

Home Canning of Fruits and Vegetables

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HOME CANNING has long been a popular and economical way of preserving fresh fruits and vegetables. Canning is a more energy-efficient method of food preservation than either drying with artificial heat or freezing. Canning also offers good retention of vitamins A and C, the key nutrients in fruits and vegetables. Use the canning liquid whenever possible; it contains more than a third of the vitamin C and other water-soluble vitamins in canned fruits and vegetables. Add the liquid from canned vegetables to soups, sauces, or gravies.

HOW CANNING PRESERVES FOOD

Food canned at home is heated (or "processed") in a glass jar with the lid in place. Heat destroys bacteria, yeasts, and molds that spoil food. When the jar cools, the lid forms an airtight seal that prevents recontamination of the food.

Foods are processed in either a water bath canner or a pressure canner, depending on their acidity. Acid foods—fruits, tomatoes, and pickled vegetables—may be safely

processed in a boiling water bath. Organisms that spoil acid foods are easily killed at 212° F., the temperature of boiling water. Low-acid foods—vegetables, tomato-vegetable mixtures like stewed tomatoes, meats,¹ poultry,¹ and fish²—must be processed in a pressure canner.

The bacteria that produce botulism toxin cannot grow in acid foods but can grow in low-acid foods. These bacteria (*Clostridium botulinum*) have spores that can survive hours of boiling. However, they are destroyed within a reasonable time at 240° F., the temperature inside a pressure canner at 10 pounds pressure. **Use of a pressure canner is, then, absolutely essential for the safe processing of low-acid foods.**

If low-acid foods are canned *improperly*, any botulinum spores on

¹ For reliable directions for canning meats and poultry at home, see *USDA Home and Garden Bulletin No. 106, Home Canning of Meat and Poultry.*

² For reliable directions for canning fish at home, see *MSU Extension Bulletin E-1180, Freshwater Fish Preservation.*

