

Microbiome Pre-test

Please circle the BEST answer to the following questions.

1. True or False? Microbes, such as viruses and bacteria, who live in and on the human body can be beneficial to humans.
 - a. True. Some microbes can serve useful functions in humans, however most microbes are harmful.
 - b. True. Some microbes can serve useful functions in humans and most microbes are not harmful.
 - c. False. Microbes do not serve useful functions in humans because most microbes are harmful.
 - d. False. Microbes do not serve useful functions in humans, however most microbes are not harmful.
2. How can the microbes living in and on our body respond to changes in our body, such as a fever?
 - a. The types of microbes can change.
 - b. The numbers of microbes can change.
 - c. Once they are established, the microbes do not change.
 - d. The types and numbers of microbes can change.
3. How can taking antibiotics (medicine that fights infections) harm microbes in humans?
 - a. Antibiotics RARELY harm microbes.
 - b. Antibiotics target ONLY disease-causing microbes.
 - c. Antibiotics target MOSTLY disease-causing microbes.
 - d. Antibiotics DO NOT target disease-causing microbes.
4. Bacteria that are no longer killed effectively by antibiotics (medicine that fights infections) are called "antibiotic resistant." Which of the following is NOT true about bacteria that are antibiotic resistant?
 - a. These bacteria are naturally resistant to certain antibiotics.
 - b. These bacteria can spread resistance through reproduction.
 - c. These bacteria can transfer resistance genes to other bacteria through DNA transfer.
 - d. These bacteria cannot transfer resistance genes to other bacteria through DNA transfer.

- 5.** Different people's cell phones are home to different types of microbes. Why might this be?
- a.** The types of microbes living on cell phones changes randomly.
 - b.** The cell phone owners did not wash their hands after using the bathroom.
 - c.** The types of microbes living on cell phones reflect the same types of microbes living on the skin of their owners.
 - d.** Different cell phones have different abiotic (non-living) factors. These factors select for different types of microbes that are able to survive on different types of cell phones.
- 6.** Which of the following is true of the microbes living in or on our bodies?
- a.** Most of these microbes contribute to disease.
 - b.** We cannot be healthy without these microbes.
 - c.** Killing these microbes would make us healthier.
 - d.** Both a and c
- 7.** The human body can be thought of as an ecosystem. Why?
- a.** It includes biotic (or living) factors
 - b.** It includes abiotic (or non-living) factors
 - c.** It changes little over time
 - d.** Both a and b
- 8.** Microbes may have a relationship with chronic diseases like asthma and diabetes. What is this relationship?
- a.** Microbes almost always cause these diseases.
 - b.** These diseases kill the microbes in our bodies.
 - c.** People with these diseases have groups of microbes that are out of balance.
 - d.** Microbes have nothing to do with these chronic diseases. Microbes are related to contagious diseases.