

Health: The Basics, 12e (Donatelle)

Chapter 3a Focus On: Improving Your Sleep

1) The results from an American College Health Association study indicate that most college students

- A) get enough sleep to feel well-rested at least five days a week.
- B) feel tired or sleepy three or more days a week.
- C) sleep more hours per night than students of their parents' generation.
- D) sleep an average of only three hours per night.

Answer: B

Diff: 1

Skill: Remembering

Section: Sleepless in America

Learning Outcome: 3a.1

2) Which of the following is a major contributor to college students' lack of sleep?

- A) electronic devices
- B) failing grades
- C) eating spicy food
- D) exercising at night

Answer: A

Diff: 2

Skill: Understanding

Section: Sleepless in America

Learning Outcome: 3a.1

3) What percentage of the world's population lacks adequate sleep?

- A) about 25 percent
- B) about 35 percent
- C) about 45 percent
- D) about 55 percent

Answer: C

Diff: 1

Skill: Remembering

Section: Sleepless in America

Learning Outcome: 3a.1

4) In which of the following countries do citizens, on average, get the most sleep?

- A) Japan
- B) Mexico
- C) UK
- D) USA

Answer: B

Diff: 1

Skill: Remembering

Section: Sleepless in America

Learning Outcome: 3a.1

5) Which of the following groups of Americans is most likely to suffer from sleepiness?

- A) those between the ages of 13 and 29
- B) those between the ages of 30 and 44
- C) those between the ages of 55 and 69
- D) those age 70 and older

Answer: A

Diff: 1

Skill: Remembering

Section: Sleepless in America

Learning Outcome: 3a.1

6) Using electronic devices before bed may disrupt sleep patterns for all of the following reasons EXCEPT the

- A) blue light they give off.
- B) sleep-inducing hormone they suppress.
- C) beeping sounds they sometimes produce.
- D) increased alertness they can cause.

Answer: C

Diff: 2

Skill: Understanding

Section: Sleepless in America

Learning Outcome: 3a.1

7) According to research, immune function is increased in adolescents who

- A) get 7 hours of sleep a night.
- B) get 8 hours of sleep a night.
- C) get 9 hours of sleep a night.
- D) get more than 9 hours of sleep a night.

Answer: D

Diff: 1

Skill: Remembering

Section: The Importance of Sleep

Learning Outcome: 3a.2

8) When Marlon gets adequate sleep the night before his intramural basketball games, he has more energy and can run faster and perform better. This can be attributed to

- A) cognitive ability being restored during sleep.
- B) increased body temperature and caloric expenditure during sleep.
- C) increased brain activity during sleep.
- D) conservation of body energy during sleep.

Answer: D

Diff: 3

Skill: Applying

Section: The Importance of Sleep

Learning Outcome: 3a.2

- 9) Adequate sleep may enhance intellectual health in all the following ways EXCEPT by
- A) clearing the brain of daily minutia.
 - B) synthesizing learning.
 - C) consolidating memories.
 - D) expending energy.

Answer: D

Diff: 2

Skill: Understanding

Section: The Importance of Sleep

Learning Outcome: 3a.2

- 10) After working on a class project all week and only sleeping about four hours per night, Courtney is

- A) compromising her immunity.
- B) improving her productivity.
- C) getting an adequate amount of sleep for her body needs.
- D) increasing her ability to handle sleep deprivation.

Answer: A

Diff: 3

Skill: Applying

Section: The Importance of Sleep

Learning Outcome: 3a.2

- 11) Sleep-deprived individuals may be at greater risk of overweight and obesity because

- A) sleeping less is associated with smoking more.
- B) sleeping less is associated with eating more.
- C) sleeping less is associated with exercising more.
- D) sleeping less is associated with earning more.

Answer: B

Diff: 2

Skill: Understanding

Section: The Importance of Sleep

Learning Outcome: 3a.2

- 12) Two parts of your brain that are critical to regulating circadian rhythm are the hypothalamus and the

- A) pineal body.
- B) amygdala.
- C) cerebellum.
- D) brain stem.

Answer: A

Diff: 2

Skill: Understanding

Section: The Processes of Sleep

Learning Outcome: 3a.3

13) REM sleep is named for which physiological activity that occurs while dreaming?

- A) raised and elevated melatonin
- B) rapidly energized metabolism
- C) rapid eye movements
- D) restless energized movements

Answer: C

Diff: 1

Skill: Remembering

Section: The Processes of Sleep

Learning Outcome: 3a.3

14) In preparation for his exam, Juan plans to stay up all night studying. According to research, this strategy will likely result in

- A) improved memory in general.
- B) reduced cognitive ability.
- C) increased short-term memory only.
- D) a higher grade on his exam.

Answer: B

Diff: 3

Skill: Applying

Section: The Importance of Sleep

Learning Outcome: 3a.2

15) How does sleep deprivation affect drivers?

- A) increases hunger
- B) impairs motor skills
- C) improves response time
- D) increases thirst

Answer: B

Diff: 2

Skill: Understanding

Section: The Importance of Sleep

Learning Outcome: 3a.2

16) The disruption of which factor results in jet lag?

- A) blood pressure
- B) natural light
- C) circadian rhythm
- D) blood glucose level

Answer: C

Diff: 2

Skill: Understanding

Section: The Processes of Sleep

Learning Outcome: 3a.3

17) The hormone released by the pineal gland that causes drowsiness is

- A) growth hormone.
- B) melatonin.
- C) melanin.
- D) insulin.

Answer: B

Diff: 1

Skill: Remembering

Section: The Processes of Sleep

Learning Outcome: 3a.3

18) Which of the following decreases the effect of melatonin?

- A) alcohol
- B) tryptophan
- C) muscle relaxants
- D) caffeine

Answer: D

Diff: 4

Skill: Analyzing

Section: Getting a Good Night's Sleep

Learning Outcome: 3a.4

19) During REM sleep

- A) the body moves around a lot.
- B) the brain processes and consolidates information.
- C) body temperature drops.
- D) muscles contract and relax.

Answer: B

Diff: 2

Skill: Understanding

Section: The Processes of Sleep

Learning Outcome: 3a.3

20) Students who doze off during a lecture are usually in which stage of sleep?

- A) 1
- B) 2
- C) 3
- D) 4

Answer: A

Diff: 3

Skill: Applying

Section: The Processes of Sleep

Learning Outcome: 3a.3

21) During non-REM sleep

- A) heart rate increases.
- B) digestive processes come to a halt.
- C) vivid dreams occur.
- D) body temperature and energy use drop.

Answer: D

Diff: 2

Skill: Understanding

Section: The Processes of Sleep

Learning Outcome: 3a.3

22) During which stage of sleep does a person disengage from the environment?

- A) 1
- B) 2
- C) 3
- D) 4

Answer: B

Diff: 2

Skill: Understanding

Section: The Processes of Sleep

Learning Outcome: 3a.3

23) During stage 4, a sleeping person releases which of the following hormones?

- A) melatonin
- B) melanin
- C) insulin
- D) growth hormone

Answer: D

Diff: 2

Skill: Understanding

Section: The Processes of Sleep

Learning Outcome: 3a.3

24) Non-REM sleep is called slow-wave sleep because

- A) there is slow eye movement during this stage.
- B) this is the deepest stage of sleep.
- C) the brain generates theta and delta waves.
- D) it is the stage during which dreams occur.

Answer: C

Diff: 2

Skill: Understanding

Section: The Processes of Sleep

Learning Outcome: 3a.3

25) According to current research, most adults function best with how many hours of sleep per night?

- A) 7-8
- B) 4-5
- C) 5-6
- D) 9-10

Answer: A

Diff: 1

Skill: Remembering

Section: The Processes of Sleep

Learning Outcome: 3a.3

26) Due to her job, Jessica sleeps 5 to 6 hours per night on weekends. Which of the following is the BEST strategy for her to resolve her sleep debt?

- A) She can't make up for her lost sleep.
- B) She can sleep 12 hours one night per week and 6 to 7 hours the other nights.
- C) She can readjust her circadian rhythm by sleeping 5 to 6 hours every night.
- D) She can sleep 9 hours per night Monday through Friday.

Answer: D

Diff: 3

Skill: Applying

Section: The Processes of Sleep

Learning Outcome: 3a.3

27) Which of the following factors influences a person's sleep needs?

- A) caffeine intake
- B) alcohol intake
- C) gender
- D) time zone

Answer: C

Diff: 2

Skill: Understanding

Section: The Processes of Sleep

Learning Outcome: 3a.3

28) Sean becomes very sleepy by late afternoon most days and thinks he should make time to fit in a nap. Before including a daily nap in his schedule, he should consider which of the following to ensure that he actually benefits from it?

- A) the time of day and length of the nap
- B) his need for caffeine in the afternoon
- C) his accumulated sleep debt
- D) his body weight and tendency to snore

Answer: A

Diff: 3

Skill: Applying

Section: The Processes of Sleep

Learning Outcome: 3a.3

29) All of the following negatively affect the quality of sleep EXCEPT

- A) getting lots of exercise during the day.
- B) drinking alcohol at night.
- C) drinking caffeine at night.
- D) needing to get out of bed to go to the bathroom.

Answer: A

Diff: 2

Skill: Understanding

Section: Getting a Good Night's Sleep

Learning Outcome: 3a.4

30) What role does exposure to sunlight during the day play in improving sleep?

- A) It prevents depression.
- B) It helps a person absorb vitamins.
- C) It helps to regulate the circadian rhythm.
- D) It discourages napping during the day.

Answer: C

Diff: 2

Skill: Understanding

Section: Getting a Good Night's Sleep

Learning Outcome: 3a.4

31) Which of the following is TRUE about the effect of exercise on your quality of sleep?

- A) Exercising strenuously at some point in the day boosts sleep quality.
- B) Exercising in the morning improves sleep more than exercising a few hours before sleep.
- C) Exercising a few hours before sleep improves sleep more than exercising in the morning
- D) Aerobic exercise improves sleep more than aerobic exercise combined with stretching.

Answer: A

Diff: 3

Skill: Applying

Section: Getting a Good Night's Sleep

Learning Outcome: 3a.4

32) Vijay often tosses and turns, unable to sleep for an hour or more after he goes to bed. Which of the following will help change this pattern and allow him to fall asleep faster?

- A) getting out of bed, exercising vigorously, and taking a warm shower
- B) staying in bed and checking the clock every 15 minutes
- C) staying in bed and using his laptop to check out his friends' Facebook updates
- D) getting up after 20 minutes and doing something relaxing until he feels sleepy

Answer: D

Diff: 3

Skill: Applying

Section: Getting a Good Night's Sleep

Learning Outcome: 3a.4

33) Sleep disorders can be diagnosed through a(n)

- A) clinical sleep study.
- B) physical exam and blood tests.
- C) survey of sleep habits.
- D) evaluation of all daily activities.

Answer: A

Diff: 2

Skill: Understanding

Section: Sleep Disorders

Learning Outcome: 3a.5

34) The most common sleep disorder is

- A) narcolepsy.
- B) insomnia.
- C) sleep apnea.
- D) sleepwalking.

Answer: B

Diff: 1

Skill: Remembering

Section: Sleep Disorders

Learning Outcome: 3a.5

35) Maria has difficulty falling asleep quickly. This condition is known as

- A) sleep apnea.
- B) narcolepsy.
- C) restless legs syndrome.
- D) insomnia.

Answer: D

Diff: 1

Skill: Remembering

Section: Sleep Disorders

Learning Outcome: 3a.5

36) Insomnia is often characterized by

- A) chronic joint pain upon lying down.
- B) waking up frequently during the night.
- C) temporary lapses in breathing while asleep.
- D) nightmares.

Answer: B

Diff: 2

Skill: Understanding

Section: Sleep Disorders

Learning Outcome: 3a.5

37) Justin often engages in binge drinking on the weekends. This behavior puts him at risk for a dangerous sleep disorder in which the brain and the respiratory muscles do not communicate properly. It's known as

- A) central sleep apnea.
- B) obstructive sleep apnea.
- C) narcolepsy.
- D) delta sleep.

Answer: A

Diff: 3

Skill: Applying

Section: Sleep Disorders

Learning Outcome: 3a.5

38) Obstructive sleep apnea (OSA) commonly results in

- A) reduced snoring.
- B) frequent night waking.
- C) deep breathing.
- D) restful sleep.

Answer: B

Diff: 2

Skill: Understanding

Section: Sleep Disorders

Learning Outcome: 3a.5

39) Zack was diagnosed with obstructive sleep apnea (OSA). His doctor may include diet and exercise as part of his treatment regimen because

- A) greater physical endurance will help in fighting his condition.
- B) losing weight will decrease his risk of developing central sleep apnea.
- C) losing weight may reduce his OSA symptoms.
- D) he will have more energy during the day to combat his usual sleepiness.

Answer: C

Diff: 3

Skill: Applying

Section: Sleep Disorders

Learning Outcome: 3a.5

40) Obstructive sleep apnea increases a person's risk for all of the following EXCEPT

- A) high blood pressure.
- B) stroke.
- C) irregular heartbeats.
- D) asthma.

Answer: D

Diff: 2

Skill: Understanding

Section: Sleep Disorders

Learning Outcome: 3a.5

41) The sleep disorder in which a person experiences unpleasant sensations in the legs and an uncontrollable urge to move to relieve the sensations is

- A) central sleep apnea.
- B) restless legs syndrome.
- C) sleepwalking.
- D) narcolepsy.

Answer: B

Diff: 1

Skill: Remembering

Section: Sleep Disorders

Learning Outcome: 3a.5

42) Sleepwalking sometimes occurs during

- A) NREM stage 4.
- B) NREM stage 3.
- C) NREM stage 2.
- D) NREM stage 1.

Answer: A

Diff: 2

Skill: Understanding

Section: The Processes of Sleep

Learning Outcome: 3a.3

43) One cause of narcolepsy appears to be

- A) viral.
- B) genetic.
- C) bacterial.
- D) environmental.

Answer: B

Diff: 1

Skill: Remembering

Section: Sleep Disorders

Learning Outcome: 3a.5

44) Ana has been diagnosed with insomnia. If her doctor prescribes a medication to treat her condition, it will most likely be some type of

- A) sedative.
- B) narcotic.
- C) antidepressant.
- D) stimulant.

Answer: A

Diff: 3

Skill: Applying

Section: Sleep Disorders

Learning Outcome: 3a.5

45) Gene occasionally has difficulty falling asleep but has never been diagnosed with a sleep disorder. Which strategy can he use to help him fall asleep faster?

- A) working on the computer later in the evening to keep his mind occupied
- B) eating his largest meal within two hours of bedtime so he won't be hungry
- C) practicing deep breathing or meditation before bedtime
- D) drinking a lot of fluids in the evening to stay hydrated

Answer: C

Diff: 3

Skill: Applying

Section: Getting a Good Night's Sleep

Learning Outcome: 3a.4

46) When you feel groggy and disoriented after a long nap, you are experiencing

- A) sleep apnea.
- B) narcolepsy.
- C) insomnia.
- D) sleep inertia.

Answer: D

Diff: 3

Skill: Applying

Section: The Processes of Sleep

Learning Outcome: 3a.3

47) The condition that causes people to fall asleep involuntarily during the day is

- A) sleep apnea.
- B) narcolepsy.
- C) insomnia.
- D) sleep inertia.

Answer: B

Diff: 1

Skill: Remembering

Section: Sleep Disorders

Learning Outcome: 3a.5

48) The sleep disorder in which breathing is interrupted many times during sleep is

- A) sleep apnea.
- B) narcolepsy.
- C) insomnia.
- D) sleep inertia.

Answer: A

Diff: 1

Skill: Remembering

Section: Sleep Disorders

Learning Outcome: 3a.5

49) A person who has difficulty falling asleep quickly and wakes up frequently is suffering from
A) non-REM sleep.
B) sleep debt.
C) narcolepsy.
D) insomnia.

Answer: D

Diff: 1

Skill: Remembering

Section: Sleep Disorders

Learning Outcome: 3a.5

50) A person's 24-hour cycle of sleeping, waking, and performing daily activities is his or her
A) daily cycle.
B) seasonal rhythm.
C) circadian rhythm.
D) habitual behavior.

Answer: C

Diff: 1

Skill: Remembering

Section: The Processes of Sleep

Learning Outcome: 3a.3

51) The restful, restorative period of sleep is
A) non-REM sleep.
B) REM sleep.
C) alternating-wave sleep.
D) rapid-wave sleep.

Answer: A

Diff: 2

Skill: Understanding

Section: The Processes of Sleep

Learning Outcome: 3a.3

52) The energizing period of sleep during which dreams occur is
A) non-REM sleep.
B) REM sleep.
C) alternating-wave sleep.
D) rapid-wave sleep.

Answer: B

Diff: 2

Skill: Understanding

Section: The Processes of Sleep

Learning Outcome: 3a.3

53) The difference between hours of sleep needed and actual hours slept is

- A) sleep ratio.
- B) sleep debt.
- C) sleep pattern.
- D) sleep inertia.

Answer: B

Diff: 1

Skill: Remembering

Section: The Processes of Sleep

Learning Outcome: 3a.3

54) Some researchers believe that chronic sleep deficiencies can

- A) regulate blood glucose levels.
- B) increase testicular size.
- C) increase sperm motility.
- D) increase the risk for type 2 diabetes.

Answer: D

Diff: 2

Skill: Understanding

Section: The Importance of Sleep

Learning Outcome: 3a.2

55) The portion of the brain considered to be the "master mind" that only rests during sleep is the

- A) cerebral cortex.
- B) cerebellum.
- C) brain stem.
- D) midbrain.

Answer: A

Diff: 1

Skill: Remembering

Section: The Importance of Sleep

Learning Outcome: 3a.2

56) During a sleep study, a person spends the night in a sleep lab, and his or her body functions are monitored by

- A) full-time sleep specialists.
- B) nurses on the night shift.
- C) sensors and electrodes.
- D) imaging equipment.

Answer: C

Diff: 2

Skill: Understanding

Section: Sleep Disorders

Learning Outcome: 3a.5

57) Caffeine effectively counteracts the negative effects of sleep deprivation.

Answer: FALSE

Diff: 2

Skill: Understanding

Section: The Processes of Sleep

Learning Outcome: 3a.3

58) In the United States, about 20 percent of the population suffers from excessive daytime sleepiness.

Answer: TRUE

Diff: 1

Skill: Remembering

Section: Sleepless in America

Learning Outcome: 3a.1

59) Nicotine and alcohol improve sleep by inducing relaxation.

Answer: FALSE

Diff: 2

Skill: Understanding

Section: Getting a Good Night's Sleep

Learning Outcome: 3a.4

60) Sleep helps the body to conserve energy.

Answer: TRUE

Diff: 1

Skill: Remembering

Section: The Importance of Sleep

Learning Outcome: 3a.2

61) Getting enough sleep may reduce a person's susceptibility to colds.

Answer: TRUE

Diff: 2

Skill: Understanding

Section: The Importance of Sleep

Learning Outcome: 3a.2

62) Short-duration sleep lowers a person's risk for cardiovascular disease.

Answer: FALSE

Diff: 2

Skill: Understanding

Section: The Importance of Sleep

Learning Outcome: 3a.2

63) Somnolence is a synonym for sleep deprivation.

Answer: FALSE

Diff: 4

Skill: Analyzing

Section: Sleepless in America

Learning Outcome: 3a.1

64) Sleep deficiencies have been linked to increased alcohol abuse.

Answer: TRUE

Diff: 2

Skill: Understanding

Section: Sleepless in America

Learning Outcome: 3a.1

65) Lack of sleep can have a detrimental effect on academic performance.

Answer: TRUE

Diff: 2

Skill: Understanding

Section: Sleepless in America

Learning Outcome: 3a.1

66) A sleep-deprived driver is as impaired as an intoxicated driver.

Answer: TRUE

Diff: 2

Skill: Understanding

Section: The Importance of Sleep

Learning Outcome: 3a.2

67) Jet lag occurs because travelers take frequent naps while flying.

Answer: FALSE

Diff: 2

Skill: Understanding

Section: The Processes of Sleep

Learning Outcome: 3a.3

68) The majority of nighttime sleep is spent in REM sleep.

Answer: FALSE

Diff: 1

Skill: Remembering

Section: The Processes of Sleep

Learning Outcome: 3a.3

69) REM sleep restores the body.

Answer: FALSE

Diff: 2

Skill: Understanding

Section: The Processes of Sleep

Learning Outcome: 3a.3

70) During NREM sleep, body temperature and energy use drop.

Answer: TRUE

Diff: 2

Skill: Understanding

Section: The Processes of Sleep

Learning Outcome: 3a.3

71) The shortest stage of sleep is stage 2.

Answer: FALSE

Diff: 1

Skill: Remembering

Section: The Processes of Sleep

Learning Outcome: 3a.3

72) Some scientists believe that REM sleep enhances memorization and learning.

Answer: TRUE

Diff: 2

Skill: Understanding

Section: The Processes of Sleep

Learning Outcome: 3a.3

73) Most adults need only 5 to 6 hours of sleep per night, provided it is high-quality sleep.

Answer: FALSE

Diff: 2

Skill: Understanding

Section: The Processes of Sleep

Learning Outcome: 3a.3

74) Jane stayed up all night taking care of her sick child. She will need to sleep more than average the next few nights to make up for the hours of lost sleep.

Answer: TRUE

Diff: 3

Skill: Applying

Section: The Processes of Sleep

Learning Outcome: 3a.3

75) Naps are most effective for improving alertness if they are longer than 30 minutes.

Answer: FALSE

Diff: 2

Skill: Understanding

Section: The Processes of Sleep

Learning Outcome: 3a.3

76) Ty works two jobs and attends college part-time. He averages 5 hours of sleep per night most nights of the week. What are the health risks of his sleep deprivation?

Answer: Sleep deficiency affects the immune system, leaving a person more at risk for viruses and other ailments, along with an overall disruption of immune functioning. It increases the risk of high blood pressure and cardiovascular disease. It also slows down the metabolism and raises the risk of overweight and obesity, and possibly the development of type 2 diabetes. Sleep is also important for neurological functioning, motor tasks, including driving, and stress management.

Diff: 2

Skill: Understanding

Section: The Importance of Sleep

Learning Outcome: 3a.2

77) Tracy pulls "all-nighters" during finals week. Explain why this could negatively impact her grades.

Answer: Restricting sleep can cause neurological problems. She may have lapses of attention, slowed or poor memory, reduced cognitive ability, difficulty concentrating, and difficulty engaging in creative thinking.

Diff: 2

Skill: Understanding

Section: The Importance of Sleep

Learning Outcome: 3a.2

78) Explain the four stages of NREM sleep.

Answer: Stage 1 is the lightest stage of sleep. It lasts only a few minutes. Stage 2 lasts 5-15 minutes and is deeper than stage 1. Stages 3 and 4 are delta-wave sleep. Blood pressure, heart rate, and respiration slow. These are the deepest stages. Growth hormone is released during stage 4, and sometimes people sleepwalk, cook, clean, or even drive in this stage, particularly if they are taking sleep medications.

Diff: 2

Skill: Understanding

Section: The Processes of Sleep

Learning Outcome: 3a.3