

Causes of food spoilage and methods for food preservation

Feroz Tedley

Molecular Biology and Metabolic Engineering Horticulture Department, University of Florida, USA

INTRODUCTION: If food items are retained for an extensive period of time and not kept precisely, they get spoil such food items are appalling for health. When food items kept for wide-ranging time gets wipe out as microbes start growing on it. Once the foodstuff is decayed, it cannot be eaten and has to be concerned away. Spoilage is a development in which food items diminish to the point in which it is not fit for human eating

CAUSES OF SPOILAGE: The food and water may be ruined by germs. Flies carry germs. When flies take a pew on our food, they beat on these microbes to our food. There are several factors which are accountable for food decomposition such as bacteria, mould, wetness, light, temperature and chemical reaction.

Bacteria: Bacteria are the amplest microbes recruit on the earth. They are irrelevant in size and show an irregularity in shape. Some microbes are useful also. Microbes help to convert milk into curd.

Protozoa: They are single-celled microbes that basis ailment like food intoxication etc.

Fungi: They are found in damp and humid places and grow on the dead and rotten matter.

Temperature: Temperature is one of the most significant factors which are responsible for food spoilage.

SIGNS OF FOOD SPOILAGE: Signs of food spoilage embrace a presence diverse from the fresh food, such as a variation in color, a change in surface, an unfriendly odor or taste.

FOOD PRESERVATION: Preserving food can help to persist left from stabbing of food. Food preservation contains preventing the food from Being spoiled. Maintenance of food is the method by which food is stored by demanding methods. Fit for human eating or unprepared food can be potted in diverse ways to be used later. Some methods of conservancy are

Freezing: Food kept in a fridge ruins fresh for some days. Germs do not grow simply in cool places. We preserve food items, like milk fruit, vegetables and cooked food by keeping them in a fridge.

Boiling: By this procedure, we can preserve food for a quick period of time. Germs in milk are slayed by pasteurization. It is done by hot milk for now and then and then cooling it quickly.

Salting: We can comprise salt to preserve pickles and fish.

Sweetening: Excess sugar in food also acts as a preservative. We store food for a wide time in the form of jams, jellies by addition of sugar.

Dehydration: In this way, the food items are dried out in sun to stop the progress of bacteria in them. Certain foods, like raw mangoes, fishes, potato chips and papads are conserved by this technique.

Canning: In this process, air is parted from food and put in closed can so that germs do not produce on them. Food items like vegetables, seafood, dairy commodities etc. are potted over this system.

ADVANTAGES AND DISADVANTAGES:

Advantages of food preservation: Bacteria do not grow without struggle in preserved food and make it safe to eat. Preservation allows us to enjoy nomadic fruits like strawberries and mangoes flush through the offseason.

Disadvantages of food preservation: Additional salt and sugar are used in the protection of food which is not high-quality for wellbeing. Some approaches of food preservation may escort to cost of nutrients.