

**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

- 1) Which of the following is responsible for 60% of a person's body weight? 1) \_\_\_\_\_  
A) Bone                      B) Muscle                      C) Water                      D) Fat
- 2) The small intestine is lined with 4 to 5 million finger-like projections that are called 2) \_\_\_\_\_  
A) Villi                      B) Lymph nodes                      C) Papillae                      D) Stomach buds
- 3) Where does the digestion of food begin in the body? 3) \_\_\_\_\_  
A) Mouth                      B) Stomach                      C) Small intestine                      D) Large intestine
- 4) An example of malnutrition is 4) \_\_\_\_\_  
A) Nutritional anemia                      B) Starvation  
C) Obesity                      D) All of the above
- 5) Each of the following is TRUE about phytochemicals except one. Which one is the exception? 5) \_\_\_\_\_  
A) They are not considered an essential nutrient  
B) They may provide protection against certain health conditions  
C) They are substances that come from plants  
D) They provide calories
- 6) Taste perception can be altered by 6) \_\_\_\_\_  
A) Health conditions                      B) Radiation therapy  
C) Medications                      D) All of the above
- 7) Foods that have nutrients added that were lost during processing are called 7) \_\_\_\_\_  
A) Probiotics                      B) Phytochemicals  
C) Fortified foods                      D) Enriched foods
- 8) In what body cavity are the olfactory neurons, which are responsible for one's sense of smell, located? 8) \_\_\_\_\_  
A) Nasal                      B) Cerebral                      C) Oral                      D) Intestinal
- 9) For which of the five taste sensations do children have the greatest affinity? 9) \_\_\_\_\_  
A) Bitter                      B) Sour                      C) Sweet                      D) Salt
- 10) Antioxidants are thought to protect the body against the damaging effects of 10) \_\_\_\_\_  
A) Genetically modified foods                      B) Phytochemicals  
C) Free radicals                      D) Nutrient deficiency
- 11) The five sensations of taste are sweet, salty, bitter, sour, and 11) \_\_\_\_\_  
A) Butter                      B) Umami                      C) Rich                      D) Rough
- 12) The turnover time of taste buds is approximately how many days? 12) \_\_\_\_\_  
A) One                      B) Ten                      C) Three                      D) Five

- 13) Amylase is secreted by the salivary glands in the mouth. Amylase is the enzyme involved in protein digestion. 13) \_\_\_\_\_  
A) Both statements are true.  
B) Both statements are false.  
C) The first statement is true; the second is false.  
D) The first statement is false; the second is true
- 14) What is a damaging factor that the oral cavity is constantly subjected to? 14) \_\_\_\_\_  
A) Cold foods B) Hot foods  
C) Eating utensils D) All of the above
- 15) The turnover time for oral soft tissues is 15) \_\_\_\_\_  
A) 14 days B) 3–7 days  
C) 1–3 days D) None of the above.
- 16) Where are the earliest clinical signs of nutritional deficiencies often seen? 16) \_\_\_\_\_  
A) Hair B) Liver C) Oral cavity D) Skin
- 17) The mission of the modern dental team is to 17) \_\_\_\_\_  
A) Treat oral disease  
B) Restore oral function  
C) Implement strategies to prevent further oral disease  
D) All of the above
- 18) Chemical digestion occurs in all of the following sites except one. Which is the exception? 18) \_\_\_\_\_  
A) The stomach B) The mouth  
C) The small intestine D) The esophagus
- 19) Absorption can help protect the body from nutritional deficiency because absorption is a selective process. 19) \_\_\_\_\_  
A) The statement is correct, but the reason is not.  
B) Both the statement and reason are correct but not related.  
C) The statement is not correct, but the reason is correct.  
D) Both the statement and reason are correct and related.  
E) Neither the statement nor the reason is correct.
- 20) All of the following substances provide energy except one. Which is the exception? 20) \_\_\_\_\_  
A) Protein B) Alcohol C) Carbohydrates D) Vitamins
- 21) The earliest clinical signs of nutrient deficiencies are first seen in the oral cavity because the soft tissues in the mouth have a more rapid turnover rate than other tissues in the body. 21) \_\_\_\_\_  
A) Neither the statement nor the reason is correct.  
B) Both the statement and reason are correct but not related.  
C) The statement is correct, but the reason is not.  
D) The statement is not correct, but the reason is correct.  
E) Both the statement and reason are correct and related.
- 22) All of the following are signs of undernutrition with the exception of one. Which is the exception? 22) \_\_\_\_\_  
A) Excess saliva production B) Dry, sore lips  
C) Swollen abdomen D) Loose teeth

- 23) Problems in the oral cavity can affect \_\_\_\_\_  
 A) Diet B) Nutritional status  
 C) Appetite D) All of the above
- 24) The condition of the oral cavity is influenced by \_\_\_\_\_  
 A) Oral hygiene B) Diet  
 C) Overall health status D) All of the above
- 25) In which of the following 10 leading causes of death does nutrition play a role in reducing the risk? \_\_\_\_\_  
 A) Cancer B) Diabetes  
 C) Heart disease D) All of the above

**TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.**

- 26) A person with a nutrient deficiency will always display overt clinical signs. \_\_\_\_\_
- 27) Most of the current nutritional concerns in the US are due to nutritional deficiencies as opposed to nutritional excess. \_\_\_\_\_
- 28) All of the essential nutrients provide calories to the body? \_\_\_\_\_
- 29) Decreases in taste and/or smell will always lead to malnutrition. \_\_\_\_\_
- 30) Taste buds can be found on the roof of the mouth. \_\_\_\_\_
- 31) Most nutrient absorption occurs in the stomach. \_\_\_\_\_
- 32) Most of the clinical signs of nutritional deficiencies or toxicities are seen in or around the eyes. \_\_\_\_\_
- 33) Mechanical digestion is the process during which enzymes break down large starch molecules in food to smaller carbohydrate molecules in the mouth. \_\_\_\_\_
- 34) The acidic food mass that moves from the stomach into the small intestine is called chyme. \_\_\_\_\_
- 35) The American Dental Association supports dentists to maintain a current knowledge of nutrition recommendations and to effectively educate and counsel their patients about proper nutrition and oral health. \_\_\_\_\_

**SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.**

- 36) \_\_\_\_\_ are substances thought to reduce the harmful effects of free radicals in the body. 36) \_\_\_\_\_
- 37) A \_\_\_\_\_ is a food substance that provides nourishment to the body for growth and/or metabolism. 37) \_\_\_\_\_
- 38) The oral cavity is often referred to as the "mirror of overall \_\_\_\_\_." 38) \_\_\_\_\_
- 39) The \_\_\_\_\_ tissues have a more rapid turnover time than any other tissue in the body. 39) \_\_\_\_\_

- 40) Calcium fortified orange juice is an example of a \_\_\_\_\_. 40) \_\_\_\_\_
- 41) The senses of taste and smell contribute significantly to \_\_\_\_\_. 41) \_\_\_\_\_
- 42) \_\_\_\_\_ movements prolong and enhance taste sensations on the soft palate. 42) \_\_\_\_\_
- 43) \_\_\_\_\_ is the primary determinant of food choices in young children. 43) \_\_\_\_\_
- 44) Following digestion, energy from food is stored as \_\_\_\_\_ in the short term, \_\_\_\_\_ intermediately, and \_\_\_\_\_ for the long term. 44) \_\_\_\_\_
- 45) The \_\_\_\_\_ nutrients are those necessary for body function. 45) \_\_\_\_\_
- 46) There are \_\_\_\_\_ classes of nutrients. 46) \_\_\_\_\_
- 47) \_\_\_\_\_ is the study of the effects of individual gene variations on individual nutrient needs. 47) \_\_\_\_\_
- 48) There are \_\_\_\_\_ different kinds of papillae on the tongue. 48) \_\_\_\_\_
- 49) The \_\_\_\_\_ is the pathway to the rest of the body. 49) \_\_\_\_\_
- 50) Good \_\_\_\_\_ is the foundation for overall oral and general health. 50) \_\_\_\_\_

**ESSAY. Write your answer in the space provided or on a separate sheet of paper.**

- 51) What is the difference between enrichment and fortification?
- 52) What are some of the essential functions of nutrients in the body?
- 53) Define malnutrition.
- 54) What is secondary malnutrition and how does it differ from primary malnutrition?
- 55) As a future oral-health professional, why is it important to understand the relationship between oral health and nutrition?

## Answer Key

Testname: UNTITLED1

- 1) C
- 2) A
- 3) A
- 4) D
- 5) D
- 6) D
- 7) D
- 8) A
- 9) C
- 10) C
- 11) B
- 12) B
- 13) C
- 14) D
- 15) A
- 16) C
- 17) D
- 18) D
- 19) D
- 20) D
- 21) E
- 22) A
- 23) D
- 24) D
- 25) D
- 26) FALSE
- 27) FALSE
- 28) FALSE
- 29) FALSE
- 30) TRUE
- 31) FALSE
- 32) FALSE
- 33) FALSE
- 34) TRUE
- 35) TRUE
- 36) Antioxidants
- 37) nutrient
- 38) health
- 39) oral
- 40) functional food (or fortified food)
- 41) appetite
- 42) Tongue
- 43) Taste
- 44) ATP; glycogen; fat in adipose tissue
- 45) essential
- 46) six
- 47) Nutritional genomics (or nutrigenetics)
- 48) four
- 49) oral cavity
- 50) nutrition

## Answer Key

Testname: UNTITLED1

- 51) In both enrichment and fortification, synthetic nutrients are added to food sources after processing. Enrichment refers to the addition of nutrients that were initially present in the food, but lost during processing. The end result is a food that contains approximately the same amount of the nutrient that was present prior to processing. Fortification refers to the process of adding vitamins or minerals to foods in which they were not initially present, or in a higher amount than was initially present.
- 52) Providing energy sources for body work; maintaining a constant internal environment; providing structural components for growth, development, and the maintenance of body tissues and fluids; and regulating metabolic processes.
- 53) Malnutrition refers simply to "poor nutrition," or any case in which a person's nutritional status is less than optimal. This can be the result of either over-nutrition or under-nutrition. Malnutrition can be present in someone who is overweight or underweight.
- 54) Secondary malnutrition occurs due to physiological reasons whereas primary malnutrition is a result of dietary consumption. Secondary malnutrition results from an interference with adequate digestion, absorption, or the utilization of foods.
- 55) Oral health and nutrition are integrally related. Food must first pass through the mouth before it can deliver nutrients to the body. Poor oral health may result in the development of conditions that make eating difficult, painful, and in some cases impossible. Such conditions greatly reduce a person's ability to take in adequate nutrition. In addition, poor nutritional habits can lead to oral-health problems. Diets high in sugar and acidic foods promote caries formation.