



Canning on Smooth Top Stoves



FOR QUESTIONS CONTACT:

Lizann Powers Hammond
WSU Benton County Extension
5600-E W. Canal Dr.
Kennewick, WA 99336

Phone: (509) 735-3551
Email: powers@wsu.edu

For information on
home canning visit:

www.homefoodpreservation.com

A common question that arises during canning season is whether or not you can use a smooth cooktop for canning. Because of the variability in types of smooth cooktops, there is no simple answer. This fact sheet will help explain the issues and concerns with canning on a smooth cooktop.

Our first recommendation is to check with the manufacturer of your cooktop for their recommendations. Not all smooth cooktops are created equal, and they differ in ways that will influence their suitability for canning. There are three possible answers to the question of “Can I can on my smooth cooktop?” Some manufacturers say yes, some say no and some say it is ok, but only under certain conditions.

To find out about the smooth cooktop in your home for canning, locate your manufacturers guide or contact their customer service department.

When canning on smooth cooktops, there are three main areas of concern:

- 1) Concerns about damaging the cooktop.
- 2) Burner issues: Automatic heat cut-off mechanisms and cycling of burner heat do not allow for adequate processing.
- 3) Equipment requirement: Regulations about the size and design of cookware/canners acceptable smooth cooktops.

Damage to the Smooth Cooktop.

The risk for damage to a smooth cooktop results from the high amount of heat that is reflected back down on the top of the stove during the long canning process. The size and weight of the pan and extended cooking times can damage the cooktop and may void the warranty if the manufacturer advises against it. The damage that may occur can range from discoloration of white tops, burner damage, cracking of the glass tops, to fusion of the metal from the canner to the glass of the smooth cook top.

The possibility of damage increases greatly if the canner is larger than what is intended for the burner being used. Scratching of the smooth cooktop can also occur if the aluminum canner is slid or pulled across the cooktop. This often happens with large, heavy canners.

Burner Issues: Heating the Canner

The canning process requires steady continuous heat. In many cases the burners on smooth cook-tops cycle off and on. This cycling is designed to prevent damage to the cooktop from excessive heat, which is good for safety, but bad for the home canning process.

- ◆ When the burner cycles the heat on and off, it does not maintain the steady and even heat necessary for the canning process.
- ◆ In the boiling water canner, cycling of the burner prevents the water in the canner from coming to a full rolling boil.
- ◆ In the pressure canner, the cycling of the burner prevents the buildup of pressure inside the canner.

The inability to get a boiling water canner to a vigorous boil or pressure canner to a steady, constant pressure results in under processed and unsafe home canned foods.

Canning Equipment:

If the manufacturer states that your cooktop is acceptable for canning, chances are there will be some limitations on the size of the canning pot in relation to burner and the design of the canner.

Older boiling water and pressure canners may not meet the size requirements. If your manufacturer only recommends a pot of equal or smaller diameter than the burner, you can create a boiling water canner from any flat bottomed stock pot. The pot will need a rack in the bottom and be large enough to have lots of water boiling freely around the jars, and at least 1 inch of water over the tops of the jars.

For pressure canning, some newer pressure canners have a special bottom that was created to accommodate smaller burner diameters.

For a smooth cooktop, the bottom of your canner must be completely flat. You can determine if the bottom of a canner is flat by placing a straight edge across the bottom of the canner, and then look for any gaps. Many older canners have concave bottoms. When you combine a concave bottom with a flat surface, heat, and water, there is a risk that a seal will form between the canner and the stovetop.

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By: Lizann Powers-Hammond, M.S., C.N.
WSU Benton County Extension