



1. Physical activity is defined as
  - A) any bodily movement produced by the contraction of skeletal muscles that results in a substantial increase in caloric requirements over resting energy expenditure.
  - B) a type of physical activity consisting of planned, structured, and repetitive bodily movement done to improve and/or maintain one or more components of physical fitness.
  - C) a set of attributes or characteristics that people have or achieve that relates to the ability to perform physical activity.
  - D) a broad range of activities that are designed to enhance reaction and hand-eye coordination.
  
2. Exercise is defined as
  - A) any bodily movement produced by the contraction of skeletal muscles that results in a substantial increase over resting energy expenditure.
  - B) a type of physical activity consisting of planned, structured, and repetitive bodily movement done to improve and/or maintain one or more components of physical fitness.
  - C) a set of attributes or characteristics that people have or achieve that relates to the ability to perform physical activity.
  - D) a broad range of activities that are designed to enhance reaction and hand-eye coordination.
  
3. Physical fitness is defined as
  - A) any bodily movement produced by the contraction of skeletal muscles that results in a substantial increase over resting energy expenditure.
  - B) a type of PA consisting of planned, structured, and repetitive bodily movement done to improve or maintain one or more components of physical fitness.
  - C) the ability to carry out daily tasks with vigor and alertness, without undue fatigue, and with ample energy to enjoy leisure-time pursuits and meet unforeseen emergencies.
  - D) a broad range of activities that are designed to enhance reaction and hand-eye coordination.
  
4. Which of the following is considered a health-related physical fitness component?
  - A) Cardiorespiratory endurance
  - B) Agility
  - C) Coordination
  - D) Reaction time
  
5. Which of the following is considered a skill-related component of physical fitness?
  - A) Body composition
  - B) Muscular strength
  - C) Flexibility
  - D) Balance

6. The ability to change the position of the body in space with speed and accuracy is known as
  - A) coordination.
  - B) balance.
  - C) agility.
  - D) reaction time.
  
7. The ability to use the senses, such as sight and hearing, together with body parts in performing tasks smoothly and accurately is known as
  - A) coordination.
  - B) balance.
  - C) agility.
  - D) reaction time.
  
8. The maintenance of equilibrium while stationary or moving is known as
  - A) coordination.
  - B) balance.
  - C) agility.
  - D) reaction time.
  
9. The time elapsed between stimulation and the beginning of the reaction to it is known as
  - A) coordination.
  - B) balance.
  - C) agility.
  - D) reaction time.
  
10. Which of the following has been defined as “moderate” physical activity?
  - A) <3 METs
  - B) 3–<6 METs
  - C) ≥6–9 METs
  - D) >9 METs
  
11. There is strong evidence today for an inverse dose-response relationship between physical activity and
  - A) high-density lipoprotein cholesterol.
  - B) dyslipidemia.
  - C) weight maintenance.
  - D) all-cause mortality.
  
12. For which of the following is there insufficient data to determine if a relationship exists with physical activity?
  - A) Cardiovascular disease
  - B) Weight maintenance
  - C) Metabolic health

- D) Depression and distress
13. Based on the U.S. Surgeon General's Report of 1996, which of the following is *true*?
- A) Important health benefits can be obtained by including a moderate amount of physical activity on most, if not all, days of the week.
  - B) Americans are becoming more obese because they lack enough sleep, carbohydrates, and protein in the meals they eat.
  - C) An exercise program must consist of aerobic activities of 30 min or more twice a week to be effective.
  - D) Exercise programs can only be effective if they involve both small and large muscle groups and are done every day.
14. According to a recent survey, what percentage of U.S. adults meet aerobic activity guidelines?
- A) 65%
  - B) 51.6%
  - C) 46%
  - D) 22%
15. Since the publishing of the U.S. Surgeon General's Report in 1996, several reports have been published advocating physical activity levels above the minimum recommendations. These guidelines and recommendations refer to the volume of physical activity required to
- A) run a marathon.
  - B) play professional sports.
  - C) train for a specific activity such as running a 10-km road race.
  - D) prevent weight gain and/or obesity.
16. Which of the following is *not* a primary recommendation from the ACSM-AHA physical activity and public health update?
- A) All healthy adults aged 18–65 yr need high-intensity aerobic physical activity for a minimum of 30 min 5 d · wk<sup>-1</sup> or moderate activity for a minimum of 45 min 5 d · wk<sup>-1</sup>.
  - B) Moderate-intensity aerobic activity can be accumulated toward the 30 min minimum by performing bouts each lasting 10 or more minutes.
  - C) Every adult should perform activities that maintain or increase muscular strength and endurance a minimum of 2 d · wk<sup>-1</sup>.
  - D) Because of the dose-response relationship between physical activity and health, persons who wish to further improve their personal fitness, reduce their risk for chronic diseases and disabilities, and/or prevent unhealthy weight gain may benefit by exceeding the minimum recommended amounts of physical activity.
17. Which of the following may *not* be considered a benefit of regular physical activity and/or exercise?
- A) Improvement in cardiovascular and respiratory function

- B) Reduction in cardiovascular disease risk factors
  - C) Increased morbidity and mortality
  - D) Decreased anxiety and depression
18. An intervention designed to prevent an initial occurrence of a disease is known as
- A) primary prevention.
  - B) secondary prevention.
  - C) tertiary prevention.
  - D) nonsense: You cannot prevent the initial occurrence of a disease.
19. As a result of regular physical activity, which of the following is considered an improvement in cardiovascular and respiratory function?
- A) Reduced resting systolic/diastolic pressures
  - B) Increased serum high-density lipoprotein cholesterol and decreased serum triglycerides
  - C) Reduced total body fat and reduced intra-abdominal fat
  - D) Increased maximal oxygen uptake resulting from both central and peripheral adaptations
20. Which of the following is *not* true regarding the benefits of regular physical activity and primary and secondary prevention programs?
- A) Higher activity and/or fitness levels are associated with lower death rates from coronary artery disease.
  - B) Higher activity and/or fitness levels are associated with higher incidence rates for cancer of the colon and breast.
  - C) Based on meta-analyses (pooled data across studies), cardiovascular and all-cause mortality are reduced in patients with postmyocardial infarction who participate in cardiac rehabilitation exercise training, especially as a component of multifactorial risk factor reduction.
  - D) Randomized controlled trials of cardiac rehabilitation exercise training involving patients with postmyocardial infarction do not support a reduction in the rate of nonfatal reinfarction.
21. From several accounts, the greatest cause of exercise-related death among young athletes is
- A) hypertrophic cardiomyopathy.
  - B) thromboembolism.
  - C) coronary artery aneurysm.
  - D) myocardial scarring.
22. Which of the following is considered to be the absolute annual risk of exercise-related sudden death among high school and college athletes?
- A) 1 in 200,000 men and 500,000 women
  - B) 1 in 133,000 men and 769,000 women
  - C) 1 in 100

- D) 1 in 267,000 men and 268,000 women
23. Why is the risk of sudden cardiac death or acute myocardial infarction higher in middle-aged and older adults than in younger individuals?
- A) There is a higher prevalence of cardiovascular disease in the older population.
  - B) Older adults exercise more frequently.
  - C) Young people engage in lower intensity exercise when compared to older people.
  - D) Smoking is more prevalent in the older adult.
24. Which of the following is the estimated overall cardiac arrest and SCD incidence rates among runners?
- A) 1 per 150,000 and 1 per 356,000 runners, respectively
  - B) 1 per 256,000 and 1 per 184,000 runners, respectively
  - C) 1 per 184,000 and 1 per 256,000 runners, respectively
  - D) 1 per 500,000 and 1 per 856,000 runners, respectively
25. The highest risk of cardiovascular events occurs in those individuals with diagnosed coronary artery disease. How many cardiac arrests per patient-hours can be expected?
- A) One cardiac arrest per 116,906 patient-hours
  - B) One myocardial infarction per 10,000 patient-hours
  - C) One fatality per 1,007 patient-hours
  - D) One cardiac arrest and one myocardial infarction per 11,976 patient-hours
26. Which of the following is *not* a strategy to prevent exercise-related cardiac events?
- A) Health care professionals should know the pathologic conditions associated with exercise-related events so that physically active children and adults can be appropriately evaluated.
  - B) Active individuals should know the nature of cardiac prodromal symptoms and seek prompt medical care if such symptoms develop.
  - C) High school and college athletes should undergo preparticipation screening by qualified professionals.
  - D) Athletes with known cardiac conditions should be banned from competition.
27. According to a recent survey, what percentage of U.S. adults meet muscle strengthening guidelines?
- A) 65%
  - B) 41.1%
  - C) 29.3%
  - D) 12%
28. Which one of the following factors is *not* associated with musculoskeletal injury?
- A) Exercise intensity
  - B) Exercise duration
  - C) Nature of the activity

D) Musculoskeletal anomalies

29. Which of the following methods may reduce the risk for musculoskeletal injury?

A) Stretching

B) Warm-up

C) Gradual progression of exercise intensity and volume

D) All of the above

30. Which of the following is *true* regarding physical inactivity?

A) It is a global pandemic.

B) It has been identified as one of the four leading contributors to premature mortality

C) It affects 31.1% of adults worldwide.

D) All of the above

**Answer Key**

1. A
2. B
3. C
4. A
5. D
6. C
7. A
8. B
9. D
10. B
11. D
12. B
13. A
14. B
15. D
16. A
17. C
18. A
19. D
20. B
21. A
22. B
23. A
24. C
25. A
26. D
27. C
28. B
29. D
30. D

1. Potential exercise program participants should be screened for the presence and/or signs and symptoms of various cardiovascular, metabolic, and renal diseases to
  - A) optimize safety during exercise participation.
  - B) increase the likelihood that participants will drop out.
  - C) encourage them to participate in vigorous exercise.
  - D) increase revenue generation.
  
2. The exercise preparticipation health screening process is based on
  - A) physical activity level; signs and symptoms of cardiovascular, metabolic, or renal disease; presence of known cardiovascular, metabolic, or renal disease.
  - B) resting heart rate, resting blood pressure, and height and weight.
  - C) informed consent, PAR-Q, and medical clearance.
  - D) cardiovascular disease risk factors, medical history, and informed consent.