The 3 Men's Fish Smoking Process

The following process is for *smoke cooking* (sometimes, called hot smoking) as opposed *to cold smoking*. Smoke cooking is in effect a cooking process. Use this technique for fish that you expect to eat immediately or within up to three weeks of cooking (six weeks if the finished product is vacuum sealed).

This process can be used for any type of fish and involves preparing the fish, brining, drying and smoking. It is easiest to work with filets of fish but you can also use fish steaks or cleaned whole fish.

Preparing the Fish

Use only fresh fish or fish that was frozen immediately after catching and thawed just before cooking. Rinse in fresh water and trim all loose pieces and bones. Hemostats work well for removing bones in filets of fish. Your finished product will be much more attractive if you clean and trim the fish properly. Skin may be left on or removed. It is easiest to leave the skin on for the smoking process since with most fish it can be easily removed after smoking. It is best to work with batches of fish that are similar is weight as this is one of the variables in establishing the time of brining.

3 Men's Fish Smoking Brine Recipe*

- 1 U.S. gallon of water at room temperature
- 2 cups salt
- 1 cup brown sugar
- 1/3 cup lemon juice
- 1 tablespoon garlic juice (or 1 tablespoon garlic powder)
- 1 tablespoon onion powder
- 1 tablespoon allspice (it is best to sift this into the water to avoid clumping
- 2 teaspoons white pepper

*This recipe is for an 80º brine and can be multiplied as many times as needed

In a glass, plastic or ceramic container (never wood or metal), mix all of the ingredients thoroughly until dissolved. A small handblender such as those made by Braun works well for mixing the ingredients. For brining fish we like to use rectangular plastic containers that are four inches to six inches deep. These can be purchased at restaurant supply stores. As long as it is not wood or metal, any type of container is acceptable.

Place the fish in the brine solution ensuring that all pieces are completely submerged. Place plates on top of the fish to maintain complete submersion. For short brining periods (three hours of less) in cool temperatures the brine may be at room temperature if the fish is well chilled before placing it in to the brine. If the fish is not well chilled and/or the ambient temperature is warm, place the brine and fish in a refrigerator for the

duration of the time of brining. Alternatively, you may place bags containing ice in to the brine mixture to cool the temperature.

Brining Time

The type of fish, the weight of the pieces and whether the skin has been left on or removed establish the brining time. Following are general guidelines for time of brining. Adjustments to the general guidelines for type of fish and whether the skin is left on or removed are discussed below.

Weight of Each Piece of Fish	Time for Brining
Under ¼ lb.	30 minutes
¼ lb. To ½ lb.	45 minutes
½ lb. To 1 lb.	1 hour
1 lb. To 2 lb.	2 hours
2 lbs. To 3 lbs.	3 hours
3 lbs. To 4 lbs.	4 hours
4 lbs. To 5 lbs.	5 hours

Note that the total weight of the fish is irrelevant. Time of brining is established by the weight of the individual pieces of fish. That is why it is easiest to work with batches of fish of similar weight.

Adjustments to Time of Brining - If the skin is left on the fish then increase the time of brining by 25%. For oily fish (Great Lakes chub, Atlantic herring, Gulf pompano, most trout, whitefish, cod, mackerel, salmon, sturgeon, dogfish, etc.) increase time of brining by 25%.

Overhauling - To obtain the best curative and flavoring effect from brining, all pieces of the fish must be freely exposed to the brine solution. Overhauling is simply the process of rearranging the pieces of fish in the brining container to provide for a proper turnover. Overhauling is not necessary for brining periods of two hours or less. For longer periods overhaul occasionally (e.g., for a four hour time of brining you might overhaul once half way through the time of brining).

Drying

At the end of the brining period the fish is removed from the brine for drying. The 3 Men are not all in agreement as to whether or not the fish should be rinsed in water after removing it from the brine. If rinsed it should be lightly rinsed in fresh water. If you do not rinse the fish the finished product will be somewhat saltier than if you rinsed it.

After removing the fish from the brine, place the fish on elevated racks for drying prior to smoking. It is easiest to use the same racks that you will use in your smoker. Lightly oil the racks (a product like Pam works well for this) to avoid sticking. Place the racks of fish in a cool breezy place protected from flying insects. We usually place an electric fan near the racks to provide a breeze. The time for drying is usually one hour at which time a thin glaze called the pellicle is formed on the fish. The pellicle aids in the development of the color and flavor as the fish is smoking. It also helps keep in the juices and retain the firm texture of the fish as it is smoked.

Smoking

Fish smoking can be accomplished in many different types of smoking equipment. Follow the manufacturer's instructions. Depending on the type of equipment you are using, you will use wood chips or chunks, sawdust, pellets or whole logs for your source of smoke. We have found that any hard wood works fine for smoking fish. We have used alder, apple, oak, hickory, pecan, cherry, mesquite and grape stock with excellent results.

We use Cookshack electric smokers, Weber bullet smokers, Weber kettles and very large smokers like the types manufactured by Pitts & Spits and Jerry ("J R") Roach. Any type of smoker will work as long as there is a source of smoke and a source of heat at a consistent temperature. We generally smoke our fish at approximately 190 degrees. Lower temperatures can be used with a corresponding adjustment to the smoking time. At 190 degrees we generally follow these approximate smoking times:

Weight of Each Piece of Fish	Approximate Smoking Time
¼ lb. To ½ lb.	1 and ¼ hour to 1 and ½ hour
½ lb. To 1 lb.	1 and ½ hour to 2 hours
1 lb. To 2 lbs.	2 hours to 2 and ½ hour
3 lbs. To 4 lbs.	2 and ½ hour to 3 hours

The foregoing represents approximate smoking times which will vary based upon the type of fish your are smoking, the equipment you are using and the temperature at which you are smoking. Additionally, the cooking time needs to be increased depending on how many times you lift the lid or open the door to check on progress.

Smoked fish is done when it flakes easily while pressing it lightly with a knife of fork. On larger pieces of fish you may want to test for doneness with an instant-read thermometer. Fish is done when the internal temperature reaches 140 degrees.

When you are done smoking the fish, remove the racks to an elevated surface to cool. We sometimes set the racks on top of beer cans, as usually there are plenty of those around. Once the fish has cooled for approximately one-half hour, wrap tightly in foil and place the foil parcel in a zip lock type bag or (preferably) vacuum seal in plastic pouches.

Tips for Smoking Fish

Water for Brining – We usually use bottled water for brining.

Salt for Brining – Some prefer kosher salt for brining but most recently we have used regular table salt (not iodized) which can be purchased inexpensively in large quantities at the Price Club or Smart & Final.

Quantity of Wood for Smoking – Don't do as we have done and figure that if a little smoke is good then more must be better. Too much smoke will cause the fish to taste bitter. Use just enough wood to maintain a steady smoke.

Keep Notes – Get a binder and record as much information as you can about your brine, brining time, smoking time, etc. This way you can experiment and refer to your notes at a later date.

Vacuum Sealing – We like to vacuum seal our finished product as it extends the shelf live by about 50%. It also makes for an impressive and appealing finished product. We use Vacmaster and FoodSaver vacuum sealers.