Multiple Choice Questions

1. A researcher observes that first-grade children who only eat foods sweetened with honey seem to behave the same as first-grade children who eat foods sweetened with cane sugar. After making the observation, the research decides to conduct a study to explore whether eating honey has any affect on school-age children's behavior. The researcher wants to follow the basic steps of the scientific method. Now that he's made the observation, his next step will be to
   A. form at least two basic conclusions about behavioral problems that affect children who eat sweeteners such as honey.
   B. analyze information about the general dietary practices and common behavioral problems of first-grade children.
   C. ask a group of peer reviewers for their help in designing a single-blind study involving the dietary practices of children.
   D. develop a question that's based on his observations of the children's behavior and their intakes of sweeteners such as honey.

Blooms Level: 2. Understand
Learning Outcome: 2.01.01 Define all of the key terms in this module.
Learning Outcome: 2.01.02 List the basic steps of the scientific method as it relates to nutrition research in general.
Learning Outcome: 2.01.03 Discuss ways that scientists conduct nutrition-related research that involves human subjects.
Module: 2.01 Nutrition: Science for Consumers
Section: 2.01a Collecting Science-based Evidence
Topic: Nutrition Basics
2. A medical researcher asked 50 people with painful, arthritic knees to rub a cream that contained vitamin E on their knees for two weeks. At the end of the two weeks, she asked the subjects whether their knee pain improved, stayed about the same, or worsened during the treatment period. All 50 subjects reported improvement in their knee pain. Based on this information, which of the following statements is true?

A. The results of this study prove that rubbing a cream that contains vitamin E on arthritic knees is a good way to relieve knee pain.

B. The researcher should find a peer-review group to analyze her findings about the vitamin E-containing cream as a treatment for knee pain.

C. The results about the benefits of using a vitamin E cream for knee pain are questionable, because the researcher didn't have a control group.

D. The researcher shouldn't report her findings, until she uses a single-blind study to test the vitamin E-containing cream.

3. A group of researchers wants to conduct a scientific study to investigate dietary factors that affect the development of obesity. Which of the following activities is likely to be the first step of their research efforts?

A. observing the general dietary practices of obese people

B. submitting an article that explains the experiment's design to a newspaper

C. analyzing data collected during the study

D. reporting their results on a popular television program
4. Researchers at a major American university plan a scientific study to investigate lifestyle factors that contribute to heart disease. Which of the following activities is most likely to be a component of their research efforts?
A. obtaining the approval of the Federal Trade Commission (FTC) to conduct research on human subjects
B. submitting an article describing the study and its results to a peer-reviewed journal
C. announcing the results of the study on a popular TV program
D. using a single-blind study that includes placebos to test the question

5. A scientist conducts a study to determine the effects of the mineral cadmium on the weight of mice. She adds 5 mcg of the mineral to the daily diet of 100 4-week-old laboratory mice. Every week, the researcher weighs and records the weight of each mouse. At the end of the study, the scientist notes that 3 mice died, 40 mice lost weight, 40 mice gained weight, and the remaining 17 mice didn't gain or lose weight during the 12-week period. Based on this information, what would you tell the researcher about her findings?
A. The findings are very interesting and provide scientific proof that cadmium causes weight loss.
B. The findings are not meaningful because of the way the scientist designed her study.
C. The findings are biased because the scientist used mice instead of humans in her study.
D. The findings are newsworthy and important enough to be published in a peer-reviewed nutrition journal.
6. A nutrition researcher adds 30 mg of the mineral iron to the daily diet of 50 4-week-old laboratory mice. After ten weeks, the scientist takes blood samples from each mouse. According to his findings, the mice developed abnormal red blood cells. Based on this information and your knowledge of scientific research, what would you tell him?
A. He should report his findings to other nutrition scientists, so they can repeat his study and confirm the results.
B. He should call a press conference and report his findings to the public, so they can avoid consuming excess iron.
C. He should consider his findings as an observation and redesign the study to include a control group.
D. He should prepare a research article for submission to a peer-reviewed nutrition journal.

Blooms Level: 4. Analyze
Learning Outcome: 2.01.01 Define all of the key terms in this module.
Learning Outcome: 2.01.02 List the basic steps of the scientific method as it relates to nutrition research in general.
Module: 2.01 Nutrition: Science for Consumers
Section: 2.01a Collecting Science-based Evidence
Topic: Nutrition Basics

7. Derek consumes a protein-rich drink before and after his workouts. He told his workout partner that he became 200% stronger within a couple of months after he added the drink to his diet. His report about the positive effects of the special drink is an example of a(an)
A. peer review.
B. anecdote.
C. testimonial.
D. scientific conclusion.

Blooms Level: 2. Understand
Learning Outcome: 2.02.01 Define all of the key terms in this module.
Module: 2.02 Spreading Nutrition Misinformation
Section: 2.02a Anecdotes and Testimonials
Topic: Nutrition Basics
8. Zack takes 500 mg of vitamin C daily. He advises his friends to take the vitamin C pills because, he claims, the vitamin protects him from cold viruses. His information about the usefulness of the vitamin is a(an)
A. disclaimer.
B. bias.
C. motive.
D. anecdote.

9. Emily has brittle fingernails that crack and split easily. Emily's mother advises her daughter to take gelatin pills 3 times/day, because she has heard the practice strengthens fingernails. The mother's nutrition-related advice about the benefit of taking gelatin pills is an example of a(an)
A. scientific conclusion.
B. testimonial.
C. anecdote.
D. biased report.
10. Dylan takes garlic pills to lower his blood cholesterol level, and he recommends the pills to his friends, because he thinks the pills are helpful. Dylan's nutrition-related advice to his friends is an example of a(an)
A. testimonial.
B. bias.
C. motive.
D. anecdote.

Blooms Level: 2. Understand
Learning Outcome: 2.02.02 Explain the difference between an anecdote and a testimonial.
Module: 2.02 Spreading Nutrition Misinformation
Section: 2.02a Anecdotes and Testimonials
Topic: Nutrition Basics

11. Having a control group enables researchers to
A. provide specific treatments to participants of the group.
B. compare findings of the control group with those of the experimental group.
C. avoid using harmful interventions when testing members of the experimental group.
D. test possible questions for future research efforts.

Blooms Level: 1. Remember
Learning Outcome: 2.01.01 Define all of the key terms in this module.
Learning Outcome: 2.01.03 Discuss ways that scientists conduct nutrition-related research that involves human subjects.
Module: 2.01 Nutrition: Science for Consumers
Section: 2.01a Collecting Science-based Evidence
Topic: Nutrition Basics
12. Phil is a participant in a study designed to examine the effects of taking a new protein-containing product on muscle tissue development. Phil suspects he's in the experimental group, because he's certain his muscles are bigger and stronger as a result of taking the product supplied by the researchers. When the study is completed, Phil learns that he didn't receive the new source of protein. Phil thinks the researchers made a mistake—he's certain his muscle mass increased while he consumed the product. According to this information, Phil's belief that his physical condition improved while he participated in the study is an example of

A. the placebo effect.
B. an anecdotal report.
C. human subject bias.
D. participant fatigue.

13. Which of the following statements is untrustworthy or misleading because it contains a "red flag" of unreliable nutrition-related information?

A. People who have complaints about false or misleading health claims should report them to the Federal Trade Commission.
B. People who have cancer should take vitamin C pills because the pills have been clinically proven to cure cancer.
C. People who have questions about medical conditions should seek answers from practitioners who have had the proper training and licensing.
D. People who have concerns about health-related products or treatments should be skeptical to avoid being cheated out of their money.
14. Researchers are conducting a study to determine the effects of vitamin C on the human immune system. The study involves providing pills that contain vitamin C to one group of human subjects and pills that do not contain vitamin C or other active ingredients to another group of people. The pills that do not contain the vitamin are
A. antidotes.
B. supplements.
C. placebos.
D. treatments.

Blooms Level: 2. Understand
Learning Outcome: 2.01.01 Define all of the key terms in this module.
Module: 2.01 Nutrition: Science for Consumers
Section: 2.01a Collecting Science-based Evidence
Topic: Nutrition Basics

15. Researchers are conducting a study to determine the effects of vitamin D on the human body. The study involves providing pills that contain vitamin D to one group of human subjects and pills that do not contain the vitamin or other active ingredients to another group of people. The pills that do not contain vitamin D are
A. placebos.
B. antidotes.
C. distractors.
D. interventions.

Blooms Level: 1. Remember
Learning Outcome: 2.01.03 Discuss ways that scientists conduct nutrition-related research that involves human subjects.
Module: 2.01 Nutrition: Science for Consumers
Section: 2.01a Collecting Science-based Evidence
Topic: Nutrition Basics
16. Researchers are conducting a study to determine the effects of the mineral zinc on the human body. The study involves providing pills that contain zinc to one group of human subjects and pills that do not contain zinc or other active ingredients to another group of people. The pills that do not contain zinc are
A. probiotics.
B. supplements.
C. antidotes.
D. placebos.

17. Which of the following statements is true?
A. In the United States, scientists often conduct studies on animals before using human subjects.
B. Before scientists begin their research, they usually develop a question to guide their study.
C. An experimental study doesn't need to have a control group.
D. In a single-blind study, both the researchers and the human subjects don't know their group assignments.

18. The government agency that enforces consumer protection laws by investigating false or misleading health-related claims is the
B. Environmental Protection Agency (EPA).
C. Agricultural Research Service (ARS).
D. Centers for Disease Control and Prevention (CDC).
19. Mitch recently tried a hair-restoring product that he purchased from an Internet website. The package's label displayed the following claim: "Rubbing a tablespoon of 'NutraTerraMino' on your scalp each day will cure the hair loss associated with the aging process." After a month of using "NutraTerraMino" daily, he stopped because the product made his hair fall out. Based on this information, Mitch should file a complaint with the
A. Bureau of Health Fraud.
B. Environmental Protection Agency.
C. Department of Public Safety.
D. Federal Trade Commission.

20. You recently watched an infomercial at an Internet website in which an actor promoted a new weight loss product. The actor stated that you'll lose weight almost instantly by consuming the product, because it contains a secret herbal formula that's both safe and effective. The promoter also said that you can continue to eat all of your usual foods and still lose weight, while taking the herbal formula. You're concerned that people might waste their money on this product. Which agency should you contact to file a complaint about the website?
A. National Organization Against Health Fraud
B. Consumer Protection Alliance
C. Department of Human Resources
D. Federal Trade Commission
21. Mariele purchased a box of cereal that had the following claim on the label: "Eat one bowl of this cereal a day for a month, and your skin will be healthier." Mariele is skeptical about the honesty of the claim. She should report her concern about the claim to the
A. Food and Drug Administration.
C. Academy of Nutrition and Dietetics.
D. Federal Trade Commission.

22. Actress Lotta Talent appears in commercials endorsing an herbal product for weight loss. Her endorsement is an example of a(n)
A. placebo effect.
B. testimonial.
C. anecdote.
D. peer review.

23. The professional football star Andro "The Man" McGraw appears in television commercials in which he endorses "AminoProFix" for building muscle mass quickly and safely. His support of the product is an example of a(an)
A. industrial bias.
B. peer review.
C. paid testimonial.
D. placebo effect.
24. Which of the following web sites is most likely a source of biased and unreliable nutrition information?
A. purdue.edu
B. dietsnomore4u.com
C. eatright.org
D. choosemyplate.gov

Blooms Level: 3. Apply
Module: 2.03 Becoming a More Critical Consumer of Nutrition Information
Section: 2.03c The Internet
Topic: Nutrition Basics

25. Which of the following web sites is most likely a source of biased and unreliable nutrition information?
A. ksu.edu/foodandnutritiondepartment
B. optimalhealthandnutrition4ever.com/tips
C. eatright.org/informationforpublic
D. choosemyplate.gov/fruit

Blooms Level: 3. Apply
Module: 2.03 Becoming a More Critical Consumer of Nutrition Information
Section: 2.03c The Internet
Topic: Nutrition Basics

26. Which of the following web sites is most likely a source of biased and unreliable nutrition information?
A. mizzou.edu
B. losefastandforever.com
C. marchofdimes.org
D. cdc.gov

Blooms Level: 3. Apply
Module: 2.03 Becoming a More Critical Consumer of Nutrition Information
Section: 2.03c The Internet
Topic: Nutrition Basics
27. A popular fitness magazine has an article about the health benefits of high-fiber diets. Which of the following credentials indicates that the author is likely to be a reliable source of food and nutrition information?
A. RD
B. MS
C. RN
D. DM

Blooms Level: 1. Remember
Learning Outcome: 2.04.01 Explain how to identify reliable nutrition experts.
Module: 2.04 Seeking Reliable Nutrition Information
Section: 2.04a Nutrition Experts
Topic: Nutrition Basics

28. A popular women's magazine has an article about planning a nutritious diet. Which of the following credentials indicate the author is likely to be a reliable source of food and nutrition information?
A. DNS
B. PhD
C. RD
D. HES

Blooms Level: 1. Remember
Learning Outcome: 2.04.01 Explain how to identify reliable nutrition experts.
Module: 2.04 Seeking Reliable Nutrition Information
Section: 2.04a Nutrition Experts
Topic: Nutrition Basics

29. Which of the following statements is true?
A. The Internet is generally a reliable source of nutrition information, because information posted at web sites has been peer-reviewed.
B. Web sites with .edu in their addresses are likely to provide reliable nutrition information.
C. U.S. laws require promoters of nutrition-related products to publish information in magazine articles and books that's honest or not misleading.
D. In general, personal web sites, such as blogs, are reliable sources of nutrition information.

Blooms Level: 2. Understand
Learning Outcome: 2.02.03 Explain why there is so much nutrition misinformation.
Learning Outcome: 2.03.04 Describe how to identify reliable sources of nutrition information.
Module: 2.03 Becoming a More Critical Consumer of Nutrition Information
Section: 2.02c Why Is There So Much Nutrition Misinformation?
Section: 2.03c The Internet
Topic: Nutrition Basics
30. Which of the following statements is true?
A. Testimonials for weight loss supplements are usually based on scientific evidence.
B. In general, commercial (*.com) Internet web sites are reliable sources of scientifically-based nutrition information.
C. Promoters of nutrition misinformation often exploit the general public's mistrust of scientists.
D. The First Amendment to the U.S. Constitution guarantees the right of consumers to be protected from health misinformation.

31. Which of the following statements is true?
A. A person who uses a drink that contains vinegar as a cure for patients with lung cancer is practicing quackery.
B. According to scientific research, anecdotes that describe how nutrients benefit health are reliable sources of information.
C. In the United States, people can include "RD" after their name, even if they are not qualified to use the credential.
D. A disclaimer on a product's label provides proof that the product is likely to live up to the manufacturer's claims.
32. Articles that appear in the *Journal of the American Medical Association* are reliable sources of health information because the editors
A. are trained to recognize and reject articles that include questionable findings.
B. only publish articles written by scientists whose research is funded by various health-related associations.
C. have other scientists review and react to the content of articles before publishing them.
D. know the authors publish articles in other scientific or medical journals.

*Blooms Level: 2. Understand*
*Learning Outcome: 2.01.01 Define all of the key terms in this module.*
*Learning Outcome: 2.01.02 List the basic steps of the scientific method as it relates to nutrition research in general.*
*Module: 2.01 Nutrition: Science for Consumers*
*Section: 2.01a Collecting Science-based Evidence*
*Section: 2.01b Confusion and Conflict*
*Topic: Nutrition Basics*

33. *Men's Journal* and *Family Circle* may be unreliable sources of nutrition information, because
A. the general public and public libraries subscribe to them.
B. articles in such popular magazines generally do not undergo peer-review before they are published.
C. registered dietitians are usually hired to write the articles about nutrition that are published in these journals.
D. authors generally pay the editors of popular magazines to publish their nutrition articles.

*Blooms Level: 2. Understand*
*Learning Outcome: 2.01.02 List the basic steps of the scientific method as it relates to nutrition research in general.*
*Learning Outcome: 2.03.02 Describe how you can become a careful and critical consumer of nutrition information.*
*Module: 2.03 Becoming a More Critical Consumer of Nutrition Information*
*Section: 2.03a Becoming a More Skeptical Consumer*
*Topic: Nutrition Basics*
34. An ad for a weight-loss product contains several dishonest and misleading statements. Which of the following statements is a "red flag" statement that's in the ad?

A. This product should not be taken during pregnancy, because it can harm your baby.
B. This product is guaranteed to raise your metabolism by 400%, which is why it causes you to lose weight safely and rapidly.
C. This product may raise your blood pressure and increase your risk of a heart attack, so don't take more than the recommended dose.
D. This product can damage your liver when combined with other drugs, so do not take it with alcohol and/or medications.

35. In the United States, which agency investigates complaints about false or misleading health-related claims that appear in food advertisements?

A. Organization for Honesty in Advertising
B. Environmental Protection Agency
C. Academy of Nutrition and Dietetics
D. Federal Trade Commission

36. Which of the following statements is true?

A. A nutritionalist has the same credentials as a registered dietitian.
B. In general, registered dietitians are reliable sources of nutrition information.
C. Quackery is the practice of dietetics without proper training and credentials.
D. A person with a PhD has the proper training to be registered dietitian.
37. A person claims his newly invented device treats cancer without surgery, medication, or other forms of conventional medical therapy. However, people who have used the device report that it was not helpful, and it may have harmed them. According to this information, the inventor's claims and his device are
A. quackery.
B. anecdotal evidence.
C. placebos.
D. clinically proven.

Blooms Level: 2. Understand
Learning Outcome: 2.03.01 Define all of the key terms in this module.
Module: 2.03 Becoming a More Critical Consumer of Nutrition Information
Section: 2.03a Becoming a More Skeptical Consumer
Topic: Nutrition Basics

38. Which of the following statements is true?
A. The First Amendment of the U.S. Constitution often protects people who spread nutrition misinformation.
B. You can ask your personal physician for nutrition advice, because physicians have the same training as registered dietitians.
C. In the United States, only registered dietitians can provide nutrition information legally.
D. Registered dietitians are not required to maintain their certification regularly.

Blooms Level: 2. Understand
Gradable: automatic
Learning Outcome: 2.04.01 Explain how to identify reliable nutrition experts.
Module: 2.04 Seeking Reliable Nutrition Information
Section: 2.02c Why Is There So Much Nutrition Misinformation?
Topic: Nutrition Basics
39. During a television interview, Dr. Ima Quack provides the following statement. "Most Americans suffer from nutritional deficiency diseases and will develop cancer within the next 10 years because they are not taking my megavitamin formula therapy." Dr. Quack's statement is an example of a(n)
A. biased report.
B. scare tactic.
C. anecdotal evidence.
D. scientific observation.

40. A magazine advertisement for a weight loss product includes before and after photos of a woman who supposedly lost 50 pounds in 3 weeks while taking the product. The bottom of the ad includes the statement, "Results are not typical." This statement is an example of a(n)
A. testimonial.
B. anecdote.
C. placebo.
D. disclaimer.
41. A television advertisement for a protein-rich drink includes before and after photos of a young man. In the "before" photo, the man appears unhappy and slim, but he looks thrilled and very muscular in the "after" photo. The narrator claims the man gained 30 pounds of "solid muscle" while drinking the protein formula daily for 2 months. At the bottom of the man's after photo, you notice a statement in small print that's difficult to read. According to the statement, "results may vary." This statement is an example of a
A. disclaimer.
B. placebo.
C. warning.
D. bias.

42. A scientist would like to collect information concerning the health of a large group of older adults. To obtain this information, the scientist conducts a
A. medical history survey.
B. double-blind study.
C. controlled human experiment.
D. double-blind study.
43. Which of the following statements is true?

A. Scientists typically use different methods to conduct research, which explains why studies involving humans often have conflicting results.

B. Scientists developed dietary recommendations for the U.S. population after analyzing results of a single American study, the Framingham Heart Study.

C. Scientists have peer reviewers analyze the designs of their human research studies, because the peer-review process reduces research bias.

D. Scientists are unlikely to obtain money to conduct research, if they don't respect the opinions and beliefs of the people in agencies who fund such projects.

Blooms Level: 2. Understand
Learning Outcome: 2.01.04 Explain why results of similar studies can provide different findings.
Module: 2.01 Nutrition: Science for Consumers
Section: 2.01b Confusion and Conflict
Topic: Nutrition Basics