



K-State Extension Connection

Preserve Fresh Produce with Safety in Mind

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If you are planning on home canning some of the wonderful produce from your garden, orchard, or from the Farmer's Market this summer, it is also a good idea to be planning for food safety.

If you plan to be pressure canning with a dial gauge canner, now is a good time to make sure the dial gauge of your pressure canner is accurate. Most local extension offices in Kansas (including those in Wildcat District) have a pressure gauge tester available and can test dial gauges at no cost. You can bring in just the dial gauge, or leave it attached to your canner lid and bring it in for testing. Note: Most offices are not equipped to test All American canner gauges.



Other things to consider when preparing for home canning include the following:

1. Use tested recipes.

Canning a homemade or outdated recipe is risky, and may cause spoilage and foodborne illness. Use tested recipes from trusted resources such as USDA, K-State Research and Extension publications, or home preserving equipment and ingredient manufacturers. Commercially canned foods are rigorously tested for safety. It is dangerous to try to recreate them at home.

Make sure your food preservation recipes are current with up-to-date, scientifically tested guidelines. Don't use outdated publications or cookbooks, even if they were handed down to you from trusted family cooks.

2. Use the correct Processing Equipment

Processing methods recommended for home canning are water bath canners for high-acid foods and pressure canners for low-acid foods. **The following old methods are NOT recommended and may cause spoiled food and foodborne illness.**

****Open Kettle Canning** – In this method, food is poured into the jar and the lid and ring are applied with no further heat processing. This allows bacteria, yeast, and mold to grow and spoil food. Examples include inverting hot jars and sun canning.

****Oven Canning** – Oven temperatures vary with the accuracy of oven regulators and air movement. Dry heat moves slowly through jars, allowing bacteria to grow. Jars may crack due to temperature shock.

***Dishwasher Canning** – Use the dishwasher to wash empty jars and keep them hot. Do not use it for processing filled jars. The water temperature is not high enough to kill bacteria for safe canning.

For detailed information about which canning processing method to use and the science behind these recommendations check out K-State’s informative series of Home Canning Videos at: <https://www.rrc.k-state.edu/preservation/videos.html>. A video of particular interest might be “The Science Behind Home Canning” which discusses acidity among other topics.

3. Use the correct Headspace

Proper headspace helps ensure a good vacuum seal on jars. Too little headspace can compromise the seal. Food and liquid expands during processing and may seep underneath the sealing compound. Too much headspace leaves excess air inside the jar, causing discoloration, seal failure, and spoilage. For best results, always follow headspace measurements given in your tested recipe.

4. Acidify Tomatoes

Tomatoes are on the borderline between a low-acid and high-acid food. Tomato processing recommendations include both boiling water and pressure canning. Pressure processing instructions are equivalent in heat treatment to water bath processing. BOTH methods require acidification. There are no recommendations to process tomatoes without acidification.

5. Follow Tested Recipes Exactly

Adding thickeners, pasta, rice, or any other ingredients to tested recipes can result in spoilage and foodborne illness. These changes alter the acidity and consistency, which slows heat penetration. Instead, make the recipe as stated, then add extra ingredients before serving.

6. Check Manufacturer Instructions On Canning Lids

If you are accustomed to heating your lids prior to use, you will be pleasantly surprised to learn that some significant changes to canning lid construction were made for the 2017 season. Lids can now be washed in warm soapy water, rinsed, and they are ready to use without heating. Keep in mind that all canning lids are for ONE canning use only.

Home canning can be an excellent way to preserve garden produce and share it with family and friends. **If you plan to be canning this summer, make sure you plan for food safety as well.**

Find more information about these topics and others, by contacting K-State Research and Extension Wildcat District offices at: Crawford County, 620-724-8233; Labette County, 620-784-5337; Montgomery County, 620-331-2690; Wilson County, 620-378-2167; Pittsburg Office, Expanded Food and Nutrition Education (EFNEP), 620-232-1930. Wildcat District Extension is on the Web at <http://www.wildcatdistrict.ksu.edu>. Or, like our Facebook page at www.facebook.com/wildcat.extension.district.

For more information, please contact Barbara Ames, Family and Consumers Sciences Agent, bames@ksu.edu, (620)331-2690.

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