

## Chapter 13: Methods of Preserving Food

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### CAN YOU TELL ? [PAGE 64]

#### Can you tell ? | Q 1 | Page 64

**Talk to the elderly people in your family to find the answers to the following questions, with reference to the foodstuffs mentioned below: Milk, vegetables, grains, flours, sugar, jaggery.**

When do we say that the foodstuff is spoiled? What changes are seen in it?

#### SOLUTION

The foodstuff that is smelling foul and with unpleasant appearance is a spoilt food. Sometimes there is a growth of fungus on the foodstuff. The spoilt food undergoes chemical changes. The colour and taste of such food are changed. There is a growth of fungus and microorganisms in such food. Such foodstuff develops hazardous substances in it. This food is bad for health.

#### Can you tell ? | Q 2 | Page 64

**Talk to the elderly people in your family to find the answers to the following questions, with reference to the foodstuffs mentioned below: Milk, vegetables, grains, flours, sugar, jaggery.**

Is the time in which foodstuffs get spoiled different in different seasons?

#### SOLUTION

Spoiling of foodstuff is dependent on the temperature and humidity of the surrounding. Food spoilage is rapid when the surrounding temperature and humidity are more. If the surrounding air is dry and cool, the food spoilage is not immediate. Thus the foodstuffs take different time for spoilage in different seasons. In the summer season, food may get spoilt rapidly but not so during winter.

#### Can you tell ? | Q 3 | Page 64

**Talk to the elderly people in your family to find the answers to the following questions, with reference to the foodstuffs mentioned below: Milk, vegetables, grains, flours, sugar, jaggery.**

Which foodstuffs spoil most quickly?

#### SOLUTION

Milk and milk products, fruits, vegetables, fish, meat, etc. are the foodstuffs that spoil most quickly.

#### Can you tell ? | Q 4 | Page 64

**Talk to the elderly people in your family to find the answers to the following questions, with reference to the foodstuffs mentioned below: Milk, vegetables, grains, flours, sugar, jaggery.**

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

### **SOLUTION**

We keep certain foodstuffs in the refrigerator. Some foodstuffs are dried and - then stored. Some are processed and kept for a longer time.

### **EXERCISES [PAGE 67]**

#### **Exercises | Q 1. (a) | Page 67**

##### **What's the solution?**

The papads have become soft and moist.

### **SOLUTION**

Place the moist papads in the sun for drying. If they are dried for 3 to 4 days continuously, their moisture content will vanish and they can become crisp again. If there is a microwave oven in the house, we can also dry them by placing them in the oven for 1 to 2 seconds. Later, these papads should be stored in an airtight container.

#### **Exercises | Q 1. (b) | Page 67**

##### **What's the solution?**

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

### **SOLUTION**

We can use different methods of food preservation in order to preserve these fruits and vegetables. E.g. Juice and pulp can be extracted from mangoes. One can make products from mango pulp like amba-poli or dried sheets of mango pulp. Raw mangoes, amla, or guava can be preserved by making their squash preparations. Peas can be peeled from pods and then frozen and stored for a long time. Fenugreek can be used for making theplas, muthtyas, and other eatables. Tomatoes can be preserved by making tomato puree, squash, ketchup, or sauce. Onions can be dried or fried and kept for a long time. If any fruits or vegetables are available in plenty in certain seasons, they can be preserved using a suitable method. They can be thus stored for even a year or more.

#### **Exercises | Q 2 | Page 67**

##### **Use your brain power !**

Semolina (shevaya) do not get spoiled for a very long time. But kheer made from them spoils easily. Why is this so?

### **SOLUTION**

Semolina is made by drying them in the sun. They do not have moisture in them and hence can be stored for a long time. They do not get spoilt even after storage. But kheer

is made using milk. Milk is highly perishable, that is, it can get spoilt soon. Therefore kheer spoils quickly.

**Exercises | Q 3. (a) | Page 67**

**Find and correct the wrong statement.**

When something is boiled, the micro-organisms in it are destroyed.

1. **Correct**
2. Incorrect

**SOLUTION**

This statement is correct.

When something is boiled, the micro-organisms in it are destroyed.

**Exercises | Q 3. (b) | Page 67**

**Find and correct the wrong statement.**

Our food does not get spoiled when micro-organisms begin to grow in it.

1. Correct
2. **Incorrect**

**SOLUTION**

This statement is incorrect.

Our food gets spoiled when micro-organisms begin to grow in it

**Exercises | Q 3. (c) | Page 67**

**Find and correct the wrong statement.**

Foodstuffs dried in summer cannot be used for the rest of the year.

1. Correct
2. **Incorrect**

**SOLUTION**

This statement is incorrect.

Foodstuffs dried during summer season can be used for the rest of the year

**Exercises | Q 3. (d) | Page 67**

**Find and correct the wrong statement.**

Foodstuffs get warmth when put in a fridge.

1. Correct
2. **Incorrect**

**SOLUTION**

This statement is incorrect.

Foodstuffs get cool temperatures when put in a fridge.

**Exercises | Q 4. (a) | Page 67**

**Answer the following question.**

What are the different methods of preserving food?

**SOLUTION**

Drying, cooling, boiling, placing in airtight containers, and using food preservative substances are the different methods of preserving food.

**Exercises | Q 4. (b) | Page 67**

**Answer the following question.**

Why do we avoid eating food that has got spoiled?

**SOLUTION**

1. Microorganisms that spoil the food are harmful to health.
2. The spoiled food has a foul smell and bad appearance.
3. Eating such food can cause stomach-ache, vomiting and diarrhoea.
4. Sometimes the spoiled food also has fungus growing on it.
5. Such food is not nutritious and can be dangerous for health. Therefore we must avoid eating spoiled food.

**Exercises | Q 4. (c) | Page 67**

**Answer the following question.**

Why do we make jams from fruits?

**SOLUTION**

Fruits cannot stay longer in their natural and tasty form. Microorganisms and fungus can grow on them. For preserving them, food preservatives like sugar are added to them. Sugar is used to make jams that can be stored for a longer time. We can have jams even after the season of fruits is over. Therefore we make jams from fruits.

**Exercises | Q 4. (d) | Page 67**

**Answer the following question.**

What are preservatives?

**SOLUTION**

Substances added to food stuffs to store them for a longer period are called preservatives. By using preservatives, we can relish some foodstuffs like fruits even after their season is over.

**Exercises | Q 4. (e) | Page 67**

**Answer the following question.**

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

## **SOLUTION**

1. There are different types of spices such as cinnamon (dalchini), cardamom (velchi), bell leaves (tamalpatra), cloves (lavang), coriander seeds (dhana), cumin seeds (jeera), black pepper (kali miri), nutmeg (jaifal), etc.
2. Coriander seeds, cumin seeds, black pepper are seeds of a plant.
3. Cinnamon is a part of the stem of a plant.
4. Cardamom and nutmeg are fruits.
5. Bell leaves are leaves of a plant while cloves are dried peduncles of a flower.