

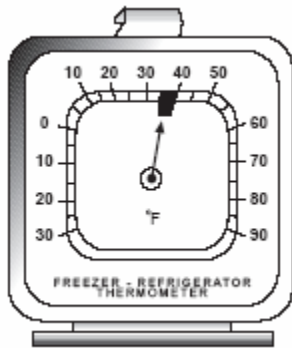
Importance of Refrigeration:

Refrigeration slows bacterial growth. Bacteria exist everywhere in nature, including in the foods we eat. When bacteria have nutrients (food), moisture, and favorable temperatures, they grow rapidly, increasing in numbers to the point where some types of bacteria can cause illness. Bacteria grow most rapidly in the range of temperatures between 41°F and 140 °F (the "Danger Zone"), some doubling in number in as little as 20 minutes. A refrigerator set at 41°F or below will protect most foods.



Pathogenic (disease causing) bacteria can grow rapidly in the "Danger Zone," the temperature range between 41°F and 140 °F, but they do not generally affect the taste, smell, or appearance of a food. In other words, one cannot tell that a pathogen is present.

Safe Refrigerator Temperature:



For safety, it is important to verify the temperature of the refrigerator. Refrigerators should be set to maintain a temperature of 41°F or below. An appliance thermometer should be kept in the refrigerator to monitor the temperature. This can be critical in the event of a power outage. When the power goes back on, if the refrigerator is still 41°F, the food is safe. Foods held at temperatures above 41°F for more than 4 hours should not be consumed. Appliance thermometers are specifically designed to provide accuracy at cold temperatures. Be sure refrigerator/freezer doors are closed tightly at all times. Don't open refrigerator/freezer doors more often than necessary and close them as soon as possible.

Monitor the temperature:

A thermometer is important in monitoring the temperature in your refrigerator. Refrigerator thermometers, which are relatively inexpensive, are designed specifically to be accurate at cold temperatures. It is a good idea to place the thermometer near the center of the refrigerator in a convenient and easy-to-read location. Make a habit of checking the temperature regularly, preferably at least once a day.

Sources:

Refrigeration and Food Safety, Food Safety and Inspection Service (FSIS), United States Department of Agriculture, January 1999.

Refrigerator and Freezer Safety, WVU Extension Service, 1998. *Susan Bauer, M.A., C.F.C.S., L.D., Extension Agent Associate Professor* *Traci L. Henderson, B.S., Dietetic Intern, Virginia Tech* *Sally Summers, M.S., C.F.C.S., L.D., Extension Agent and Associate Professor* *Guendoline Brown, Ph.D., Extension Nutrition and Health Specialist and Professor*
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