

Slow Cooker Food Safety

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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. The slow cooker cooks foods slowly at a low temperature so vitamins and minerals of foods are retained. 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 this 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.

Slow Cooker Food Safety Tips

- Begin with a clean slow cooker, utensils and work area. Wash hands well before and during cooking.
- To simplify clean up, before adding ingredients spray the inside of the crock with a non-stick cooking spray or line the crock with a heat resistant nylon liner available for 3 – 6.5 quart round or oval crocks.
- 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.
- Do not use the slow cooker to cook large pieces of food like a whole chicken or roast because the food will remain in the bacterial "danger zone" too long. Cut meat, poultry and vegetables into medium to small uniform pieces to ensure rapid heat transfer.
- Preheat the crock before adding ingredients or cook on the highest setting for the first hour.
- When cooking meat or poultry, the water or stock level should almost cover the ingredients to ensure effective heat transfer throughout the crock.
- 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 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 accurate food thermometer to test food doneness: Poultry 180°F, Pork 170°F and Beef 160°F.
- Do not leave cooked food to cool down in the crock. Either consume it immediately or place leftovers in shallow containers and refrigerate immediately. Never reheat leftovers in the slow cooker.
- For information about your slow cooker, consult the manufacturer's owner's guide.

Resources on Slow Cooker Food Safety

- **Info U – U of M Extension Consumer Information Line**
 - **1.800.535.4555 enter:**
 - # 627 Slow Cookers – How to Test for Accuracy and
 - # 768 Slow Cooker Safety
 - **or by website:**
 - Slow Cookers – How to Test for Accuracy:
www.extension.umn.edu/info-u/nutrition/BJ627.html
 - Slow Cooker Safety:
www.extension.umn.edu/info-u/nutrition/BJ768.htm
- **AnswerLine** the new University of Minnesota Extension Service and Iowa Extension Service consumer answering hotline 1.800.854.1678.
- **Food Safety and Inspection Service**
 - Focus On: Slow Cooker Safety, January 2006:
http://www.fsis.usda.gov/Fact_Sheets/Focus_On_Slow_Cooker_Safety
 - or call the FSIS Meat and Poultry Hotline at 1-888-674-6854.

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