virus |
| HSV-1 | herpes simplex virus type 1 |

PEARSON

| IBD | inflammatory bowel disease |
|-----|-----------------------------|
| IBS | irritable bowel syndrome |
| IVC | intravenous cholangiography |
| NG | nasogastric |
| NPO | nothing by mouth |
| n&v | nausea and vomiting |
| O&P | ova and parasites |

PEARSON

| рс | after meals |
|-----|---|
| PO | by mouth |
| рр | postprandial |
| PTC | percutaneous transhepatic cholangiography |
| PUD | peptic ulcer disease |
| TPN | total parenteral nutrition |
| UGI | upper gastrointestinal series |

