

# Keeping Food Safe: Preparing and Cooking<sup>1</sup>

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Food preparation and cooking can be fun and rewarding for many reasons. Well-prepared meals can save money and meet nutritional needs, and making safe and healthy meals a part of your lifestyle can contribute to lower healthcare costs. However, many people with busy schedules find it difficult to make time to cook meals. Also, when we are rushed, we may not pay close attention to good food safety practices. It is very important to follow food safety guidelines during food preparation and cooking in order to reduce the risk of foodborne illness for you and your loved ones. Read on to learn more about food safety during food preparation and cooking.



## Preparation

### Maintain Good Personal Hygiene

- The best way to avoid spreading foodborne illness is to stay healthy.
- To prevent the spread of illness, be sure to:
  - Cover your mouth when sneezing or coughing, and wash your hands afterwards.
  - Cover any cuts on your hands with waterproof bandages or gloves.
- Wash your hands frequently with warm soapy water. Spend at least 20 seconds washing, and make sure to include your wrists, the areas between your fingers, and under your fingernails.
- Know when to wash your hands:
  - before food preparation
  - after handling raw meat, poultry, seafood, and eggs
  - after touching pets
  - after gardening or working outside
  - after using the toilet and
  - after touching anything that could contaminate your hands.

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- Dry your hands with a paper towel or clean dishcloth, or let your hands air dry.

## Avoid Sources of Contamination

- Clean the inside of the refrigerator frequently, including surfaces and crisper drawers.
- Wash countertops and utensils after preparing food.
- Clean and sanitize your food preparation sink often.
- When laundering kitchen towels, wash in hot water.
- Sanitize sponges often by running them through the dishwasher (if it has a sanitizing cycle) or briefly heating them (2 minutes) in the microwave oven (wet the sponge first). Change sponges frequently.
- Replace cutting boards when they develop numerous cracks and crevices.

## Prevent Cross-Contamination from Raw Meat, Poultry, and Seafood

- Keep raw meat, poultry, seafood, and their juices away from other food, especially ready-to-eat foods like salad greens, fruit, and bread.
- Do not wash meat and poultry before cooking. Doing so can spread bacteria that are present on the surface of the meat, contaminating other areas.
- Use one cutting board for raw meat and another one for fruits and vegetables.
- If only one cutting board is available, cut fruits, vegetables, and anything that will be eaten without cooking first. Cut raw meat, poultry, and seafood last.
- After cutting raw meat, wash cutting boards, dishes, countertops, and knives with hot, soapy water. *Sanitize* them with an antibacterial substance, such as a solution of 1 tablespoon of unscented, liquid chlorine bleach per 1 gallon of water.
- When marinating meat, poultry, and seafood, use a covered dish (glass or plastic, non-metal) in the refrigerator. Never reuse marinade on cooked food, unless it is boiled just before using.

## Prevent Cross-Contamination from Fruits and Vegetables

- Wash fruits and vegetables under cool tap water, including those with skins and rinds that are not eaten. Scrub firm produce, like potatoes, with a clean brush. Also see FCS8746 *Underground Vegetables: Safe Handling Practices for Consumers*.

- Do not use detergent or soap to wash produce.
- Cut off damaged or bruised areas on hard fruits and vegetables, such as apples and potatoes.
- If soft fruit and vegetables such as tomatoes or citrus have damaged or spotted areas, throw them away.

## Thaw Foods Safely

Never thaw frozen food at room temperature. Instead, use one of the methods below.

- Thaw in the refrigerator at 40°F (4.4°C) or lower. This is the best choice, because it allows food to thaw slowly.
- If you need the food faster, thaw in cold water (70°F). Fill a clean sink or container with cold tap water. Place frozen food in a leak-proof plastic bag and submerge it. Change the water often to keep the water cold. Food must be cooked immediately after thawing.
- Thaw as part of the cooking process. Be sure the food reaches a safe internal temperature.
- Thaw using the microwave, following the manual's instructions. Food must be cooked immediately after thawing.

## Cooking

- Cook eggs until the yolk is firm. Scrambled eggs should not be runny.
- Cook fish until the flesh is opaque and separates easily with a fork.
- Do not interrupt cooking and then finish later; this can cause food to stay in the temperature danger zone (40-140°F).
- Always cook foods to the recommended minimum internal temperature. (See Table 1.)
- Check temperatures with a food thermometer. It is the only way to be sure your food has reached a safe internal temperature that will destroy foodborne bacteria.
- Do not taste food until it has reached a safe minimum internal temperature.
- Use separate plates for raw food and cooked food.
- Use a clean utensil each time when tasting and use a clean utensil to stir and mix.
- Wash food thermometers with hot, soapy water before and after using.

Table 1.

Temp.	Food
165°F	<ul style="list-style-type: none"><li>• Poultry (chicken and turkey): whole, pieces, and ground</li><li>• Stuffing (cooked alone or in the bird)</li><li>• Combined dishes and leftovers</li><li>• Food cooked in the microwave</li></ul>
160°F	<ul style="list-style-type: none"><li>• Ground beef, ground pork, ground veal, and ground lamb</li><li>• Egg dishes</li></ul>
145°F	<ul style="list-style-type: none"><li>• Beef, veal, pork and lamb (steaks, roasts, and chops)*</li><li>• Fish</li></ul>

\*Whole cuts of meat also need a 3-minute rest time after removal from the heat source. During these three minutes, the meat's internal temperature remains constant or continues to rise, which destroys harmful bacteria.  
Source: [www.foodsafety.gov](http://www.foodsafety.gov)

## Cooking in the Oven

- When baking, set your oven at 325°F or above. Temperatures lower than 325°F can allow food to be in the temperature danger zone.

## Cooking in the Microwave

- Use a covered dish. This will create moist heat that will destroy harmful bacteria.
- Stir or rotate the food to eliminate cold spots.
- Only use the microwave to partially cook foods if you will immediately finish cooking the food with another cooking method.

## Using Slow Cooker (Also see: Slow Cooker Safety by FSIS/USDA/USDA)

- Choose recipes high in moisture content, such as soup and stews.
- Keep perishable ingredients (such as meat and vegetables) separate in the refrigerator until you start to cook them.
- Do not use frozen meats. They must be thawed before putting them in the crock pot.
- Bring liquid foods to a boil before putting them in the crock pot.

## References

United States Department of Agriculture, Food Safety and Inspection Service, Safe Food Handling. [Kitchen Companion](#). Accessed January 12, 2011.