

Chapter 13: Methods of preserving food

Question. 1. Underline the correct word:

- (1) In summer/winter, foodstuffs remain unspoiled for a longer period.
- (2) Grains are dried in the sun/shade before storing
- (3) Spores/Seeds of fungus are present in air.
- (4) Food in which plants/microorganisms grow is bad for health.
- (5) Different spices are obtained from specific parts of the plants/animals.

Question. 2. Answer whether the following statements are True or False. If false, rewrite them after correcting:

- (1) When something is boiled, the microorganisms in it are destroyed.
- (2) Our food does not get spoiled when microorganisms begin to grow in it.
- (3) Foodstuffs dried during summer season cannot be used for the rest of the year.
- (4) Foodstuffs get warmth when put in a fridge.
- (5) One season's crop must be stored and protected till the next season.
- (6) Fruits and vegetables do not taste their best in the season in which they are grown.
- (7) Mango Pulp and milk are not spoiled quickly.
- (8) Cotton wool like fibres growing on chapati are cotton wool fibres only.

Answer.

- (1) True.
- (2) False. Our food gets spoiled when microorganisms begin to grow in it.
- (3) False. Foodstuffs dried during the summer season can be used for the rest of the year.
- (4) False. Foodstuffs get cold when put in a fridge.
- (5) True.
- (6) False. Fruits and vegetables taste their best in the season in which they are grown.
- (7) False. Mango pulp and milk spoil quickly.
- (8) False. Cotton wool-like fibers growing on chapati are fungus.

Question. 3. Name the following:

- (1) **Preservative substances:** Sugar, salt, asafoetida, mustard, oil, vinegar
- (2) **Foodstuffs prepared after drying in the sun :** Papad, Kurdal, Sandage
- (3) **Favourable factors for growth of microorganisms:** Air, moisture, warmth
- (4) **Matter printed on the boxes or sealed bags of foodstuffs:** Expiry Date
- (5) **Place for the storage of onions and potatoes:** Airy and dry place
- (6) **Cotton-wool like fibrous growth on chapati:** Fungus

Question. 4. Answer the following questions:

- (1) **What are the different methods of preserving food?**

Answer. Different methods of preserving food include:

- (a) Putting food in jars to keep it fresh.
- (b) Keeping food very cold to stop it from going bad.
- (c) Taking water out of food so it doesn't spoil.
- (d) Soaking food in vinegar to keep it safe.

- (2) **Why do we avoid eating food that has spoiled?**

Answer. We avoid eating spoiled food because:

- (a) It can make us feel sick.
- (b) Spoiled food smells bad or looks different.
- (c) Eating it can give us a tummy ache.

(d) Its can cause health related problems

(3) Why do we make jams from fruits?

Answer. We make jam from fruits to preserve their flavor and nutrients. The sugar and cooking process help prevent spoilage by stopping bacteria from growing. Jam also makes fruits tasty and can be used as a sweet spread.

(4) What are preservatives?

Answer. Substances added to foodstuffs to store them for a longer period are called preservatives. They help stop the growth of bacteria, mold, and yeast, keeping food safe and fresh for a longer time.

(5) Find out the names of different spices. Also find out which part of their plant they are.

Answer. Different spices and their plant parts:

- | | |
|-----------------------------------------|-----------------------|
| 1. Cinnamon: Bark | 5. Clove: Flower buds |
| 2. Black Pepper: Dried berries (fruits) | 6. Cardamom: Seeds |
| 3. Turmeric: Rhizome (root) | 7. Cumin: Seeds |
| 4. Ginger: Rhizome (root) | 8. Nutmeg: Seed |

(6) When do we say that foodstuff is spoiled? What changes are seen in it?

Answer. We say that foodstuff is spoiled when:

- (a) It has an unpleasant smell or odor.
- (b) The taste is sour or off, indicating fermentation.
- (c) The color changes, becoming dull or discolored.
- (d) The texture becomes slimy, mushy, or hard.
- (e) There are visible signs of mold or unusual spots.
- (f) It develops bubbles or gas, indicating fermentation or decay.

(7) Is the time in which foodstuffs get spoilt different in different seasons?

Answer. Yes, the time in which foodstuffs spoil can be different in different seasons.

In warmer seasons, food can spoil more quickly due to higher temperatures and humidity, which promote the growth of bacteria and mold.

In colder seasons, food tends to stay fresh longer because the cooler temperatures slow down spoilage.

(8) Which foodstuffs spoil most quickly?

Answer. Foodstuffs that spoil most quickly include:

- (a) Fresh fruits and vegetables.
- (b) Dairy products.
- (c) Cooked foods and leftovers.
- (d) Bread, especially if exposed to moisture.

(9) What measures are taken to keep the foodstuffs in the house in good condition, for as long as possible?

Answer. Measures taken to keep foodstuffs in good condition include:

- (a) Use airtight containers to keep it fresh and dry.
- (b) Store milk, meat, and fruits in the fridge to keep them cold.
- (c) Put leftovers and fruits in the freezer to save them longer.
- (d) Clean storage areas often to keep pests away.
- (e) Use preservatives

Question. 5. Give reasons:

(1) Leftover food prepared for one meal is stored in a refrigerator.

Answer. Leftover food prepared for one meal is stored in a refrigerator to keep it fresh and prevent spoilage. The cold temperature slows down the growth of bacteria, allowing the food to be safely consumed later.

(2) Milk and eggs are carefully stored and then sent to their users.

Answer. Milk and eggs are carefully stored and then sent to their users to ensure they remain fresh and safe to eat. Proper storage prevents spoilage and contamination, which is important for maintaining their quality and safety during transportation.

(3) We store foodstuffs that we need for several days in our house.

Answer. We store foodstuffs that we need for several days in our house to ensure we have enough supplies for meals. This helps reduce the number of trips to the store and allows us to plan our meals better. Properly stored food can stay fresh and safe to eat for a longer time.

• Use your brain power! (Textbook page 67)

(4) Semolina (Shevaya) do not get spoilt for a long time. But Kheer made from them spoils easily. Why is this so?

Answer. Semolina (Shevaya) does not spoil for a long time because it is dry and has little moisture. Kheer spoils easily because it contains milk and sugar, which add moisture and allow bacteria to grow. This makes Kheer need to be eaten quickly.

OPEN-ENDED QUESTIONS

What's the solution? (Textbook page 67)

(1) The papads have become soft and moist.

Answer. The papads have become soft and moist because they were not stored properly. To fix this, keep papads in a dry, airtight container in a cool place to keep them crispy.

(2) Fruits like mangoes, amlas, guavas and vegetables like peas, onions, tomatoes, fenugreek are needed all year around. They are available in plenty only in certain seasons.

Answer. Fruits like mangoes, amlas, and guavas, and vegetables like peas and tomatoes, are only available in plenty during certain seasons. To enjoy them all year round, we can preserve them by drying, freezing, or making pickles and jams when they are in season.