Questions and Answers About

Storing Food in the Refrigerator

A food safety study was conducted with 58 international students from 30 different countries at North Dakota State University. Participants indicated the kind of food safety information they would like to get to help them safely handle new and unfamiliar foods they encountered in the U.S. Many of the participants asked for information about food storage, preserving leftovers, proper handling of salads and fresh vegetables, and the safety of processed and frozen foods.

Q: What temperature should my refrigerator be?

Perishable food, including cut-up fruit and leftover pizza, must be kept refrigerated at 40 degrees F (5 C) or below to slow bacterial growth and to keep food at best quality. An appliance thermometer can be kept in the refrigerator to monitor the temperature. Refrigerator thermometers are designed to provide accuracy at cold temperatures.

Q: How long can my food safely be at room temperature?

Bacteria begin to multiply rapidly at the temperature danger zone between 40 F (5 C) and 140 F (60 C). Prepared leftover foods must be refrigerated within two hours or one hour if the food has been outside on a hot day. Refrigerate leftovers at 40 F (5 C) or below or freeze at 0 F (minus 18 C) as soon as possible.

Q: Can I put cooked food that is still hot in the refrigerator?

Hot food can be placed in the refrigerator. However, a large pot of food, such as soup or stew, should be divided into small portions and put in shallow containers before being refrigerated for quicker cooling. To speed chilling, place containers of food in an “ice bath” in your sink and stir occasionally.

Divide a large cut of meat (such as a roast) or whole poultry into smaller pieces and place in shallow containers before refrigerating. Cover foods with airtight lids or enclose in plastic wrap or aluminum foil to retain moisture and prevent them from picking up odors from other foods.

“I would like to get information on how people store food in the United States.”

“I would like to have some information on how to handle storing food in residence halls. How should you store food?”

NDSU Extension Service
Reviewed Jan. 2015
Q: How do I safely reheat cooked and leftover foods?

Always reheat leftovers thoroughly in a microwave oven or conventional oven or on the stovetop. Use a food thermometer to verify the internal temperature of the food. Reheat sauces, soups and gravies to a boil. Reheat leftovers, such as meat and mixed dishes, to steaming hot until the internal temperature reaches 165 degrees F (74 C) as measured with a food thermometer. When reheating foods in the microwave, cover and rotate or stir foods once or twice during cooking.

Q: How do I use a food thermometer?

Follow these steps:

* Remove the protective case on stemmed thermometers.
* Wash thermometers in hot, soapy water and rinse with clean, hot water. Keep the protective case clean, especially inside the case.
* Place the thermometer in the center of the dish or in the thickest part of meat away from bone, inserting it to the “dimple,” or a minimum of 2 inches on the stem of the thermometer.
* Take the temperature reading when the needle on the dial has stopped moving for 15 seconds or the digital scale stabilizes.
* Measure the temperature of the food in several places to confirm thorough cooking.
* Do not leave thermometers with plastic lens covers in foods during cooking. Use a meat thermometer or other thermometer that can withstand the heat of the oven.

Julie Garden-Robinson, Ph.D., R.D., L.R.D.
Food and Nutrition Specialist
Agnes Ngale Lyonga, Ph.D.,
Former Post-doctoral Program Assistant

Q: How long are my leftover foods safe to eat?

You can store leftover or cooked food in the refrigerator for up to four days. The quality decreases each time food is reheated, so just reheat the amount needed. If you will not eat the leftovers within four days, freeze them for longer storage. Always clean thermometers after use.

Q: How often should I clean my refrigerator?

Cleaning your refrigerator regularly is an important step in keeping your food safe. Wipe up spills immediately and clean surfaces thoroughly with hot, soapy water, then rinse. Avoid using solvent cleaning agents, abrasives and all cleansers that may impart taste to food or ice cubes or cause damage to the interior finish of your refrigerator. Once a week, make a habit of throwing out spoiled foods to eliminate odor in your refrigerator.

For more information, visit these Web sites:

NDSU Extension Service:
www.ndsu.edu/globalfood
(information about food safety and nutrition in several languages)
www.ndsu.edu/eatsmart
(click on “publications” at the bottom, then “food safety”)
Partnership for Food Safety Education:
www.fightbac.org
Food and Drug Administration:
www.cfsan.fda.gov
U.S. Department of Agriculture:
www.fsis.usda.gov/Fact_Sheets/index.asp

This material is based upon work supported by the USDA-CSREES under Award No. 2005-51110-03293. Any opinions, findings, and conclusions or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the views of the USDA.

For more information on this and other topics, see www.ag.ndsu.edu

County commissions, North Dakota State University and U.S. Department of Agriculture cooperating. North Dakota State University does not discriminate on the basis of age, color, disability, gender expression/identity, genetic information, marital status, national origin, public assistance status, race, religion, sex, sexual orientation, or status as a U.S. veteran. Direct inquiries to the Vice President for Equity, Diversity and Global Outreach, 205 Old Main, (701) 231-7708. This publication will be made available in alternative formats for people with disabilities upon request, (701) 231-7881.