

**SECTION 38-1 REVIEW**

**FOOD AND NUTRITION**

**VOCABULARY REVIEW Define the following terms.**

- 1. **Calorie** \_\_\_\_\_  
\_\_\_\_\_
- 2. **carbohydrate** \_\_\_\_\_  
\_\_\_\_\_
- 3. **fat** \_\_\_\_\_  
\_\_\_\_\_
- 4. **protein** \_\_\_\_\_  
\_\_\_\_\_
- 5. **vitamin** \_\_\_\_\_  
\_\_\_\_\_

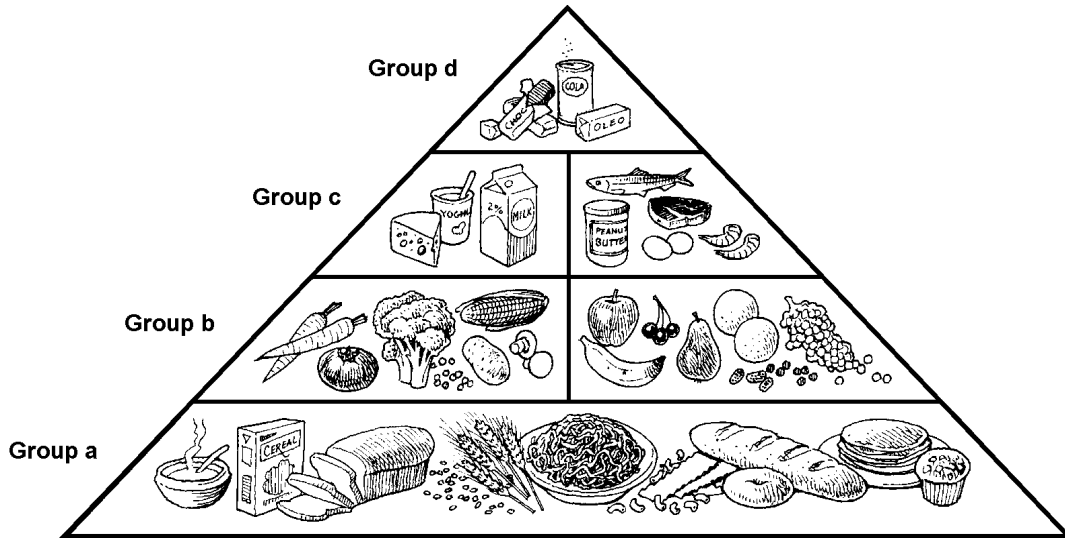
**MULTIPLE CHOICE Write the correct letter in the blank.**

- \_\_\_\_\_ 1. The amount of energy in foods is measured in  
a. ATP.                      b. Calories.                      c. carbohydrates.                      d. disaccharides.
- \_\_\_\_\_ 2. Carbohydrates are important sources of  
a. proteins.                      b. energy.                      c. minerals.                      d. fat.
- \_\_\_\_\_ 3. Essential amino acids are obtained from  
a. meat products.                      b. milk products.                      c. beans and rice.                      d. All of the above.
- \_\_\_\_\_ 4. Saturated fats  
a. are found in most plant oils.                      c. have double bonds.  
b. are found in animal fats.                      d. are better for your health.
- \_\_\_\_\_ 5. What is the minimum amount of water you should drink each day?  
a. 0.5 liter                      b. 1 liter                      c. 2 liters                      d. 3 liters

**SHORT ANSWER** Answer the questions in the space provided.

1. Explain the difference between essential amino acids and nonessential amino acids. (p.973) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
2. Describe the importance of simple sugars for normal body functioning. (p.972) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
3. List two reasons that water is an important nutrient. (p.972) \_\_\_\_\_  
\_\_\_\_\_
4. What characteristic is common to all of the nutrients? (p.972) \_\_\_\_\_  
\_\_\_\_\_

**STRUCTURES AND FUNCTIONS** Use the food pyramid below to answer the following questions. (p.976)



1. Based on the organization of the pyramid, which food group does the body need and use the most? What is the primary nutrient in this group? \_\_\_\_\_  
\_\_\_\_\_
2. Which food groups contains all of the essential amino acids? Explain your answer. \_\_\_\_\_  
\_\_\_\_\_

**SECTION 38-2 REVIEW**

**THE PROCESS OF DIGESTION**

**VOCABULARY REVIEW Define the following terms.**

- 1. **amylase** \_\_\_\_\_  
\_\_\_\_\_
- 2. **peristalsis** \_\_\_\_\_  
\_\_\_\_\_
- 3. **chyme** \_\_\_\_\_  
\_\_\_\_\_
- 4. **pancreas** \_\_\_\_\_  
\_\_\_\_\_
- 5. **villi** \_\_\_\_\_  
\_\_\_\_\_

**MULTIPLE CHOICE Write the correct letter in the blank.**

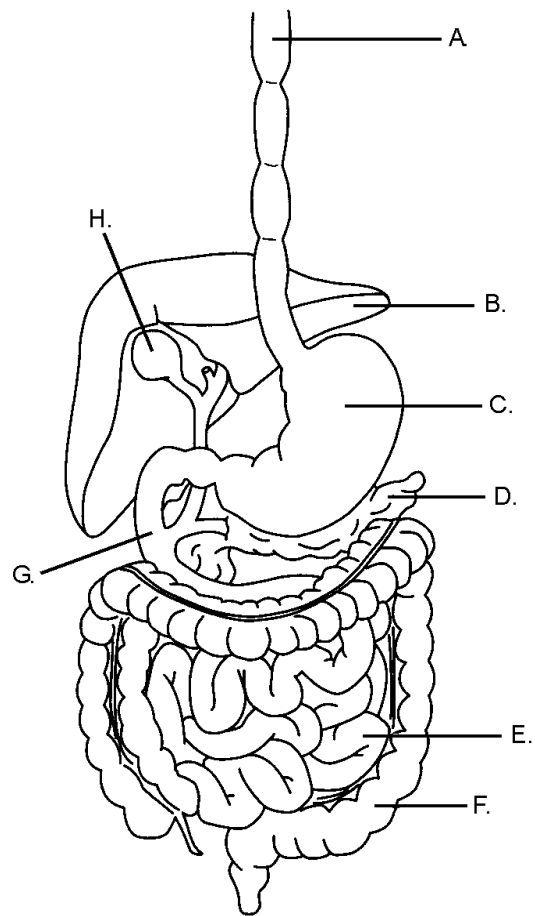
- \_\_\_\_\_ 1. The alimentary canal includes the  
a. small intestine.      b. liver.      c. pancreas.      d. All of the above.
- \_\_\_\_\_ 2. Bile is  
a. released into the small intestine.      c. stored in the gallbladder.  
b. produced by the liver.      d. All of the above.
- \_\_\_\_\_ 3. Chemical digestion involves  
a. the molars.      c. the hard and soft palate.  
b. amylase in saliva.      d. the incisors.
- \_\_\_\_\_ 4. Muscle contractions that help squeeze food through the esophagus are known as  
a. chemical digestion.      b. peristalsis.      c. chyme.      d. microvilli.
- \_\_\_\_\_ 5. Ulcers are linked to the breakdown of the  
a. pyloric sphincter.      c. stomach lining.  
b. gallbladder function.      d. common bile duct.

**SHORT ANSWER** Answer the questions in the space provided.

1. What is the function of mucus in the stomach? (p.980) \_\_\_\_\_  
\_\_\_\_\_
2. What is the primary role of pepsin in digestion? (p.980) \_\_\_\_\_  
\_\_\_\_\_
3. How does the pancreas aid in digesting food? (p.981) \_\_\_\_\_  
\_\_\_\_\_
4. Which part of the digestive tract should have the highest concentration of blood capillaries? Explain your answer. (p.983) \_\_\_\_\_  
\_\_\_\_\_

**STRUCTURES AND FUNCTIONS** Use the figure of the digestive tract below to answer the following questions.

1. Label each part of the figure in the spaces provided.  
Use the following terms: colon, small intestine, duodenum, liver, pancreas, gall bladder, stomach, and esophagus. (p.979)
2. Which structure produces bile? (p.982) \_\_\_\_\_
3. Is the appendix visible in this diagram? \_\_\_\_\_
4. Hormones that regulate blood sugar are produced in which structure? (p.981) \_\_\_\_\_
5. Which structures in this diagram contain villi, which aid in absorbing nutrients? (p.982) \_\_\_\_\_
6. In which structure would bolus be found? \_\_\_\_\_
7. In which structures would chyme be found? \_\_\_\_\_  
\_\_\_\_\_
8. What substance is being stored in structure H? (p.982) \_\_\_\_\_  
\_\_\_\_\_



**SECTION 38-3 REVIEW**

**THE EXCRETORY SYSTEM**

**VOCABULARY REVIEW** Define the following terms.

- 1. **kidney** \_\_\_\_\_  
\_\_\_\_\_
- 2. **urinary bladder** \_\_\_\_\_  
\_\_\_\_\_
- 3. **nephron** \_\_\_\_\_  
\_\_\_\_\_
- 4. **loop of Henle** \_\_\_\_\_  
\_\_\_\_\_
- 5. **urethra** \_\_\_\_\_  
\_\_\_\_\_

**MULTIPLE CHOICE** Write the correct letter in the blank.

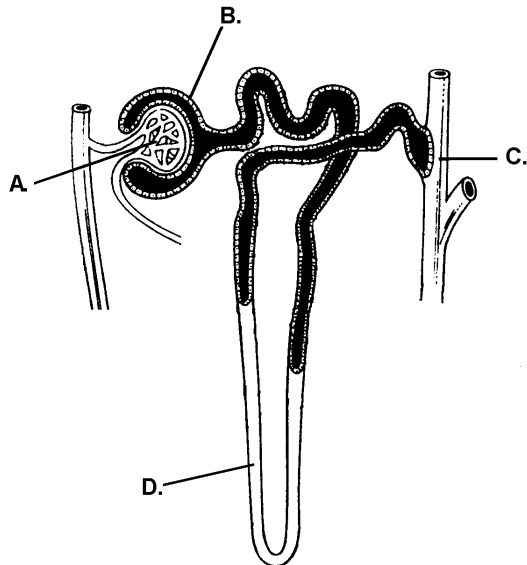
- \_\_\_\_\_ 1. Most reabsorption within a nephron occurs in the
  - a. urinary bladder.
  - b. duodenum.
  - c. collecting duct.
  - d. loop of Henle.
- \_\_\_\_\_ 2. Which of the following is not part of the nephron?
  - a. glomerulus
  - b. loop of Henle
  - c. urethra
  - d. Bowman's capsule
- \_\_\_\_\_ 3. Which of the following substances would not normally be collected in the Bowman's capsule?
  - a. amino acids
  - b. glucose
  - c. red blood cells
  - d. vitamins
- \_\_\_\_\_ 4. Urine is excreted from the body through the
  - a. ureter.
  - b. urethra.
  - c. urinary bladder.
  - d. renal vein.
- \_\_\_\_\_ 5. Dialysis performs the function of the
  - a. kidneys.
  - b. small intestine.
  - c. liver.
  - d. ureters.

**SHORT ANSWER Answer the questions in the space provided.**

1. How does the body lose water? (p.987) \_\_\_\_\_  
\_\_\_\_\_
2. Discuss the functions of the following structures of the excretory system: kidneys, ureter, urinary bladder, and urethra. (pp.986-987) \_\_\_\_\_  
\_\_\_\_\_
3. How do the kidneys respond to an increased intake of water? (p.988) \_\_\_\_\_  
\_\_\_\_\_
4. Describe the process of dialysis? (pp.988-989) \_\_\_\_\_  
\_\_\_\_\_
5. What are a person's two options for survival if both of his or her kidneys are unable to function? (p.989) \_\_\_\_\_  
\_\_\_\_\_

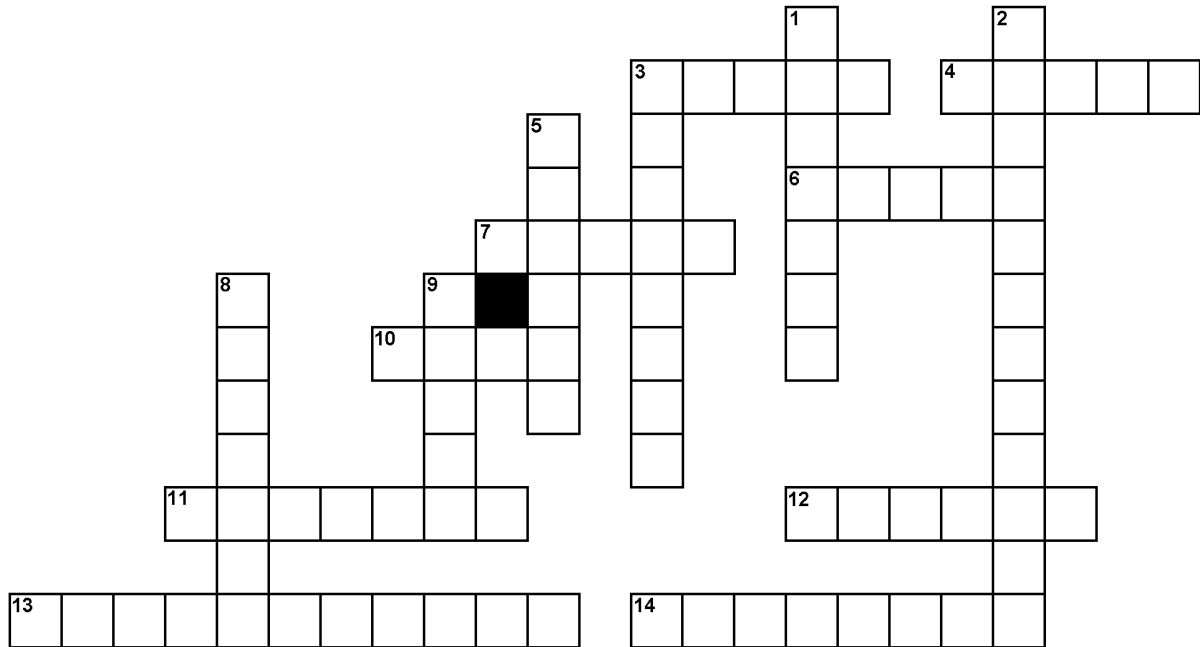
**STRUCTURES AND FUNCTIONS** Use the figure of a nephron and answer the following questions. (p.986)

1. Label each part of the figure in the spaces provided. Use the following terms: loop of Henle, collecting duct, glomerulus, and Bowman's capsule.
2. In which structure is filtration taking place? \_\_\_\_\_
3. In which structure is reabsorption taking place? \_\_\_\_\_
4. In which structure is excretion taking place? \_\_\_\_\_
5. Which structure could rupture and allow red blood cells to enter the filtrate and become part of one's urine? \_\_\_\_\_  
\_\_\_\_\_



## VOCABULARY - CHAPTER 38

The crossword puzzle is a simple way to master some of the more important vocabulary terms in this chapter.



**Across**

3. the organ that produces bile when recycling old red blood cells
4. ball of food
6. the loop of \_\_\_\_\_ is much longer in desert animals therefore allowing them to reabsorb more water
7. used to begin mechanical digestion in the mouth
10. \_\_\_\_\_ is stored in the gall bladder
11. \_\_\_\_\_ glands in the stomach secrete hydrochloric acid
12. an enzyme found in the stomach that begins to break down large proteins into smaller proteins
13. wave-like contractions of the digestive tract that begin in the esophagus and end at the rectum
14. the \_\_\_\_\_ convoluted tubule is the site where reabsorption of glucose and amino acids take place

**Down**

1. the filtering unit of the kidney
2. \_\_\_\_\_ amino acids can be produced within the body
3. lymphatic vessels found in the villi of the small intestine are required for absorption of fatty acids
5. a tubule that connects the kidney to the urinary bladder
8. the beginning of the nephron is the \_\_\_\_\_ capsule which surrounds the glomerulus and collects the filtrate
9. small, finger-like projections that greatly increase surface area in the small intestine

The following words are **not** in this chapter but are used in this puzzle. Use a reference book and look up their meanings to successfully complete this vocabulary puzzle: **proximal and lacteals**.