**DATE:** January 11, 2021

**Food Preservation through Canning: Dial Gauge Testing.** Over the past few years there has been an increased interest in backyard and community gardening across the country. Gardening attracts people for a variety of reasons; whether it be the security of growing your own food, the allure of consuming fresh fruits and vegetables, or the stress relief associated with working the soil, people are exploring gardening at an impressive rate. If you have ever grown a garden then you know it is not easy and if you are lucky enough to be rewarded with an abundance of your own produce, then you also understand the importance of food preservation.

Canning is one of the easiest and most common methods of food preservation. Proper canning practices create a vacuum tight seal and preserve food by removing oxygen, destroying enzymes, and preventing growth of undesirable microorganisms, yeasts, and molds[[1]](#endnote-1). Canning has been in practice for centuries, but the USDA produced the first publication on home canning in 1909[[2]](#endnote-2). The two main types of canning include boiling-water (water bath) canners and pressure canners. Over the next few weeks, I will be discussing various aspects of food preservation through canning.

Before getting into more specific topics, it is important to discuss dial gauge testing on your presser canner. As you handle and use your pressure canner the calibration of the dial gauge can become in accurate and should be tested each year before you begin the canning process. If your dial gauge is inaccurate (providing a lower or higher pressure reading), your food may not reach the proper temperature needed to kill harmful bacteria (lower pressure reading) or the temperature may get too high and overcook your food, resulting in quality and texture issues (higher pressure reading). Canning food at too low a pressure is a safety issue. If you have a pressure canner with a weighted gauge, you do not need to be check annually for accuracy as a weighted gauge does not get out of calibration.

The Rains County Texas A&M AgriLife Extension provides free dial gauge testing (for most dials). If you would like your pressure canner dial gauge tested, please call (903) 473-4580 or email [sarah.latham@ag.tamu.edu](mailto:sarah.latham@ag.tamu.edu) to set up a test time. Following your dial gauge test, you will receive written test results with instructions to adjust the pounds of pressure for proper cooking as well as information on replacement parts, if needed. Additionally, gaskets and plugs will be inspected. Overtime, rubber seals may become worn or brittle and need replacing. If needed, information on replacement parts will be provided.

Stay tuned for the next Food Preservation through Canning article discussing the difference between water bath and pressure canning methods.

In the meantime, if you have questions or concerns, please contact me, (903) 473-4580 or email [Sarah.Latham@ag.tamu.edu](mailto:Sarah.Latham@ag.tamu.edu). You may also read more about this and many more topics on my blog, http://agentsarah.blogspot.com/. Follow Rains County AgriLife on Facebook for additional information and upcoming events.

1. National Center for Home Food Preservation. (2021) *General Canning Information*. https://nchfp.uga.edu/how/general.html [↑](#endnote-ref-1)
2. Andress, E. and Kuhn, G. (1998). *Critical Review of Home Preservation Literature and Current Research*. Athens, GA: University of Georgia, Cooperative Extension Service. [↑](#endnote-ref-2)