

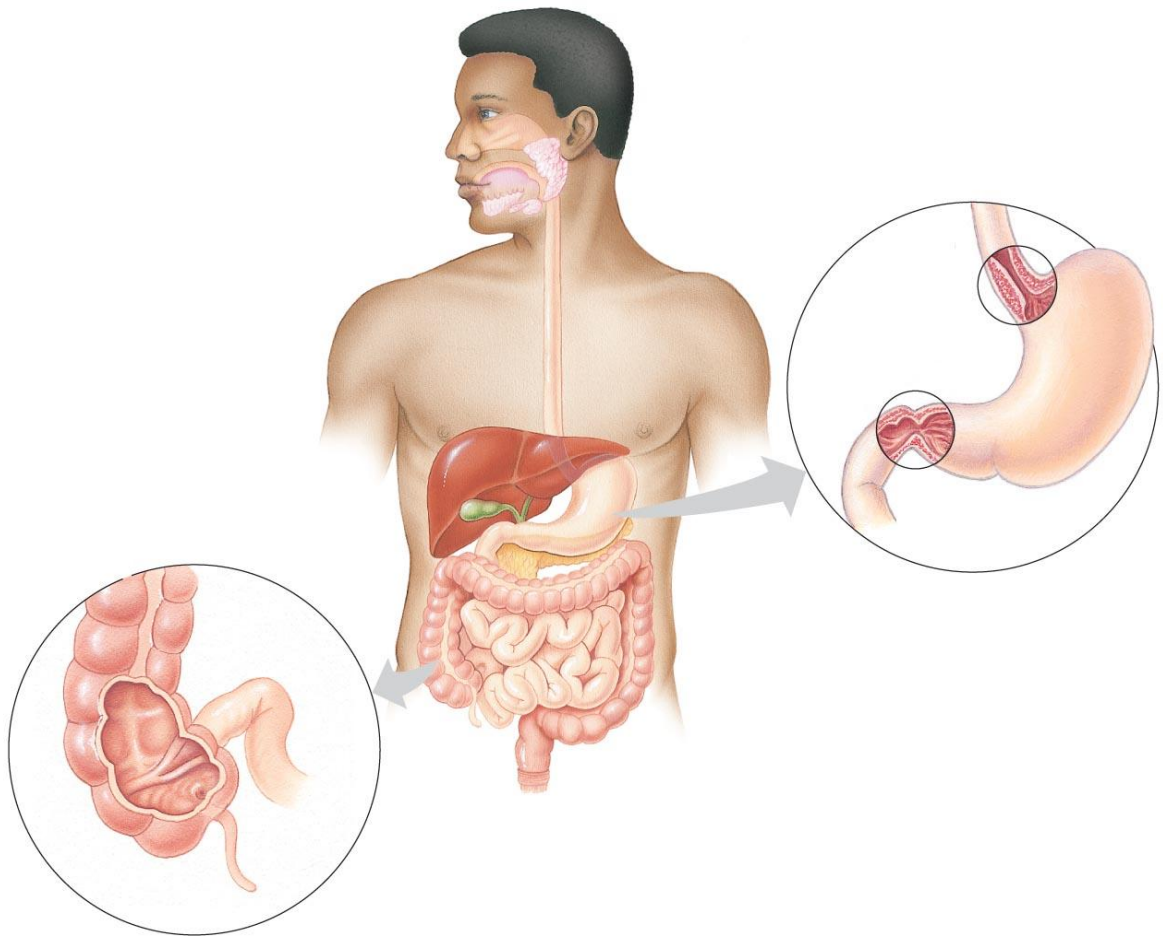
NAME \_\_\_\_\_

DATE \_\_\_\_\_

## **Chapter 41: Animal Nutrition**

1. What is the difference between herbivores, carnivores, and omnivores? Provide examples of each.
2. Name three things that an animal's diet must supply.
3. Contrast undernutrition with malnutrition.
4. How can vegetarians avoid protein deficiencies?
5. Compare and contrast vitamins with minerals. Provide 3 examples of each.
6. Name and explain the four stages of food processing.
7. Why are nutrients from a recently ingested meal not really "inside" your body prior to the absorption stage of food processing?
8. What is peristalsis?

9. Label the diagram of the human digestive system.



10. Describe the role of each of the following in human digestion:

a. Salivary amylase (oral cavity)

b. Bolus

c. Epiglottis

d. Esophagus

e. Stomach

1. Acidity of gastric juice

2. Pepsin (gastric juice)

- What protects the stomach against self-digestion?

3. Chyme

4. Pyloric sphincter

f. Small intestine

1. Duodenum

2. Pancreas

3. Pancreatic bicarbonate

4. Pancreatic amylases

5. Pancreatic proteases (trypsin, chymotrypsin, and carboxypeptidases)

6. Pancreatic nucleases

7. Liver

8. Gallbladder

9. Bile salts

10. Pancreatic lipases

11. Brush border

12. jejunum and ileum

13. Villi and microvilli

g. Large intestine (colon)

h. Feces

i. Rectum

11. Where is each of the following chemically digested?

a. Carbohydrate:

b. Protein

c. Nucleic acid

d. Fat

12. What is the role of bacteria in the digestive tract?

13. Describe the role of the following hormones:

a. Gastrin: \_\_\_\_\_

b. Secretin: \_\_\_\_\_

c. Cholecystokinin: \_\_\_\_\_

14. What is the importance of fiber in our diets?

15. Why do herbivores and omnivores have longer alimentary canals than carnivores?

16. What unique nutritional challenge faces herbivores? How do these organisms overcome this challenge?