University of California
Agriculture and Natural Resources | UCCE Master Food Preserver Program

"Teaching research-based practices of safe home food preservation to the residents of Solano and Yolo Counties."

Burning Issue: Canning on Smooth Cooktops

Can I can on my smooth cooktop?

We have to say to follow manufacturer's advice because styles of smooth cooktops being manufactured differ in ways that influence suitability for canning. Some smooth cooktop manufacturers say do not can on them, while others who say it is okay still put stipulations on the diameter of the canner compared to the diameter of the burner. Boiling water or pressure canners may not be available that meet the maximum diameter pot they allow. There are several issues:

1. There can be damage to the cooktop from the excessive heat that reflects back down on the surface, especially if the canners used are too large of a diameter than is intended for the burner being used. The damage can range from discoloration of white tops to actual burner damage to cracking of the glass tops to fusion of the metal to the glass top.

   And by the way, even if a manufacturer says a burner/cooktop can be used for canning, people should also be aware the scratching can occur if the aluminum canner is slid or pulled across the cooktop. This often happens with large, heavy filled canners, so people need to be careful.

2. Many of these cooktops have automatic cut-offs on their burners when heat gets excessive. If that option is built in, and the burner under a canner shuts off during the process time, then the product will be under-processed and cannot be salvaged as a canned food. The process time must be continuous at the intended temperature, or microorganisms may survive. Also, if the pressure drops quickly, most likely liquid and maybe even food will be lost from the jar (it will spill over from the area of higher pressure inside the jar to the lower pressure now in the canner around the jar).

3. Even if boiling water canning is approved by the manufacturer, it may be necessary to fashion your own canner out of a flat-bottomed stockpot with a bottom rack inserted. Many canners do not have flat enough bottoms to work well on a smooth cooktop to be able to maintain a full boil over the tops of the jars. The pot used as a canner must also be large enough to have lots of water boiling freely around the jars, and at least 1 inch over the tops of jars. If the canner is too small, then it starts boiling faster than expected and the total required heat the jars receive in the canner even before the process time begins can be too short.

4. Some manufacturers of pressure canners do not recommend using them on a smooth cooktop. Follow the advice of your canner manufacturer.

Our recommendation, therefore, is to contact or consult information from the manufacturer of your smooth cooktop and your pressure canner, if interested in pressure canning, before making your decision to can (or not) on it. They are the recommended sources of this information and may also have up-to-date alternatives or suggestions for equipment that you can use. We also caution that you might have to be sure they understand how large your boiling water or pressure canner is, how long it must be heated at high heat, how long the hot canner may stay on the burner until it cools after the process time, and that the canner is made from aluminum (if it is).

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