



Fact Sheet

FOOD SAFETY FACTS ON MICROWAVE OVENS

Foodborne illness can occur as a result of using improper food handling techniques and cooking practices when using a microwave oven. Thorough cooking is the best way to kill bacteria present in food. Because cooking in a microwave oven might not result in even cooking, follow these instructions.

The Microwave

- Do not operate the microwave oven if the door does not close firmly, or the oven is damaged in any other way.
- Do not use metal pans made for convectional ovens or aluminum foil as they cause uneven cooking and could even damage the oven
- Clean the oven frequently with water and mild detergent.

Defrosting

- Remove food from plastic wrap, freezer cartons, and/or styrofoam trays before defrosting and cooking. They are not heat stable and could leach hazardous compounds from the container or plastic wrap to the food.
- Do not defrost foods in a microwave oven for more than two hours. Set a timer as a reminder.
- Defrost frozen foods completely before cooking them in a microwave. Frozen and thawed portions in the same food will lead to uneven heating.

Cooking

- Arrange items uniformly on microwave safe cookware. Cover with a microwave safe lid or with microwave safe plastic wrap that does not touch the food to promote even heating. This will trap steam in the cooking vessel which will more effectively kill bacteria and ensure even heating and thorough cooking. However, leave a small section uncovered so that steam can escape.
- Cut food into small pieces for uniform cooking.
- Debone larger pieces of meat that are to be cooked in a microwave. The bone causes uneven heating around it. Place thicker portions of meat and poultry around the outside of a dish. Turn pieces at least once during cooking.
- Cook larger pieces of meat at 50% power. This allows the heat to penetrate further into the meat without overcooking the outer portions.
- Never cook whole turkeys in the microwave. The size and density of the bird do not allow for even cooking. Never cook stuffed turkeys in the microwave.
- Never partially cook meat in the microwave or in the convection oven. If microwave cooking is done to speed up the total cooking process then it must be followed immediately by another cooking method (grill, oven, stove top).
- Make sure food is cooked completely and evenly. Because of the rapid heating process, parts of food may cook faster than other parts. Rotate trays and stir food several times during cooking.
- Observe all standing times for microwaved food after cooking. This will allow for even heat distribution.
- Use a thermometer to determine if meat is adequately cooked. Check the temperature in several places, especially in the thickest area of the meat. Make sure the thermometer does not touch bone, metal, glass or packaging materials.
- Cook red meats to a minimum temperature of 74°C (165°F) and poultry to at least 85°C (180°F). Juices should run clear for meats and poultry.
- Adjust cooking times for lower powered microwaves ovens. Microwave ovens with lower power will take longer to cook food to the required temperatures.

Reheating

- Do not reuse trays and containers that came with microwave convenience foods. They may be designed for one-time use only.
- The temperature in the center of reheated microwave items should reach 74°C (165°F).

For more information on foodborne illness and safe food handling practices, visit the Canadian Food Inspection Agency website at www.inspection.gc.ca