

Leftovers

KEEPING LEFTOVERS SAFE

Safe leftovers have to start with food that is safe.

Always follow the four simple steps to food safety:

- Clean
- Separate
- Cook
- Chill

Clean — Wash Hands and Surfaces Often:

Bacteria can spread throughout the kitchen and get on to cutting boards, knives, sponges and counter tops. Here's how to keep hands and surfaces clean.

- Wash hands in hot soapy water before preparing food and after using the bathroom, changing diapers and handling pets. For best results use warm water to moisten hands and then apply soap and rub hands together for 20 seconds before rinsing thoroughly.
- Wash cutting boards, knives, utensils and counter tops in hot, soapy water after preparing each food item and before going on to the next one.
- Use plastic or other non-porous cutting boards. Cutting boards should be run through the dishwasher — or washed in hot, soapy water — after use.
- Consider using paper towels to clean up kitchen surfaces. Or, if using cloth towels, wash them often in the hot cycle of the washing machine.

Separate — Don't Cross-Contaminate:

Cross-contamination is how bacteria spread from one food product to another. This is especially true for raw meat, poultry and seafood. Experts caution to keep these foods and their juices away from ready-to-eat foods. Here's how to prevent cross-contamination.

- Separate raw meat, poultry and seafood from other food in the shopping cart.
- Store raw meat, poultry and seafood on the bottom shelf of the refrigerator so juices don't drip onto other foods.
- If possible, use one cutting board for raw meat products and another for salads and other foods that are ready to be eaten.
- Always wash cutting boards, knives and other utensils with hot soapy water after they come in contact with raw meat, poultry and seafood.
- Never place cooked food on a plate that previously held raw meat, poultry or seafood.

Cook — Heat to Proper Temperatures:

Foods are properly cooked when they are heated for a long enough time and at a high enough temperature to kill the harmful bacteria that cause food-borne illness. Follow these recommendations to cook foods safely.

- Use a meat thermometer, which measures the internal temperature of cooked meat and poultry, to make sure that the meat is cooked all the way through.
- Cook roasts and steaks to at least 145 °F. Whole poultry should be cooked to 180 °F for doneness.
- Bacteria can spread during the grinding process, so cook ground meats to at least 160 °F. Information from the Centers for Disease Control and Prevention links eating undercooked, pink ground beef with a higher risk of illness. If a thermometer is not available, do not eat ground beef that is still pink inside.

- Cook eggs until the yolk and white are firm, not runny. Don't use recipes in which eggs remain raw or only partially cooked.
- Cook fish until it is opaque and flakes easily with a fork.
- Make sure there are no cold spots in food (where bacteria can survive) when cooking in a microwave oven. For best results, cover food, stir and rotate for even cooking. If there is no turntable, rotate the dish by hand once or twice during cooking.

Chill — Refrigerate Promptly:

Proper storage of leftovers and other previously-cooked foods is imperative for food safety. This category includes foods from a supermarket deli or restaurant, convenience foods or a planned extra batch of a recipe. Follow these steps to keep foods properly chilled:

- Refrigerate foods quickly because cold temperatures keep most harmful bacteria from growing and multiplying. Refrigerate or freeze perishables, prepared food and leftovers within two hours. Foods left out longer should be discarded.
- Set the refrigerator at 34 °F to 40 °F and the freezer unit at 0 °F and occasionally check these temperatures with a thermometer.
- Never defrost (or marinate) food on the kitchen counter. Use the refrigerator, cold running water or the microwave.
- Divide large amounts of leftovers into small, shallow containers for quick cooling in the refrigerator.
- With poultry and other stuffed meats, remove the stuffing and refrigerate it in a separate container.
- Hot foods may be put directly into the refrigerator or freezer, but don't overload. Cool air must circulate to keep food safe.

SAFELY USE LEFTOVERS

Use refrigerated leftovers within three to four days. Freeze quantities that can't be used by then. Since bacteria can't grow at freezer temperatures, food is generally safe indefinitely while frozen. However, use frozen foods in a reasonable length of time for best quality.

REHEATING LEFTOVERS SAFELY

Reheat thoroughly to a temperature of 165 °F or until hot and steaming. Soups and gravies should be brought to a rolling boil.

REHEATING IN THE MICROWAVE

There's no doubt about it. The microwave is America's favorite reheater. But careless reheating can contribute to foodborne illness. It's important to become thoroughly acquainted with your microwave. It doesn't cook like other appliances. While microwaves can get food hot enough to kill bacteria that may be present, the microwave doesn't always cook evenly. Therefore, it's up to the cook to arrange, cover, rotate, stir and turn foods so they reach a safe temperature throughout.

Foods cook differently in microwaves than by conventional heat. In a regular oven, hot air makes both the food and its container hot, while in the microwave, the air is cool. Cooking occurs when microwaves cause food molecules to vibrate; the resulting friction creates heat. Since microwaves go about an inch deep in most foods, the center cooks when heat from the outer areas travels inward.

Food continues to cook after the microwave turns off, whether the food is still in the oven or someplace else. Be patient and allow the food to stand for an additional one third of the original cooking time, or as the recipe directs.

This carry-over heat can raise the internal temperatures several degrees and helps equalize temperature throughout the food. Both are important to food safety because in order for food to be safe, food must reach a temperature hot enough and long enough to kill bacteria.

Microwave Food Safety Checks For Leftovers:

- Microwave only properly stored and handled foods.
- Arrange food to promote even heating.
- Use only microwave-safe dishes. Remove food from plastic wrap, styrofoam and/or freezer containers.
- Cover dish with lid or heavy-duty plastic wrap turned back at one corner.

- Midway through cooking and as needed: turn dish, reposition dish on rotating table, rearrange or stir food, and turn large food items over.
- Allow food to stand after microwaving.
- Reheat foods to 165 °F to ensure that bacteria are destroyed. Bring soups, sauces and gravies to a rolling boil. Food should steam throughout, not just at the edges. The center bottom of the plate or utensil containing the food should be very hot to the touch.

TABLE 1. SAFE KEEPING TIMES OF PREPARED OR LEFTOVER FOOD IN COLD STORAGE

Product	Refrigerator (40 °F)	Freezer (0 °F)
TV DINNERS, FROZEN CASSEROLES:	Keep Frozen	3-4 Months
DELI AND VACUUM PACKED PRODUCTS: 1. Store-prepared (or Homemade) Egg, Chicken, Tuna, Ham 2. Pre-stuffed Pork and Lamb Chops, Chicken Breasts Stuffed with Dressing 3. Store-cooked Convenience Meals 4. Commercial Brand Vacuum Packed Dinners with USDA Seal, unopened	1. 3-5 Days 2. 1 Day 3. 1-2 Days 4. 2 Weeks,	1. Don't Freeze 2. Don't Freeze 3. Don't Freeze 4. Don't Freeze
SOUPS AND STEWS: 1. Vegetable 2. Meat Added	1. 3-4 Days 2. 1-2 Days	1. 2-3 Months 2. 2-3 Months
GROUND HAMBURGER AND STEW MEATS: 1. Ground Hamburger and Stew Meats 2. Ground Turkey, Veal, Pork and Lamb Mixtures	1. 1-2 Days 2. 1-2 Days	1. 3-4 Months 2. 3-4 Months
HOTDOGS AND LUNCHMEATS: 1. Hotdogs a. Opened b. Unopened 2. Lunchmeat a. Opened b. Unopened	1a. 1 Week 1b. 2 Weeks 2a. 3-5 Days 2b. 2 Weeks	1a,b. Wrapped, for 1-2 Months 2a,b. Wrapped, for 1-2 Months
FRESH MEAT: 1. Steaks, Beef 2. Chops, Pork 3. Chops, Lamb 4. Roasts, Beef 5. Roasts, Lamb 6. Roasts, Port and Veal 7. Variety Meats: Tongue, Brain, Kidneys, Liver, Heart, Chitterlings	1. 3-5 Days 2. 3-5 Days 3. 3-5 Days 4. 3-5 Days 5. 3-5 Days 6. 3-5 Days 7. 1-2 Days	1. 6-12 Months 2. 4-6 Months 3. 6-9 Months 4. 6-12 Months 5. 6-9 Months 6. 4-6 Months 7. 3-4 Months
MEAT LEFTOVERS: 1. Cooked Meat and Meat Dishes 2. Gravy and Meat Broth	1. 3-4 Days 2. 1-2 Days	1. 2-3 Months 2. 2-3 Months
FRESH POULTRY: 1. Chicken, Turkey (whole) 2. Chicken, Turkey (pieces) 3. Giblets	1. 1-2 Days 2. 1-2 Days 3. 2 Days	1. 1 Year 2. 9 Months 3. 3-4 Months
COOKED POULTRY, LEFTOVER: 1. Fried Chicken 2. Cooked Poultry Dishes 3. Pieces, Plain 4. Pieces, Covered with Broth and Gravy 5. Chicken Nuggets, Patties	1. 3-4 Days 2. 3-4 Days 3. 3-4 Days 4. 1-2 Days 5. 1-2 Days	1. 4 Months 2. 4-6 Months 3. 4 Months 4. 6 Months 5. 1-3 Months
FISH: 1. Fresh Fish 2. Cooked Fish	1. 1-2 Days 2. 3-4 Days	1. 2-3 Months 2. 1 Month

KEPT IT TOO LONG?

Safe refrigerator and freezer storage time limits are given for many common foods in the table below. But what about something you totally forgot about and may have kept for too long?

Danger: Never taste food that looks or smells strange to see if you can still use it. Just discard it.

Is it Moldy?: The mold you see is only the tip of the iceberg. The poisons which molds can form are found under the surface of the food. So, while you can sometimes save hard cheese, salamis, and firm fruits and vegetables by cutting the mold out and removing a large area around it, most moldy food should be discarded.

SOURCES:

1. USDA Food Safety and Inspection Service Consumer Publication *Food Safety in the Kitchen: A HACCP Approach*. November, 1996.
2. USDA Cooperative Extension Service, University of Kentucky Special Project No. 91-ESFQ-1-4035
3. Iowa State University Extension. *Food Safety Project*. (1997).
4. USDA Food Safety and Inspection Service Consumer Bulletin, *Guide to Safe Food Handling*. September, 1990.

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