

Keeping Food Safe in the Kitchen

Author: Lisa Treiber, MSU Extension Food Safety Educator

If food isn't prepared correctly, people can become ill with food poisoning. This fact sheet gives tips on cleaning, handling, cooking and storing food that will keep you and your family safe.

Clean

An NSF International (n.d.) study found that the kitchen sink contains 100,000 times more germs than the sink in the bathroom. Germs can enter the kitchen in many ways: on our hands, from raw food being handled improperly and through contact with our pets. Being aware and making smart decisions will help protect you from *E. coli*, *Salmonella*, *Listeria* and other bad bugs that can make you or your family ill.

Hands can be the biggest contributor to spreading bacteria. Wash your hands thoroughly with soap and warm water before handling food, after touching raw or uncooked food, after unpacking groceries, after cracking open eggs, after washing fresh produce and of course, after using the bathroom. Remember to also wash after interacting with the family pet, and playing or working outside as well.

Consider using paper towels for cleaning kitchen surfaces and drying hands. Hand towels can harbor bacteria. If you do use cloth towels and washcloths, wash them frequently in hot water in your washing machine.



Keep counters and eating surfaces free from clutter. Items such as books, book bags, purses and shopping bags can transfer unseen dirt and bacteria to your food preparation areas.

Rinse fruits and vegetables under running tap water. Produce with skins and rinds that are not eaten should be rinsed before cutting. With a designated vegetable scrub brush, scrub produce having rough, bumpy exteriors. Avoid soaking produce in water.

(Partnership for Food Safety Education, n.d.)

Do not rinse raw meat, poultry and seafood prior to cooking. Rinsing raw meat under running water may splash bacteria on counter tops, faucets and other areas nearby.

(U.S. Department of Agriculture Food Safety and Inspection Service, 2020, June 1)

Keeping Food Safe in the Kitchen

Separate

To prevent cross contamination, always keep a clean work environment. This includes clean cutting boards, knives, counter tops – anything that will come in contact with food. Wash counters with hot soapy water before preparing food on them. Sanitize cutting boards by using a solution of 1 tablespoon of unscented, liquid chlorine bleach in 1 gallon of water.

Marinate meat, poultry, seafood, fish or produce in a covered dish in the refrigerator. Never re-use the marinade for basting or dipping; make a fresh batch.

Never place cooked food on a plate that previously held raw meat, poultry, seafood or eggs.

Keep raw food away from ready-to-eat foods (foods that don't require any more cooking), avoiding the potential for cross contamination.

Use separate cutting boards when preparing vegetables, salads and meat; or wash, rinse and sanitize the cutting board and knife between uses.

(Partnership for Food Safety Education, n.d.)

Cook

You must cook meat, poultry, fish and seafood to a safe internal temperature. Do not rely on color to determine doneness. Use a food thermometer to check internal temperatures. Follow this Safe Minimum Internal Temperature chart:

Table 1. Safe Minimum Internal Temperature.

Product	Minimum Internal Temperature
Beef, Pork, Veal & Lamb Steak, chops, roasts	145 °F and allow to rest for at least 3 minutes
Ground meats	160 °F
Ham , fresh or smoked (uncooked)	145 °F and allow to rest for at least 3 minutes
Fully Cooked Ham (to reheat)	Reheat cooked hams packaged in USDA-inspected plants to 140 °F and all others to 165 °F.
All Poultry (breasts, whole bird, legs, thighs, and wings, ground poultry, and stuffing)	165 °F
Eggs	160 °F
Fish & Shellfish	145 °F
Leftovers	165 °F
Casseroles	165 °F

Adapted from U.S. Department of Agriculture Food Safety and Inspection Service. (2020, May 11). *Safe minimum internal temperature chart*. <https://www.fsis.usda.gov/food-safety/safe-food-handling-and-preparation/food-safety-basics/safe-temperature-chart>

Keeping Food Safe in the Kitchen

When microwaving, check for cold spots where bacteria could survive. If the microwave doesn't have a turntable, rotate the dish by hand once or twice during cooking. For the best results, cover food and stir during the cooking process. With a food thermometer, test the food to ensure it has reached its minimum internal cooking temperature (Partnership for Food Safety Education, n.d.).

Serve

When serving food, keep hot food hot (140 °F or warmer) and cold food cold (40 °F or colder). This will slow down the growth of harmful bacteria. Again, use a food thermometer to check food temperatures. Perishable food should not be left out more than two hours at room temperature (one hour when the temperature is 90 °F or above).

Thaw

Never thaw food at room temperature. There are three ways to safely thaw food: in the refrigerator, in cold water and in the microwave. You must cook food thawed in cold water or in the microwave immediately (Partnership for Food Safety Education, n.d.).

You can also cook a frozen product without thawing; however, cooking time will be 50 percent longer than the recommended time for fully thawed or fresh meat and poultry.

Discard or store

Discard leftovers if they are not refrigerated or frozen within 2 hours. Place leftover food into a shallow container, and place in refrigerator or freezer for rapid cooling. Consume most cooked leftovers within 3 to 4 days. Make sure to reheat leftovers to 165 °F, whether heating on stovetop, microwave or oven.

References:

- NSF International. (n.d.). *Germs! They're hiding...* https://d2evkimvhatqav.cloudfront.net/documents/where_germs_are_hiding_infographic_sm.pdf?mtime=20200713162752&focal=none
- Partnership for Food Safety Education. (n.d.). *The core four practices.* <https://www.fightbac.org/food-safety-basics/the-core-four-practices/>
- U.S. Department of Agriculture Food Safety and Inspection Service. (2020, May 11). *Safe minimum internal temperature chart.* <https://www.fsis.usda.gov/food-safety/safe-food-handling-and-preparation/food-safety-basics/safe-temperature-chart>
- U.S. Department of Agriculture Food Safety and Inspection Service. (2020, June 1.) *Washing food: Does it promote food safety?* <https://www.fsis.usda.gov/food-safety/safe-food-handling-and-preparation/food-safety-basics/washing-food-does-it-promote-food>

Find out more about Michigan Food Safety at www.msue.msu.edu/safefood.

MICHIGAN STATE UNIVERSITY | Extension

MSU is an affirmative-action, equal-opportunity employer, committed to achieving excellence through a diverse workforce and inclusive culture that encourages all people to reach their full potential. Michigan State University Extension programs and materials are open to all without regard to race, color, national origin, gender, gender identity, religion, age, height, weight, disability, political beliefs, sexual orientation, marital status, family status or veteran status. Issued in furtherance of MSU Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Quentin Tyler, Director, MSU Extension, East Lansing, MI 48824. This information is for educational purposes only. Reference to commercial products or trade names does not imply endorsement by MSU Extension or bias against those not mentioned. 1P-1R-04:2022-Web-PA/BH WCAG 2.0