

Canning Meat, Poultry and Fish

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Canning meat, poultry, game and fish is a great way to preserve quality sources of protein. Home-canned products are safe, tender and flavorful when preserved correctly. To ensure good quality, use only meat, poultry, game and fish trimmed of gristle, bruised spots and fat.

When processing home-produced meat, chill immediately after slaughter to prevent spoiling. Meat is easier to handle when it is cold. For thorough chilling, keep meat at a temperature below 40°F until time to prepare it for canning; can it within a few days after slaughter.

If refrigeration is not available and if the maximum daily temperature is above 40°F, process the meat as soon as body heat is gone from the carcass.

If meat must be held for longer than a few days, freeze it prior to processing. Store frozen meat at temperatures of 0°F or lower until canning time. If frozen meat is to be thawed before canning, thaw it in a refrigerator at a temperature of 40°F or lower until most of the ice crystals have disappeared.

To ensure a safe product, keep all meat clean and sanitary. To control the bacteria that cause spoilage, wash hands, knives and cutting boards in hot, soapy water before and after use.

Keep all meat as cool as possible during preparation for canning. Handle it rapidly; process it as soon as containers are packed.

Meat, poultry, game and fish are low-acid foods. They must be processed in a pressure canner to assure their safety. Refer to the **Pressure Canning How-Tos** section for directions. Use the processing time and pressure indicated for each product. If canning at altitudes greater than 1,000 feet, see **Altitude Warning**.

Salt may be added to canned meat for flavor. It does not act as a preservative in canned meat, so it is not needed to make the product safe. If you use salt, add it after meat is packed in the jar or can.

After packing containers, wipe the tops free of fat. Any fat that is left on the rim of jars or cans may prevent an airtight seal.

Pressure Canning How-Tos

- ✓ Make sure the pressure canner is working properly before preparing food. Clean lid gaskets and other parts according to the manufacturer's directions; make sure all vent pipes are clear and contain no trapped material or mineral deposits. Check your manufacturer's directions for specific information about use, care and storage.

Once clean add the rack and water to the pressure canner. If the amount of water is not specified with a given recipe, use enough water so there are 2 to 3 inches in the canner.

For hot-packed foods, bring the water to 180°F ahead of time,

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but be careful not to boil the water or heat it long enough for the water level to go below 2 inches or the level specified in the recipe. For raw-packed foods, the water should only be heated to 140°F.

- ✓ Using a jar lifter, place filled jars fitted with lids and ring bands on the jar rack in the canner. When moving keep the jar upright at all times. Tilting the jar could cause food to spill into the sealing area of the lid.
- ✓ Fasten the canner lid securely. Leave the weight off the vent pipe or open the petcock.
- ✓ Turn the heat setting to its highest position. Heat until the water boils and steam flows freely in a funnel shape from the open vent pipe or petcock. Vent for 10 minutes once a steady stream of steam is seen.
- ✓ After this venting of the canner, place the counterweight or weighted gauge on the vent pipe or close the petcock to pressurize. The canner will pressurize during the next 3 to 10 minutes.
- ✓ Start timing the process when the pressure reading on the dial gauge indicates that the recommended pressure has been reached or, for canners without dial gauges, when the weighted gauge begins to jiggle or rock as described by the manufacturer.
- ✓ Regulate the heat under the canner to maintain a steady pressure at or slightly above the correct gauge pressure. One type of weighted gauge should jiggle a certain number of times per minute, while another type should rock slowly throughout the process – check the manufacturer’s directions.
 - Loss of pressure at any time can result in under-processing or unsafe food.
 - Quick and large pressure variations during processing may cause unnecessary liquid losses from jars.

IMPORTANT: If at any time pressure goes below the recommended amount, bring the canner back to pressure and **begin the timing of the process over**, from the beginning (using the total original process time). This is important for the safety of the food.

- ✓ When the timed process per recipe instruction is completed, turn off the heat, remove the canner from the heat (electric burner) if possible, and let the canner cool down naturally. (Lift the canner to move it; do not slide the canner. It is also okay to leave the canner in place after you have turned

off the burner. It is better to do so than to let jars inside the canner tilt or tip over if the canner is too heavy to move easily.)

While the canner is cooling, it is also depressurizing. **Do not force cool the canner, as forced cooling may result in food spoilage, loss of liquid from jars and seal failures.** Forced cooling may also warp the canner lid. Do not force the lid open if the cover locks are not released. Manufacturers will provide more detailed instructions for particular models.

Depressurization of older canner models without dial gauges should be timed. Standard-sized, heavy-walled canners require about 30 minutes when loaded with pints and 45 minutes when loaded with quarts. Newer thin-walled canners cool more rapidly and are equipped with vent locks that are designed to open when the pressure is gone. These canners are depressurized when the piston in the vent lock drops to a normal position. Some of these locks are hidden in handles and cannot be seen; however, the lid will not turn open until the lock is released.

- ✓ After the canner is completely depressurized, remove the weight from the vent pipe or open the petcock. Wait 10 minutes; then unfasten the lid and remove it carefully. Tilt the lid away from you so the steam coming out of the canner does not burn your face.
- ✓ Using a jar lifter, remove the jars one at a time, being careful not to tilt the jars. Carefully place them directly onto a towel or cooling rack, leaving at least one inch of space between the jars during cooling. Avoid placing the jars on a cold surface or in a cold draft.
- ✓ Let the jars sit undisturbed while they cool for 12 to 24 hours. Do **not** tighten ring bands on the lids or push down on the center of the flat metal lid until the jar is completely cooled.
- ✓ Remove ring bands from sealed jars. Ring bands can be washed and dried and put away for using another time. Put any unsealed jars and jars that have lost liquid during processing in the refrigerator and use first.
- ✓ Wash jars and lids to remove all residue.
- ✓ Label jars and store in a cool, dry place out of direct light for up to 12 months.
- ✓ Follow maintenance and storage instructions that come from your canner manufacturer.

Selected Procedures

Broth for Hot Pack – To make meat or poultry broth, place bony pieces in saucepan and cover with cold water. Simmer until the tidbits of meat are tender. Pour broth into another pan; skim off fat. Add boiling broth to containers packed with precooked meat or poultry; fill to level specified in directions.

Altitude Warning – Processing times and pressures given are for altitudes of 0-1,000 feet. **If you are canning at a higher altitude**, the processing times will stay the same but adjust pressure as follows:

Dial Gauge Pressure Canner

0-2,000 feet11 pounds pressure

2,001-4,000 feet12 pounds pressure

Weighted Gauge Pressure Canner

0-1,000 feet10 pounds pressure

Over 1,001 feet.....15 pounds pressure

Strips, Cubes or Chunks of Meat (Bear, Beef, Lamb, Pork, Veal, Venison)

Choose quality, chilled meat. Remove excess fat. Soak strong-flavored wild meats for 1 hour in brine containing 1 tablespoon of salt per quart of water to improve flavor. Rinse. Remove large bones. Cut into 1-inch wide strips, cubes or chunks.

Hot Pack – The hot pack method produces the best liquid cover and quality during storage. Precook meat to rare by roasting, stewing or browning in a small amount of fat. Pack hot meat loosely into hot jars, leaving 1-inch headspace. Add 1 teaspoon of salt per quart (1/2 teaspoon per pint) if desired. Add boiling broth, meat drippings, water or tomato juice (with wild game), leaving 1-inch headspace. Remove air bubbles. Wipe jar rims. Adjust lids and process.

Raw Pack – Fill jars with raw meat pieces, leaving 1-inch headspace. Add 1 teaspoon of salt per quart (1/2 teaspoon per pint) if desired. Do not add liquid. Wipe jar rims. Adjust lids and process.

Process in a **Dial Gauge Pressure Canner** at 11 pounds pressure or in a **Weighted Gauge Pressure Canner** at 10 pounds pressure:

Pints.....75 minutes

Quarts90 minutes

Ground or Chopped Meat (Bear, Beef, Veal, Lamb, Pork, Mutton, Venison, Sausage)

Freezing gives a much higher-quality product. However, if canning is desired, choose fresh, chilled meat. For venison, add one part high-quality pork fat to three or four parts venison before grinding. For sausage, use freshly made sausage seasoned with salt and cayenne pepper (sage may cause a bitter off flavor).

Hot Pack – Shape ground meat or sausage into patties or balls or cut cased sausage into 3- to 4-inch links. Cook until lightly browned. Ground meat may also be sautéed without shaping. Remove excess fat. Pack hot meat loosely into hot jars, leaving 1-inch headspace. Fill jars to 1 inch from top with boiling meat broth, water or tomato juice. Add 1/2 teaspoon salt per pint (1 teaspoon per quart) if desired. Remove air bubbles. Wipe jar rims. Adjust lids and process.

Process in a **Dial Gauge Pressure Canner** at 11 pounds pressure or in a **Weighted Gauge Pressure Canner** at 10 pounds pressure:

Pints75 minutes

Quarts90 minutes

Stock (Broth)

Beef – Saw or crack fresh trimmed beef bones to enhance extraction of flavor. Rinse bones and place in a large stockpot. Cover bones with water. Place cover on pot and simmer three to four hours. Remove bones. Cool broth. Skim off and discard fat. Remove meat from bones and add to broth. Reheat broth to boiling. Fill hot jars, leaving 1-inch headspace. Wipe jar rims. Adjust lids and process.

Chicken or Turkey – Place large carcass bones in a large stockpot and add enough water to cover bones. Cover pot and simmer 30 to 45 minutes or until any remaining tidbits of meat can be easily stripped from bones. Remove bones. Cool broth. Skim off fat and discard. Remove meat from bones, and return meat to broth. Reheat to boiling. Fill jars, leaving 1-inch headspace. Wipe jar rims. Adjust lids and process.

Process in a **Dial Gauge Pressure Canner** at 11 pounds pressure or in a **Weighted Gauge Pressure Canner** at 10 pounds pressure:

Pints.....20 minutes

Quarts25 minutes

Poultry (Chicken, Duck, Goose, Turkey, Game Birds)

Choose freshly killed and dressed poultry or game birds. Strong-flavored game birds (especially water fowl) can be soaked for 1 hour in a brine made from 1 tablespoon salt and 1 quart of water. Rinse. (**NOTE:** If you soak game birds, don't add salt when filling the jars.)

Dressed poultry and game birds should be chilled for 6 to 12 hours before canning. Remove excess fat and cut meat into suitable sizes for canning. The meat may be canned with or without bones.

Hot Pack – The hot pack method produces the best liquid cover and quality during storage. Boil, steam or bake meat until about two-thirds done. Fill hot

jars with meat, leaving 1 1/4-inch headspace. Add 1/2 teaspoon salt to pints (1 teaspoon to quarts) if desired. Fill jars to 1 1/4 inch from top with hot broth. Remove air bubbles. Wipe jar rims. Adjust lids and process.

Raw Pack – Fill hot jars loosely with raw meat, leaving 1 1/4-inch headspace. Add 1/2 teaspoon salt to each pint jar (1 teaspoon to quarts) if desired. Do not add liquid. Wipe jar rims. Adjust lids and process.

Process in a **Dial Gauge Pressure Canner** at 11 pounds pressure or in a **Weighted Gauge Pressure Canner** at 10 pounds pressure:

Without Bones	
Pints	75 minutes
Quarts	90 minutes
With Bones	
Pints	65 minutes
Quarts	75 minutes

Rabbit

Soak meat one hour in brine made by dissolving 1 tablespoon salt per quart of water. Rinse.

Use preparation procedures and processing times recommended for poultry, omitting the salt.

Squirrel

Soak meat one hour in brine made by dissolving 1 tablespoon salt per quart of water. Rinse.

Use preparation procedures and processing times recommended for poultry, omitting the salt.

Fish
(Blue Mackerel, Salmon, Steelhead, Trout, Other Fatty Fish Except Tuna)

CAUTION: Eviscerate fish within two hours after they are caught. Keep cleaned fish on ice until ready to can.

NOTE: Glass-like crystals of magnesium ammonium phosphate sometimes form in canned salmon. There is no way for the home canner to prevent these crystals from forming, but they usually dissolve when heated and are safe to eat.

Raw Pack – Only can fresh or thawed from frozen fish. Remove head, tail, fins and scales. Wash and remove all blood. You do not need to remove the skin. Bones can be removed, but removal is not necessary in most fish as the bones become soft during processing. If desired split fish lengthwise. Cut cleaned fish into 3 1/2-inch lengths. Pack fish into pint jars, skin side next to glass, leaving 1-inch headspace. Add 1 teaspoon of salt per pint if desired. Do not add liquid. Wipe jar rims. Adjust lids and process.

Process in a **Dial Gauge Pressure Canner** at 11 pounds pressure or in a **Weighted Gauge Pressure Canner** at 10 pounds pressure:

Pints.....100 minutes

References

Complete Guide to Home Canning, Agriculture Information Bulletin No. 539, USDA, revised 2009.

Preserving Food: Using Pressure Canners, E. Andress, The University of Georgia Cooperative Extension Service, revised 2011.

So Easy to Preserve, 6th edition, revised by E. Andress and J. Harrison, The University of Georgia Cooperative Extension Service, 2014.