Food Preservation

Introduction

Food preservation is the process of preventing food spoilage caused by microorganisms like bacteria and fungi. It helps keep food safe and fresh for a longer time.

Why Do We Need to Preserve Food?

- To prevent spoilage
- To avoid wastage
- To store food for longer periods
- To maintain its nutrients and taste

Common Methods of Food Preservation

- i. Drying
 - Removes water from food, stopping microbes from growing
 - Used for: grains, pulses, fruits, fish

ii. Salting

- Salt absorbs moisture and kills bacteria
- Used for: pickles, fish, raw mango

iii. Sugaring

- Sugar also removes moisture and prevents spoilage
- Used for: jams, jellies, sweets

iv. Refrigeration and Freezing

- Low temperatures slow down microbial growth
- Used for: milk, fruits, vegetables, cooked food

v. Boiling

- Kills most microorganisms
- Used for: milk, water

vi. Canning and Bottling

- Food is sealed in airtight containers
- Prevents entry of microbes
- Used for: juices, soups, vegetables, fruits

vii.Vacuum Packing

- Removes air (oxygen) needed by microbes to grow
- Used for: chips, snacks, dry fruits

viii. Chemical Preservatives

- Chemicals like sodium benzoate or vinegar are added
- Prevents growth of bacteria and fungi
- Used in: pickles, sauces, squashes

Important Point:

- Microorganisms need water, warmth, and air to grow.
- Food preservation works by removing or controlling these conditions.

Summary Table:

Method	Used For	How It Works
Drying	Fruits, fish	Removes water
Salting	Pickles, fish	Removes moisture, kills bacteria
Sugaring	Jams, sweets	Draws out moisture
Boiling	Milk, water	Kills microbes
Refrigeration	Fruits, vegetables, milk	Slows microbial growth
Canning	Juices, soups	Airtight seal, no microbes enter
Vacuum packing	Chips, snacks	No air for microbes
Chemicals	Pickles, sauces	Stop microbial growth chemically