

This summer in our “Cooking with Kids” workshop, we talked about using microwaves for cooking and some safety features. I was surprised how many of the youth use the microwave and how many were unsure of what not to put in the microwave.

Several months back we replaced our microwave at home. This being our fourth microwave since marriage, my husband plugged it in and we started using it. Now that I am writing an article on microwave use and safety, I got out the owner’s manual and started reading. This is my first recommendation is to read the owner’s manual before operating your microwave. Wow! I have more features, than I was aware of!

With over 90% of Americans having microwaves in their homes, it’s important that we know how to operate our microwaves.

Be sure you are not using your microwave if there is any damage to the oven. If the door does not close properly, if the hinges or latches are loose or broken, or if the oven has been dropped, do not use your microwave. If your oven is damaged, repairs should be done by qualified service personnel.

There are certain containers that can be used in the microwave. Look at the bottom of the container you are about to use. It will state whether the dish or container is microwavable. We have a set of cute plastic poke-a-dotted plates and on the bottom of these plates it says, “Not for use in the microwave”. It is recommended that food be warmed in microwave-safe ceramic or glass containers. Plastic containers, even if they are microwave safe, however, are for one time use only, especially the containers you get from restaurants. Plastic can stain, warp, and lose their usefulness over time. This goes for plastic microwavable containers that are microwave safe. Some containers can become very hot when microwaving so always use an oven mitt when taking items out of the oven.

Many of us use our microwave for heating water, soups, and other liquids. People have been burned by heating liquids in the microwave. The liquid gets super hot and can explode; this is called superheating. To avoid superheating, add a non-metal object to the liquid, such as an ice cream stick or a wooden stirrer. What happens is the liquid was heated too long, the cup of hot water just sits above boiling point, and when it is agitated, it breaks the surface tension and all of a sudden it splashes out.

Even though a microwave can be used for cooking, you may experience a food borne illness if the food does not reach the correct temperature. Take ground turkey meat for instance. When cooking the ground turkey meat, there will be cold spots which usually occur in microwaved cooking. To encourage even heat food must be rotated, stirred half way through, temperature checked with a meat thermometer, and letting the food rest after the cook cycle is complete. I don’t know about you, but I have never been successful at cooking raw meat that was palatable with a good texture. Warming cooked meat produces a better food product then cooking raw meats. Always check the temperature of meat with a thermometer to test for doneness. Meat should be cooked at an internal temperature of a least 160°F and poultry at least an internal temperature of 180° F. Cooking to these temperatures usually protects against foodborne illness.

It is important that you know the wattages and power of your microwave. Microwave meals have heating instructions for cooking time and wattage of your microwave. If you don’t know the wattage of your oven you may under cook or over cook the meal. There have been reports of Salmonella cases from turkey pot pies prepared in the microwave. This happen because the instructions did not spell out the required power level or wattage to use to ensure a fully cooked turkey pot pie.

Have you ever burned popcorn in the microwave? When popcorn is heated too long or on a high power, it will burn or even catch on fire! When this happens, close the microwave door and unplug the microwave. This will put out the fire. This will most likely damage your microwave. Do not use the microwave again unless it has been checked by qualified service personnel.

There are certain things that should never be put in the microwave. Items include metal, foil, and metal, such as twist-ties, poultry pins or gold rimmed dishes, recycled paper towels containing small metal pieces, stapled bag, forks and knives. Metal will make sparks in the microwave which is called arcing. If you see arcing, press the stop/rest pad on your control panel.

You should never operate the microwave with no food inside; this will cause damage to the oven and could start a fire. Whole eggs should never be cooked in the microwave. The pressure will build up inside egg yolk and will cause it to burst. Closed jars should not be heated in the microwave oven and it will explode. Food with unbroken outer skin such as potatoes, hot dogs sausages, tomatoes, apples, chicken livers, and other giblets, and egg yolks should be pierced to allow steam to escape during cooking. Because of the uneven distribution of heat, the microwave is not recommended for warming baby food or baby formula.

If you spill or food splatters in the microwave it is best to clean it up when it happens. My motto is "if it's your mess, clean it up"! Dried food for days in the microwave is much harder to clean! My owner's manual recommends that the microwave be wiped occasionally with a solution of baking soda and water to keep it fresh inside. Always unplug your microwave before cleaning any part of the oven. Always read the recommendation for cleaning products for your microwave. Never operate a microwave with dried food around the door seal.