

Brining, Smoking, and Canning Salmon

Steve Meharg

“The Doctor's Maple/Garlic/Honey Smoked Salmon”

Immediately upon catching the salmon, bleed it thoroughly and get on ice. I do not consider darker fish as good “canners.” Most agree that prime fish make the best canned fish. Smoked cardboard is no better than plain cardboard. I use Columbia River up-river bright chinook and bright Coho. Steelhead also may make it into the mix.



I filet and vacuum pack the fish for freezing. Alternatively, and preferably, remove all gills, wrap the fish tightly in a garbage bag and seal with duct tape and freeze the fish whole. Mother nature provides the best vacuum packing material: the fish's own skin. Opening the gut cavity and exposing to oxygen is what promotes rapid decay.

Thaw and butcher fish into medium chunks, skin on. I will try to keep chunks roughly uniform in thickness by trimming the shoulder/back, belly, and tail pieces into separate chunks.

Rinse chunks in cold water and place in brine for 36 hours, stirring a few times in the process to ensure even soak.

Brine Recipe

This can be enlarged or reduced using same ratios. I brine in 5 gallon buckets, and this amount can brine a lot of fish in one bucket.

- 4 pounds brown sugar. Light or dark, does not matter for taste, but brown will produce a slightly darker product.
- 1.5 cups canning salt (you can go up to 2 cups if you like it saltier)

- 1 cup white sugar
- 6 quarts water (I use distilled or at least filtered water)
- ½ cup soy sauce (I use low sodium)
- Garlic to taste, crushed or powdered, usually about 1 heaping tablespoon



Mix brine thoroughly. When bringing large amounts, I place in clean 5 gallon buckets lined with turkey roasting bags. This makes for clean brining and easy cleanup after. Two bags are usually needed, as one often leaks a little. These are relatively inexpensive and come two to a package. You need lids for the buckets, but the turkey bags can also be twisted and closed

with a twist tie or chip clip to help keep it contained. Cover and place buckets on ice in large coolers, or refrigerator. Mix every 8-12 hours to ensure even soak on the chunks. You could also split up the brine and use large Ziploc bags. Whatever works for your size of batch.

Pull chunks out of brine with tongs and gently shake off any brine. I do not rinse the brine off. Allowing them to dry to the point of tacky glaze is important for full smoking, but not needed for canning. You can blot them with paper towels if there are pools of brine. You can also baste them with a mixture of ½ honey and ½ pure maple syrup before and during the smoking process, but I have found it easier to use my secret sauce method, described below.



Place chunks in smoker per usual instructions. I place larger and thicker chunks on the bottom racks close to the heat, and thin chunks on top racks. I use 1/4 alder and 3/4 apple chips. Smoke for about 3 hours at relatively low heat. You do not want to really cook the fish, as the canning process will do this. Cooking the

fish while smoking and again in the canner produces a dense and hard product.

The fish will be “kippered” but not fully cooked and should remain very moist, soft, and easy to peel off the skin.

Sterilize ½-pint wide mouth Kerr jars in the dishwasher and lids in near-boiling water. Do not over-boil the lids, as this will degrade the rubber. Place 3-5 jalapenos slices (“nacho” pickled slices) in each jar. I also put in *Steve’s Secret Sauce* on the bottom of each jar. This is equal parts honey, pure maple syrup (not imitation), lots of minced fresh garlic, and



Sriracha sauce to taste (this is optional). I make 1-part honey (12oz), 1-part syrup (12oz), and about ½-1 cup (4-8oz) minced garlic. This mix is heated and stirred to near boiling in a sauce pan on the stove, then cooled and refrigerated the day



before to promote melding of flavors. Do not burn or overcook it. Re-mix and spoon about 1 teaspoon into the bottom of each sterilized jar just before adding the peppers and loading the fish. It will infuse the fish while canning. This is a lot less messy than basting the fishing in the smoker, and creates the same effect. Incidentally, this sauce also makes a good finishing glaze to full smoked fish.

As noted above, the smoked fish chunks should be soft and mushy.

Wearing nitrile gloves and using a large sterile cutting board, peel skin off, but also use filet knife to scrape any fat off the inside of the skin to include in the jar. This contains the Omega oils and adds richness and silky texture. Remove any large rib bones as you go. Small to medium bones will dissolve and add calcium, so do not worry about these. Do this sitting next to a lined garbage can in which to throw skin and bones. Try to prevent voids and air pockets, and gentle pack the jar. Put as much whole flesh against inside of jar walls as possible for a nice appearance. Leave about some space (barely a 1/4 inch at the most) between fish and bottom of lid. The fish will





condense and shrink during canning. Wipe rim of jar with moist clean cloth to clean off oil or fish before seating a sterilized lid. Screw on the bands firmly, but do not wrench them down hard. This is best a two-person process; one packer and one wiper/lid sealer. Try to keep the outside of the jar clean.

Setting up Canner(s)

Fill bottom of canner with clean water to about 1 ½ inches deep. The amount of water you need varies with the canner, but you do not want it to go dry during canning, nor do you want it to boil over the tops of the jars. I add a capful of white vinegar to the water, which helps it clean up easier. Can outside or in a shop. Your house will stink for weeks if you do it inside. Load canner with jars that do not touch each other. Seal lid to canner and turn up heat to medium high. Do not yet put on the rocker. Once steam begins to pour out of rocker spout, allow to vent strong for about 7-8 minutes. This raises temperature in jars to kill bacteria and mold spores.

Once steam-out is complete, place rocker or gauge to 12 pounds of pressure. When 12 pounds of pressure is achieved, cook fish for 100 minutes. Keep pressure between 10-15 pounds during cooking, with an average of 12-13.

Turn off heat and allow to cool. Be patient and don't mess with the rocker or vent the cooker until there is no pressure left. Remove canner top when cool enough to do so, but not until all pressure gone.

Remove jars with a jar puller and place on a paper- or cloth-cover table. You should see bubbling in each jar, and hear lids popping as they seal. Once cooled, check lid of each jar to ensure seal. Unsealed jars should be put in fridge for immediate eating.

The next day, I remove bands and thoroughly wash and gently scrub with a scrubby sponge each jar and lid in warm, soapy water bath to wash off fish oil and sugar that has boiled over. They will stink up your pantry if you do not, and look

better when giving them away if not stained and sticky. There is no need to keep the bands on jars when storing. Save them for the next canning.

The leftover brine and water from steamers will kill grass, forever. Dump used brine down the toilet and canner water somewhere where there is no grass.

It is important to understand that freshly canned smoked salmon goes into “canner shock” for a while. You can open and eat the salmon right away, but it may taste a bit harsh. This fish is best after several months on the shelf just resting and getting happy. I find the best quality 3-12 months after actual date of canning.

I have a friend who is allergic to garlic, so I make a few garlic-free jars for her. Also, some Gringos do not like spicy jalapenos. These can often just be removed after opening jar. They will be on top if you dump the jar upside down. However, you may want to omit the peppers in some jars if you have people you prefer no spice at all. The salmon can be eaten out of the jar or dumped into a bowl, but do not drain the liquid. This is where the flavor is, and the liquid will absorb back into the meat when re-pressurized.

You can also make a simple and delicious salmon spread by draining a small amount of liquid, then mixing thoroughly with one softened brick of Neufchatel (light) cream cheese. Leave more liquid for a softer and smoother spread, less for a firmer spread. If possible, cover tightly and refrigerate the day before serving. The flavors improve as it melds, with best flavor after 24-48 hours.

The spread is good as is and will have a mild spiciness from the peppers, but you can add finely minced shallots, red onion, chives, fresh dill, extra garlic, lemon juice, or more spiciness to your taste. It can also be mixed with pre-seasoned cream cheese (e.g., Philadelphia chive and onion) for the same effect, and/or rolled in chopped nuts to make a salmon ball-type spread. It will pair well with a bright white wine such as Pinot Gris or Sauvignon Blanc, a Rose, or even a sparkling wine.

