Pressure Canning Done Right

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This year I think I’m the only one that didn’t plant a garden. It wasn’t because I don’t like to garden it’s because lots of people give me produce which is very much appreciated. Also when the garden is producing abundantly, that is my busiest time of year at work.

During this pandemic, more gardens were planted and now they are producing some great crops! So when those tomatoes all ripen at the same time, what can you do? Preserve them!

Pressure canning is used to preserve vegetables and meat, including many tomato products. Vegetables and meat are low acid foods and require pressure canning to destroy botulism.

It is critical to follow the directions in using pressure canners. Always read the instruction manual for your canner. Do a practice run with water in the canner to learn how to use it and how it works with your stove. Check your stove manufacturer to be sure canning is recommended. Some glass top stoves are not suitable for canners as they can crack under the weight of a heavy canner.

Another important part of ‘Pressure Canning Done Right’ is understanding headspace. Leaving the specified amount of headspace in a jar is important to assure a vacuum seal. If too little headspace is allowed, the food may expand and bubble out when air is forced out from under the lid during processing. The bubbling food may leave a deposit on the rim of the jar or the seal of the lid and prevent the jar from sealing properly. If too much headspace is allowed, the food at the top is likely to discolor. Also, the jar may not seal properly because there will not be enough processing time to drive all the air out of the jar.

The amount of headspace depends on how much the food moves or swells inside the jar during the canning process. In the case of spaghetti sauce, there is a lot of food material and more viscosity or thickness compared to a tomato juice. So the food pulp/pieces are going to shift or swell more than a juice, therefore they need more room. Also, how the heat moves through the jar, by convection or conduction, can influence the amount of headspace needed.

Reliable recipes will specify the amount of headspace needed for that product. In general, jams and jellies are 1/4 inch; pickles, fruits, some tomato products are 1/2 inch; and plain vegetables and meats are at least one inch.

When using a pressure canner, it is very important to vent the air out of the canner before pressurizing. Air trapped in a pressure canner lowers the temperature obtained for a given pressure and results in under processing. To be safe, USDA recommends that **ALL pressure canners must be vented 10 minutes before they are pressurized**.

To vent a canner, leave the vent pipe (steam vent) uncovered (or manually open the petcock on some older models) after you fill the canner and lock the canner lid in place. Heat the canner on high until the water boils and generates steam that can be seen escaping through the open vent pipe or petcock. When a visible funnel-shape of steam is continuously escaping the canner, set a timer for 10 minutes. After 10 minutes of continuous steam, you can close the petcock or place the counterweight or weighted gauge over the vent pipe to begin pressurizing the canner.
Check out the Phillips-Rooks Extension District web page for videos on canning salsa and meat. Once you are on the web page go to Health and Nutrition, then click on Food Preservation and Canning. A list of videos is on that page.

One last suggestion, don’t forget to get your pressure gauge on your canner checked each year.
For more information, contact your local extension office.

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