

Glossary

1. **Bacteria:** Bacteria constitute a large domain of prokaryotic microorganisms. Typically a few micrometers in length, bacteria have a number of shapes, ranging from spheres to rods and spirals
2. **Botulism:** Botulism is a rare but serious paralytic illness caused by the bacterium *Clostridium botulinum*. Food borne botulism has been caused by such foods as canned . *Clostridium botulinum* is a Gram-positive, rod-shaped, anaerobic, spore-forming, motile bacterium with the ability to produce the neurotoxin botulinum.
3. **Canning:** one of the most common methods for preserving foods today is to enclose them in a sterile container. The term canning refers to this method although the specific container can be glass, plastic, or some other material as well as a metal can, from which the procedure originally obtained its name.
4. **Downy mildew** refers to any of several types of oomycete microbes that are obligate parasites of plants. **Downy mildews** exclusively belong to Peronosporaceae. In commercial agriculture, they are a particular problem for growers of crucifers, grapes and vegetables that grow on vines.
5. **Fermentation:** Fermentation is a naturally occurring chemical reaction by which a natural food is converted into another form by pathogens. It is a process in which food spoils, but results in the formation of an edible product.
6. **Freezing:** Freezing is an effective form of food preservation because the pathogens that cause food spoilage are killed or do not grow very rapidly at reduced temperatures. The process is less effective in food preservation than are thermal techniques such as boiling because pathogens are more likely to be able to survive cold temperatures than hot temperatures.
7. **Irradiation:** this is a modern technique of food preservation. In this method the food is exposed to either electromagnetic or ionizing radiation which destroys the entire microorganism present in it.
8. **Mesophile:** A mesophile is an organism that grows best in moderate temperature, neither too hot nor too cold, typically between 20 and 45 °C. The term is mainly applied to microorganisms. Organisms that prefer extreme environments are known as extremophiles.
9. **Pathogen** :A **pathogen** or infectious agent is a biological agent that causes disease or illness to its host. The term is most often used for agents that disrupt the normal physiology of a multicellular animal or plant. However, **pathogens** can infect unicellular organisms from all of the biological kingdoms.

10. ***Psychrophiles***: Prefer low temperatures. They can grow at temperatures of 32 °F (0 °C) or lower, but they can also thrive at moderate temperatures of 59 °F (15 °C) to 68 °F (20 °C). They are quite common in environments where the temperature remains consistently low. They are mainly of marine origin.
11. **Vacuum Drying**: Vacuum drying is a form of preservation in which a food is placed in a large container from which air is removed. Water vapor pressure within the food is greater than that outside of it, and water evaporates more quickly from the food than in a normal atmosphere.