Jams and Jellies

September 29th, 2016
Host: Alison Juta

Processing is the word traditionally used when filled jars of food are heated to specific temperatures for specific lengths of time. Heat destroys all molds, yeast and most bacteria.

Sugar present in high concentrations traps water in food, creating an environment where micro-organisms cannot grow. Jams and jellies are preserved in this way. Molds and some yeasts can grow on the surface of such foods, but only in the presence of air. An airtight seal achieved from heat processing prevents the growth of such molds and yeasts.

Easy Step-by-Step Canning

1. Food Selection and Preparation

- Use only the best, fresh ingredients
- Wash food thoroughly, discard any bruised or moldy fruit
- Read through recipe and set out ingredients, measure accurately

2. Equipment Preparation

- Heat jars, place in canner on medium heat until ready to use
- Place the lids, but not the screw bands, in hot water for 5 minutes immediately before using

3. Filling Canning Jars

The processing times vary depending on contents, jar size and altitude. Follow each recipe carefully. It is important that the jars be processed immediately following the cooking stage.

- Remove each jar from canner as needed
- Fill jars, a clean wide-mouth funnel is helpful to avoid spills when filling jars
- Leave a headspace to allow for expansion of food during processing approximately ½ inch for most food
- Remove any air bubbles trapped in with a plastic or metal spatula between food and jar
- Wipe jar rim clean and dry
- Remove a lid from the hot water and place on jar, apply screw band until finger tight

4. Processing Canning Jars

- Place jars in canner
- Adjust water level to approx. 1 inch above jars
- Start counting processing time once it reaches a steady boil
- When time is finished turn off heat and remove lid from canning pot, allow jars to sit for 5 minutes in the pot
- Use a jar lifter or lift the rack and transfer to a wooden surface or a surface with towels, do not place on a cold surface or they could break
- Let jars cool undisturbed for 12-24 hours then check the seal. You can refrigerate any jars that did not seal and use for up to three weeks
- Remove screw bands and wipe dry, they are not necessary for storing the jars

5. Storing Preserved Food

- Attach labels with contents and date
- Keep in a cool, dark place

If recipes and canning procedures are followed carefully, there should be no problem with spoilage. However, before you open a jar of preserved food, it is a good idea to look closely for any sign of spoilage like a bulging lid or any leakage. The lid should be tight and give resistance when opened. If the lid is loose, or if the food has any off-flavors or mold on the surface, the food must be discarded. **Don't take any chances.** Plan to use the preserved foods within a year. As long as the seal is secure, there is no risk of spoilage for a much longer time, but the quality of the food will deteriorate with extended storage.

POSSIBLE CAUSES FOR SEAL FAILURE OR SPOILED FOOD

- Food was not processed in the canner for the correct time. It is important to start counting processing time just after the water in the canner **returns to a boil**
- Processing time was not adjusted for altitude
- New sealing lids were not used or were not softened in hot water
- Screw bands were put on too tight or were re-tightened after processing
- Too much or insufficient head space was left in the jar
- The jar was cracked before, during or after processing. Cracking during processing could result from adding cold water to a canner or filled jars, placing hot jars on a cold surface or using jars not designed to withstand boiling water temperatures
- The amount of ingredients called for in the recipe were not measured accurate
- The vinegar was not of the standard 5% acetic acid. Always use vinegars of known acidity for canning purposes