

Canning the Fish Catch

HANDLING THE CATCH

In the field

When you catch fish, handle each one with care to avoid bruising and exposure to sun or heat. Bleed the fish immediately after catching to help increase storage life. Remove viscera (internal organs), rinse fish and keep iced, refrigerated or frozen.

GETTING STARTED

Contact your local Cooperative Extension Service office for current canning information. This publication is for salmon, trout, and other fatty fish except tuna. For canning tuna at home refer to: https://nchfp.uga.edu/how/can_05/tuna.html.

Two canning videos, *Pressure Canner Basics* (<https://youtu.be/ucyGuGoX4TU>) and *Canning Fish in Jars* (<https://youtu.be/yeBKq-DAGjc>), are available on our YouTube channel: youtube.com/uafextension.

Preparing the fish

If the fish is frozen, thaw it in the refrigerator before canning. Rinse the fish in cold water. You can add vinegar to the water (2 tablespoons per quart) to help remove slime and scales.

Though it is not necessary to remove the head, tail, fins or scales, some people prefer the quality and taste if they are removed. It is necessary to remove the bones of halibut, but not those of salmon, trout or other fatty fish (they will become soft and are a good source of calcium). Very small fish like hooligan (Eulachon) may be canned whole after cleaning. Refrigerate all fish until you are ready to pack in jars.

Equipment

Be certain that you have all the equipment needed to produce a safe, good-tasting canned product.

A pressure canner is required for processing fish.

The high temperatures reached under pressure are necessary to ensure a safe product.

Re-read and follow directions for your canner. If you no longer have an instruction manual, look online or contact the manufacturer for a new copy.

Your pressure canner must be in good condition. Replace the gasket and safety plug if necessary. Be certain the vent or petcock is clear.

If you have a dial pressure gauge, have it checked for accuracy before the canning season begins. ***Dial pressure gauges may be checked at your local Cooperative Extension Service office.***

For pressure processing fish, the 1-pint, wide-mouth, straight-sided mason-type jar is recommended. Laboratory-tested times and pounds of pressure for processing fish in quart jars are available in Extension publication FNH-00126, *Canning Fish in Quart Jars*.

Jars should be washed in hot, soapy water and rinsed before you use them. Check the rims of jars and discard any that have nicks.

Use two-piece, self-sealing lids. Flat lids should be purchased new and used only once for canning. Rings are reusable if they are not bent or rusty.

Prepare the jar rings and flat lids by rinsing and setting aside until needed.

It is a good idea to complete a trial run with your canner before using it the first time or at the beginning of each canning season. Use 2-3 inches (about 3 quarts) of water in the canner. Put the canner through a short canning cycle to be certain it will reach and maintain the necessary pressure, and to become familiar with the sound of the weighted gauge or with reading the dial gauge if you are new to canning.

An acrylic or hardwood cutting board is recommended to cut down on bacterial contamination. Knives should be sharp.

PACKING THE JARS

Cut the fish into jar-length filets or chunks of any size.

If the skin has been left on the fish, you can pack the fish with the skin side out or in, as is your preference. If the skin side is out, it may be harder to clean the jar after eating the contents.

Pack solidly into clean half or 1-pint jars, leaving 1 inch headspace (the unfilled space between the jar sealing edge and the top of the food or its liquid).

Run a plastic utensil around the inside of the jar to align and settle the product; this allows firm packing of fish and helps in even heat distribution during processing.

For most fish, no liquid, salt or spices need to be added, although seasonings or salt may be added for flavor (½ teaspoon salt per pint, or amount desired). See *Adding Variety to Home-Canned Fish* (free Extension publication FNH-00224) for seasoning and flavor ideas.

For halibut, add 1-2 tablespoons of vegetable or olive oil per pint jar if you wish. The canned product will seem more moist. However, the oil will increase the caloric value of the fish.

Carefully clean the jar sealing edge with a paper towel dampened with water or a small amount of vinegar; then wipe with a dry paper towel to remove any fish oil or scales.

Attach jar lids and rings.

Follow the manufacturer's guidelines for tightening the jar lids properly, though the general direction is "finger-tight."

If the rings are too loose, liquid may escape from the jars during processing, and seals may fail. If the rings are too tight, air cannot vent during processing, and the jar will not seal or the food will discolor during storage. Over-tightening may also cause lids to buckle and jars to break.

PROCESSING

Add 2–3 inches (about 3 quarts) of cool water to the pressure canner (or follow the specific directions for your canner). Put the rack in the bottom of the canner. Place closed jars on the rack according to the instructions provided with your pressure canner. Fasten the canner cover securely, but do not close the lid vent.

Heat the canner until steam comes through the open vent in a steady stream. Allow the steam to escape for 10 minutes. This step removes air from inside the canner so the temperature is the same throughout the canner.

Close the vent (use a hot pad or mitt) by shutting the petcock or by placing the weighted gauge on the vent. Depending on brand or model, there are often three positions on the weighted gauge: 5, 10 or 15 pounds; for most pressure canning the weighted gauge will be positioned on 10 pounds of pressure. Some brands will have only a 15-pound weight, which will be used as a pressure regulator, not a gauge. In this case, the canner is considered a dial-gauge canner.

Turn the heat on high and when the pressure reads 11 pounds per square inch (psi) on the dial gauge or the 10-pound weighted gauge, if your canner has one, begins to jiggle, begin the timing process and adjust the heat to maintain a steady pressure.

Write down the time at the beginning of the process and the time when the process will be finished.

If the pressure drops below 10 or 11 psi, the timing must begin again from zero minutes. If the pressure rises above 10 or 11 psi, lower the heat on the stove but do not begin timing again.

****Note: If you live at, or move to, an altitude greater than 1,000 feet (305 meters) above sea level, these times/pressures may be insufficient. Consult your local Extension agent for recommended times/pressures.***

For safety's sake, you must have a complete, uninterrupted 100 minutes at a minimum pressure of 11 pounds for a dial gauge or 10 pounds for a weighted gauge.

RECOMMENDED FOR JARS OF FISH

- Process 1-pint jars for 100 minutes.*
- Use 10 pounds pressure for a weighted pressure gauge.
- Use 11 pounds pressure for a dial pressure gauge.

* *If you use ½-pint jars, process for 100 minutes also, using the same pressures recommended for 1-pint jars.*

COOLING DOWN

At the end of the processing time, turn off the stove and allow the canner to cool naturally; leave the petcock closed or the weight in place.

Let the pressure drop to zero psi naturally; some weighted gauge canners have a lid lock that drops when zero psi is reached.

Wait one more minute; then, using a hot pad or mitt, slowly open the vent on dial gauge canners, or remove the weighted gauge.

Open the canner and tilt the lid far side up so the steam escapes away from you.

Carefully remove jars with a jar lifter or tongs and place on a cloth or newspaper covered table away from drafts. **DO NOT TIGHTEN LID RINGS.** The sealing compound is hot and soft and the jar lids are still sealing. Most two-piece lids will begin the sealing with a “pop” sound while cooling, but they will not be fully sealed until completely cool.

CHECKING THE SEAL

After 12 hours, the jar lids should be sealed (lids curve downward in the middle and do not move when pressed with a finger). Rings are not needed on stored jars; wash and store for later use. If you want to store jars with rings in place, remove the rings, wash and fully air dry both jars and rings before replacing the rings.

If a jar did not seal (lid bulges or does not curve downward in the center and moves when pressed with a finger), remove the lid and check the jar sealing edge for tiny nicks. If needed, change the jar, add a new flat lid, and reprocess within 24 hours using the same processing time. Food in unsealed jars may also be stored in the refrigerator for a few days or in the freezer. Adjust headspace to allow for expansion of frozen food.

STORING THE JARS

Wash the jars and label each lid with contents, processing date and processing method (i.e. 11 PSI/100 minutes). Store jars in a cool, dry, storage area.

For best quality, home-canned food should be used within one year.

Note: Glass-like crystals of magnesium ammonium phosphate (common name “struvite”) 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.

Research on food preservation is an ongoing process. The United States Department of Agriculture and the Cooperative Extension Service continuously apply new research findings to their recommendations for food preservation techniques. The guidelines in this publication may be revised at any time additional knowledge is gained that may increase the margin of safety or improve the quality of home preserved products. Please consult your local Cooperative Extension Service annually for updated information.

FOR SAFETY'S SAKE

HEAT HOME CANNED FISH BEFORE EATING!

- Do you know if the dial gauge on your canner is reading accurately?
- Do you know when the rocking or jiggling weight is signaling properly?
- Did you follow the USDA Cooperative Extension recommendations for pressure processing this food?
- Was this preserved food a gift? If it was, do you know if the USDA Cooperative Extension Service recommendations for pressure processing this food were followed?

If you answered no to any of these questions, **you should heat this home-canned food before you eat it.** Here's how:

1. Open the jar of fish. Check the contents. **If fish smells bad or if you see gas bubbles, THROW CONTENTS AWAY! Do not taste!***
2. If fish smells and looks good, insert a meat thermometer into the center of the fish. Cover the jar loosely with foil.
3. Place the opened jar in an oven that has been preheated to 350°F.
4. Remove jar from the oven when the meat thermometer registers 185°F. This heating takes about 30 minutes.
5. Allow the jar to stand at room temperature for 30 minutes to let the heat distribute evenly.
6. Serve the fish hot or chill for later use.
7. If jar is recovered, cover with a clean lid.

** Before you throw it away, detoxify, so that no humans or pets can get poisoned by eating spoiled foods. To detoxify, place jar lids and open jars with food in saucepan. Add water to cover jars and boil 30 minutes. Cool. Drain liquid. Throw away food and jar lids. Jars may be reused.*

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

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03-75/MS/02-23

Revised February 2024