

Study Guide for Digestive System

Textbook Reference: Sections 11.1 and 11.2

Questions from Textbook

Section 11.1 (p. 358) #'s 1-7

Section 11.2 (p.373) #'s 1-9

Nutrients

Terms:

Monosaccharides
(simple sugars)
Disaccharides
Polysaccharides
Amylose
amylopectin
Glucose
Fructose
Galactose
Sucrose
Maltose
Lactose

Starch
Glycogen
Cellulose
Chitin
Fats
Oils waxes
Glycerol
Fatty acids
Amino acid
Dipeptide
Polypeptide
Nucleotide

deoxyribose
ribose
nitrogenous base
phosphate group
adenine
thymine
guanine
cytosine
uracil
coenzymes
cofactors

Questions:

1. What is the function of vitamins?
2. Know the chart detecting the presence of nutrients-(multiple choice only)
3. Be familiar with the main functions, basic structure and structural units, and food sources for each organic compound-(multiple choice only)
4. Distinguish between LDL's and HDL's.
5. How can blood cholesterol be reduced?

Digestion

Terms

Nutrients	Pyloric glands	Maltase
Molars	Duodenum	Sucrase
Incisors	Jejunum	Lactase
Cuspids	Ileum	Villi
Mucin	Emulsification	Microvilli
Salivary amylase	Common bile duct	Lacteals
Bolus	Pancreatic amylase	Cecum
Bicarbonate ions	Lipase	Ascending colon
Peristalsis	Proteases	Transverse colon
Sphincter	Trypsin	Descending colon
Chyme	Chymotrypsin	Sigmoid colon
Gastric glands	Erepsins	Feces
Gastrin	Pancreatic nucleases	Anus
Pepsinogen	Peptidases	
Pepsin	Intestinal nucleases	

Questions:

1. Distinguish between food and nutrients.
2. What are the six basic nutrients? Be able to identify their major sources and functions.
3. What are the end products of digestion?
4. Distinguish between mechanical and chemical digestion.
5. Be able to identify all parts of the digestive system on a diagram.
6. Identify the locations of the four types of taste buds on the tongue.
7. What causes heart burn or acid indigestion?
8. Identify each sphincter muscle. Be sure to give its location and function.
9. What substances are secreted by the salivary glands? What are their functions?
10. What mechanisms are responsible for the release of gastrin?
11. What substances are released by the gastric glands? Describe their functions.
12. How is the stomach able to protect itself from being digested?
13. How does bile aid in the digestion of lipids?
14. What is the function of mucus in the digestive system?
15. Describe the two major parts of the villus. Identify the end products of digestion that they each absorb.
16. What substances enter the villus via active transport? What substances enter the villus via passive transport?
17. What are the functions of the large intestine?

Note: *The worksheet on digestion is very useful for study*

Special Project: *If given a particular meal or food item, be able to trace all of the stages of digestion throughout the entire digestive tract.*