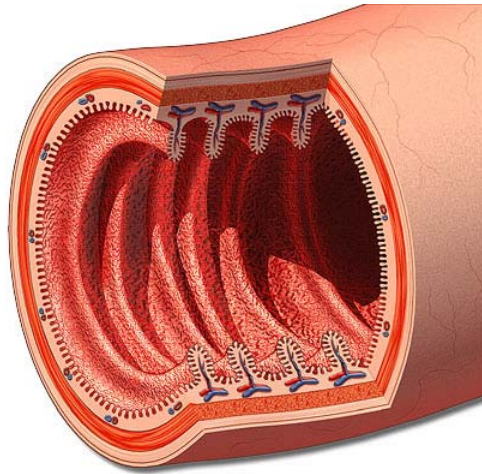


The Digestive System: Anatomy Review

1. List two main divisions of the digestive system.
 - a. _____
 - b. _____

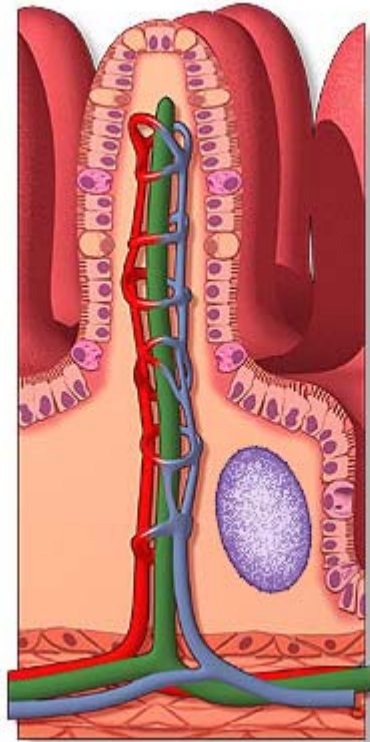
2. The four main layers of the digestive tract wall are
 - a. _____.
 - b. _____.
 - c. _____.
 - d. _____.

3. Label the diagram below with the four main layers you listed in question 6.



4. The mucosa includes a type of columnar _____ that forms the inner lining of the lumen
5. Blood and lymph vessels of the mucosa are found in its _____ connective tissue layer.
6. The smooth muscle layer of the mucosa is called the _____.
7. The function of epithelial goblet cells is to secrete _____.
8. _____ cells of the mucosa secrete hormones into the blood.
9. Absorption of nutrients occurs through the mucosal epithelium and into either _____ or _____ vessels.

10. Label the vessels you listed in question 13 in the diagram below.



11. The muscularis mucosa has both _____ and _____ fibers that function in moving the villi to aid in digestion and absorption.
12. The built-in (intrinsic) network of nerve cells in the submucosa is the _____.
13. The two types of movements produced by contractions of the muscularis externa are _____ and _____.
14. The network of neurons in between the two muscle layers of the muscularis externa is the _____.
15. The mouth, with its _____ epithelium, is involved in both chemical and _____ digestion.

16. List the four regions of the stomach:

a. _____

b. _____

c. _____

d. _____

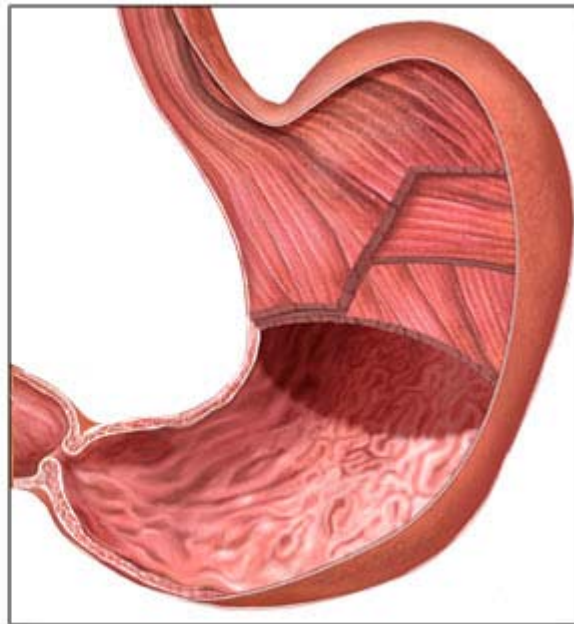
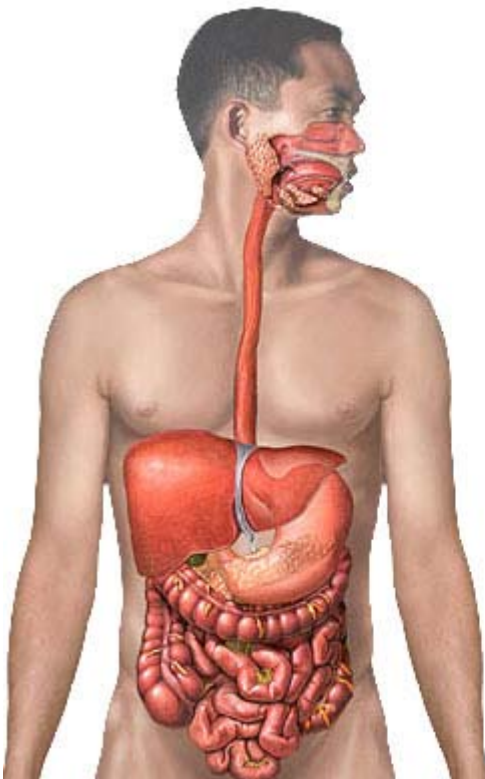
17. List the three sheets of muscle in the stomach's muscularis externa:

a. _____

b. _____

c. _____

18. Label the three sheets of muscle in the stomach's muscularis externa in the diagram below.



19. List, in order from the pylorus to the colon, the three regions of the small intestine:

a. _____

b. _____

c. _____

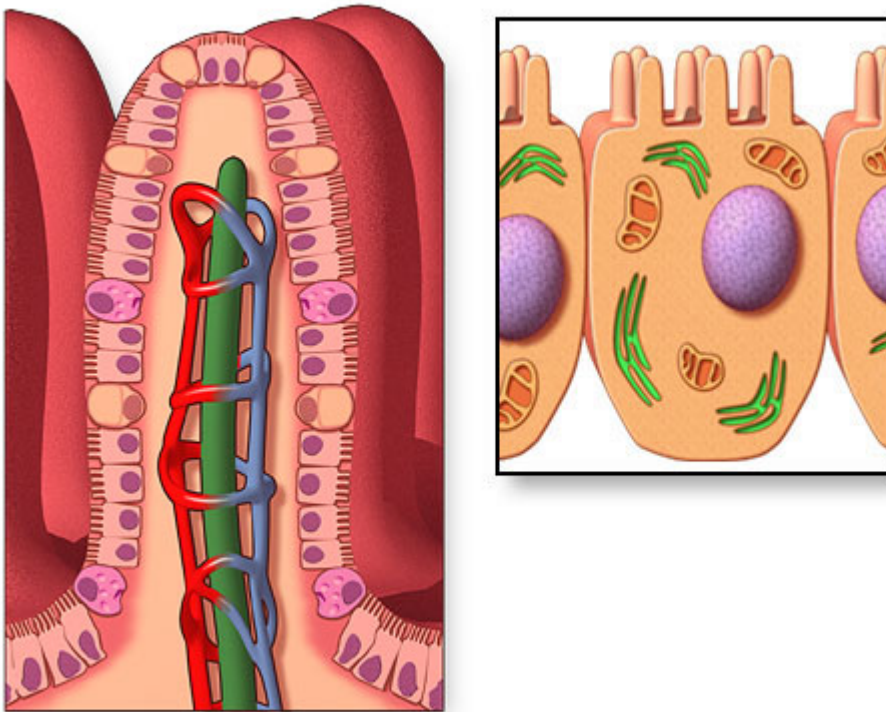
20. From largest to smallest, list the three modifications of the small intestine's inner wall that function to increase surface area:

a. _____

b. _____

c. _____

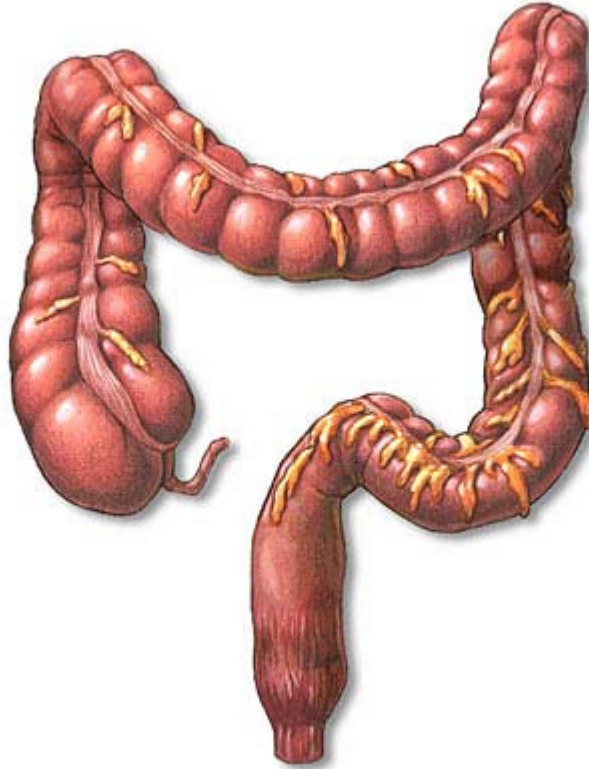
21. Label two of the modifications of the intestine to increase surface area in the diagram below.



22. The microvilli of the small intestine's epithelial cells form the _____ border.

23. The large intestine absorbs _____, _____, and _____.

24. Starting from the ileocecal valve, trace the path of undigested material through the large intestine.



25. The anus is lined with _____ epithelium.

26. List the 6 sphincters of the digestive tract:

a. _____

b. _____

c. _____

d. _____

e. _____

27. The single digestive function of the liver is to produce _____.

28. The main digestive enzyme-producing organ in the body is the _____.

29. Three pairs of _____ function to moisten food in the mouth.