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   C. churning of food in the muscular stomach
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   A. to ingest food
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   D. eliminate indigestibles
   E. All of the choices are correct.

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   A. epiglottis
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4. Erosion of teeth due to bacterial digestion of sugar resulting in acid production is called:
   A. dental caries
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5. Movement of food from the esophagus to the stomach requires:
   A. relaxation of the diaphragm
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   C. relaxation of a sphincter
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6. Which of the following is in correct order of food movement in the gastrointestinal tract?

A. esophagus, stomach, pharynx
B. pharynx, stomach, esophagus
C. pharynx, esophagus, stomach
D. stomach, pharynx, esophagus

7. Protein digestion begins in the:

A. oral cavity
B. esophagus
C. stomach

8. Which of the following functions in the storage and elimination of feces?

A. small intestines
B. large intestines
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9. Food is prevented from entering the trachea when you swallow by the:

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B. uvula
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10. Which of the following is a muscular tube that passes foodstuffs from the mouth to the stomach?

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B. trachea
C. nasopharynx
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11. The primary function of the stomach is:

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B. to store food, churn, begin digestion
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12. The rhythmic contractions of the digestive tract that allow movement of foodstuffs are called:
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   C. peristalsis  
   D. perineum

13. The "ball" of food that is moved through the esophagus is called:
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   B. cannula  
   C. bolus  
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14. The innermost layer of the digestive tract that is a mucous secreting epithelium is:
   A. mucosa  
   B. submucosa  
   C. muscularis  
   D. serosa

15. The layer of tissue in the digestive wall, which consists of a layer of longitudinal and circular smooth muscles is:
   A. mucosa  
   B. submucosa  
   C. muscularis  
   D. serosa

16. The central opening of a tube is called:
   A. lacuna  
   B. laluna  
   C. lumen  
   D. lamella
17. Choose the CORRECT statement.

A. Pepsin is activated by HCl.
B. Helicobacter pylori causes gastric ulcers.
C. Alcohol is absorbed by the stomach.
D. Mucus is a protective secretion in the stomach.
E. All of the choices are correct.

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B. esophagus
C. stomach
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20. Food is primarily digested by the:

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B. pancreas
C. stomach
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E. large intestine

21. Starch digestion is confined to the:

A. mouth and large intestine
B. stomach and large intestine
C. mouth and stomach
D. mouth and small intestine
22. Name 2 accessory glands that secrete enzymes that digest starch:

A. salivary glands  
B. liver  
C. pancreas  
D. salivary glands and liver  
E. salivary glands and pancreas

23. The digestive enzyme responsible for fat digestion is:

A. amylase  
B. amyllose  
C. lipase  
D. peptidase  
E. glycerase

24. The digestive organ that produces maltase and peptidase is:

A. liver  
B. pancreas  
C. stomach  
D. small intestine  
E. large intestine

25. The digestive organ that contains microvilli or a brush border on the luminal cells:

A. liver  
B. pancreas  
C. stomach  
D. small intestine  
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26. Which of these organs is NOT involved in digestion?

A. spleen  
B. pancreas  
C. gallbladder  
D. liver
27. Which of the following is considered an accessory gland?

   A. pharynx
   B. esophagus
   C. stomach
   D. cecum
   E. pancreas

28. The pancreas secretes enzymes that act upon:

   A. carbohydrates
   B. fat
   C. protein
   D. All of the choices are correct.

29. Which of the following human digestive enzymes is INCORRECTLY matched to its substrate?

   A. pepsin-protein
   B. trypsin-nucleic acid
   C. salivary amylase-starch
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30. The small lymphatic capillaries that reside in the small intestines and absorb fats are:

   A. villi
   B. lacteals
   C. gastric glands
   D. duodena

31. Which of the following is the correct pairing of the structure with its secretion?

   A. pancreas; bile
   B. liver; bile
   C. gallbladder; bile
32. Choose the following statement concerning hydrolytic enzymes that is NOT accurate.

A. Salivary amylase breaks down starch.
B. Pepsin breaks down proteins.
C. Peptidases break down peptides.
D. Maltase breaks down glucose.

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A. gastric juice
B. HCl
C. pepsin
D. All of the choices are correct.

34. Which of the following is NOT an accurate statement concerning digestion/absorption?

A. Foods are broken down and absorbed into the blood.
B. Digestive enzymes are secreted from several glands.
C. The gallbladder manufactures bile.
D. Bile secreted from the gallbladder emulsifies fats.

35. Three major classes of macronutrients required in the diet are:

A. carbohydrates, vitamins, fat
B. proteins, carbohydrates, minerals
C. fats, carbohydrates, proteins
D. vitamins, minerals, proteins

36. The quickest, most readily available source of energy for the body is:

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B. starch
C. glucose
D. fatty acids

37. The major group of organic molecules that contains cholesterol and fats are:

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B. carbohydrates
C. proteins
D. nucleic acids
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B. fatty acid blockage
C. plaques
D. cysts

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A. the pancreas
B. the gallbladder
C. the epiglottis
D. the appendix

41. Organic compounds (not major nutrients) that are required for metabolic reactions and must be taken in the diet are:

A. minerals
B. vitamins
C. buffers
D. enzymes

42. Vitamins often form:

A. coenzymes
B. structural proteins
C. antioxidants
D. coenzymes and antioxidants

43. Which of the following are macronutrients?

A. Ca, K, Na, Cl, Mg
B. Zn, Cu, Fe
44. Having a habit of eating to excess and then purging is called:

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45. Which of the following vitamins is water soluble?

A. Vitamin A
B. Vitamin D
C. Vitamin E
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E. Vitamin C

46. The human body requires ____ different amino acids.

A. 100
B. 50
C. 30
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47. Free radicals can donate electrons to:

A. DNA
B. proteins found in the plasma membrane
C. lipids found in the plasma membrane
D. DNA and proteins found in the plasma membrane
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