

# Slow Cooker Food Safety

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## INTRODUCTION

A slow cooker has a glazed ceramic container or crock, housed in an outer metal casing. In the metal case is an electric heating element. A tight fitting clear dome lid allows condensation to run down inside forming a water seal that aids in the retention of flavor and heat. These small electrical appliances became popular in the 1970's. Today, a wide range of slow cookers are available. The one quart model is popular for singles and couples, the four to six quart for families, and the twelve quart for entertaining or large group meals.

## ADVANTAGE OF SLOW COOKERS

- A slow cooker is *convenient and saves time*. With advanced planning, a meal can be prepared in the morning and be ready-to-eat after a busy day at work.
- A slow cooker can be a *money saver*. Less expensive, less tender cuts of meat become tender when cooked in a slow cooker and shrink less. By preparing homemade soups, stews, casseroles, or desserts in the slow cooker, money can also be saved in comparison to purchasing ready-to eat products. A slow cooker also uses less electricity than a conventional oven. In summer months, a slow cooker introduces less heat into the kitchen than the oven, saving on air conditioning costs.
- A slow cooker can *improve the nutritional content* of our meals. Ready-to-eat, convenience foods can be high in sodium, fats, and sugar. By preparing the food at home in a slow cooker, you can:
  - ☉ use low sodium or sodium free broths; eliminate salt in recipes and substitute flavorful herbs
  - ☉ use lean cuts of meat and skinless poultry
  - ☉ reduce the sugar in desserts by substituting 100% fruit juice for sugar
  - ☉ increase whole grains, vegetables and fruits in your diet by including as ingredients
- A meal prepared using the slow cooker can be *delicious*. With slow cooking, flavors have time to fully develop. Vegetables absorb the flavors of the stock and herbs used. Meats are fork-tender due to moist heat cooking.
- Food prepared in a slow cooker can be *safe to eat*, if prepared as recommended in a slow cooker that is heating properly. The direct heat from the slow cooker, lengthy cooking and steam created within the tightly covered container, combine to destroy bacteria and make the slow cooker a safe process for cooking foods.

## SLOW COOKER TEST FOR SAFETY

A safe slow cooker, cooks slow enough for unattended cooking, yet fast enough to keep food out of the bacterial danger zone (above 40° F to below 140° F). In the danger zone, bacteria grows very rapidly. Food left in the danger zone too long can cause food borne illness. To determine if a slow cooker is safe to use:

1. Fill the slow cooker one-half to two-thirds full of tap water.
2. Heat on a low setting for 8 hours with the lid on.
3. Check the water temperature with an accurate food thermometer. Do this quickly because the temperature drops 10–15 degrees when the lid is raised or removed.
4. The temperature of the water should be 185°F. Temperatures below 185°F would indicate the slow cooker does not heat food high enough or fast enough to avoid potential food safety problems; the slow cooker is unsafe and should be replaced.

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## SLOW COOKER FOOD SAFETY TIPS

- Begin with a clean slow cooker, utensils and work area. Wash hands well before and during cooking.
- To prevent foods from sticking and to simplify clean up, spray the inside of the crock with a non-stick cooking spray, before adding ingredients,
- Keep perishable foods refrigerated until preparation time. Refrigeration assures that bacteria, which multiply rapidly at room temperature, will not get a “head start” in the first few hours of slow cooking.
- If you cut up meat and vegetables in advance, store them separately in the refrigerator.
- Thaw frozen meat, poultry, and other ingredients in the refrigerator before adding to the slow cooker. If using a commercially frozen slow cooker meal, prepare according to manufacturer's instructions.
- New research conducted by USDA FSIS indicates it is safe to cook large cuts of meat and poultry in a slow cooker. Follow the manufacturer's instructions and safety guidelines.
- Dried beans, especially kidney, contain a natural toxin. These toxins are easily destroyed by boiling. Safe steps for preparing would include soaking the beans for 12 hours, rinsing, and then boiling for at least 10 minutes, before adding the beans to a slow cooker.
- Preheating the crock before adding ingredients or cooking on the highest setting for the first hour, will ensure a rapid heat start. Either will shorten the time foods are in the temperature danger zone.
- When cooking meat or poultry, the water or stock level should almost cover the ingredients to ensure effective heat transfer throughout the crock. Water or liquid is necessary to create steam.
- Since vegetables cook the slowest, place them near the heat, at the bottom and sides of the slow cooker.
- Do not overload the crock. Fill to a minimum of 1/2 full and a maximum of 2/3 full.
- Do not lift the lid or cover unnecessarily during the cooking cycle. Each time the lid is raised, the internal temperature drops 10–15 degrees and the cooking process is slowed by 30 minutes.
- Use an accurately calibrated food thermometer to test food doneness. The thermometer should be inserted in the thickest part away from bone. Safe internal temperatures include: Poultry 165°F, Beef, Pork and Lamb 160°F. (USDA FSIS [www.lsitDoneYet.gov](http://www.lsitDoneYet.gov))
- Do not leave cooked food to cool down in the crock. Either consume it immediately or place leftovers in shallow containers and refrigerate immediately. It is not recommended or safe to reheat leftovers in a slow cooker. Heat leftovers in the oven, microwave, or stovetop, until it reaches 165°F and then add to a preheated slow cooker. In the slow cooker, food should remain hot for serving, 140°F or above, as measured by a calibrated food thermometer.
- For information or recipes specifically formulated for your slow cooker, consult the manufacturer's owner's guide.



## RESOURCES ON SLOW COOKER FOOD SAFETY

**University of Minnesota Extension** Food Safety website [www.extension.umn.edu/foodsafety](http://www.extension.umn.edu/foodsafety)

Slow Cookers - How to Test for Accuracy <http://www.extension.umn.edu/distribution/nutrition/00011.html>

Slow Cooker Safety <http://www.extension.umn.edu/distribution/nutrition/00012.html>

**AnswerLine** <http://www.extension.iastate.edu/answerline/>

Call the University of Minnesota Extension and Iowa Extension Service consumer answering hotline, Monday through Friday, 9 am-noon, and 1-4 pm, CST.

1-800-854-1678 (in Minnesota)

1-800-262-3804 (in Iowa)

**USDA Food Safety and Inspection Service** <http://www.fsis.usda.gov>

Call the USDA Meat and Poultry Hotline at 1-888-674-6854, Monday through Friday, 10:00 am-4:00 pm, EST.

Slow Cookers and Food Safety, February 7, 2008 [http://www.fsis.usda.gov/Fact\\_Sheets/Focus\\_On\\_Slow\\_Cooker\\_Safety/index.asp](http://www.fsis.usda.gov/Fact_Sheets/Focus_On_Slow_Cooker_Safety/index.asp)



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