

Food Safety

EXERCISE [PAGE 39]

Exercise | Q 1.1 | Page 39

Complete the following statement by using the correct option from those given below.

Drying the food grains from farms under the hot sun is called

1. Irradiation
2. **dehydration**
3. pasteurization
4. natural
5. chemical

Solution: Drying the food grains from farms under the hot sun is called dehydration.

Exercise | Q 1.2 | Page 39

Complete the following statement by using the correct option from those given below.

Materials like milk are instantly cooled after heating up to a certain high temperature. This method of food preservation is called

1. Irradiation
2. dehydration
3. **pasteurization**
4. natural
5. chemical

Solution: Materials like milk are instantly cooled after heating up to a certain high temperature. This method of food preservation is called pasteurization.

Exercise | Q 1.3 | Page 39

Complete the following statement by using the correct option from those given below.

Salt is a type of food preservative.

1. Irradiation
2. dehydration
3. pasteurization
4. **natural**

5. chemical

Solution: Salt is a natural type of food preservative.

Exercise | Q 1.4 | Page 39

Complete the following statement by using the correct option from those given below.

Vinegar is a type of food preservative.

1. Irradiation
2. dehydration
3. pasteurization
4. natural
5. **chemical**

Solution: Vinegar is a chemical type of food preservative.

Exercise | Q 2.1 | Page 39

Answer the following question in your own words.

How is milk pasteurized?

Solution: Milk is pasteurised in order to kill any kind of harmful microorganism present in it and to increase its shelf life. Pasteurisation is a process in which the milk is heated to a certain temperature for a fixed period of time and then is quickly cooled. For example, it may be heated at 80°C for 15 minutes and then immediately cooled. This helps to kill any kind of microorganism which is present in milk.

Exercise | Q 2.2 | Page 39

Answer the following question in your own words.

Why should we not consume adulterated food materials?

Solution: The process of substituting or concealing the quality of food, adding harmful or poisonous substances to food, and misbranding or giving false labels to food is known as food adulteration. the adulterants which are added to food products have harmful effects on our bodies. For example:

- vegetable oil is adulterated with cheaper and non-edible oils such as argemone oil which causes dropsy, which in turn leads to renal and cardiac failure.
- pulses are mixed with kesari dal or with metanil yellow to improve the colour which can cause carcinogenic disorder and it can also affect the nervous system.

We should be very careful in buying our food products and should be aware of our rights and actions which can be taken against people who are involved in this crime.

Exercise | Q 2.3 | Page 39

Answer the following question in your own words.

What precautions do your parents take to keep foodstuffs safe?

Solution: Precautions which are taken to preserve foods:

1. Storing fruits and vegetables in proper storage, for example, fruits like banana are not stored in refrigerator while fruits like mangoes require refrigerator.
2. Storing grains, dals etc. in dry conditions and in air proof containers.
3. Making pickles and jams to increase their shelf life.

Exercise | Q 2.4 | Page 39

Answer the following question in your own words.

How does food spoilage occur? Which are the various factors spoiling the food?

Solution:

- The undesirable or disagreeable change in the state of food which makes it unsuitable for human and animal consumption is termed as food spoilage. Spoilage of food can be caused by various factors like:
 - Microorganisms: Growth of microorganisms like bacteria, fungi etc. can lead to spoilage of food.
 - Action of enzymes: Enzymes which are an inherent part of plant and animal tissue begin the decomposition process after the death of plant or animal. For example, a banana starts to ripen and then spoil if it is not consumed on time.
 - Infestation by insects: Insects like cockroaches may infest the food stuff and make them unsuitable for consumption. There is possibility of transmission of pathogens from these insects.
 - Wrong handling of products may also result in the spoilage of foodstuffs.
 - Overcooking is another such reason for spoilage of foods.

Exercise | Q 2.5 | Page 39

Answer the following question in your own words.

Which methods of food preservation would you use?

Solution: The following methods of food preservation can be used:

- Preservation by common salt: Common salt is usually used to preserve meat and fish as it checks the growth of bacteria in these foods. It is also used to preserve amla, raw mangoes, and tamarind.

- Preservation by sugar: Sugar is usually used to preserve jam, jellies, and squashes. Sugar prevents spoiling of food by reducing the moisture content of food, which inhibits the growth of bacteria in it.
- Preservation by oil and vinegar: Oil and vinegar are used to preserve vegetables, fruits, fish, and meat. They prevent food from getting spoilt as micro-organisms cannot grow in such an environment.