Top Tips for Safe Home-Canned Food

Summer is right around the corner! Whether you peruse local farmers’ markets or grow your own, you will soon have access to an abundance of freshly harvested produce and with that, an opportunity to preserve it and enjoy it through the fall and winter. While there are many food preservation methods: canning, freezing, dehydration, fermentation, etc., it seems many of the questions I receive are about canning. Thankfully K-State Research & Extension has many great publications available on the subject. I would like to share some of their top tips for SAFE home-canned food.

1. **Altitude Adjustment** — Kansas altitude can range from below 1,000 feet to just over 4,000 feet. Failure to adjust for altitude will lead to under-processed food, which encourages the growth of *Clostridium botulinum*.

2. **Headspace** — Proper headspace helps ensure a good vacuum seal on jars. Too little headspace can compromise the seal. Food and liquid expand 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 in the recipe.

3. **Untested or Homemade Recipes** — Canning your favorite recipe is risky, and may cause spoilage and foodborne illness. It is difficult to determine the safety of a homemade recipe without having detailed knowledge of the recipe, preparation procedures, total acid content, and consistency of the final product. 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.

4. **Acidifying 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.

<table>
<thead>
<tr>
<th>Acidification Options for Tomatoes (choose one)</th>
<th>Bottled Lemon Juice</th>
<th>Citric Acid</th>
<th>Vinegar (5% acidity)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pints</td>
<td>1 tablespoon</td>
<td>¼ teaspoon</td>
<td>2 tablespoons</td>
</tr>
<tr>
<td>Quarts</td>
<td>2 tablespoons</td>
<td>½ teaspoon</td>
<td>4 tablespoons</td>
</tr>
</tbody>
</table>

5. **Lids and Jars** — Recipes specify what size of jar to use. If a recipe lists pint only, do not use a larger jar. Regular and wide-mouth Mason-type, threaded, home-canning jars with self-sealing lids are the best choice. They are available in 4-ounce, ½-pint, 12-ounce, pint, 1½-pint, quart, and ½-gallon sizes. Half-gallon jars are only used for canning high-acid juices. With careful use and handling, Mason jars may be reused many times.
When using 12-ounce jars, follow pint jar processing recommendations. When using 1½-pint jars, follow quart jar processing recommendations. Colored jars and lids are available and are safe for canning. Colored jars are not recommended for fair exhibits, which are judged visually, because it is difficult to see through colored glass. Commercial jars, such as mayonnaise jars, can be used for high-acid foods and water-bath canning. You must use the two-piece lid and ring, which may not fit the jar rim. Commercial jars that cannot accommodate two-piece canning lids are not recommended for home canning. The common self-sealing lid consists of a flat metal lid and a metal screw band. These lids are used one time only. Reusing metal lids can lead to seal failure and spoilage. Lids manufactured since 2014 do not require heat treatment before use. All lids, however, can be heated gently in hot simmering water. Do not boil lids as excessive heat softens the gasket compound too much. Metal screw bands can be reused. These tips are from Karen Blakeslee’s publication MF3170: 10 Tips for Safe Home-Canned Food. Questions about canning can be directed to Kaitlin Moore, Nutrition, Food Safety & Health Agent at 785-243-8185 or kaitlinmoore@ksu.edu.

-30-

Kansas State University Agricultural Experiment Station and Cooperative Extension Service

K-State Research and Extension is an equal opportunity provider and employer.