

Test Bank for Nutrition for Sport and Exercise 5th Dunford

Chapter 01: Introduction to Sports Nutrition

1. Which of the following is the best description of exercise physiology?
- a. The art and science of training
 - b. The clinical study of mental and physical fatigue
 - c. The science of the response and adaptation of bodily systems to the challenges imposed by movement
 - d. Case study observations of acute and chronic exercise

ANSWER: c

2. Which of the following is the best description of sports nutrition?
- a. Ingestion, digestion, absorption, metabolism, and biochemistry of nutrients.
 - b. Study of weight-loss supplements.
 - c. Science of eating and supplementation.
 - d. Integration and application of scientifically based nutritional and exercise physiology principles that support and enhance training, performance, and recovery.

ANSWER: d

3. What is the best definition of exercise?
- a. A planned program of physical activity with the goal of improving or maintaining athletic performance
 - b. Planned, structured, repetitive, and purposive physical activity in which improvement or maintenance of fitness is the key
 - c. Movement that stresses the cardiovascular system
 - d. The capacity to do work

ANSWER: b

4. Which of the following descriptions best categorizes the term endurance athlete?
- a. One who predominantly uses the oxygen-dependent energy system
 - b. One who trains for many hours
 - c. One who only engages in moderate intensity activity
 - d. One who does not lift weights as part of training

ANSWER: a

5. Which type of athlete participates in sports to be physically active, to maintain a healthy lifestyle, and for enjoyment?
- a. Elite
 - b. Collegiate
 - c. Performance-focused recreational
 - d. Recreational

ANSWER: d

6. Which term refers to the wasting or decrease in organ or tissue size?
- a. Hypertrophy

Chapter 01: Introduction to Sports Nutrition

- b. Overload
- c. Atrophy
- d. Volume

ANSWER: c

7. Where else can glycogen be stored in the body other than in muscle tissue?

- a. Pancreas
- b. Bone marrow
- c. Kidneys
- d. Liver

ANSWER: d

8. Why do athletes need to ensure that they have adequate intake of protein?

- a. For growth and repair of tissue
- b. For the replenishment of glycogen
- c. To support a healthy immune system
- d. To minimize dehydration

ANSWER: a

9. Which training principle is based on the idea that individuals may respond and adapt slightly differently, even when exposed to the same training stimulus?

- a. The principle of progressive overload
- b. The principle of specificity
- c. The principle of individuality
- d. The principle of hard/easy

ANSWER: c

10. Which training principle is based on the idea that the type of physiological responses and eventual adaptations will be specific to the type of stimulus and stress imposed on the body?

- a. The Principle of progressive overload
- b. The Principle of specificity
- c. The Principle of individuality
- d. The Principle of hard/easy

ANSWER: b

11. Which statement best describes macronutrients?

- a. Any nutrient that provides energy
- b. The eight key nutrients needed for good health
- c. Carbohydrates, proteins, and fats
- d. Vitamins and minerals

ANSWER: c

Chapter 01: Introduction to Sports Nutrition

12. Which statement best describes training periodization?

- a. It is always the same to ensure consistency.
- b. It involves changing the intensity, volume, and specificity of training to achieve specific goals.
- c. It is unplanned and very flexible.
- d. It is based on each athlete's aerobic capacity.

ANSWER: b

13. Which statement best describes the early focus of nutrition research?

- a. The types of nutrients that help prevent chronic diseases
- b. The amount of nutrients that help prevent chronic diseases
- c. The amount and type of nutrients needed to prevent deficiencies
- d. The prevention of heart disease

ANSWER: c

14. What are Dietary Reference Intakes (DRI)?

- a. The minimum amount of nutrients needed by an individual each day
- b. The maximum amount of nutrients that should not be exceeded each day
- c. A standard used to assess and plan diets for individuals and groups
- d. Eight key nutrients needed for good health

ANSWER: c

15. Which choice is an example of an electrolyte?

- a. Linoleic acid
- b. Potassium
- c. Vitamin A
- d. Vitamin C

ANSWER: b

16. Which statement defines EAR?

- a. The average daily dietary intake that is sufficient to meet the nutrient requirement of nearly all (97–98%) healthy individuals in a particular group according to stage of life and gender
- b. What is used when an RDA cannot be determined
- c. What is used to assess dietary adequacy and as the basis for the RDA
- d. The highest daily nutrient intake that is likely to pose no risk of adverse health effects for almost all individuals in the general population

ANSWER: c

17. How does the Recommended Dietary Allowance (RDA) differ from the Adequate Intake (AI)?

- a. AI is not as scientifically strong as it is based on estimates or approximations derived from scientific research.

Chapter 01: Introduction to Sports Nutrition

- b. RDA is a U.S. standard while the AI is an international standard.
- c. RDA values are given for macronutrients while the AI values are given for micronutrients.
- d. RDA is based on a person's age and weight.

ANSWER: a

18. The Tolerable Upper Intake Level (UL) helps people answer which question?

- a. Am I deficient?
- b. Am I consuming enough?
- c. Am I consuming too much?
- d. Do I have the right balance between food and supplements?

ANSWER: c

19. Which statement best describes how the Dietary Reference Intakes (DRI) apply to athletes in training?

- a. The DRI are not applicable to athletes because they were developed for the general population.
- b. Although they were developed for the general population, athletes can use the DRI to assess the adequacy of their diets.
- c. Athletes should add 10% to DRI values to reflect the increased need for nutrients while training.
- d. All of the DRI are applicable to both the general and athletic populations.

ANSWER: b

20. The Nutrition Facts label was revised in May 2016 and now requires which of the following?

- a. Potassium
- b. Added sugars
- c. Trans fat
- d. All of these are correct

ANSWER: d

21. Which amount is the estimated daily value (DV) of calories for the average person to consume?

- a. 1,500
- b. 2,000
- c. 2,500
- d. 3,000

ANSWER: b

22. What is the purpose of the Dietary Guidelines for Americans?

- a. To inform people about ways to treat chronic diseases through diet and exercise
- b. To list the nutrient content of common foods sold in the United States
- c. To outline daily and weekly diet and exercise programs for weight reduction
- d. To provide dietary and exercise advice to Americans over the age of 2 that will promote health and reduce the risk for chronic diseases

ANSWER: d

Chapter 01: Introduction to Sports Nutrition

23. Which item below can be “exchanged” when using the Food Lists system because it has approximately the same content for the portion size listed?

- a. Vitamin and mineral
- b. Macronutrient
- c. Fiber
- d. Water

ANSWER: b

24. The daily recommendation for athletes is to consume 3 to 12 grams per (kg) of body weight of which item below?

- a. Carbohydrate
- b. Protein
- c. Fat
- d. Fluid

ANSWER: a

25. Which are the weakest of all scientific findings?

- a. Case studies
- b. Epidemiological studies
- c. Correlational studies
- d. Experimental studies

ANSWER: a

Twenty sprint cyclists were randomly selected to be in a study designed to test the effectiveness of 12 weeks of creatine supplementation on performance. Ten cyclists received a creatine supplement for three months, while the other ten received a placebo. The cyclists did not know which supplement they were taking, while the researcher did have this information.

26. Which type of study is this example?

- a. Case
- b. Epidemiological
- c. Experimental
- d. Clinical

ANSWER: c

27. Twenty sprint cyclists were randomly selected to be in a study designed to test the effectiveness of 12 weeks of creatine supplementation on performance. Ten cyclists received a creatine supplement for three months, while the other ten received a placebo. The cyclists did not know which supplement they were taking, while the researcher did have this information.

Which type of study was this example?

Chapter 01: Introduction to Sports Nutrition

- a. Randomized
- b. Double-blind
- c. Crossover
- d. Unbiased

ANSWER: a

28. Which description below best defines the term **level of evidence**?

- a. The number of peers who reviewed a research study manuscript
- b. The number of epidemiological studies conducted on a topic
- c. The strength of the study with the largest number of subjects
- d. The relative strength or weakness of the current collective body of scientific research

ANSWER: d

29. Which certification should consumers look for on websites to indicate that the website abides by the codes, including backing up claims with scientific research?

- a. HON code
- b. USP verification
- c. RCEP certification
- d. RD credential

ANSWER: a

30. Which category below best describes the most frequently accessed location by Internet users that also contains biased content used to bolster sales?

- a. Government agencies
- b. Noncommercial websites
- c. Commercial websites
- d. Educational institutions

ANSWER: c

31. Which certification requires earning a bachelor's degree with specialized dietetics courses, completion of 6 to 12 months of supervised practice, and passing a national exam?

- a. Registered Dietitian (RD)
- b. Personal trainer
- c. Certified Athletic Trainer (ATC)
- d. Clinical exercise specialist

ANSWER: a

32. How many minutes per day of physical activity is recommended for children and adolescents by the Physical Activity Guidelines for Americans?

- a. 20
- b. 40

Chapter 01: Introduction to Sports Nutrition

c. 60

d. 80

ANSWER: c

33. Which professional is a degreed health and fitness professional qualified to assess, design, and implement individual and group exercise and fitness programs for apparently healthy individuals and individuals with medically controlled diseases?

a. ACSM Certified Personal Trainer (CPT)

b. ACSM Certified Exercise Physiologist (EP-C)

c. ACSM Certified Clinical Exercise Physiologist (CEP)

d. ACSM Registered Clinical Exercise Physiologist (RCEP)

ANSWER: b

34. Body fat adds to total body weight, which can be a performance advantage for ____, because it adds mass.

a. cyclists

b. sprinters

c. pole vaulters

d. shot putters

ANSWER: d

35. Which supplements have a link to both food and medications?

a. Herbs

b. Vitamins

c. Minerals

d. Botanicals

ANSWER: d

36. ____ are intended to bring dietary supplement manufacturing standards more in line with pharmaceutical standards.

a. RDAs

b. AIs

c. EARs

d. GMPs

ANSWER: d

37. Surveys suggest that up to ____ percent of all elite athletes use one or more dietary supplements.

a. 50

b. 60

c. 70

d. 80

ANSWER: d

Chapter 01: Introduction to Sports Nutrition

38. Which substance is banned in many sports?

- a. Creatine
- b. Caffeine
- c. Omega-3 fatty acids
- d. Ephedrine

ANSWER: d

39. General agreement among members of a group is known as ____.

- a. causation
- b. consensus
- c. correlation
- d. anecdotal evidence

ANSWER: b

40. An analysis of a person or a particular situation is known as a(n) _____ study.

- a. case
- b. epidemiological
- c. experimental
- d. mortality

ANSWER: a

41. Which of the following training principles refers to an exercise stimulus that is of sufficient magnitude to cause enough stress to warrant long-term changes by the body?

- a. Specificity
- b. Individuality
- c. Disuse
- d. Overload

ANSWER: d

42. Which of the following is a term used on food labels to estimate the amount of certain nutrients needed each day based on a 2,000-calorie diet?

- a. HFS
- b. RDA
- c. DV
- d. DRI

ANSWER: c

43. An athlete with this condition has an intake of water that is far in excess of fluid lost (primarily through sweat), causing the athlete to be at risk of death due to low blood sodium levels.

- a. Hypohydration
- b. Hypertrophy

Chapter 01: Introduction to Sports Nutrition

- c. Hyponatremia
- d. Atrophy

ANSWER: c

44. This concept refers to a broad term used to describe any external influence that athletes use to enhance training, recovery, or performance.

- a. Ergogenic aids
- b. Placebo
- c. Supplements
- d. Botanicals

ANSWER: a

45. The strongest resulting studies come from ones in which data are obtained from both an experimental (treatment) group and a control (nontreatment) group. What type of substance does a control group receive?

- a. Double-blind
- b. Placebo
- c. Crossover
- d. Randomized

ANSWER: b

46. Researchers and scientists use these types of studies when highlighting nutrition and exercise patterns in order to show associations and correlations.

- a. Variable group
- b. Control group
- c. Epidemiological study
- d. Randomized study

ANSWER: c

47. Dietary guidelines recommend that the general population and even athletes make food choices based on this particular quantity.

- a. Mineral content
- b. Vitamin content
- c. Nutrient density
- d. Fluid distribution

ANSWER: c

48. The Food Lists system refers to carbohydrates, fats, and proteins, which are otherwise known as this term.

- a. Micronutrients
- b. Vitamins
- c. Minerals
- d. Macronutrients

Chapter 01: Introduction to Sports Nutrition

ANSWER: d

49. Athletes can use this substance, often found in beverages, to replace sodium levels after intense training.

- a. Botanicals
- b. Vitamins
- c. Electrolytes
- d. Pedialyte

ANSWER: c

50. Athletes use this training method to work on powerful, explosive movements.

- a. Running
- b. Plyometrics
- c. Lifting
- d. Calisthenics

ANSWER: b

51. Gradual erosion of physiological capacity over time is often observed in individuals as a result of sedentary lifestyles and can lead to what muscle condition?

- a. Hypertrophy
- b. Anaerobic capacity
- c. Aerobic capacity
- d. Atrophy

ANSWER: d

52. An example of this training principle is when competitive long distance runners spend a portion of their yearly training time concentrating on running longer distances to improve their maximal aerobic capacity and endurance and another portion of their training time running shorter distances at higher intensity to improve their speed.

- a. Overload
- b. Specificity
- c. Proximity
- d. Disuse

ANSWER: b

53. Proper nutrition during the recovery period is essential for replenishing nutrient stores depleted during training, for example, muscle _____.

- a. glycolysis
- b. protein
- c. minerals
- d. glycogen

ANSWER: d

Chapter 01: Introduction to Sports Nutrition

54. In order to adjust this fitness principle, athletes can change either their absolute or relative difficulty of physical activity or exercise.

- a. Frequency
- b. Time
- c. Intensity
- d. Type

ANSWER: c

55. When these certifications appear on dietary supplements, it means that they are produced using good manufacturing practices.

- a. NFS
- b. RDA
- c. DV
- d. DRI

ANSWER: a

56. Sports nutrition is the application of nutrition and exercise physiology principles to support and enhance training, performance, and recovery.

- a. True
- b. False

ANSWER: True

57. Endurance athlete is a term commonly used to describe an athlete who primarily depends on anaerobic energy systems.

- a. True
- b. False

ANSWER: False

58. Micronutrients include vitamins and minerals.

- a. True
- b. False

ANSWER: True

59. Athletes should adhere to a very rigid eating plan.

- a. True
- b. False

ANSWER: False

60. The RDA are based on the DRI whenever possible.

- a. True
- b. False

ANSWER: False

Chapter 01: Introduction to Sports Nutrition

61. The MyPlate plate is divided into four parts—fruits, vegetables, dairy, and proteins.

- a. True
- b. False

ANSWER: False

62. The Dietary Supplement Health and Education Act (DSHEA) provides a legal definition, labeling guidelines, and ensures the safety and effectiveness of dietary supplements.

- a. True
- b. False

ANSWER: False

63. Ginseng and Echinacea are the most widely used herbal supplements by athletes.

- a. True
- b. False

ANSWER: True

64. Epidemiological studies are used to confirm cause-and-effect relationships.

- a. True
- b. False

ANSWER: False

65. In a crossover study, subjects are in both the treatment and the control groups.

- a. True
- b. False

ANSWER: True

66. A double-blind study is one in which neither the researchers nor the study participants know which group they are in or which treatment they are receiving.

- a. True
- b. False

ANSWER: True

67. Sports nutrition recommendations should be made based on the results of one research study.

- a. True
- b. False

ANSWER: False

68. Anecdotal evidence is based on data obtained from research studies with less than 10 subjects.

- a. True
- b. False

ANSWER: False

Chapter 01: Introduction to Sports Nutrition

69. The conclusions are supported by good evidence, known as a rich body of data in Grade I.

- a. True
- b. False

ANSWER: True

70. Evidence-based sports nutrition recommendations are based primarily on observing the dietary intakes of successful athletes in a given sport.

- a. True
- b. False

ANSWER: False

71. The strength of any scientific recommendation depends on the quality of the research conducted.

- a. True
- b. False

ANSWER: True

72. USP is a code of conduct for medical and health websites.

- a. True
- b. False

ANSWER: False

73. Most Internet users access commercial websites, which have higher-quality information because of higher editing standards and the inclusion of more rigorous scientific articles as references.

- a. True
- b. False

ANSWER: False

74. Scope-of-practice definitions help establish professional boundaries and consumers can be assured that practitioners have been properly trained.

- a. True
- b. False

ANSWER: True

75. The *Journal of the Academy of Nutrition and Dietetics* is a peer-reviewed journal.

- a. True
- b. False

ANSWER: True

76. When the term **nutritionist** is used, it refers to an individual that has a bachelor's degree in nutrition.

- a. True
- b. False

ANSWER: False

Chapter 01: Introduction to Sports Nutrition

77. A Certified Specialist in Sports Dietetics (CSSD) is a registered dietitian who has specialized knowledge and experiences in sports nutrition.

- a. True
- b. False

ANSWER: True

78. MNT is nutrition advice that is intended to prevent, treat, or cure a disease or disorder.

- a. True
- b. False

ANSWER: True

79. Anaerobic means “without oxygen.”

- a. True
- b. False

ANSWER: True

80. Anaerobic is used in reference to exercise that primarily uses the energy system known as oxidative phosphorylation.

- a. True
- b. False

ANSWER: False

81. A mesocycle is subdivided into time frames called macrocycles.

- a. True
- b. False

ANSWER: False

82. Microcycles are often designed to coincide with the monthly calendar.

- a. True
- b. False

ANSWER: False

83. Nutrient density refers to a food containing a relatively low amount of nutrients compared to its caloric content.

- a. True
- b. False

ANSWER: False

84. The EAR is the highest daily nutrient intake that is likely to pose no risk of adverse health effects for almost all individuals in the general population.

- a. True
- b. False

Chapter 01: Introduction to Sports Nutrition

ANSWER: False

85. Sports nutrition recommendations should be evidence based.

- a. True
- b. False

ANSWER: True

86. The strength of any scientific recommendation depends on the quality of the research conducted.

- a. True
- b. False

ANSWER: True

87. A strong research design is not necessarily fundamental to obtain accurate results.

- a. True
- b. False

ANSWER: False

88. Epidemiological and experimental studies provide the same types of data.

- a. True
- b. False

ANSWER: False

89. Individual research studies are important, but knowledge of the body of literature is necessary to understand a topic.

- a. True
- b. False

ANSWER: True

90. Much of the information on the Internet about exercise, nutrition, and dietary supplements is inaccurate.

- a. True
- b. False

ANSWER: True

91. Certifications vary widely in their requirements.

- a. True
- b. False

ANSWER: True

92. Many exercise- and nutrition-related certifications do not require a bachelor's degree.

- a. True
- b. False

ANSWER: True

Chapter 01: Introduction to Sports Nutrition

93. It is not necessary for practitioners to stay within their scope of practice and recognize the limits of their knowledge, training, and expertise.

- a. True
- b. False

ANSWER: False

94. An ACSM Certified Personal TrainerSM (CPT) is a fitness professional involved in developing and implementing an individualized approach to exercise leadership in healthy populations.

- a. True
- b. False

ANSWER: True

95. An ACSM Certified Exercise Physiologist® (EP-C) is a nondegreed health and fitness professional qualified to assess, design, and implement individual and group exercise and fitness programs for apparently healthy individuals and individuals with medically controlled diseases.

- a. True
- b. False

ANSWER: False

96. Describe the importance of using the public domain for gathering information.

ANSWER: Practitioners must recognize the limitations of their training, skills, and knowledge. Many practitioners have basic but not advanced knowledge of nutrition and physical fitness. In such cases, professional organizations often suggest using and promoting only general nutrition and exercise materials that are in the public domain.

Public domain documents can be freely copied and distributed. Excellent public domain general nutrition and fitness materials are produced by federal government agencies and large health-oriented organizations such as the American Heart Association. The 2015–2020 Dietary Guidelines for Americans

97. Compare and contrast an exercise physiologist and a personal trainer.

ANSWER: The ACSM Certified Personal TrainerSM (CPT) is a fitness professional involved in developing and implementing an individualized approach to exercise leadership in healthy populations and/or those individuals with medical clearance to exercise. The ACSM Certified Exercise Physiologist® (EP-C) is a degreed health and fitness professional qualified to assess, design, and implement individual and group exercise and fitness programs for apparently healthy individuals and individuals with medically controlled diseases.

98. Explain the difference between a certified exercise physiologist and a certified clinical exercise physiologist.

ANSWER: The ACSM Certified Exercise Physiologist® (EP-C) is a degreed health and fitness professional

Chapter 01: Introduction to Sports Nutrition

qualified to assess, design, and implement individual and group exercise and fitness programs for apparently healthy individuals and individuals with medically controlled diseases. The ACSM Certified Clinical Exercise Physiologist® (CEP) is a health care professional certified by the ACSM to deliver a variety of exercise assessment, training, rehabilitation, risk factor identification, and lifestyle management services to individuals with or at risk for cardiovascular, pulmonary, and metabolic disease(s).

99. Explain the importance of practitioners abiding by their scope of practice, in terms of interprofessional conduct.

ANSWER: Who is qualified to make nutrition and training recommendations to athletes? Because health, nutrition, and exercise are interrelated, the lines between these disciplines are sometimes blurry, and there is some overlap among various practitioners. Scope-of- practice definitions help establish professional boundaries by outlining the skills, responsibilities, and accepted activities of practitioners. Such definitions take into account academic training and professional knowledge and experiences. Certifications and licenses are one way to formally define scope of practice, but not all health, exercise, and nutrition practitioners are formally licensed, and some certifications are voluntary. In some states, scope of practice may be legally defined. Many professional organizations have clear statements regarding scope of practice. Scope of practice protects both consumers and practitioners.

100. Explain the importance of obtaining licenses or certifications.

ANSWER: Many people work with athletes in the areas of exercise and nutrition; however, their backgrounds and training may be very different. Licenses and certifications require at least a bachelor's degree and successful completion of a written exam. In some cases, higher degrees and more training are needed. Health care professions generally have rigorous standards because patients can be harmed if practitioners are not properly trained. They should also have experience in the assessment of fitness and the design and implementation of safe and effective fitness programs for individuals and groups. One way to determine if exercise/fitness practitioners have the necessary and appropriate knowledge is to look at their academic training. College and university degrees in exercise science, kinesiology, physical education, and other related degrees are available from many institutions at the undergraduate and graduate level. There is a growing movement for accreditation of these academic programs through the Commission on Accreditation of Allied Health Education Programs (CAAHEP), which provides evidence that an academic program meets rigorous educational standards. Certification programs can also attest to the skills and experience of the fitness practitioner. There are many certification programs available, many with minimal requirements, but there are some that require specific educational degrees and thorough preparation in the field.