

Food spoilage: Causes and Preventive Measures

Zhao Chen*

Department of Biological Sciences, Clemson University, China

EDITORIAL NOTE

Food deterioration is where a food item gets unacceptable to ingest by the purchaser. The reason for such a cycle is because of numerous external components as a symptom of the sort of item it is, just as how the item is bundled and put away. Because of food deterioration, 33% of the world's food created for the utilization of people is lost each year. Microscopic organisms and different growths are the reason for waste and can make genuine ramifications for the buyers, however there are preventive estimates that can be taken.

All food should be safe and free from contamination and spoilage at all points in its journey from its source until it reaches the consumers. However, food contamination is a serious public health problem in Ethiopia, resulting in foodborne diseases that affect many people every year. Hence, awareness of potential sources of food contamination is an important component of good nutrition and good health. In this study session we are going to concentrate on food contamination by microorganisms, chemicals and physical factors.

Food may be contaminated by different microorganisms or by chemicals that can cause health problems for anyone who eats it. In Study Session 9 you will learn in detail about foodborne diseases. But first you will be introduced to the basic principles of food microbiology in this study session, and about the ways in which food becomes contaminated by different microorganisms, chemicals and physical objects. You will also learn about the causes of food spoilage and its consequences for health.

Spoiled food is generally more a problem of appearance than a problem of disease causing. In food spoilage, the changes in appearance or texture of the food, such as rotteness, softness and change in colour, taste or odour are usually obvious,

whereas in contaminated food such characteristics may not be noticed. A large majority of the microorganisms responsible for food spoilage are not pathogenic to humans. However, you should advise people in your community that they should not eat food that is spoiled because it is not nutritious and may make them sick.

Preservatives can expand the shelf life of food and can lengthen the time long enough for it to be harvested, processed, sold, and kept in the consumer's home for a reasonable length of time. One of the age old techniques for food preservation, to avoid mold and fungus growth, is the process of drying out the food or dehydrating it. While there is a chance of it developing a fungus targeted towards dried food products, the chances are quite low.

Food like meat, poultry, milk and cream should be kept out of the Danger Zone (between 4°C / 40°F to 60°C / 140°F). Anything between that range is considered dangerous and can cause pathogenic toxins to be emitted, resulting in severe illness in the consumer. Another way to keep your food from spoiling is by following a four step system: Clean, Separate, Cook, Chill. This will reduce any risks

Food spoilage may pose economic consequences if certain precautionary and preventive measures are not performed. The food industry has adopted methods to minimize spoilage with the use of natural preservatives, novel processing systems, refrigeration, packaging material and, more recently, management systems. These techniques, however, are incapable of controlling spoilage if incoming material is not of the highest quality and handled under good sanitary conditions. In all cases, the shelf life of many foods can be extended if foods are prepared to minimize the level of bacterial contamination before final processing.

Correspondence to: Zhao Chen, Department of Biological Sciences, College of Agriculture, Forestry and Life Science, Clemson University, China ; E-mail: chenzhaoqq@gmail.com

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