

Useful and Harmful Microorganisms

Chapter 2: The Invisible Living World: Beyond Our Naked Eye · Topic 2

Key Concept

Diseases caused by harmful microorganisms include the common cold and typhoid (bacteria/viruses), while food spoilage occurs when microorganisms grow on food, sometimes producing toxins dangerous to eat. Preservation methods like refrigeration, drying, salting, and pasteurisation work by slowing or stopping microorganism growth, keeping food safe for longer. Antibiotics, discovered by Alexander Fleming (penicillin), are medicines that specifically target and kill harmful bacteria without harming human cells.

Quick Revision Notes

- Useful microorganisms: Lactobacillus (curd), yeast (bread/brewing), antibiotic-producing bacteria.
- Harmful microorganisms cause diseases and spoil food.
- Food preservation methods (refrigeration, drying, salting) slow microorganism growth.
- Antibiotics, discovered by Alexander Fleming, target and kill harmful bacteria.

Practice Questions

- 1 Name one disease caused by a harmful microorganism.
- 2 Explain how refrigeration helps preserve food.
- 3 Why are antibiotics able to kill bacteria without harming human cells?