

Canning Meat in Cans

Equipment and Supplies

Pressure canner: Read manufacturer's instructions and have pressure canner dial gauge tested for accuracy each year at nearest Cooperative Extension Service district office.

Can sealer: Read instructions about assembling and adjusting the sealer. Closely inspect each can seam as it is removed from the can sealer. Adjust can sealer immediately if seam is defective.

Cans and lids: Tall, 1 pound (size: 301 x 408) or flat, ½ pound (size: 307 x 200.25), also called Alaska salmon cans, are used for canning meats. Two types of cans are available: tapered with no side or bottom seams (also called two-piece cans) and three-piece cans with a side and bottom seams.

Meat: Plan to use 1 to ½ pounds of trimmed meat per 1-pound can; ¾ pound of trimmed meat per ½-pound can. Remove gristle, bruised spots, freezer burn and fat before canning. Strong-flavored game meats may be soaked for 1 hour in brine made from 1 tablespoon salt per quart of water or your favorite marinade. Rinse meat. Cut into ¾- to 1-inch-thick chunks or cubes or 1-inch-wide strips. Previously frozen meat may be canned; thaw wrapped meat completely in a refrigerator or under cold running water.

Salt: Salt is optional. If salt is added, canning salt is best, but non-iodized salt may be used.

Other items:

Measuring spoons
Sharp knife
Cutting board or cardboard or newspapers
Stove/range or any heat source that gives reliable, steady heat
Dry pot holders
Towel or paper towels
Meat thermometer or any thermometer that registers 170°F
Permanent marker
Clock and/or timer

Method

1. Cut meat into ¾- to 1-inch-thick chunks, cubes or 1-inch-wide strips.
2. Precook meat to rare stage by roasting, stewing or browning in a small amount of oil.
3. Pack hot meat loosely into cans. Allow ¼ inch empty space at the top of the can. This is called headspace.
4. Salt is optional. Add 1 teaspoon of salt for a 1-pound can or ½ teaspoon of salt for a ½-pound can.
5. Fill can to ¼ inch from top with boiling meat juices, broth, water or tomato juice. Remove air bubbles by running a

plastic knife or spatula around the inside of the can, gently shifting the food so trapped air is released.

6. **Important: Exhaust open cans to 170°F.** Cans must be exhausted so a vacuum will form after the can is sealed and processed. Exhaust the food in the cans by heating the meat in open cans to 170°F.



- (a) Place canner rack on bottom of canner.
- (b) Add enough water to come halfway up the sides of the bottom row of filled cans.
- (c) Place open, filled cans on the rack in the pressure canner.
- (d) Turn heat on high and bring water to a gentle boil. Do not cover the canner with a lid unless each can is covered with aluminum foil. This will keep excess water from getting into the open cans. Adjust heat to keep water boiling.
- (e) Use a meat thermometer to check the temperature of the meat in the cans. The internal temperature of the meat in the center of the can must reach 170°F.

Note: A second layer of cans may be exhausted in the pressure canner or in cake or roasting pans set on top of the stove (set open cans in water in the pan).

7. When the temperature of the meat reaches 170°F, seal one can at a time. Use a jar lifter or hot pad to handle the can. With a clean cloth or paper towels, wipe the edge of each can carefully to remove any food particles or broth that could affect the quality of the seam.
8. Seal can using adjusted can sealer. Place the hot, exhausted can on the sealer and place the lid on the can. Seal cans according to the instructions with your sealer or see related publications at the end of this publication. Check each can seam before you put the can in the pressure canner.

If a seam looks defective, adjust your can sealer immediately. The meat must be removed from the can and placed in a new can, heated to 170°F and resealed with a new lid.

Check can seams often and adjust sealer as needed. Return sealed can to pressure canner.

9. Fill the canner by placing the sealed cans on the rack in the canner. If you have a second layer, use a second rack or stagger the cans. Add more water to the pressure canner if needed (to equal 2 to 3 inches or 3 quarts of water). Place the lid on the canner. When closed, the lid handles must be centered over the handles of the canner body.

10. Turn heat on **high**. When a steady stream of steam comes out of the vent, let it escape for 10 minutes. This is called venting or exhausting the canner.
11. Close vent with weight or petcock. Heat canner until the needle on the dial gauge reaches 11 pounds pressure or until the 10-pound weighted gauge rocks or jiggles according to manufacturer's instructions. Adjust heat to keep pressure steady. When proper pressure is reached, set timer and write down the time. Add the recommended processing time to determine the time the canning will be finished; write that time down too.
12. Hold the pressure steady for:

Dial gauge canner, process at 11 pounds pressure
at altitudes of 0-2,000 feet

Can Size	Processing Time
1-pound cans (size: 301 x 408)	99 minutes
½-pound cans (size: 307 x 200.25)	70 minutes

(At altitudes of 2,001-4,000 feet, use 12 pounds pressure; at 4,001-6,000 feet, use 13 pounds pressure; and at 6,001-8,000 feet, use 14 pounds pressure.)

Weighted gauge canner, process with 10-pound weight
at altitudes of 0-1,000 feet

Can Size	Processing Time
1-pound cans (size: 301 x 408)	99 minutes
½-pound cans (size: 307 x 200.25)	70 minutes

(At altitudes above 1,000 feet, use 15-pound weight.)

Watch canner and check the pressure often. If pressure drops below recommended number of pounds, increase heat to bring pressure back up and start processing time from the beginning (0 minutes).

13. When processing time is complete, turn off the heat.
14. Move canner off the heat source, if possible. DO NOT release steam by tipping the weight or running the canner under cold water. (It takes 25 to 35 minutes for pressure to drop in a small canner filled with cans and 45 to 60 minutes in a large canner with a full load.)

On a dial gauge canner, allow pressure to drop naturally. Wait for the overpressure plug to drop, cover lock to drop and gauge needle to rest on "0." Tip the pressure regulator to check for steam inside the canner. If no steam escapes, the pressure regulator and lid may be safely removed.

On weighted gauge canners (ones without a dial gauge), wait for the overpressure plug to drop and the cover lock to drop. Test to see if pressure is down by gently nudging the weight. No steam should be released and no resistance should be felt. Remove the pressure regulator and the lid.

Note: On some pressure canners the overpressure plugs and cover locks are inside the canner handles and cannot be seen. Check the owner's manual for ways to determine if the pressure is down.

15. Loosen the lid. Tilt the lid away from you to keep the escaping steam away from your face.
16. Remove cans from canner with a jar lifter or hot pad. Put cans on newspapers, cooling racks or towels. Allow to cool completely for 12 hours. Do not put cans in cold water. Can lid will pull in when a vacuum is formed.
17. Check can seams. The seam should be flat and smooth with no pointed or rough edges. No leakage should be seen around the can edges.
18. Wipe cans if they are greasy. Use a permanent marker to label cans with type of meat, herbs or spices added, date, processing time and pounds pressure. Store sealed, labeled cans in a cool, dry place. Do not allow cans to freeze.
19. Clean and dry your canner. Wrap in paper and store. Do not fasten lid on but wrap it in paper and place upside down on the canner to protect the gauge, vent and sealing ring.
20. Every year, check with your local Extension office for updates on food preservation information and for pressure canner dial gauge test.

Related Publications: These related publications are available from your local Cooperative Extension Service office and are available on the web at www.uaf.edu/ces.

FNH-00022	<i>Assembling a Can Sealer</i>	Free
FNH-00023	<i>Visual Inspection of Can Seams in Home Food Preservation</i>	Free
FNH-00125	<i>Canning Fish in Cans</i>	Free
FNH-00126	<i>Canning Fish in Quart Jars</i>	Free
FNH-00128	<i>Canning the Fish Catch</i>	Free
FNH-00129	<i>Canning Smoked Fish in Cans</i>	Free
FNH-00222	<i>Home Freezing of Fish</i>	Free
FNH-00223	<i>Home Canning Smoked Fish and Home Smoking Fish for Canning</i>	Free
FNH-00325	<i>Smoking Fish at Home</i>	Free
FNH-01282	<i>Canning Meat and Fish in Cans (DVD)</i> (includes <i>Assembling a Can Sealer</i>)	\$5

Research for processing times was done by Kristy Long and Chuck Crapo, Seafood Quality Specialist for the Fisheries Industrial Technology Center, University of Alaska Fairbanks, in 2005.

www.uaf.edu/ces or 1-877-520-5211

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