

Know how. Know now.

# **Food Safety for Families**

## **Microwave Oven Safety**

Paula W. Patton, Research Assistant, and Julie A. Albrecht, Extension Food Specialist

#### Dear Parents,

Microwave ovens are convenient when you prepare meals for your family. Microwave ovens can cook foods unevenly leaving "cold spots" in the food where harmful bacteria can grow and multiply. Use the following safety tips for using a microwave oven to prevent foodborne illness from striking your family.

#### Safe Microwave Containers



- Use cookware that is designed for use in the microwave. Ceramic, glass containers and all plastics should be labeled for microwave use. Check the container for a statement, or symbol such as the one to the right, for safe use in the microwave. Radiation waves indicate the container is safe for the microwave.
- You can test a container for microwave safety. Place one cup of water in a glass container and place it in the microwave with the container you want to test. Microwave for 1 minute on high. If the container is warm or hot, it is not safe to use.

 Wax paper, microwave plastic wraps, parchment paper, cooking bags, and paper towels should be safe to use. Do NOT let plastic wrap touch the food during microwaving.

#### **Unsafe Microwave Containers**

- Plastic storage containers such as take-out containers, margarine tubs, whipped topping containers, and other single use containers should NOT be used in the microwave. These containers can melt or warp, possibly causing harmful chemicals to seep into the food.
- **NEVER** use foil, brown paper or plastic grocery sacks, thin plastic storage bags, metal containers or newspaper in the microwave oven.

### **Microwave Safe Cooking Tips**

- Arrange food items evenly in a covered dish and add some liquid if needed.
- Cover the dish with a lid or microwave safe plastic wrap; loosen or vent the lid or wrap to let steam escape. The moist heat that is created will help destroy harmful bacteria and will help food cook evenly.



- Cooking bags also provide safe, even cooking.
- Cook large cuts of meat on medium power (50%) for a longer period of time. This allows heat to reach the center without overcooking the surface.
- Stir or rotate food midway through the microwaving time to eliminate cold spots and for more even cooking.



Extension is a Division of the Institute of Agriculture and Natural Resources at the University of Nebraska-Lincoln cooperating with the Counties and the United States Department of Agriculture.

## **Microwave Oven Safety**



### FightBac!®

Bacteria (germs), viruses and parasites are everywhere in the environment! They are organisms that you cannot see, smell, or taste. In fact, they can contaminate food and cause life-threatening illness. Foodborne illness (food poisoning) can strike anyone, especially young children, pregnant women (it endangers their unborn babies too), older adults, and persons with weakened immune systems.

# Microwave Safe Cooking Tips Continued...

- When partially cooking food in the microwave oven, finish cooking on the grill or in a conventional oven immediately. Always fully cook food to its proper internal temperature before storing.
- Use a food thermometer or the temperature probe that comes with your microwave to determine when the food has been properly cooked.
- Cooking times vary because microwave ovens have different wattages.
- Find the wattage of your microwave for proper cooking times.
- Cook foods to the following safe minimum internal temperatures:

**145°F:** Beef, steaks, roasts, and chops

**160°F:** Ground beef, veal, lamb, all cuts of pork, and egg dishes

**165°F:** All poultry, leftovers, and casseroles

- Always allow standing time of 2 minutes to complete cooking.
- Always allow standing time of 2 minutes to complete cooking.

- Ready-to-eat foods such as hot dogs,
  luncheon meats, and fully cooked ham should
  be heated to 165°F or until steaming hot.
- The color of the meat or its juice is not a reliable indicator for doneness! Always use a clean food thermometer to check the internal temperature of your food.



 Cooking whole, stuffed poultry in a microwave is not recommended. Some areas of the poultry and stuffing could be overcooked while other areas undercooked. Cook stuffing separately to 165°F.

# Tips for Thawing Foods Safely in the Microwave

- Remove food items from their packages before thawing. Foam trays and plastic wraps are not heat stable in the microwave. Melting or warping may cause harmful chemicals to seep into food.
- Cook meat, poultry, egg casseroles, and fish immediately after thawing them in the microwave. Some areas of the frozen foods may begin to cook during the thawing time.
   Do not hold partially cooked food to use later.
- Cover foods with a microwave-safe wrap or lids to hold moisture and provide even cooking.

