

Kitchen and Food Safety

Use Microwaves Safely



Microwaves are a great way to save time and energy while preserving your favorite foods' flavor and key nutrients. To make great-tasting foods using your microwave, follow these tips.

Use Microwave-Safe Containers

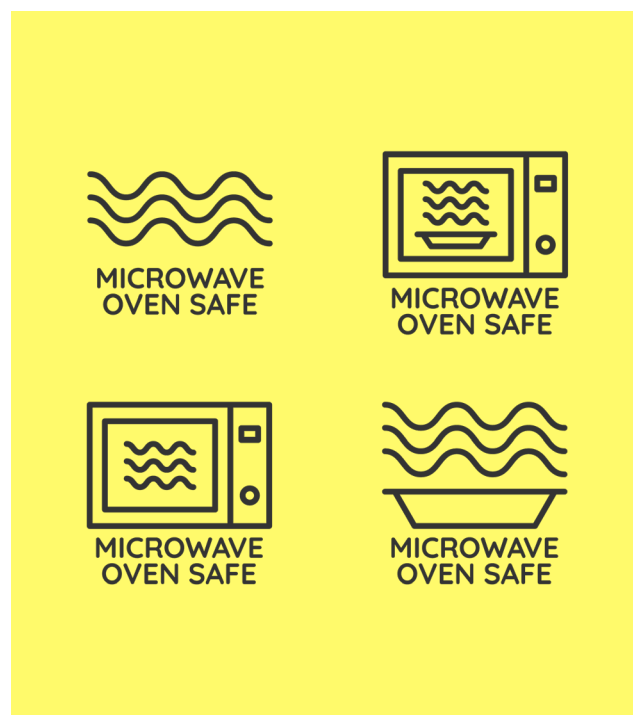
When heating or reheating food, only use microwave-safe containers. Microwave-safe containers are tested to ensure they meet the standards and specifications set by the Food and Drug Administration.

Scientists have documented that small amounts of chemicals, such as bisphenol-A and phthalates, can be transferred from containers into food. Therefore, it is important to use only containers designed for the microwave.

- Do not use Styrofoam or foam carry-out containers. Many of these are not intended to be used in microwave ovens.
- Do not reuse containers from microwavable ready foods. These containers are intended to be used only once, and repeated heating will make the container less safe.
- Do not use plastic wraps or other plastics unless labeled microwave-safe.

The extent to which chemicals leach into food during microwaving will vary. Foods with a higher fat content, such as meats and cheese, are more likely to cause leaching than less fatty foods.

Unsure if your container is microwave-safe? Look for the microwave-safe symbol on the bottom of the container.



Cover Food

Cover foods with a microwave-safe lid or a microwave-safe plastic wrap. Covering food will maintain even heating while retaining moisture and nutrient content. Covers should fit loosely during the cooking process to prevent pressure build-up and allow for venting. Allow enough space between the top of the container and the food to prevent food from touching the lid.



Prevent Fires

- Do not overcook foods, as this can lead to fires.
- Do not leave the microwave unattended while in use.
- Never use a microwave to heat objects not intended for use in the microwave.
- Fire can occur when overheated paper is exposed to fatty foods.

Cook Food Safely

Cooking times may vary because microwaves vary in power and efficiency. Stir or rotate food midway through the microwaving time to allow for even cooking and to eliminate cold spots where harmful bacteria can survive.

- Do not cook large cuts of meat on high power (100%).
- To prevent overcooking of outer edges and to allow heat to reach the center, cook large cuts of meat on medium power (50%) for a longer period.
- When cooking foods with outer skins or covers, such as potatoes, sausages, and hot dogs, puncture the outer skin. This will prevent food from exploding from the build-up of pressure.
- Use a food thermometer to check that food has reached a safe minimum internal temperature after cooking.
 - Ground meats: 160 F
 - Fresh beef, pork, lamb, veal steaks, chops, roasts: 145 F
 - Poultry: 165 F
 - Eggs and egg dishes, such as frittata, quiche: 160 F
 - Fish: 145 F
 - Reheating all leftovers: 165 F



Defrosting Food in The Microwave

A microwave is a safe and fast way to defrost food. Before defrosting, remove food from packaging, including foam trays and plastic wrap.

- To defrost, select either the defrost option on your microwave or microwave at 30% power. You can defrost at any power level; however, a lower power level prevents food from beginning to cook during the defrosting process.
- Watch food closely while defrosting; rotate and rearrange food as needed.
- When thawing individual pieces or parts of food, such as ribs or chicken, break apart pieces as soon as possible to prevent cooking the outer pieces.
- When defrosting ground meats, continually scrape the outer thawed portions off as they soften. Once removed, place the remaining frozen portion in a microwave-safe container and continue this process.

During the defrosting process, some areas of the frozen food may begin to cook or reach temperatures where harmful bacteria become active and multiply into unsafe numbers. Therefore, immediately after defrosting in the microwave, completely cook meat, poultry, casseroles, and fish. Never partially cook food and store it for later use.

Standing Time

After the microwave stops, the food continues to cook. This process can be called carryover cooking time, resting time, or standing time. During this time, the temperature of food increases by several degrees. Therefore, let food rest for at least 3 minutes after removing from the microwave before serving.

Call Your Local Office

Contact your local Illinois Extension office with your food safety questions: go.illinois.edu/FindILExtension.

References

- [Cooking with Microwave Ovens](#). USDA Food Safety and Inspection Service.

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