

Chapter 1
Food Chemistry and Nutrition

1. Which of these are functions of fats in human nutrition?
(A) Concentrated source of energy
(B) Transport of oxygen to various organs
(C) Absorption of fat-soluble vitamins
(D) synthesis of cell membrane and hormones
2. Which of the following carbohydrates are classified as dietary fiber?
(A) Agar
(B) Pectin
(C) Sodium alginate
(D) Tapioca starch
3. Which of the following statements are CORRECT in relation to muscle proteins?
(A) Actin and myosin interact to form actomyosin which is responsible for muscle contraction
(B) Collagen contributes to the toughness of muscles due to its abundant presence
(C) Elastin, a constituent of ligaments, is tougher than collagen
(D) Actomyosin is not the main state of actin and myosin in postmortem muscles
4. Which of the following represent saturated fatty acids?
(A) Lauric
(B) Myristic
(C) Oleic
(D) Arachidic
5. The enzyme system which is used for the removal of glucose from egg prior consist
(A) glucose isomerase
(B) catalase
(C) glucoamylase
(D) glucose oxidase
6. Which one of the following are CORRECT statement?
(A) Meatiness is the taste produced by compounds such as glutamate in products like cheese, soy sauce
(B) Astringency is a dry mouth feel in the oral cavity that is most associated with phenolic compounds
(C) Saltiness is a taste that is mainly produced by chloride ions
(D) Sourness is related to acidity and is sensed by hydrogen ion channels in the human tongue
7. Which of the following diseases are caused by the metabolism of lipids?
(A) Gaucher disease
(B) Kwashiorkor disease
(C) Tay-Sachs disease
(D) Beriberi
8. Mark the CORRECT statements with respect to nutritive evaluation of proteins?
(A) PER is defined as the live weight gain per unit weight of protein intake
(B) 'Metabolic nitrogen' is the amount of nitrogen present in the feces when a nitrogen free diet is fed to an animal

- (C) Net protein utilization is a product of biological value and digestibility
- (D) 'Chemical score' of a mixed protein diet can be calculated from the total amino acids present in the mixture

9. Rigor mortis

- (A) used to determine the approximate time of death
- (B) begin with the hands and head
- (C) caused by the unavailability of ATP
- (D) depend on the level of lactic acid among the muscles

10. Mark the CORRECT match of commodity with their bioactive constituent.

- (A) ginger – shogaols
- (B) Tulsi – alpha bisabolene
- (C) Spinach – epigallocatechin gallate
- (D) Turmeric – curcumin

Answer

- 1. (A), (C), (D)
- 2. (A), (B), (C)
- 3. (A), (B), (C)
- 4. (A), (B), (D)
- 5. (B), (D)
- 6. (A), (B), (D)
- 7. (A), (C)
- 8. (A), (B), (C)
- 9. (A), (C), (D)
- 10. (A), (B), (D)