Choose a Pressure Canner to Safely Preserve

by Janet Hackert, Regional Nutrition and Health Education Specialist

With each year’s growing season, there seems to be a new round of new and improved kitchen gadgets to make preserving the harvest easier and better. Some can be a great help; others, like the electric multi-cooker appliances, may not result in the safe canned product one might be expecting. University of Georgia Cooperative Extension’s National Center for Home Food Preservation (NCHFP) released comments this spring warning against the use of electric multi-cookers for canning. They warn, “We do not support the use of the USDA canning processes in the electric, multi-cooker appliances now containing ‘canning’ or ‘steam canning’ buttons on their front panels.”

This national center (NCHFP), which has conducted testing and made the canning recommendations USDA endorses, explains their cautious reception of these appliances. The purpose of canning is to first destroy any microorganisms that may be present in food that can cause foodborne illness and then seal the jar to preserve the food’s safety and make it shelf-stable. Testing involves measuring the temperature inside and throughout the jar of food during processing to make sure all food will reach required temperatures for the necessary length of time to render it fully safe.

For low acid foods, like vegetables and meats, the USDA’s recommendations for pressure canning must be followed. Because of their low acid content, temperatures higher than the boiling point of water must be reached and this is only possible by processing under pressure. But the environment in the pressure canner is also critical to safely can. For example, the USDA guidelines say to vent the pressure canner for ten minutes. This evacuates the interior of air which, if left in the canner, can lower the actual pressure (AND temperature) inside the canner. Likewise, elevation affects the pressure inside the canner and so tested recommendations include appropriate altitude adjustments. According to NCHFP, “The position of jars in the canner and flow of steam around them also impacts the temperature in the jars.”

It is unknown if the new appliances have been adequately tested with thermal process canning work. So although they may have a button that indicates canning, the resulting safety of the food is not certain. Also, these appliances are usually smaller than what is required to follow the USDA recommendations. What they do recommend is, “using only pressure cookers/canners that hold four or more quart-size jars.” For more information from the National Center for Home Food Preservation, visit http://homefoodpreservation.org online and search for electric multi-cookers. For a fact sheet on this topic, go directly to http://nchfp.uga.edu/publications/nchfp/factsheets/electric_cookers.html. To watch a short video explaining what to look for in a safe canner and showing what is approved for both pressure canning and boiling water canning, go to http://nchfp.uga.edu/video/pressure_canners.html.

For more information on pressure canners or canning or any other topic, please contact me, Janet Hackert, at 660-425-6434 or HackertJ@missouri.edu or your local University of Missouri Extension office.

(written 4/17/15)