MICROORGANISMS AND HEALTH

Key Concepts

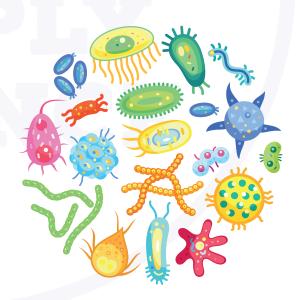
- Microorganisms include bacteria, viruses, and fungi.
- Some microorganisms cause disease, but others are helpful.
- Vaccines protect against certain diseases.

Key Facts to Remember

- Good bacteria help digest food, make vitamins, and protect against harmful bacteria by competing for space in the gut.
- Antibiotics kill bacteria but not viruses, so they are ineffective against illnesses like the flu.
- Washing hands with soap removes germs and prevents their spread.
- Fungi like yeast are used in baking (to make bread rise) and brewing (to ferment beverages).
- Some viruses can be prevented through vaccines, which train the immune system by introducing a harmless form of the virus.
- Pathogenic microorganisms can cause diseases such as colds, flu, food poisoning, and tuberculosis.
- The body's first line of defense includes physical barriers like skin, mucus that traps pathogens, and stomach acid that destroys them.
- White blood cells are part of the immune system, attacking harmful microorganisms that enter the body.
- Probiotics are supplements containing live beneficial bacteria to support gut health.
- Viruses reproduce by invading host cells, unlike bacteria, which can multiply on their own.

Quick Questions

- 1. Name one helpful microorganism.
- 2. What do antibiotics treat?
- 3. How can you prevent spreading germs?
- 4. What microorganism is used in making bread?
- 5. What do vaccines do?
- 6. Name a disease caused by a virus.
- 7. What is the body's first line of defense?
- 8. Can antibiotics kill viruses?



Fun Fact

There are more bacteria in your mouth than people on Earth!