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TEXTBOOK TESTBANKS

Test Bank for Practical Applications in Sports Nutrition 7th Fink

TEST BANK SAMPLE PREVIEW

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RESOURCE TYPE

Test Bank

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Multiple Choice

1. Any unabsorbed and/or undigested polysaccharides, such as fiber, that pass through the small intestine:
A) enter the large intestine, where bacterial digestion and gas formation can occur.
B) enter the large intestine, where no absorption of carbohydrates occurs.
C) pass through the system and are eliminated as feces.
D) All of these are correct.
Ans: D
Complexity: Difficult
Ahead: How are carbohydrates digested, absorbed, transported, and assimilated in the body?
Subject: Chapter 2
Title: Nutrients to Energy Metabolism
Feedback: Different carbohydrates have different fates in the digestive system.

2. Which of the following is a means of cellular absorption in which the movement of molecules through permeable cell membranes is driven only by differences in the concentration gradient?
A) Endocytosis
B) Facilitated diffusion
C) Passive diffusion
D) Active transport
Ans: C
Complexity: Easy
Ahead: How are carbohydrates digested, absorbed, transported, and assimilated in the body?
Subject: Chapter 2
Title: Nutrients to Energy Metabolism
Feedback: Of the four means of cellular absorption, passive diffusion is dependent on concentration gradients.

3. Which of the following is a means of cellular absorption in which protein carrier molecules move substances across membranes, driven only by differences in the concentration gradient?
A) Endocytosis
B) Facilitated diffusion
C) Passive diffusion
D) Active transport
Ans: B
Complexity: Easy
Ahead: How are carbohydrates digested, absorbed, transported, and assimilated in the body?
Subject: Chapter 2
Title: Nutrients to Energy Metabolism

Feedback: Of the four means of cellular absorption, only facilitated diffusion is dependent on concentration gradients and the presence of a transporter molecule.

4. Which of the following are substances that break lipids into very small globules so that they are more manageable in watery fluids?
A) Free fatty acids
B) Stomach acids
C) Emulsifiers
D) All of these are correct.
Ans: C
Complexity: Easy
Ahead: How are fats digested, absorbed, transported, and assimilated in the body?
Subject: Chapter 2
Title: Nutrients to Energy Metabolism
Feedback: Emulsifiers are critical for absorption of fats in the digestive system.

5. Fat digestion and absorption is, for the most part, completed by the time the food contents reach the:
A) large intestine.
B) small intestine.
C) stomach.
D) pancreas.
Ans: A
Complexity: Moderate
Ahead: How are fats digested, absorbed, transported, and assimilated in the body?
Subject: Chapter 2
Title: Nutrients to Energy Metabolism
Feedback: The majority of fat digestion and absorption occurs in the stomach and small intestine.

6. Although the majority of minerals released during digestion are absorbed in the small intestine, which mineral is absorbed in the large intestine?
A) Sodium
B) Potassium
C) Chloride
D) All of these are correct.
Ans: D
Complexity: Difficult
Ahead: How are minerals, vitamins, and water absorbed and transported in the body?
Subject: Chapter 2
Title: Nutrients to Energy Metabolism

Feedback: Some electrolyte absorption occurs in the large intestine.

7. Which of the following is the process of breaking down ingested foods into their basic units in preparation for absorption by the cells of the gastrointestinal tract?
A) Metabolism
B) Ingestion
C) Digestion
D) Mastication
Ans: C
Complexity: Easy
Ahead: What happens to nutrients after they are ingested?
Subject: Chapter 2
Title: Nutrients to Energy Metabolism
Feedback: Digestion is critical for dismantling ingested foods for absorption by the gastrointestinal tract.

8. Although digestion begins in the mouth, where does the majority of digestion occur?
A) The stomach and small intestine
B) The esophagus
C) The large intestine
D) The rectum
Ans: A
Complexity: Moderate
Ahead: What happens to nutrients after they are ingested?
Subject: Chapter 2
Title: Nutrients to Energy Metabolism
Feedback: The stomach and small intestine are key players in the digestion of ingested foods.

9. Which of the following are single sugar molecules that form the building blocks for more complex carbohydrates?
A) Oligosaccharides
B) Monosaccharides
C) Disaccharides
D) Polysaccharides
Ans: B
Complexity: Easy
Ahead: How are carbohydrates digested, absorbed, transported, and assimilated in the body?
Subject: Chapter 2
Title: Nutrients to Energy Metabolism
Feedback: Monosaccharides are single sugar molecules.

10. Which of the following is the monosaccharide that is most important to the human body?
A) Glucose
B) Glycogen
C) Amylase
D) Bile
Ans: A
Complexity: Moderate
Ahead: How are carbohydrates digested, absorbed, transported, and assimilated in the body?
Subject: Chapter 2
Title: Nutrients to Energy Metabolism
Feedback: Glucose is the primary monosaccharide responsible for energy in the human body.

11. Lipids exist in the body primarily in what form?
A) Glucose
B) Glycogen
C) Triglycerides
D) Polysaccharides
Ans: C
Complexity: Moderate
Ahead: How are fats digested, absorbed, transported, and assimilated in the body?
Subject: Chapter 2
Title: Nutrients to Energy Metabolism
Feedback: Lipids are commonly referred to as fats and exist in the body primarily as triglycerides.

12. Fatty acids that have been cleaved off glycerol are called:
A) triglycerides.
B) free fatty acids.
C) diglycerides.
D) monoglycerides.
Ans: B
Complexity: Moderate
Ahead: How are fats digested, absorbed, transported, and assimilated in the body?
Subject: Chapter 2
Title: Nutrients to Energy Metabolism
Feedback: Fatty acids that are not attached to glycerol are known as free fatty acids.

True/False

1. True or False? On Earth, the primary source of chemical energy for animal life originates from other animals.
Ans: False
Complexity: Moderate
Ahead: What is energy?
Subject: Chapter 2
Title: Nutrients to Energy Metabolism
Feedback: The light energy from the sun is the primary source of energy for life on earth.

2. True or False? ATP is stored in very large quantities in the cells.
Ans: False
Complexity: Difficult
Ahead: What is the human body's source of chemical energy?
Subject: Chapter 2
Title: Nutrients to Energy Metabolism
Feedback: ATP is stored in small amounts in cells, which is why metabolism of energy nutrients is essential.

3. True or False? Fortunately for the athlete, very few of the proteins used in gluconeogenesis come from the breakdown of muscle tissue.
Ans: False
Complexity: Moderate
Ahead: What metabolic pathways are involved with the energy systems?
Subject: Chapter 2
Title: Nutrients to Energy Metabolism
Feedback: Muscle is the main storage form of protein in the human body.

4. True or False? The demand for cellular ATP is less for low-intensity physical activity than for more powerful, fast movements.
Ans: True
Complexity: Moderate
Ahead: How do the energy systems work together to supply ATP during sport performance?
Subject: Chapter 2
Title: Nutrients to Energy Metabolism
Feedback: Powerful, fast movements require a rapid supply of cellular ATP.

5. True or False? The metabolic pathways associated with the anaerobic and aerobic energy systems are considered to be anabolic pathways.
Ans: False
Complexity: Difficult
Ahead: What metabolic pathways are involved with the energy systems?
Subject: Chapter 2
Title: Nutrients to Energy Metabolism
Feedback: Some metabolic pathways are aerobic and others are anaerobic.

6. True or False? Muscle cells never run out of ATP.
Ans: True
Complexity: Difficult
Ahead: How do the energy systems work together to supply ATP during sport performance?
Subject: Chapter 2
Title: Nutrients to Energy Metabolism
Feedback: ATP is essential for human life.

7. True or False? During steady-state exercise, the energy demand for ATP is met primarily by the anaerobic energy system.
Ans: False
Complexity: Difficult
Ahead: How do the energy systems work together to supply ATP during sport performance?
Subject: Chapter 2
Title: Nutrients to Energy Metabolism
Feedback: Steady-state exercise depends on the aerobic energy system.

8. True or False? All sport activities rely on the optimal blending of energy production by the three energy systems.
Ans: True
Complexity: Moderate
Ahead: How do the energy systems work together to supply ATP during sport performance?
Subject: Chapter 2
Title: Nutrients to Energy Metabolism
Feedback: The three energy systems work together to supply ATP for sport activities.

9. True or False? Of the three macronutrients, proteins are the primary source of the body's

chemical energy.
Ans: False
Complexity: Easy
Ahead: How are proteins digested, absorbed, transported, and assimilated in the body?
Subject: Chapter 2
Title: Nutrients to Energy Metabolism
Feedback: Carbohydrates are the primary source of chemical energy in the body.

10. True or False? Unlike carbohydrates and fats, proteins do not undergo enzymatic digestion in the mouth.
Ans: True
Complexity: Moderate
Ahead: How are proteins digested, absorbed, transported, and assimilated in the body?
Subject: Chapter 2
Title: Nutrients to Energy Metabolism
Feedback: Digestion of proteins begins in the stomach.

11. True or False? The fact that fat-soluble vitamins are readily stored in the body is one reason why taking high dosages is not recommended.
Ans: True
Complexity: Moderate
Ahead: How are minerals, vitamins, and water absorbed and transported in the body?
Subject: Chapter 2
Title: Nutrients to Energy Metabolism
Feedback: Fat-soluble vitamins can become toxic because they are stored in the body's fat stores.

12. True or False? Compared to basal metabolic rate, resting metabolic rate is much easier to measure.
Ans: True
Complexity: Easy
Ahead: What is energy?
Subject: Chapter 2
Title: Nutrients to Energy Metabolism
Feedback: Basal metabolic rate is measured under rigorous laboratory conditions.

13. True or False? In the human body, ingested foods provide the chemical energy to make ATP.
Ans: True
Complexity: Easy

Ahead: What is the human body's source of chemical energy?
Subject: Chapter 2
Title: Nutrients to Energy Metabolism
Feedback: Foods are digested, absorbed, and metabolized to provide chemical energy in the body.