

HOME | FOOD SAFETY AND QUALITY | HOME FOOD SAFETY | FOOD PRESERVATION | PRESSURE CANNER DIAL GAUGE TESTING

Pressure Canner Dial Gauge Testing

Testing gauges on dial gauge pressure canners should be a routine step in preparing for each new canning season.

ARTICLES | UPDATED: MAY 23, 2018



Martha Zepp, Penn State University

Over time as the canner lid is handled, bumped, or just used, the calibration of a dial gauge can become inaccurate. Even gauges on new canners and replacement gauges need tested before use.

Research tested recipes for pressure canned foods are based on set temperatures and times to kill harmful bacteria.

Gauge Inaccuracies

If the pressure is lower than that recommended for processing, the internal temperature of

the food will not be adequate to kill all the bacteria and spores. Spores that survive can produce harmful toxins that can cause illness or death, such as botulism. Although a jar may seal if processed at a lower temperature, it does not mean that the food inside is safe. Processing foods at too low a pressure is a safety issue. If a dial gauge is inaccurate and the processing pressure is higher than recommended, the food inside the jar may be overcooked and softer in texture than desired. This is not a safety issue but is a quality issue, especially when canning tender fruit.

Gauge Testing

- If the dial gauge tests off by less than 2 pounds, you will need to adjust the pounds of pressure you use when processing the foods.
- If a gauge tests off by more than two pounds, replace the dial gauge. In addition, replace a gauge if it is cracked or the glass cover is missing.
- When your dial gauge is tested, the condition of the gasket, pressure plug, and safety lock will be examined if the canner lid is available.
- Before shopping for replacement parts, make certain that you have the model number of your canner. Look for the model number on the bottom of the canner, on the handle, or on the lid.
- Replacement parts may not be available for very old canners.
- The test is free and only takes a few minutes.
- Only the lid is needed for testing. If the gauge has been removed from the canner lid, it can still be tested. If you need to have an All American Canner gauge tested using our Presto Testing Unit, the gauge should be removed from the lid in order to get a proper result. Then when needing to reattach the All American gauge, use Teflon tape around the threads of the gauge when putting back on the lid to ensure a proper seal.
- Newer models of the All American canner have both regulator weights

(weighted gauge) and the dial gauge. The weight is more accurate than the gauge and customers should use the weight in order to determine if they are at the needed pressure. If the weight begins to rock at the desired pressure and the gauge is off by more than 2 psi the company recommends replacing the gauge. The gauge is now used as a reference to know when the unit is at 0 psi and can safely be removed.

Pressure canners with a weighted gauge do not need tested for accuracy because they cannot go out of calibration. While canners should be clean when brought for testing, be careful to avoid getting water into the gauge pipe as this can affect test results. Call your local Extension Office to schedule an appointment or to find out about testing events in your area.

© 2020Penn State Extension