

## The Digestive System

Text: Human Biology, by Mader. pp. 158-169

1. Introduction
  - A. Ingestion
  - B. Digestion
  - C. Movement
  - D. Absorption
  - E. Elimination
  
2. Digestive Tract Wall
  - A. Lumen
  - B. Mucosa
  - C. Submucosa
  - D. Muscularis
  - E. Serosa
    - i. Peritoneal Cavity and Peritonitis
  
3. Mouth
  - A. Hard Palate
  - B. Soft Palate
  - C. Salivary Glands

## Human Biology Student Outline – Digestive System

- i. Saliva (p. 160)
  - a. Composition and Function
    - Mucin forms mucus.
    - Salivary Amylase
    - Bicarbonate

### D. Teeth and Gums (p. 160)

- i. Dentition
  - a. Incisors - cutting
  - b. Canines - tearing
  - c. Premolars - grinding
  - d. Molars - grinding
    - Wisdom Teeth (Molars)
- ii. Deciduous Teeth
- iii. Permanent teeth
- iv. Periodontal Ligaments
- v. Tooth Anatomy (p. 160)
  - a. Root
  - b. Crown
  - c. Root Canal

- d. Enamel
- e. Dentine
- f. Cement
- g. Pulp
- vi. Dental Caries
  - a. Bacteria
  - b. Plaque
  - c. Lactic Acid
    - Perioditis

G. Tongue (p. 161)

- i. Function
- ii. Skeletal Muscle
- iii. Tongue and Bolus Formation

3. Pharynx (p. 161)

A. Swallowing

- i. Process (know steps involved - p. 161)
- ii. Epiglottis and Glottis

4. Esophagus

A. Peristalsis

B. Lower Esophageal Sphincter

5. Stomach

A. Anatomy

i. Rugae

ii. Lower Esophageal Sphincter

iii. Pyloric Sphincter

B. Histology

i. Mucosa and Gastric Glands

ii. Muscularis

iii. Serosa

C. Functions of Stomach

i. Storage

iii. Digestive Functions

a. HCL

b. Pepsinogen → Pepsin

ii. Chyme Formation

- D. Gastric Emptying
  - i. Peristaltic Waves
  - ii. Pyloric Pump
- 6. Small Intestine (p. 165 - 166)
  - A. Anatomy
    - i. Duodenum
    - ii. Jejunum
    - iii. Ileum
  - B. Adaptations of the mucosa of the small intestine
    - i. Intestinal Folds
    - ii. Villi
      - a. Microvilli
      - b. Lacteal and Fat absorption
    - iv. Aggregated Lymph Nodules
  - C. Digestive Functions of the Small Intestine
  - D. Lactose Intolerance
  - E. Absorption
    - i. Water Soluble Nutrients

7. Pancreas (p. 166)

A. Gross Anatomy

i. Pancreatic Duct

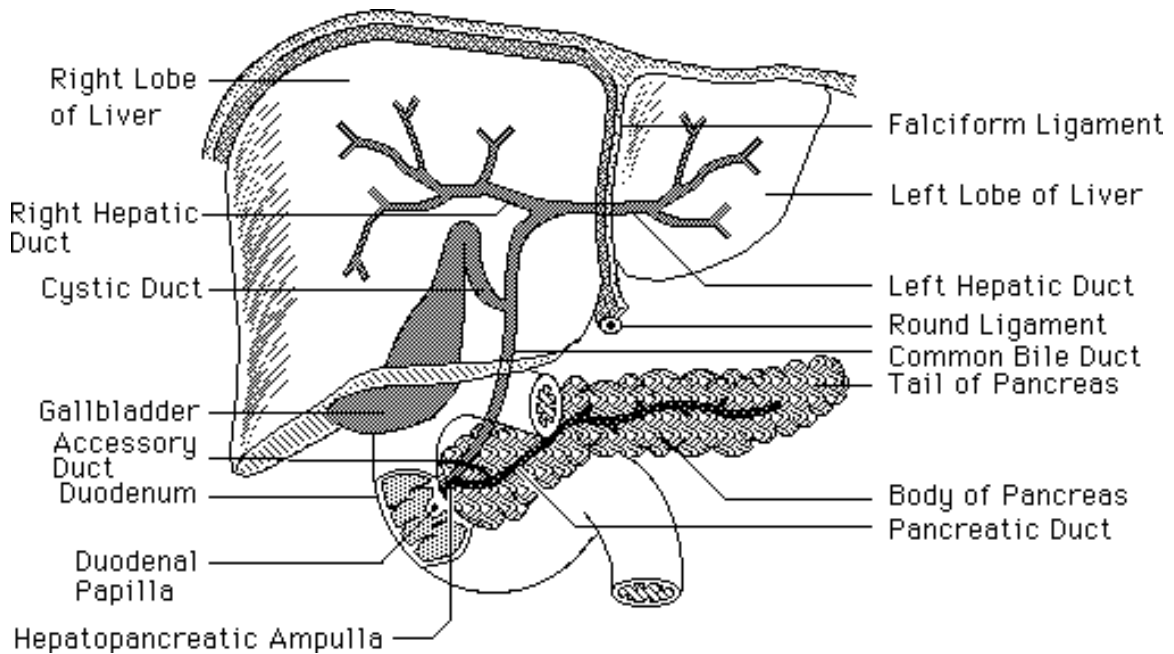
B. Functions

8. Liver (p. 167)

A. Gross Anatomy

i. Common Hepatic Duct

ii. Common Bile Duct



B. Functions

i. Storage Functions

ii. Bile Production

iii. Synthesis Functions

9. Gall Bladder

10. Large Intestine (p. 169 - 169)

A. Gross Anatomy

i. Cecum

a. Vermiform appendix (appendix)

ii. Ascending Colon

iii. Transverse Colon

iv. Descending Colon

v. Sigmoid Colon

vi. Rectum

vii. Anus

B. Functions of the Large Intestine

i. Bacterial Activity

ii. Water Reabsorption

10. Defecation Reflex

11. Pathologies (p. 169 - 170)

## Human Biology Student Outline – Digestive System

- A. Diarrhea
- B. Constipation
- C. Diverticulosis