

Cardiorespiratory Endurance

Multiple-Choice Questions

1. Which of the following is NOT one of the functions of the cardiorespiratory system?
 - a. to transport oxygen
 - b. to pick up waste products
 - c. to transport nutrients
 - d. to produce ATP

2. Which of the following is NOT a component of the cardiorespiratory system?
 - a. the brain
 - b. the heart
 - c. the blood vessels
 - d. the lungs

3. Systemic circulation carries blood to all organs of the body EXCEPT
 - a. the brain
 - b. the lungs
 - c. the heart
 - d. the liver

4. During systole, the heart is
 - a. at rest
 - b. contracting
 - c. suffering an attack
 - d. filling with blood

5. Alveoli serve what function in the lungs?
 - a. They ensure that air flows completely through the lungs.
 - b. They prevent dust and pollens from entering the lungs.
 - c. They help to expand and contract the lungs.
 - d. They allow for the exchange of carbon dioxide and oxygen.

6. Olympic-caliber athletes may be able to increase their metabolic rate by
 - a. 100%
 - b. 500%
 - c. 1000%
 - d. 2000%

7. The following are all energy-containing nutrients EXCEPT
 - a. vitamins
 - b. proteins
 - c. fats
 - d. carbohydrates

8. Most carbohydrates are broken down into
 - a. amino acids
 - b. fatty acids
 - c. glucose
 - d. oxygen

9. Adenosine triphosphate (ATP) is defined as
 - a. the stored form of proteins
 - b. the stored form of glucose
 - c. the stored form of fats
 - d. the basic form of energy used by cells

10. An example of an activity that primarily uses the immediate energy system is
 - a. running a marathon
 - b. weight lifting
 - c. walking
 - d. in-line skating

11. The nonoxidative energy system typically provides energy for
 - a. 3 or fewer seconds
 - b. 10-120 seconds
 - c. 3-5 minutes
 - d. in-line skating

12. Accumulation of lactic acid increases
 - a. immunity
 - b. fatigue
 - c. metabolism
 - d. soreness

13. The oxidative energy system produces ATP in structures called
 - a. alveoli
 - b. capillaries
 - c. mitochondria
 - d. atria

14. Fat is utilized as a fuel more efficiently during periods of
 - a. prolonged exercise
 - b. moderately intense exercise
 - c. rest
 - d. short-term intense activity

15. Maximal oxygen consumption (VO₂max) is
 - a. the best measure of the capacity of the cardiorespiratory system
 - b. the velocity of oxygen flowing through the blood
 - c. solely determined by genetics

- d. very difficult to predict
16. Which of the following is NOT an immediate response to exercise?
- a. increased blood flow to the skin
 - b. increased ventilation (breathing)
 - c. increased heart rate
 - d. increased blood flow to the liver and kidneys
17. As the result of regular endurance exercise, resting heart rate is often
- a. up to 10 beats per minute lower
 - b. 10-20 beats per minute lower
 - c. up to 10 beats per minute higher
 - d. 10-20 beats per minute higher
18. Which one of the following is NOT increased by endurance training?
- a. insulin sensitivity
 - b. functional stability of cells and tissues
 - c. number and size of free radicals
 - d. number and size of mitochondria
19. Free radicals are
- a. complex carbohydrates that fuel muscle activity
 - b. metabolic byproducts that cause fatigue
 - c. reactive compounds that can cause cellular damage
 - d. cellular structures that contain enzymes
20. Which of the following is NOT one of the major cardiovascular disease risk factors?
- a. a sedentary lifestyle
 - b. smoking
 - c. high cholesterol levels
 - d. poor immune function
21. Endurance exercise can help to increase
- a. HDL
 - b. LDL
 - c. triglycerides
 - d. glucose
22. Exercise may reduce the risk of colon cancer through all the following means EXCEPT
- a. reducing blood fats
 - b. speeding the movement of food through the gastrointestinal tract
 - c. enhancing immune function
 - d. increasing concentrations of epinephrine and norepinephrine

23. Regular endurance exercise contributes to better control of body fat by
 - a. decreasing calorie requirements
 - b. decreasing daily energy expenditure
 - c. increasing calorie intake
 - d. increasing daily energy expenditure

24. Cardiorespiratory endurance is best measured in terms of
 - a. maximal oxygen consumption
 - b. minutes per mile
 - c. maximal pounds lifted
 - d. blood pressure

25. Regular physical activity is linked to all of the following EXCEPT
 - a. lower endorphin levels
 - b. reduced anxiety
 - c. increased creativity
 - d. improved mood

26. Immediate effects of cardiorespiratory exercise include
 - a. decreased blood flow to the brain
 - b. decreased stroke volume
 - c. decreased blood flow to the kidneys
 - d. decreased oxygen transport

27. Long-term effects of regular cardiorespiratory exercise include
 - a. increased sweat rate
 - b. increased resting heart rate
 - c. increased platelet stickiness
 - d. increased body fat

28. Which one of the following statements about monitoring exercise heart rate is true?
 - a. count your pulse for one moment
 - b. press firmly on the carotid artery
 - c. Use your thumb, not one or more of your fingers
 - d. Count your pulse immediately after stopping exercise

29. Appropriate cardiorespiratory endurance exercise includes all of the following EXCEPT
 - a. walking
 - b. cycling
 - c. push-ups
 - d. swimming

30. The most important exercise factor for achieving training effects is
 - a. duration

- b. repetition
 - c. frequency
 - d. intensity
31. In addition to pulse counting, one may also monitor exercise intensity by using
- a. ratings of perceived exertion
 - b. duration of exercise
 - c. heart rate reserve
 - d. frequency of training
32. The recommended duration of an exercise training workout is dependent on its
- a. frequency
 - b. specificity
 - c. intensity
 - d. mode
33. Recommended treatment of minor soft tissue injuries such as bruises includes all of the following EXCEPT
- a. rest
 - b. elevation
 - c. ice
 - d. massage
34. Heat may be applied to a soft tissue injury
- a. immediately after the injury occurrence
 - b. 1 to 2 hours after the injury occurrence
 - c. after the swelling has subsided
 - d. until the swelling has subsided
35. Guidelines for preventing exercise injuries include all of the following EXCEPT
- a. avoid or minimize high-impact activities
 - b. exercise through illnesses or fatigue
 - c. gradually increase the intensity of your workouts
 - d. use proper body mechanics

Answers

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| 1. d | 13. c | 25. a |
| 2. a | 14. a | 26. c |
| 3. b | 15. a | 27. a |
| 4. b | 16. d | 28. d |
| 5. d | 17. b | 29. c |
| 6. d | 18. c | 30. d |
| 7. a | 19. c | 31. a |
| 8. c | 20. d | 32. c |

9. d

10. b

11. b

12. b

21. a

22. d

23. d

24. a

33. d

34. c

35. b