

## Why Refrigerate?

The world is teeming with bacteria (germs). Some are good like those that help us to make cheese, vinegar and sour cream, and some are bad like those that cause food spoilage and produce foodborne illness.

To grow and reproduce, bacteria need three conditions: moisture, warmth and food. If any one of these necessities is missing, bacteria will not grow.

Before refrigeration, people dried foods to preserve it. When the moisture was removed from fresh food, bacteria could not grow and cause spoilage or food poisoning.

In the days before mechanical refrigeration, many homeowners used iceboxes. Men would deliver ice to homes and store in a box that kept foods cold. However, the iceboxes only cooled to about 50 degrees F and some bacteria will still grow at that temperature.

The normal home refrigerator should be set at 45 degrees F or below and a freezer should be set at 0 degrees F.

Refrigeration is just one step in safe food handling. It is important to wash hands before handling any food, avoid cross-contamination, and cook foods to the proper temperature.



# COLD FACTS ABOUT HOME FOOD PREPARATION



Pennsylvania Department of Agriculture  
Bureau of Food Safety and  
Laboratory Services  
2301 North Cameron Street  
Harrisburg, PA 17110-9408  
717-787-4315



# COLD FACTS ABOUT HOME FOOD PREPERATION

## Your Refrigerator

- Your refrigerator should be set at 45 degrees F or less in order to keep your food cold.
- The refrigerator is coldest (lowest temperature) just below the freezer unit at the top of the cabinet and warmest (higher temperature) at the bottom of the cabinet.
- Do not store milk or other perishable foods in the refrigerator door. The door is not the coldest part of the refrigerator!
- Place an accurate thermometer in your refrigerator.
- Keep the inside of the refrigerator clean. Keep the areas around the motor and refrigerator unit clean. Lint and dirt on these parts cut off the supply of air and cause the motor and refrigeration unit to overwork, thus reducing their efficiency.
- Check the gaskets around the doors. Be sure that they are flexible and prevent cold air from escaping.
- If your refrigerator is not self-defrosting, defrost when the ice buildup on the cooling coils is 1/4".



## Leftovers

Don't be fooled by the old myth about leftovers sitting on the counter to cool. Instead, immediately cool hot food leftovers at or below 45 degrees F. Place food in shallow containers or divide food into smaller containers to quickly cool food.

If leftovers are not used within 48 hours, discard or freeze. Remember that some foods such as bacon, ham and other processed meats may not freeze well for quality reasons.

## Freezer Storage

- Do not let frozen food sit on the counter to thaw.
- Freezers should be maintained at 0 degrees F or lower.
- Pre-chill foods before putting into freezer. Warm food products will raise the temperature of the freezer.
- To pre-chill foods, immediately move hot food leftovers to the refrigerator. Place in shallow containers or divide food into smaller containers to quickly chill foods. Once food has cooled, move to the freezer.

## Thawing Food

Use one of the following methods to thaw potentially hazardous foods\*:

- 1.) Under refrigeration at 45 degrees F or less;
- 2.) Completely submerged under running water (with an overflow), with the water temperature at 70 degrees F or below;
- 3.) As part of the cooking process; or
- 4.) In a microwave oven and then immediately transferred to conventional cooking equipment with no interruption in the process.

\* Potentially hazardous food is any food that consists in whole or in part of milk or milk products, eggs, meat, poultry, fish, shellfish, edible crustacea or other ingredients, including synthetic ingredients, and which is in a form capable of supporting rapid and progressive growth of infectious or toxigenic microorganisms.

The **Temperature Danger Zone** is between 45 degrees F and 140 degrees F. Keep hot foods hot and cold foods cold, or don't keep them!