

# It's Canning Season: Time to Update Your Recipes

**While Grandma may have used the same canning methods for years, it might be time to review some of the basics for safely canning food at home, now that it's your turn to carry on the tradition!**

## **Canning methods have changed**

"As a child, I loved to go to Grandma's pantry and choose the jars of beans or corn for Sunday dinner," says Barb Ingham, University of Wisconsin-Madison/Extension food science specialist. "It was a treat to stand before row after row of colorful jars, and memories of the food that Grandma prepared from her garden's bounty make me hungry even today."

"While I treasure those memories," Ingham says, "I also know that canning methods have changed a lot since Grandma started out. For the sake of the health of your family and friends, it's important to review some of the basics for safely canning food at home."

## **How canning preserves food**

Canning preserves food by heating each jar for a particular time and at a particular temperature. Every food has a special combination of time and temperature that will ensure a safe, high quality product.

Food acidity affects the canning method, Ingham says. Foods are divided into two groups for canning based on the amount of acid they contain. Foods such as meat, green beans, corn, potatoes, and carrots contain only a slight amount of acid. These low-acid foods (meats and vegetables) must be canned in a pressure canner to ensure safety. Pressure canning is necessary to provide the high temperatures (240 degrees F to 250 degrees F) needed to destroy spores of the bacterium *Clostridium botulinum*. If the spores of *C. botulinum* are not destroyed, they can produce a deadly toxin in any low-acid home-canned food.

Foods that are high in acid don't need to be pressure canned, but can be safely canned in a boiling water canner. Some foods, such as apples and peaches, are naturally high in acid. Other foods, such as quick pack pickles, relishes and tomatoes have acid added to them in the form of vinegar or lemon juice before canning in a boiling water canner.

Safe canning requires careful planning. It can be rewarding to fill your pantry shelves with home canned foods, but remember to follow these simple guidelines:

## **Follow a tested recipe**

Grandma's old cookbooks might have some wonderful recipes, but canning recommendations have changed significantly over the years. To ensure a safe, high quality product, follow a tested recipe. The US Department of Agriculture's Complete Guide to Home Canning (1994 edition) is an excellent source of tested recipes. You can find the USDA canning guide on the web at <http://foodsafety.cas.psu.edu/presqueryform.cfm>

### **Use the proper canning method**

Safe canning of food requires you to use the proper canning method. For example, green beans and meat (both low-acid foods) must be pressure canned. Boiling water canning is acceptable only for high-acid foods such as pickles and fruits.

### **Some unsafe canning methods to avoid**

- Open-kettle canning, where hot food is poured into hot jars and the jars are sealed without further processing. Foods canned using this method will likely spoil, and will be unsafe.
- Oven canning, where jars of meat or bread are placed in a hot oven and baked for a period of time before the jars are sealed. This method leads to under-processed foods, with a high risk of botulism poisoning. Oven canning has never been recommended.
- Dishwasher canning and microwave canning are somewhat less common, but are canning methods that are not recommended.

Follow the processing time and temperature exactly. Tested recipes give processing times and temperatures that must be followed exactly to ensure a safe, high quality product. Variation in the processing time or temperature can lead to an unsafe product, putting you and your family at risk of food poisoning.

Carefully evaluate all home-canned products. Food that is carefully processed using a tested recipe should never spoil. But for safety's sake, always check jars of home canned food for signs of spoilage: bulging, leaking jars; an off-odor or off-color when the jar is opened; the presence of bubbles in the jar; or liquid spurting from the jar when the lid is opened.

If you follow these simple guidelines, you can look forward to a year of enjoying the bounty of the harvest.