Guidelines of using an Atmospheric Steam Canner for Home Food Preservation

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June 2015

The University of Wisconsin-Madison has published research which indicates that an Atmospheric Steam canner may be used for home canning of naturally acid foods such as peaches, pears, and apples, or acidified-foods such as salsa or pickles, as long as all the following criteria are met:



Back to Basics Steam Canner Image credit: nchfp.uga.edu

- Foods must be **high in acid**, with a pH of 4.6 or below. Either a Boiling Water Canner or an Atmospheric Steam Canner can be used to safely preserve foods high in acid.
- A research tested recipe developed for a boiling water canner must be used in conjunction
 with the Atmospheric Steam Canner. Approved recipes are available from sources such as
 the National Center for Home Food Processing and Preservation: nchfp.uga.edu Standard
 canning jars with 2-piece metal lids must be used. The booklet accompanying an
 Atmospheric Steam Canner can't be relied on to provide safe canning instructions.
- Jars must be processed in **pure steam at 212°F**. The canner must be vented prior to starting the processing time until a full column of steam appears. A full column of steam (6-8 inches) should be observed venting from the hole(s) in the side of the canner during the entire timed process. Ideally, temperature should be monitored with a thermometer placed in the vent port, but the placement of jars in the canner may make this difficult. Some appliances come with a built-in temperature sensor in the dome lid and these appear to be accurate.
- Jars must be heated prior to filling, and filled with hot liquid (raw or hot pack). An Atmospheric Steam Canner can be used with recipes approved for half-pint, pint, or quart jars.
- Processing time must be modified for elevation as required by a tested recipe. Elevation for any address can be checked here: http://www.daftlogic.com/sandbox-google-maps-find-altitude.htm
- Processing time must be limited to 45 minutes or less, including any modification for elevation. The processing time is limited by the amount of water in the canner base. When processing food, the canner should not be opened to add water. Regulate heat so that the canner maintains a temperature of 212°F. A canner that is boiling too vigorously can boil dry within 20 minutes. IF a canner boils dry, the food is considered under-processed and therefore potentially unsafe.

Cooling of jars must occur in still, ambient air. Cooling is important for safety.
 Jars should be cooled on a rack or towel away from drafts. Jars should not force-cooled.

Reference: P. Willmore et al. 2015. Home Processing of Acid Foods in Atmospheric Steam and Boiling Water Canners. *Food Protection Trends*. 35:150-160.



Victorio® Steam Canners with built-in temperature gauge Image credit: victorio.info