

Foundations of Dietetics

Dietetics · Practice Test · 20 Questions

1. Which nutrient is classified as a macronutrient that provides 9 kilocalories per gram?

- A) Protein
- B) Carbohydrates
- C) Lipids
- D) Fiber

2. Which vitamin is water-soluble and essential for collagen synthesis?

- A) Vitamin A
- B) Vitamin C
- C) Vitamin D
- D) Vitamin K

3. What is the primary storage form of glucose in the human liver and muscles?

- A) Amylose
- B) Glycogen
- C) Cellulose
- D) Fructose

4. Which mineral deficiency is most commonly associated with goiter?

- A) Iron
- B) Calcium
- C) Iodine
- D) Magnesium

5. Which amino acid is considered conditionally essential during periods of physiological stress?

- A) Glutamine
- B) Leucine
- C) Valine
- D) Lysine

6. What is the standard chemical structure of a trans fatty acid?

- A) Cis-configuration
- B) Hydrogen atoms on opposite sides of the double bond
- C) Saturated hydrocarbon chain
- D) Polyunsaturated structure

7. Which substance acts as a precursor to Vitamin D in the human skin?

- A) Cholesterol
- B) Retinol
- C) Tocopherol
- D) Ascorbic Acid

8. What is the thermic effect of food (TEF) approximately as a percentage of total energy expenditure?

- A) 5-10%
- B) 20-30%
- C) 40-50%
- D) 60-70%

9. Which organ is the primary site for the absorption of cobalamin (Vitamin B12)?

- A) Stomach
- B) Duodenum
- C) Ileum
- D) Colon

10. What is the recommended dietary allowance (RDA) unit of measurement for dietary folate equivalents (DFE)?

- A) Milligrams
- B) Micrograms
- C) International Units
- D) Nanograms

11. Which enzyme is responsible for the initial breakdown of starch in the oral cavity?

- A) Lipase
- B) Pepsin
- C) Amylase
- D) Trypsin

12. What condition is characterized by a failure to absorb nutrients due to an immune reaction to gluten?

- A) Crohn's Disease
- B) Celiac Disease
- C) Ulcerative Colitis
- D) Diverticulitis

13. Which mineral is a key component of hemoglobin responsible for oxygen transport?

- A) Zinc
- B) Iron
- C) Selenium
- D) Copper

14. What type of fiber is known to form a gel-like substance in the digestive tract?

- A) Insoluble fiber
- B) Soluble fiber
- C) Cellulose
- D) Lignin

15. Which fat-soluble vitamin is essential for the synthesis of blood clotting factors?

- A) Vitamin A
- B) Vitamin D
- C) Vitamin E
- D) Vitamin K

16. What is the byproduct of anaerobic glycolysis in muscle tissue?

- A) Lactic acid
- B) Pyruvate
- C) Acetyl-CoA
- D) Citrate

17. Which sugar is a disaccharide composed of one glucose and one fructose molecule?

- A) Lactose
- B) Maltose
- C) Sucrose
- D) Galactose

18. What is the physiological role of the intrinsic factor secreted by the stomach?

- A) Fat digestion
- B) B12 absorption
- C) Glucose metabolism
- D) Protein denaturation

19. Which protein is the most abundant in the human body, providing structural support to connective tissues?

- A) Keratin
- B) Myosin
- C) Collagen
- D) Albumin

20. What is the average nitrogen content in dietary protein?

- A) 6.25%
- B) 12.5%
- C) 16%
- D) 20%