

# Home Canning

## Operational Requirements



**Home canning is a term used for any canning done at home, including small-scale canning operations that produce canned products for sale at stores, farmers' markets, and food establishments.**

Home canning is gaining popularity as people's interest in preserving seasonal, fresh, and locally produced foods in environmentally friendly packaging continues to grow. However, if home-canned products are not produced properly they can cause serious foodborne illnesses.

The *Food Premises Regulation* section of the *Health Protection and Promotion Act* outlines operational requirements for producers of home-canned products to help ensure these food goods are safe for the public to consume. The Simcoe Muskoka District Health Unit (SMDHU) and its public health inspectors are responsible for the inspection and enforcement of a wide range of food premises to prevent foodborne illnesses.

### Home canning operations requirements

Anyone starting a home canning business from their residence or in a commercial kitchen must notify the health unit and undergo an

inspection by a SMDHU public health inspector before beginning to prepare and sell food to the public.

The *Food Premises Regulation* 493/17 requires home canning operations to use a separate hand washing sink and adequate dishwashing equipment except when preparing high-acid foods that have a pH less than 4.6, such as pickles, jams, and preserves. These food items still require a sink to wash hands, but it doesn't have to be strictly for hand washing.

If your kitchen is already inspected by the health unit and you want to start preparing home canned goods, please speak to your local public health inspector.

Due to the vulnerable populations served in child care centres and/or long-term care facilities, home canning is not advised in these facilities.

### What are the risks of home canning?

Botulism is a deadly form of food poisoning caused by the *Clostridium botulinum* (*C.*

*botulinum*) bacteria. Outbreaks of botulism have been associated with home-canned food products, especially low-acid foods like vegetables and meat. Improper processing methods, unsanitary conditions or the insufficient addition of acid can allow *C. botulinum* bacteria to germinate and produce a harmful neurotoxin.

It is very important to use a validated recipe from a reputable source, such as recipes from the National Centre for Home Food Preservation, Ball Corporation or Bernardin. A validated recipe is a recipe that has undergone testing to identify the specific temperatures, processing times and acidification requirements to inactivate *C. botulinum* spores, thus making the product safe to eat. Recipes must be followed exactly as written. By changing the recipe you can unknowingly produce an unsafe product. Reducing sugar content, salt, or vinegar can change the acid levels and the water activity (aw) allowing bacteria to grow in the product.

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Recipes need to be tested to determine pH and water activity and validated through a private laboratory at your cost. Test results must be kept on site for review during inspections. Once the recipe has been tested and approved, this recipe must be followed exactly as written. Any changes to the recipe (i.e., ingredient type/amounts, processing times, etc.) would require approval by SMDHU.

## Home canning methods

Home canning can be classified into two categories or methods: high-acid (low risk) and low-acid (high risk). Each type requires a different method to prevent the growth of *C. botulinum*.

## High-acid foods

High-acid (low risk) or acidified foods have a pH of less than 4.6. A boiling water canner that heats food to 100°C (212°F) is sufficient to use for processing high-acid/acidified foods. The length of time for thermal application of canned food is indicated in the validated recipe and varies based on the can size and ingredients. The heat will kill the vegetative bacteria and most yeasts and moulds, but it will not deactivate the spore of pathogenic bacteria such as *C. botulinum*. The natural acid

in fruit or the addition of an acid (i.e., vinegar, ascorbic acid, lemon juice) will prevent *C. botulinum* spores from growing.

Most fruit-based jams, jellies, and vinegar-based pickles are high-acid foods. Tomatoes are sometimes a borderline high-acid food and may need the addition of an acid for a safer canned product.

## Low-acid foods

Low-acid (high risk) foods have a pH of greater than 4.6. Naturally low-acid foods such as vegetables, meat, seafood, soups, antipasto, mushrooms, and chili sauce must be prepared in a pressure canner to reach the proper temperature needed to kill *C. botulinum* spores. A low-acid, oxygen-free environment is the ideal environment for *C. botulinum* toxin to grow.

All low-acid food processing must use a scientifically validated recipe only and a pressure canner capable of reaching 116° to 121° C/ 240° to 250° F for 20 to 100 min and with the time and temperature monitored and recorded. If producing low-acid canned products for sale or served in a restaurant, you must also have a Food Safety Plan created and in use for documentation and have laboratory documentation for the pH and aw of all

potentially high risk/low-acid foods that your public health inspector deems necessary.

***If you have any further questions about canning food products, or would like more information about food inspection services, visit our website or call Health Connection at 1-705-721-7520 or 1-877-721-7520 weekdays between 8:30 a.m. to 4:30 p.m. to speak with a public health inspector.***

## References and resources

United States Department of Agriculture  
[USDA Complete Guide to Home Canning](#)

Bernardin [Recipes](#)

Ball [Recipes](#)

National Center for Home Food  
Preservation University of Georgia  
[So Easy to Preserve](#)