



Canning Meat, Poultry and Fish

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CANNING MEAT, POULTRY AND FISH

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The cheapest foods for farm families are those raised on the farm. This applies to the meat supply as well as to other food products. Each farm family should can and cure enough meat at butchering time to supply them until the next killing season, supplemented, of course, at times with fresh meat, particularly chicken. The canning of meat and meat products deserves a wider acceptance as a means of producing a satisfactory meat supply at small cost for the family raising its own poultry or meat animals.

The most important step in canning is known as "processing." By this we mean heating the meat to such a degree as will kill bacteria. The temperature required for sterilization is 240 degrees to 250 degrees Fahrenheit, corresponding to 10 to 15 pounds steam pressure and can be produced inside the can or jar only by means of the steam pressure cooker. This type of cooker is found in a rapidly increasing number of homes. Meat insufficiently processed may contain bacteria which will cause food poisoning even when there are **no visible signs** of food spoilage.

GENERAL DIRECTIONS

Meat may be packed into the jars raw but it is generally considered that flavor is improved if it is browned first in hot fat or seared and roasted in the oven until nicely browned. The length of the processing time is the same whether packed raw or pre-cooked. Water need not be added to the meat in the jars. When meat is seared or roasted before packing, any meat juices which cook out during the process should be added to the meat in the jars. The liquid in the jar of canned meat should form a jelly when cold except in cases where the meat consists entirely of muscle tissue, practically free from cartilage or bone.

Meat may be canned as steaks, chops, roasts, stew or any cut preferred by the family. Steaks should be cut into servings easily packed in the can or jar. Chops are boned to facilitate packing. Stew meat is cubed and browned before packing. Hamburger and

sausage may be made into cakes and browned or loosely packed in jars. Roasts cut into sizes convenient for packing and seared as for an oven roast yield a nicer product. Tin cans are particularly convenient for canning roasts.

PREPARATION

All meat should be thoroughly bled and cooled. Allow 24 hours after butchering for beef, pork, veal or mutton, and six hours or more for poultry or rabbits. Wash the meat if necessary but never allow it to soak in water. Wiping with a damp cloth is usually all that is necessary. Remove large bones and leave only enough fat to give flavor. Cut into convenient uniform pieces for packing in jars.

PACKING

Either tin cans or glass jars may be used as containers. Wash glass jars, lids, and tin cans before using. Keep lids for tin cans dry. Pack meat so that meat and juice come to within approximately one-half inch from the top of the can or jar, adding one-half teaspoon of salt to each pint jar or number two can, and one teaspoon for each quart jar or number two and one-half can. If meat has been pre-cooked, strain fat and juices over the meat packed in the jars. If tin cans are used, care must be taken that the meat is packed while still hot, and kept hot in steam cooker or a kettle of boiling water until processing is begun. If meat is packed cold, the jars should be heated in hot water until the product is steaming hot before sealing.

SEALING

Glass jars: Wipe tops of jars and rubbers carefully to be sure that no fat or juices are present. The fat may prevent a perfect seal. Partially seal jars containing the hot product before placing in the pressure cooker.

Tin cans: Seal cans containing the hot product before placing them in the pressure cooker.

PROCESSING

Make sure that the cooker is clean and that all parts—safety valve and pressure gauge—are in working order.

After pre-heating, packing, and sealing, the containers of meat should be immediately processed, or heated, in the steam pressure

cooker as directed below, keeping the pressure constant. The time periods given apply to meat which is steaming hot, or about 170 degrees F., when packed and sealed.

The length of time necessary for processing different kinds of meat is noted in the tables starting on page 9.

COOLING

After processing glass jars or No. 3 tin cans, allow the pressure to reach zero before opening the petcock, then open it gradually so there is no sudden outrush of steam. Complete the seal on glass jars and place them in the open air but protect them from drafts until cooled.

When No. 2 or No. 2½ cans are used, open the petcock on the pressure cooker gradually at the end of the processing period and allow the steam to escape. Place tin cans of all sizes in running water to cool.

CHICKEN AND POULTRY

Preparation

Canning the surplus birds from the home poultry flock is often an economical practice, especially because older birds may be used this way to better advantage than the young ones. Plump, well-fed hens, two years old, and no longer at their best for egg production, have as good texture and better flavor than chickens six months old.

Kill at least six hours before canning. Bleed well, remove feathers and cool thoroughly. Singe and wash with soap and water. Draw chickens and cut up as for stewing. Can only fresh, first-class meat. Wipe with a damp cloth, remove bone if desired and leave only enough fat to give flavor. Cut the meat into pieces suitable in size for filling the containers without cramming.

Pack the chicken using some pieces with bone in each container. Leave space for liquid to circulate around the meat. The giblets should not be packed with other meat as they will flavor and discolor it. It is better to can the livers alone and the gizzards and hearts together.

Bones and scraps may be utilized by making soup stock which can be canned in the same manner as meat.

EDIBLE MEAT SUIDRIES TO BE CANNED

BEEF:

Heart	Roasted, stewed, braised
Kidney	Broiled, stewed, fried
Liver	Sauted, baked, meat pie, en casserole
Tripe	Pickled, creamed, breaded
Oxtail	Soup, boiled, braised
Tongue	Corned, smoked, pickled, boiled

VEAL:

Heart	Baked, stewed, en casserole
Kidney	Broiled, stewed, meat pie, sauted
Liver	Sauted, baked, breaded
Sweetbreads	Creamed, braised, fritters
Tongue	Corned, smoked, boiled
Brains	Sauted, creamed, scrambled

LAMB OR MUTTON:

Heart	Baked, braised, stewed
Kidney	Sauted, stewed, broiled
Liver	Sauted, baked, en casserole
Brains	Creamed, braised, scrambled

PORK:

Heart	Baked, braised, meat pie
Kidney	Sauted, stewed
Liver	Sauted, baked, fried
Tongue	Boiled, sauted, braised
Feet	Boiled, pickled, fried
Brains	Sauted, scrambled, creamed
Head	Boiled for head cheese

FISH

Fish, for canning, should be absolutely fresh. As soon as fish are caught it is well to kill them with a knife and let the blood run out. In scaling fish it is easier to remove the scales if the fish is dipped into boiling water. If the skin is very tough, remove it and wash the fish clean. Remove entrails and the dark membrane that in some fish covers the abdominal cavity. The backbone of small

fish may be left in. In larger fish remove the backbone and use it, with what meat adheres to it, for making fish chowder. In order to draw out all blood before canning, place the fish in brine made in the proportion of one level tablespoon salt to one quart water. Let soak from 10 minutes to one hour, according to thickness of the fish. If fish meat is loose or soft it can be hardened by soaking for one to two hours in cold brine made in the proportion of $\frac{1}{2}$ cup salt to one quart water. Remove from brine and drain well before packing.

No container larger than a pint jar or a number two tin can should be used for the home canning of fish.

CLAMS

Use only fresh clams. If clams are muddy, wash before opening. After opening, discard all broken or discolored clams. After packing, fill jar to within $\frac{1}{2}$ inch from top with hot brine made in proportion of one teaspoon salt to one quart water. Pack in lacquered cans, if tin cans are used.

OYSTERS

In canning oysters, be sure they are absolutely fresh, have not "soured" and contain no oysters that are spoiled. It is, therefore, best to open them by hand and absolutely reject oysters which have the shell partly open, as this is a sign that the oyster in this particular shell is dead and unfit for use.

Rinse oysters in cold water to be sure no pieces of shell or grit are packed with oysters into the jars. Pack oysters, with their natural liquid into jars and fill to within $\frac{1}{2}$ inch of top with boiling brine, made in the proportion of one teaspoon salt to one quart water. If packed in tin, use lacquered cans.

LOBSTERS

Plunge live lobsters into rapidly boiling soda water (one half pound baking soda to two gallons water), continue boiling for 15 minutes; drain off the water, and cover again with clear boiling water, to which enough vinegar has been added to neutralize the soda remaining in the lobster, and cook for 15 minutes longer; remove from fire, drain and plunge lobsters into cold water. When the lobster is cooled enough to handle, remove claws and tail. Split

tail and remove intestine, take body from shell and remove the stomach, crack the claws and pick meat from them. Mix the meat from the claws with meat from the body and tail, add one level teaspoon salt for each pint, and pack. Use **lacquered** cans if packed in tins.

CRAB MEAT

Place live crabs into a large kettle of rapidly boiling water. Boil for 20 minutes. Remove crabs and wash them in cold water. Crack shell and pick out the meat, being careful to remove all particles of shell. Wash crab meat in cold brine made in proportion of one teaspoon salt to one quart water. If packed in tin, use **lacquered** cans.

Note: Quick cooling is necessary in order to prevent discoloration of crab meat.

SHRIMP

Shrimp should be canned when absolutely fresh.

Place the shrimp, peeled or with shell on, as desired, into a large kettle containing **boiling** water into which salt, in proportion of one pound salt (2 cups) to one gallon water, has been added. Boil from five to eight minutes. If shrimps were not peeled before boiling, drain through a colander and sprinkle with salt. This will harden the meat so they may be peeled more easily. Pack. Boiling water may be added if desired, or the dry-pack in which no water is added, may be used.

PICKLING SALMON

All species are pickled, but the most popular is the red salmon.

Remove head, split fish along the back, and clean. Remove two-thirds of the backbone. Scrape away blood and black stomach membrane, and wash and scrub thoroughly in cold water. Salt down in tubs or kegs with 15 pounds of salt to 100 pounds of fish. Lay pieces flesh side up, and sprinkle salt over each piece in packing. Weigh down so that fish will be submerged when pickle forms. Let remain one week, with brine at 90 degrees. Remove fish, clean with a scrub brush, repack in barrels with one pound of salt to every six pounds of fish.

SMOKING

After pickling, the fish may be smoked at any convenient time. Take salted fish out of brine, soak out as much salt as possible, put in smoke house over a fairly hot fire for two days, until thoroughly dried and hardened. Then expose to a smoldering fire (vine maple and apple are good) for three days to complete the process. Do not use resinous wood. Have ventilator at top open to let moisture escape. Pieces of meat should not touch each other. Do not have fire too hot as the meat should smoke rather than heat. Eight to 10 hours smoking is enough for ready consumption. When smoking is finished, cover fire with sawdust which produces a dense smoke which gives the color. Have ventilator partly closed but do not allow to sweat.

KIPPERING SALMON

Clean salmon, cut into pieces one pound or less, and place in a strong brine for several hours. Dip in a harmless vegetable coloring if you desire a red or orange color. Place in a tray with wooden frame, and bottom of one-half inch square meshed wire, being careful not to let pieces touch each other. Slip tray into a rack which will hold a number of trays. Use a medium fire for 10 to 18 hours. Dry slowly at first, then increase the fire, but do not overheat. The ventilator at the top and the damper at the bottom of the smoke house will help. The thermometer should show 250° to 275° of heat, for 25 to 35 minutes. Cool. Place in cold storage or can for future use. To can, process the same as fresh salmon.

**TIME TABLE FO CANNING MEAT, POULTRY AND FISH
WITH THE PRESSURE COOKER**

MEAT	Method of treatment before canning	Pint jars		Quart jars		No. 2 tin		No. 2½ tin		No. 3 tin	
		Time in minutes	Pounds pressure	Time in minutes	Pounds pressure	Time in minutes	Pounds pressure	Time in minutes	Pounds pressure	Time in minutes	Pounds pressure
BEEF											
Chili Con Carne	Soak beans overnight. Blanch 5 min. in boiling water. Prepare meat mixture and simmer 10 min. Combine with beans. Pack while boiling hot	120	10	150	10	120	10	135	10	150	10
Ham-burger	1. Pack loosely in jar or tin. In tin, exhaust in boiling water until steaming hot before sealing 2. Make into cakes. Brown. Pack in jars or can.	90	15	120	15	90	15	110	15	120	15
Heart	Wash, remove thick connective tissue. Cut into pieces suitable for packing. Drop into boiling water and simmer 15 to 20 min. Pack at once. Add broth to cover	85	15	120	15	85	15	110	15	120	15
Roast	Cut to fit can or jar. Sear. Pack. Add some of drippings. In tin, heat in boiling water until steaming hot before sealing.	85	15	120	15	85	15	110	15	120	15
Soup Stock	Cook bones and remove meat. Strain stock, boil down and can. Meat may be added or canned separately.	40	15	45	15	40	15	45	15	45	15
Steak	Cut into size convenient for packing. Brown. Add some drippings. In tin, heat in boiling water until steaming hot before sealing.	85	15	120	15	85	15	110	15	120	15
Stew	Cut into inch cubes. Brown. Add some drippings. In tin, heat in boiling water until steaming hot before sealing.	85	15	120	15	85	15	110	15	120	15
Tongue	Wash, drop in boiling water. Simmer 45 min. Skin and cut into pieces that will fit container. Pack, adding broth to cover. Reheat until steaming hot before sealing in tin.	85	15	120	15	85	15	110	15	120	15
CHICKEN											
	Cut as for stewing. Remove breast bone. Pack raw or browned. If raw, in tin, heat until steaming hot before sealing. Pack giblets in separate jar.										
	With bone	65	15	75	15	55	15	65	15	70	15
	Without bone	85	15	120	15	85	15	110	15	120	15

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		Time in minutes	Pounds pressure	Time in minutes	Pounds pressure	Time in minutes	Pounds pressure	Time in minutes	Pounds pressure	Time in minutes	Pounds pressure
LAMB											
Chops	Bone and brown. In tin, heat in boiling water until steaming hot before sealing.	85	15	120	15	85	15	110	15	120	15
Roasts	Cut into sizes convenient for packing. Sear and pack. Add drippings. In tin, heat in boiling water until steaming hot before packing.	85	15	120	15	85	15	110	15	120	15
Stew	Cut into cubes. Brown, if desired. Pack, adding drippings.	85	15	120	15	85	15	110	15	120	15
MUTTON											
	Prepare as for lamb.	85	15	120	15	85	15	110	15	120	15
PORK											
Chops	Bone, brown and pack. Add juices.	85	15	120	15	85	15	110	15	120	15
Head Cheese	Pack loosely in jar or can. In tin, heat in boiling water until steaming hot before sealing.	90	15	120	15	90	15	110	15	120	15
Pork and Beans	Soak beans overnight. Season as desired and bake in a slow oven 1½ hrs. Remove lid and bake ½ hr. longer. Pack hot in containers and cover with liquid or sauce.	80	10	90	10	70	10	80	10	85	10
Roasts	Cut to fit can or jar. Sear and pack, adding juices. In tin, heat in boiling water until steaming hot before sealing.	85	15	120	15	85	15	110	15	120	15
Sausage	1. Pack loosely in jar or can. In tin, heat in boiling water until steaming hot before sealing. 2. Make into cakes. Brown and pack. Add drippings.	90	15	120	15	90	15	115	15	120	15
RABBIT											
	Cut as for stewing. Pack raw or browned, as desired. If raw, in tin, heat until steaming hot before sealing.	85	15	120	15	85	15	110	15	120	15
VEAL											
	Prepare as for beef.	85	15	120	15	85	15	110	15	120	15
VENISON											
	Same as for beef (Must be used in accordance with Federal and State game regulations.)	85	15	120	15	85	15	110	15	120	15

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		Time in minutes	Pounds pressure	Time in minutes	Pounds pressure	Time in minutes	Pounds pressure	Time in minutes	Pounds pressure	Time in minutes	Pounds pressure
FISH											
Bass	Cut in slices or to fit cans. Pack. In tin, heat in boiling water until steaming hot before sealing.	100	10			90	10				
Clams	Grind or pack whole. In tin, heat in boiling water until steaming hot before sealing.	100	10			90	10				
Crab	Pack. If tin is used, heat in boiling water until steaming hot before sealing.	100	10			90	10				
Halibut	Cut in slices or to fit cans. Add 2 teaspoons olive oil if desired. Pack. In tin, heat in boiling water until steaming hot before sealing.	100	10			90	10				
Lobster	Mix meat from claws, body, and tail. Pack, adding 1 teaspoon salt to each pint. In tin, heat in boiling water until steaming hot before sealing.	100	10			90	10				
Oysters	Pack whole. In tin, heat in boiling water until steaming hot before sealing.	100	10			90	10				
Perch	Clean as for frying. Brown and pack. In tin, heat in boiling water until steaming hot before sealing.	100	10			90	10				
Salmon	Prepare as for halibut.	100	10			90	10				
Shrimp	Pack dry or fill can within ½ inch of top with boiling water. If tin is used, heat in boiling water until steaming hot before sealing.	100	10			90	10				
Trout	1. If large, cut in slices or pieces to fit can. Brown or pack raw, as preferred. In tin, heat in boiling water until steaming hot before sealing.										
	2. If small, brown and pack.	100	10			90	10				

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