

Food Spoilage: Causes and Preservation Technique

(* Ajeet Rundla)

Vaugh Institute of Agricultural Engineering & Technology, Sam Higginbottom
University of Agriculture, Technology & Sciences, Prayagraj-211007 (U.P.) India

* ajeet11094@gmail.com

When food items are maintained for an extended period of time and are not properly preserved, they spoil and are harmful to one's health. When food is stored for an extended period of time, bacteria begin to develop on it, causing it to spoil. Food that has gone bad can no longer be consumed and must be discarded. Spoilage occurs when food items decay to the point where they are no longer edible to humans.

Causes of Spoilage

Germ could be present in the food and water. Germs are spread by flies. They transfer on these bacteria to our food when they sit on it. Food deterioration is caused by a variety of causes including bacteria, mould, yeast, moisture, light, temperature, and chemical reactions.

1. Bacteria, for starters

They're the most common microbes in the planet. They are little and come in a variety of shapes. Some bacteria are also beneficial. They aid in the curdification of milk.

2. Protozoa

Single-celled microbes that cause diseases such as food poisoning.

3. Fungi

They live in wet, warm environments and feed on dead and rotting stuff.

Preserving Food

Food is priceless. Food preservation can help you avoid wasting food. Food preservation is the process of preventing food from spoiling. Food preservation is the practise of storing food using particular techniques. Food, whether cooked or raw, can be preserved in a variety of ways to be utilised later. The following are some examples of preservation techniques:



1. Freezing

Food kept in the refrigerator lasts for a few days. Germs do not thrive in cold environments. We keep milk, fruits, vegetables, and prepared food in the refrigerator to keep them fresh.

2. Boiling

We can preserve food for a limited amount of time using this strategy. Pasteurization kills the germs in milk. It's done by boiling milk for a short time and then fast cooling it.

3. Seasoning

Pickles and fish can be preserved by adding salt.

4. Suppleness

Food with too much sugar acts as a preservative. By adding sugar to food, we can preserve it for a long time in the form of jams, jellies, and murabbas.

5. Dehydration

Food products are dried in the sun to prevent bacteria from growing on them in this process. This procedure is used to preserve raw mangoes, salmon, potato chips, and papads, among other items.

6. Preserving

This approach involves removing air from food and placing it in airtight cans to prevent germs from growing on it. This method is used to preserve foods such as vegetables, seafood, dairy products, and so on.

Advantages and Drawbacks

Food preservation benefits include the fact that germs cannot easily grow in preserved food, making it safe to eat. We can enjoy seasonal fruits like strawberries and mangoes even when they are out of season thanks to preservation.

Food preservation disadvantages: Excess salt and sugar are utilised in food preservation, which is bad for your health. Some food preservation procedures may result in nutritional loss.

