PART VI: SEAFOOD PREPARATION
VI-A: HOW TO SMOKE FISH

Curing by exposure to smoke is one means of temporarily preserving fish, and of producing an appetizing flavor.

The best fish to smoke are those with high fat content, such as carp, catfish, salmon, smelt, herring, whitefish, eel and trout. There are only four steps in preparing your catch: cleaning, brining, drying, and smoking.

The first step is cleaning the fish. Depending on the species, fish may be gutted and beheaded, halved, filleted, or skinned and cut into pieces. Small fish may be smoked in the round (without cleaning). Fresh fish may also be cleaned and frozen for later smoking.

After cleaning, you are ready for step two, brining the fish. Brining means steeping the fish in a solution of salt, water and spices. This process is essential before smoking; it firms the fish by removing moisture. Here are two brine recipes for hot smoked fish:

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<td><strong>I</strong></td>
<td><strong>II</strong></td>
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<tr>
<td>1 gal. water</td>
<td>6 gal. water</td>
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<tr>
<td>1 lb. salt</td>
<td>4 lb. salt</td>
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<tr>
<td>1/2 lb. sugar</td>
<td>1 1/2 lbs. sugar</td>
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<tr>
<td>1/3 cup lemon juice</td>
<td>1 1/2 oz. saltpeter</td>
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<tr>
<td>1/2 tbs. onion powder</td>
<td>3 oz. whole cloves (optional)</td>
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<tr>
<td>1/4 tbs. garlic powder</td>
<td>1 oz. bay leaves (optional)</td>
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<tr>
<td>1/2 tbs. seafood seasoning</td>
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(This is enough brine for 20 lbs. of fish.)

**Directions:** Mix ingredients well. Submerge fish in brine and refrigerate 12 hours. Remove fish from brine and freshen under running water for 10 minutes.

Now you are ready for step three, drying the fish. Pat the fish
dry with a cloth, then place them in the refrigerator to drain for one to three hours. Drying increases keeping quality and promotes development of the "pellicle", a glossy finish of dissolved proteins on the fish which gives them the desired appearance.

The last step is the actual smoking of the fish. There are both hot and cool smoking techniques.

Cool-smoked fish require a heavier brine and a smokehouse temperature not over 90°F, in which the fish are cooked one to five days. Cool smoking is seldom done, except to preserve fish for long periods.

Hot-smoked (kippered) fish require a smoker temperature of 150 to 200°F, but a shorter cooking time of four to five hours. Hot-smoked fish are perishable and should be refrigerated.

For either process you will need a smokehouse. Your smokehouse may be designed from a large cardboard box, a metal drum, a wooden barrel, or an old refrigerator. The cardboard box is perhaps easiest to obtain; it should be 30 inches square and 48 inches high. Refer to the following diagram and building instructions.
Directions:

A. Remove one end of box to form bottom of smokehouse.
B. Unfasten flaps at opposite end so they fold back and serve as a cover.
C. Strengthen box, if necessary, by tacking 3/4 inch strips of wood on outside of box -- vertically at corners and horizontally across sides.
D. Cut a door 10 inches wide and 12 inches high in bottom center of one side. Make one vertical and one horizontal cut, so uncut side serves as hinge.
E. Suspend several rods or sticks (iron or wood) across top of box. Cut holes through box, so rods rest on wooden strips. A rack of coarse wire mesh (heavy 1/2" or 1/4" iron or steel) may replace rods.
F. Arrange fish on rods or rack so they do not touch. Fish may be hung on "S" shaped hooks, strung through gills by rods, split and nailed to rods, or simply laid on rack. Refer to the diagrams which follow for illustrated methods. Use regular nails, 8 or 10 gauge steel wires, coat hanger wires, S-shaped iron hooks, and/or round wooden sticks.
G. Build fire on level ground with nonresinous (hickory, oak, maple, apple) wood chips or sawdust to produce light, constant volume of smoke. Never use wood containing pitch, such as pine. Liquid smoke is also less satisfactory.

Split fish hung on two 1/4 inch rods

Small whole fish hung on "S"-shaped hooks
II. Center smokehouse over smouldering fire and close flaps. Danger of fire is minimized if ventilation is controlled to promote smoke rather than flames.

I. Monitor fish temperatures by inserting meat thermometer into fleshiest part of fish. Maintain fish temperature of about 180°F for kippered fish. (Temperatures exceeding 200°F cause excessive drying of fish.)

J. Smoke four to five hours.

Fish are ready for serving. Fish not eaten immediately can be stored in the refrigerator or freezer for later use. Smoking fish is fun, economical, and delicious.
VI-B: CANNING TUNA

Tuna is a low acid food and, when improperly processed, there is a danger of botulism poisoning. Botulism poisoning, one of the most severe food poisonings known, is caused by a toxin produced by the bacterium, Clostridium botulinum. This organism often is found in mud samples taken from seafood producing waters.

Two things should be done to avoid botulism poisoning. First, keep hands, equipment, and the working area clean to minimize the possibility of contamination. Second, always follow the processing instruction carefully and use the pressure canner instead of a boiling water bath or the oven. This is because it takes higher-than-boiling temperatures to completely destroy or inactivate Clostridium botulinum, and the pressure canner alone can attain sufficient heat.

Before you start, there are a few things you should check to ensure the safe use of your pressure canner. First, make sure the pressure gauge on the canner is accurate. It should be checked for accuracy once a year. Have the proper amount of water in the pressure canner. Process at either 10 or 15 pounds pressure. Begin counting the processing time after the correct pressure is reached. If you are doubtful as to whether your fish was properly processed, reprocess for the entire period; or refrigerate the fish and eat within 3 to 5 days; or freeze in tightly sealed containers. Re-read the directions on how to use the pressure canner and on canning fish.

There are different methods of canning tuna using either raw or precooked tuna. There are two reasons canned tuna sold commercially are precooked prior to canning. First, pre-cooking removes much of the body oil of tuna; that oil causes the meat to be somewhat bitter. Second, pre-cooking improves the appearance, flavor, and texture of the product. After pre-cooking, tuna meat is packed in oil (cottonseed, soy, or vegetable), water, or oil and water.
Tuna may be precooked by pressure cooking at 240°F at 10 pounds pressure for 2 hours. It may be steamed for 2 to 4 hours; or baked in a slow-to-moderate oven (250 - 350°F) for 1 to 4 hours, depending on the size of the fish, until cooked through. If cooking in the oven, the meat thermometer inserted into the center of the fish should register at 165 to 175°F when cooking is complete. Cool fish to room temperature, then store overnight, or 12 to 24 hours, in a cool room or refrigerator to firm the meat.

Before or during the packing of the precooked meat into jars, inspect for two possible defects. One is called "greening," characterized by grey or grey-green coloring of meat. It usually is accompanied by an unpleasant, urine-like odor. "Green" meat is not harmful but is unappealing and is best discarded. The other defect is called "honeycomb," which develops after the precooking step. It is characterized by pitted, spongy-looking meat, generally localized near the head of the fish. Since the defect is a result of fish decomposition, any tuna exhibiting honeycomb should be discarded. Off-odors usually accompany the honeycomb.

Before canning, the fish should be skinned and cut into chunks small enough to fit jars. Half-pint and pint jars with wide mouths are recommended. Pack fish pieces into jars, leaving 1/2- to 1-inch space at top. Add 1/2 to 1 teaspoon salt to pint jars; 1/4 to 1/2 teaspoon salt to half-pint jars. Add 4 to 6 tablespoons of hot oil, boiling water, or equal amounts of oil and water to each pint; 2 to 4 tablespoons to each 1/2 pint.

Seal jars and process at 15 pounds pressure for 80 minutes. If using 10 pounds of pressure, process half-pint containers for 90 minutes and pint jars for 100 minutes. Allow jars to cool and store in a cool, dark place.

Tuna may be canned raw without precooking. The dry pack method calls for cut pieces of raw tuna to be packed into half-pint jars to within 1/4 inch of the rim. One-half teaspoon of salt is added to the jars which are then processed at 10 pounds pressure for 1 hour and 50 minutes (80 minutes at 15 pounds pressure).

The brine pack method, similar to the dry pack method, calls for soaking cut pieces of tuna for 1 hour in a brine made of 3/4 cup salt
mixed with one gallon of water. The fish should be completely submerged in the brine. After soaking, the fish is drained for several minutes and packed into jars to within 1/4 inch of the rim. No water or salt is added. Half-pint jars are then processed at 10 pounds pressure for 1 hour and 50 minutes (80 minutes at 15 pounds pressure). One gallon of brine is enough for about 25 pounds of cleaned fish. Only use the brine once.

Whether the tuna is bought in a store or canned at home, one danger you should be aware of is scombroid poison. This substance is produced in scombroid fishes when naturally occurring spoilage bacteria in the meat convert the amino acid histidine in the fish protein into a biologically active amine poison, saurine. The saurine is produced when fish are left in the sun or at room temperature for several hours.

The incidence of scombroid poisoning is rare and generally not fatal, but the poisoning resembles a severe allergy with such symptoms as headaches, dizziness, nausea, and vomiting. Tuna containing the toxin in such high quantities as to bring on illness is said to taste "sharp and peppery." The toxin is relatively heat-stable and not completely destroyed or inactivated during the canning process. In order to avoid scombroid poisoning, fish should be processed immediately after capture, and should be discarded if left in the sun for more than two hours.

In the past, some large tuna had higher levels of mercury than that allowed by the government, and consequently were rejected for consumption. However, in recent years, it has been demonstrated that the limit set by the government was too low, and the government has since increased it. Most tuna, except, perhaps, very large ones exceeding 250 pounds, fall into the acceptable range and can be consumed without the danger of mercury contamination.
VI-C: SPICED AND PICKLED SEAFOODS

Pickling with vinegar and spices is an ancient form of food preservation, going back to prehistoric times. Stevenson (1899) believes that it probably antedates even pickling with salt. It is mentioned frequently in the writings of the Greeks and Romans, as witnessed by the citations of Smidth (1875) and Radcliffe (1921) in their excellent accounts of the fisheries of the ancients. Certain of these fishery products prepared with vinegar and spices were considered great delicacies, selling at such high prices that they were reserved for the banquet tables of the rich. One dish popular in Spain and in Central and South America today is "escabeche". It is prepared by frying fish in oil with bay leaves and spices, then marinating in vinegar and oil. This dish can be traced directly to the Romans, who in turn had it from the Greeks.

Pickling with vinegar was used extensively down through the Middle Ages, especially for fish that were fat and did not cure well by the very crude salting methods of the time. While the pickled product did not keep so long, it was more appetizing than the dried and salted products of the period. Vinegar-pickled fish played a very important part in the food economy of the north European people down through the seventeenth century.

Brine-salted fish is often called "pickled", but this is a misnomer, if the name as applied to other food products is considered. Pickled foods are fermented in the process of manufacture with the formation of organic acids. If the amount of organic acids formed is not sufficient, more acid may be added in the form of vinegar; or vinegar may be used in the original cure instead of depending on the natural formation of acid. Therefore, only fish preserved with vinegar or vinegar and spices should be considered pickled.
Preservation Action of Ingredients

Vinegar differs from salt as a preservative agent in that it does not preserve by osmosis, extracting water from the food, but enters into chemical combination with the product, reducing or inhibiting bacterial activity. The spices used may also have some slight value as a preservative; in fact through the Middle Ages pepper and other spices were valued as preservatives rather than condiments. Foods of this period were often very highly spiced, and it is probable that spoilage was masked rather than inhibited. The preservative action of vinegar is probably due to the fact that the growth of spoilage molds are inhibited and that of bacteria greatly retarded, if the product has a low pH, that is, if the medium has an acid reaction. The active principle in vinegar is the acetic acid. According to Tressler (1923) an acid content of 15 percent is required to entirely prohibit bacterial action. Since commercial vinegars average 6 percent acetic acid content, and stronger vinegars reduced to this level are as low as 3 percent when used in food preservation, fish products pickled in vinegar are only temporarily preserved. However, vinegars containing 3 percent acetic acid will preserve fish for months if the product is held in chill storage.

Requirements for Ingredients

Fish used in the vinegar-spice cure must, of course, be of the best quality. Equally important, however, is the quality of the various accessory ingredients in obtaining a finished product of the highest grade. The flavor, texture, color, and to some extent, the keeping quality are affected by the water, salt, sugar, vinegar, spices, herbs, and other miscellaneous ingredients.

The water must be potable and approved under all sanitary and health codes. Pond or shallow-well water should not be used. "Hard" waters are unsuitable, especially those with a high iron, calcium, or magnesium content. If the water supply is hard, the water must be filtered or softened with a softener. Brines should be boiled and filtered before use.

The vinegar should be clear without foreign odors or flavors, and should have a guaranteed acetic-acid content. Cider or other fruit vinegars should not be used because their acid contents are extremely
variable and the fruit esters in the vinegar might give the pickled fish an "off flavor". Distilled vinegar is recommended. Acetic acid diluted to the desired strength may be used. A 120 grain (2 1/2 percent) malt vinegar is favored by some commercial packers. Vinegar should be titrated regularly to determine whether it has the required acid content. Wine may be used as a flavoring agent, as in a spiced wine sauce added to the pickled fish, but wine or wine vinegar should not be used in the original pickle cure.

The quality of the salt is also important. A high grade of purity is required. European curers prefer a Liverpool fishery salt. The salt must be as free as possible from calcium and magnesium compounds, as these impurities give a bitter flavor to the cured product. A coarse, half-ground salt will pit the surface of the pickled fish. A finely ground cooking salt, guaranteed to contain less than one percent impurities and preferably mined, is recommended.

Experienced packers of spiced fish prefer a good grade of cane sugar. Some use is made of corn sugar but the quantity must be adjusted to the standard formula to obtain uniform results. It is not a completely satisfactory substitute at present.

Spices should be bought whole and on the basis of chemical and microscopic examination. Buying specifications should require that the spices be fresh and of a high grade of purity. Spices should not be purchased ground as they may be readily adulterated with other plant material. Mixtures of whole spices may be composed of old or inferior spices. As a rule the curer should buy fresh whole spices, singly, and make up his own mixture. Spices should not be held much more than a year.

Essential spice oils should meet the requirements of the United States Pharmacopoeia. Both spices and oils should be bought only from well-known, reputable firms specializing in these products. "Bargain" spices are usually ruinous to quality products.

Quick Pickling Procedure for Fish

Clean fish and soak in brine (2 1/2 pound salt per gallon of water) for 30 minutes. Cut fish into bite size chunks approximately 1" x 2".
Pickling Mixture:

1 1/2 quarts vinegar (5%)  
to 1 quart water  
1/2 cup salt  
1 teaspoon each of mustard seed,  
peppercorns, bay leaf and  
cloves

2 cloves garlic  
2 medium onions, sliced

Method I.
Pack fish into jars and cover with pickling mixture. Place in  
refrigerator at least one week. After 1-2 weeks, fish are ready to eat.

Method II - Alternate method.
Bring pickling mixture to a boil and add fish. Cook for 5 minutes  
and pack fish into jars, covering with boiling mixture. Cool, then  
store in refrigerator.

A different product will result from each method.

Herring
Herring is the most important pickled fish product. Some of the  
more common pickled-herring products are appetitsild, Bismarck herring,  
cut spiced herring, gabbelbissen, gaffelbiter, Kaiser Friedrich herring,  
potted herring, rollmops, Russian sardines, gewurz herring, delicatessild,  
sur-sild, and smorgaas-sild. The names indicate that most of the spiced  
herring products prepared in the United States are of foreign origin.  
The composition of the sauce is the principal point of difference among  
many of these products. Kaiser Friedrich herring, for instance, are  
Bismarck herring in mustard sauce, while rollmops are Bismarck-herring  
fillets rolled around a piece of dill pickle. Bismarck herring are  
boned, with sides still joined, and packed in vinegar and spices.  
Spiced herring packed in the United States is prepared entirely  
from fish cured during the fishing season, held in storage, and made  
into spiced-herring products as the market requires. Herring may be  
specially cured for this purpose, although Scotch-cured or Labrador salt  
herring may be substituted. Herring not specially cured for spicing is  
reported to have a shorter period of preservation and to be darker in  
color, lacking in flavor, and tougher and more fibrous in texture.

One of the most common methods for home preparation of salt herring  
is to pickle it with vinegar and spices. At one time salt herring were  
used extensively for commercial vinegar-pickled herring, but such raw
material is used today only when the stock of specially cured herring is
exhausted or unavailable.

Most of the specially cured herring are prepared from alewives or
river herring (*Pomolobus pseudoharengus*) in the Chesapeake Bay area. A
variety of curing methods are used, of which the following is typical.
The herring are cut or dressed as described in the salting of alewives.
The cut herring are cleaned thoroughly with special attention to removal
of the kidney, which is the dark streak along the backbone. The fish
are rinsed in fresh water and placed in a curing tank where they are
covered with a brine testing 80\(^\circ\) to 90\(^\circ\) by a salinometer, and containing
120-grain distilled vinegar amounting to an acidity of about 2.5 percent.
The fish are left in this brine until the salt has struck through or
completely penetrated the flesh. The fish, however, must be removed
before the skin starts to wrinkle or lose color. The length of cure
depends on the judgment of the curer and varies with the temperature,
freshness, and size of the fish. The average length of cure is reported
to be 5 days. Various sources give curing times varying from 3 to 7
days.

When the herring are sufficiently cured, they are packed in barrels.
These barrels are often second-hand, previously used for soda fountain
syrup. As a rule, no attempt is made to pack the herring in regular
layers. They are simply shoveled in until the barrel will hold no more.
The barrels are headed, filled with a salt-vinegar brine testing 70\(^\circ\)
salinometer, and shipped to marketing centers such as Chicago or New
York for final manufacture. There the herring are repacked in kegs
which are then filled with a solution of distilled vinegar diluted with
water to a 3 percent acidity, and containing sufficient salt to test 35\(^\circ\)
salinometer. Before the fish are repacked, they may be cut into fillets
or the backbone may be removed from the otherwise whole fish. The kegs
are then put into cold storage at 34\(^\circ\)F to be held until required.

The final process of manufacture begins by soaking the herring in a
tank of cold water for 8 to 10 hours. They are then removed from the
tank, drained, and placed in a solution of vinegar, salt, and water for
72 hours. The solution is made in the proportion of 1 gallon of 6
percent white distilled vinegar to 1 gallon of water and 1 pound of
salt. The fish should be well covered with the solution. They are then
made into cut spiced herring, rollmops, or Bismarck herring.
Cut Spiced Herring I

The vinegar-salt-cured herring are cut across the body in pieces 1 to 2 inches long. The sliced herring are then packed in 8-ounce tumblers or in 16- or 32-ounce glass jars, with whole mixed spices. The amount of spices added to each container is approximately one teaspoon to an 8-ounce tumbler, 2 teaspoons to a 16-ounce jar, and 1 tablespoon to a 32-ounce jar. A slice or two of onion, a slice of lemon or a strip of canned pimiento, and a bay leaf or two may be placed around the sides, depending on the preference of the individual packer. Each container is then filled with vinegar diluted to 2.5 percent acidity, containing 1/2 pound of sugar, 1/4 pound of salt, 10 drops oil of cloves, 10 drops oil of allspice, and 10 drops oil of cardamom per gallon of solution. The spice oils usually are added to the sugar before dissolving it in solution to distribute the spice flavor more evenly.

The amount and variety of spice flavors may be altered to suit the taste of the packer or his market. The formula given is typical but is not claimed to be standard. The jars are vacuum-sealed, wiped clean, labeled, and packed one or two dozen jars to the fiberboard carton. The length of preservation depends on the care in manufacture and the temperature of the storage. If held under refrigeration at 40°F, this product should remain in good condition for at least 6 months. Exposure to light causes the herring to deteriorate more rapidly even under refrigeration, as in a refrigerated show case.

Cut Spiced Herring II

The cut pieces of herring are packed in wooden tubs holding 10 or 20 pounds, or in kegs holding 100 pounds if they are to be repacked in individual glass containers. A few spices, a bay leaf or two, and several slices of onion are placed in the bottom of the container, then a layer of cut herring is placed, then another layer of spices and onion. This is repeated until the tub or keg is filled. The fish are covered with vinegar diluted with water in which the sugar is dissolved. The containers are then stored at 40°F to cure for 10 days. At the end of this time if the fish are to be repacked, they are removed from storage and packed in 8-, 16-, and 32-ounce glass jars. The vinegar used in curing may be strained and re-used, but some packers prefer to use fresh vinegar diluted to 3 percent acidity. A few of the spices,
bay leaves, and a little chopped onion are placed in each jar.

The quantities given in the formula below are sufficient for 10 pounds of cleaned herring. Whole spices are used in all recipes, unless otherwise specified.

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<tr>
<th>10 lb. salt herring</th>
<th>1/2 oz. cloves</th>
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<tr>
<td>2 oz. mustard seed</td>
<td>2 1/2 oz. sugar</td>
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<tr>
<td>1 oz. bay leaves</td>
<td>4 oz. onions, sliced</td>
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<tr>
<td>1 oz. allspice</td>
<td>2 qt. water</td>
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<tr>
<td>1 oz. black peppers</td>
<td>2 qt. vinegar (6 percent acidity)</td>
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<tr>
<td>1 oz. white peppers</td>
<td>1 oz. red (chili) peppers</td>
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There are other recipes for the preparation of cut spiced herring. Cut spiced herring in tubs usually go to delicatessen shops or other wholesale outlets.

**Rollmops**

The vinegar-cured fillets are wrapped around a piece of dill pickle or a pickled onion. The rolls are fastened with wooden toothpicks, cured several days in a spiced-vinegar sauce, then packed in glass containers, generally of the same sizes as those used for cut spiced herring. Anderson (1925) made a comprehensive study of the packing of rollmops. The formula given here is the one recommended by him:

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<tr>
<th>10 lb. salt herring</th>
<th>1/16 oz. cracked cinnamon</th>
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<tr>
<td>4 oz. chopped onions</td>
<td>1/4 oz. mustard seed</td>
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<tr>
<td>2 1/2 oz. sugar</td>
<td>1/16 oz. cracked ginger</td>
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<tr>
<td>1/4 oz. whole cloves</td>
<td>1/16 oz. crushed cardamom</td>
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<tr>
<td>1/4 oz. chili peppers</td>
<td>2 qt. distilled vinegar (5 percent acidity)</td>
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<tr>
<td>1/8 oz. bay leaves</td>
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<tr>
<td>1/8 oz. whole black peppers</td>
<td>1/8 oz. whole white peppers</td>
</tr>
<tr>
<td>1/4 oz. allspice</td>
<td>8 qt. dill pickles</td>
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<tr>
<td>1/16 oz. powdered nutmeg</td>
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Put the bay leaves and chili peppers in a small cloth bag so they can be easily separated for later use. Place this bag together with the balance of the spices and 3/4 quart of vinegar into a covered receptacle. Bring to a boil and allow to simmer for 1 1/2 to 2 hours. Violent boiling causes loss of the volatile acetic acid. A simple way to avoid it is to put the spices in a common fruit jar and place in boiling water for 2 hours. Allow to stand 1 to 2 weeks after boiling to insure still greater extraction of the spicing materials. Remove the chili peppers
and bay leaves which are to be used for decorative purposes. Strain the pickle through a cloth bag to remove the spices. Slightly less than three-fourths of a quart of pickle will be obtained.

**Preparation of the fish:** Remove heads and scale and wash. Split into two fillets and trim. Freshen two and one-half hours in running water, then drain. Ten pounds of medium size herring should give about 6 pounds drained weight.

**Preliminary vinegar-cure:** Pack the fillets skin down in a stone crock. Cover with one and one-fourth quarts of vinegar. If necessary, put a light weight on top to keep the fillets well covered. Allow to cure in a cool place for 40-48 hours. Remove and drain. The vinegar should now test about 2 percent acid and show a salinometer reading of about 30°. The fish has absorbed much of the acid and has lost some salt.

**Packing:** Cut each dill pickle lengthwise into four parts, then each of these across the center, making eight pieces in all.

Roll the fillets around a piece of pickle and fasten with a fresh clove. A clove serves the purpose just as well as a toothpick and adds to the attractiveness of the pack.

Place one teaspoonful of mixed, used spices on the bottom of the jar, then pack the fish. With a medium sized herring, three rolls will pack nicely into a No. 306 jar (six fluid ounces capacity), if placed on end. Decorate around the sides with a couple of chili peppers and a bay leaf. Add sufficient pickle to fill from 25 to 35 cc. (this is about equivalent to two level tablespoonfuls). The net weight should be five and one-half ounces or over. Seal the jars immediately after packing. Vacuum sealing is preferable.

Store in a cool place. Cold storage at about 35°F is advisable to insure longest preservation.

If vinegar-salt cured herring are used, the preparation and preliminary vinegar-cure steps are unnecessary. It is believed that a better product will be obtained if the vinegar-salt cured herring are used. Test packs, by the writer, of Anderson's formula indicate that the spice-vinegar sauce should be diluted to 3 percent acidity, that the rollmops should be cured in the spice sauce for 10 days, then repacked in jars with a few spices, and the jars should be filled with fresh 3-percent vinegar with 2 tablespoons sugar and 1 tablespoon salt to the
quart. Store at 34° to 40°F.

Herring in Sour Cream Sauce

Mild-cure salt (Holland style) herring are filleted, and milts are saved for later use. The fillets are soaked in cold water for two hours. The milts are rubbed through a fine sieve. The fillets are drained of surplus moisture. The vinegar, wine, and spices are boiled together for a few minutes, then cooled. After removing the spices, the vinegar-wine mixture is stirred into the sour cream, sweet cream, and milts. The fillets are packed in a container with sliced onions, then covered with the sauce. They are allowed to marinate in a cool place one week. The fish are then packed in glass jars, which are then filled with the sauce.

1 gal. keg Holland style herring
1 pt. white wine, dry
1 pt. sour cream
1 pt. sweet cream
1/2 pt. distilled vinegar
1/2 oz. mixed spices
2 cups onions, sliced thin

Herring in Wine Sauce

Wine sauce formulas are similar to the standard spice sauce formulas for herring, except that the amount of vinegar is reduced one-half or three-fourths and wine is added. A dry white wine or burgundy-type red wine should be used. Sweet wines are not suitable. A sample wine sauce

1 qt. white wine
1 pt. white, distilled vinegar
4 oz. chopped onions
2 1/2 oz. sugar
1/4 oz. mustard seed
1/4 oz. whole cloves
1/4 oz. chili peppers
1/8 oz. whole black peppers
1/8 oz. whole white peppers
1/4 oz. whole allspice
1/16 oz. ground nutmeg
1/16 oz. cracked cinnamon
1/16 oz. cracked ginger
1/16 oz. crushed cardamon
1/8 oz. bay leaves

First the vinegar and wine are poured into a large, covered jar, and the onions, sugar, and spices are added. The jar is placed in a pan of boiling water for two hours, then allowed to stand overnight. The sauce is then strained to remove the spices.

If vinegar-salt cured herring are used, the herring fillets are cut into pieces of suitable size, rinsed in fresh water, drained, and packed
in glass jars with a few fresh spices such as bay leaves, chili peppers, and a slice of lemon. The jars are filled with wine sauce and sealed. The amount of sauce above is enough for about 10 pounds of fish.

If ordinary salt herring are used, they are filleted and freshened in water. The drained fillets are packed in a stoneware crock, covered with 1 quart distilled vinegar of 3 percent acidity (for 10 lb. herring) and allowed to stand 48 hours. The fillets are then cut into cubes and packed in jars, which are filled with wine sauce.

Mackerel

Fillets: This formula, developed for mackerel, may be used for other fish as well. It has been obtained from German sources. Clean and wash the fish thoroughly, then cut into fillets, removing the backbone. Divide the fillets into 2-inch lengths and dredge in fine salt. Pick up the fillets with as much salt as will cling to the flesh and pack in a crock or tub. Let the fish stand for one to two hours, then rinse in fresh water. Cook the vinegar, water, and other ingredients slowly and gently for 10 minutes, counting from the moment the liquid begins to boil. Add the fish and cook slowly for 10 minutes longer, counting from the moment the liquid again begins to boil. Remove the fish and allow the pieces to drain, then pack them in sterilized jars, adding some chopped onion, a bay leaf, a few spices, and a slice of lemon to each jar. Strain the spice vinegar sauce and bring to a boil. Fill the containers with hot sauce and seal immediately. Store in a cool dry place.

10 lb. mackerel fillets
2 qt. distilled vinegar
3 pt. water
2 cups chopped onion
clove garlic, chopped
1 tbs. crushed nutmeg

2 oz. sugar
1 tbs. allspice
1 tbs. cloves
1 tbs. black peppers
1 tbs. bay leaves

Pickled Eels

This dish is a favorite in northern Europe, from the British Isles to Sweden. Clean and skin the eels and cut them into pieces about 3/4 inch thick. Wash and drain the pieces, then dredge in fine salt and allow to stand from 30 minutes to 1 hour. Rinse off the salt, wipe the
pieces dry, and rub them with a cut clove of garlic. Brush the eel pieces with melted butter and broil until both sides are lightly browned. As an alternative, pieces may be sautéed in olive oil or other good vegetable oil. Place the pieces of cooked eel on absorbent paper. When the pieces are cool, pack them in layers in a crock with a scattering of sliced onion, allspice, bay leaves, mustard seed, whole cloves, peppers, and mace between the layers of fish. Weight the mixture down to keep it compressed. Cover the fish with a cold vinegar sauce made of vinegar, water, onions, and a few bay leaves cooked for 15 to 20 minutes. After standing for 48 hours in a cool place, pack the eels in glass tumblers with a thin slice of lemon, a bay leaf, a slice of onion, and a few fresh whole spices for decoration. Fill the tumblers with sauce used in curing, which has been filtered. Seal the containers immediately. Store in a cool, dry place. This article remains in good condition for a considerable period of time.

Oysters

In the eighteenth and nineteenth centuries, pickled oysters were prepared commercially over most of the Atlantic Coast area. According to Stevenson (1899), pickled oysters were consumed extensively around New York during the Christmas holidays. They are not nearly so popular now and are usually prepared only for special orders. Some pickled oysters are prepared in Virginia for local consumption. Various formulae are available, some from traditional colonial sources, others found in French or other continental cookbooks. Two typical formulae are given here:

Virginia Pickled Oysters I: Open one gallon of oysters, saving the liquor. Strain the liquor and add enough salted water to make 3 pints. Simmer the mixture gently over a low flame. When the liquor is near the boiling point, add the oysters a few at a time, cooking until the "fringe" curls. Remove the oysters from the liquor and set aside to cool. Make a sauce of vinegar, white wine, bay leaves, onion, garlic, parsley, fennel, thyme, cloves, black pepper, allspice, cinnamon, and mace. Add this sauce to the oyster liquor and simmer 30 to 45 minutes. When it is cool, pack the oysters in glass jars with a bay leaf, a slice of lemon, and a few fresh spices in each jar. Strain the liquor and, when it is
cool, pour it into jars, seal immediately, and store in a cool, dark place. The oysters are ready for use in 10 to 14 days.

1 gal. shucked oysters
3 pt. oyster liquor
1 pt. distilled vinegar
1 pt. dry white wine
2 tbs. ground onion
2 cloves garlic, crushed
1 tbs. chopped parsley stems
2 tbs. crushed bay leaves

1 tbs. crushed fennel
1 tbs. crushed allspice
1 tbs. crushed black peppers
1 tbs. crushed cloves
1 tbs. crushed stick cinnamon
1/4 tbs. crushed mace
1/4 tbs. crushed thyme

Pickled Oysters II: Blanch one gallon of freshly opened oysters until the fringe curls. Remove the oysters and set them out to cool. Bring the liquor used in blanching to the boiling point, then set aside to cool. At the same time cook the vinegar and spices together slowly, then strain out the pieces. Combine the oyster liquor and spiced vinegar. Pack the oysters in glass tumblers with a bay leaf and a thin slice of lemon in each. When the sauce is cool, strain it and pour over oysters until the containers are filled. Seal the tumblers immediately and store in a cool, dark place.

1 gal. shucked oysters
2 qt. oyster liquor
1 qt. vinegar
1/2 oz. whole cloves

1/2 oz. whole allspice
1/2 oz. whole black peppers
1 blade mace

Mussels

This formula may also be used in pickling clams and oysters. Scrub the shells well and steam just enough to open the shells. Save the liquor or nectar. Remove the meats from the shells, cutting out the byssus or beard. Cool meats and nectar separately. When cool, pack the meats in sterilized glass jars with a bay leaf or two, a few whole cloves, and a thin slice of lemon to each jar.

Strain the liquor obtained in steaming the shellfish. To each quart of liquor add one-half pint distilled vinegar, one-half tablespoon each of allspice, cloves, and red peppers, with one-quarter teaspoon of cracked whole mace. Some recipes call for white wine or wine vinegar instead of distilled vinegar. The amount of wine or vinegar is a matter of personal taste. Simmer for 45 minutes. When the sauce is cool, pour
into the jars, and seal. Store in a cool, dark place. This product will be ready for use in about two weeks. Pickled mussels and oysters turn dark if exposed to the light.

Shrimp

Pickled shrimp is a regional speciality of the New Orleans area but is sold in fish markets from Key West to Washington, D.C. There are no standard recipes but those given here are believed to be typical.

Pickled or Spiced Shrimp Formula I: Peel the green shrimp and wash them well. Make a brine of 1 gallon water, 1/2 cup salt, 1 pint distilled vinegar, 1 tablespoon red peppers, 1/2 tablespoon cloves, 1/2 tablespoon allspice, 1/2 tablespoon mustard seed, and 6 bay leaves. Simmer the brine slowly for a half hour, then bring to a boil, and add the shrimp. After 5 minutes, counting from the time the brine again begins to boil, remove the shrimp from the brine and allow to cool. Pack in sterilized jars with a bay leaf, a few fresh spices, and a slice of lemon in each jar. Fill the jars with a solution made in the proportions of 2 pints of water, 1 pint of 5 percent distilled vinegar, and 1 tablespoon sugar. Seal the jars tightly and store in a cool, dark place. These pickled shrimp keep longer than those prepared by the second method which, however, requires less labor and is cheaper.

Pickled or Spiced Shrimp Formula II: Take 5 pounds of fresh, green headless shrimp. Wash them well but do not remove the shells. Put celery tops, salt, parsley, thyme, bay leaves, vinegar, and spices into the water. When this has boiled about 45 minutes, add the shrimp. Let boil 10 minutes, then set the pot aside and allow the shrimp to cool in the liquor. Drain and pack in small cartons with some of the spices. This product remains in good condition only a very short time unless held under refrigeration.

| 5 lb. shrimp | 1 tbs. allspice |
| 1 gal. water | 1 tbs. bay leaves |
| 1 pt. distilled vinegar | 1 tbs. red (chili) peppers |
| 2 cups salt | 1 tbs. black peppers |
| 1 bunch celery tops | 1/2 tbs. cloves |
| 1 small bunch parsley | 1 blade mace |
REFERENCES


VI-D: SALTING FISH

The next time you come home with a sizable catch of fish, you might want to preserve them in an entirely different manner. You probably never considered salting fish, but the procedure is simple and easy. Our earliest records of food preservation practices include using salt for preserving fish. Salt has long been used both as the primary preserving ingredient and in combination with other methods such as drying and smoking.

In recent years, salting as a technique for preserving fish has become less popular because of development of quick freezing preservation methods. Frozen fish have much the same flavor as fresh fish, while salted fish have a distinct flavor derived from the salting process.

Salting is usually done by one of two methods; brine salting or dry salting. In the brine salting process, the fish are salted and layered in a container and held in the brine liquor that seeps from the salted fish. In the dry salting method, the brine liquor that escapes from the fish is allowed to drain away. Although commercial salting of fish has declined significantly in this country, a small quantity of fish is still salted. Most of it is exported to the Caribbean, South America, and southern Europe.

Why Salt Slows Down Spoilage

Common salt or sodium chloride, if present in sufficient quantities, will slow down the processes that occur in fish during spoilage. Spoilage is brought about by two causes: (1) autolysis, the deterioration of the bodily tissues after death by enzymes which are part of the biological makeup of the fish; (2) deterioration due to bacteria already present in the fish, which grow rapidly under favorable conditions and produce enzymes which break down the fish tissues. Usually the quantity of bac-
teria in the body of a fish is small, but more bacteria are often introduced through handling, cleaning, washing, etc. Most of the enzymes and bacteria are destroyed or rendered inactive in a concentrated solution of salt.

As salt is being absorbed into the fish, the bacteria and the enzymes are still active, and their growth and activity continues until a certain level of salt concentration is reached. At that level, bacterial growth and activity are arrested and spoilage prevented. The presence of more than 6 percent salt in solution in the tissue of the fish retards both autolytic and bacterial decomposition. If the uptake of salt is slow, the fish can become spoiled before this level is reached.

Factors Affecting Salting Process

Several factors affect the rate of salt absorption into the fish. These include; (1) the purity of the salt; (2) the thickness of the fish; (3) freshness and fat content of the fish; (4) the temperature; and (5) the care and cleanliness exercised in handling the fish.

(1) If a solution of pure sodium chloride is used, fish do not acquire the bitter taste commonly associated with salted fish; but they become soggy and yellow. Fish salted with pure sodium chloride are most like fresh fish when freshened (soaked with water before preparing), but most commercially salted fish are prepared in salt containing such impurities as calcium and magnesium salts and sulfates. These impurities give the fish a firmer white flesh which has proved to be more marketable. They also give the fish a sharp bitter taste characteristically associated with salted fish.

If these impurities are present in sufficient quantities, the fish may spoil because the absorption of salt is inhibited.

(2) The thickness of the flesh of the fish can also affect the penetration of salt. If fish are salted whole or round (beheaded and eviscerated), the enzymes contained in the fish's body may cause the fish to spoil before salt is taken into the flesh in sufficient quantities to arrest spoilage. Since most of the enzymes causing autolysis are in
the blood and organs of the fish, whole fish are more susceptible to spoilage. Eviscerated fish should be thoroughly cleaned to minimize possible spoilage.

(3) Likewise, if the fish is not fresh when it is salted, the enzymes and bacteria may have caused the flesh to deteriorate to such a degree that the rate of salt absorption is slower than the decomposition of the fish.

The fat content in fish significantly affects the salting process. Fatty fish do not absorb salt as readily as lean fish, and bacterial growth may not be slowed quickly enough to prevent spoilage.

(4) Spoilage can also be enhanced or retarded by the temperature during salting. At very high temperatures, bacterial growth may be so rapid that the fish become spoiled before they absorb enough salt. Even after fish are salted, they deteriorate much more rapidly at high temperatures than at cool ones. Heavily cured fish (those which were cured in a concentrated solution) may be preserved at high temperatures for only a few days but can be held at lower temperatures much longer.

(5) If the fish are not handled and stored properly under sanitary conditions, the bacterial count of the fish during the salting process may be quite high. Also rough handling can tear and bruise the flesh of the fish and consequently shorten the amount of time the fish can be held before spoilage occurs.

Changes Due to Salt Absorption

Salt preserves fish by extracting water from the tissues and replacing it with salt. This absorption occurs until the concentration of salt in the fish tissues is the same as the concentration in the solution surrounding the fish, or until it reaches an upper limit of about 20 percent. Once the concentration of salt in the fish rises above 9 percent, irreversible changes take place in the muscle proteins. At this point, the fish is said to be "struck through". The inner flesh loses much of its translucent appearance and stickiness.
Select Fish Carefully

Before beginning the salting process, it is important to understand the characteristics of the fish you wish to salt. The fish with a high fat content should probably be salted by the brine method rather than the dry-salting method, since the brine method gives a more consistent distribution of salt. Fatty fish do not absorb salt as readily and are more likely to spoil.

Once the fish are salted, fat tissues are susceptible to rancidity due to oxidation, so fatty fish need to be kept in cold storage or in a manner that prevents them from oxidizing. Such handling is more successful (or easier) with the brine method.

It is difficult to classify fish accurately based upon fat content which varies considerably from one fish to another within the same species. Also, the statistics are based upon a relatively small number of samples. The following lists can serve as a general guide.

Fish have been categorized as lean if the percentage of fat is less than 2.5 percent, moderate if between 2.5 percent and 6.5 percent, and fat if over 6.5 percent. Exceptions for species within a common name have been noted.

Fat Content of Fish

Some FAT fish are: Atlantic herring, Atlantic mackerel, butterfish, chinook salmon, freshwater eels, lake trout, Pacific herring, rainbow trout, sablefish, shad, sockeye salmon, and whitefish.

Some MODERATELY FAT fish are: albacore, bluefin tuna, bluefish, brook trout, carp (Barbus), carp (Cyprinus), chub, chum salmon, coho salmon, conger eels, Dolly Varden trout, Indian carp, lake herring, mackerel (Austria), mackerel (Scomber), mackerel (Scomberomorus), mullet, Pacific mackerel, pink salmon, sardines, scup, smelt, and swordfish.

Some LEAN fish are: bigeye tuna, carp (Cirrhina), cod, croaker, fimbriated herring, flounder, grouper, haddock, hake, halibut, Indian mackerel, perch, pike, pollock, pompano or permi, porgies, rockfish, snake eels, snapper, soles, whiting, and yellowfin tuna.

Salt Purity is Important

For salting, use the purest salt with the finest grain available. Salt which is virtually chemically pure (less than 1 percent impurities)
results in fish with a milder, more pleasant flavor, which do not need prolonged freshening. The finer the salt, the more rapidly the brine forms, thus the more rapidly the flesh is penetrated with salt. Standard curing salt is available from salt companies, butcher supply firms, and, often, rural feed stores.

For home preparation, the brine method or gaspe is becoming more popular.

The Heavy Cure Method

Most small or medium sized fish are prepared for brining in the same manner: they are scaled, beheaded, eviscerated, and split along the backbone. To facilitate penetration by the brine, the fish can be scored at 1-2 inch intervals along the length. When scoring the flesh, the skin should not be cut. Large fish can be filleted and thick-skinned; spiny or large-scaled fish should be skinned before brining.

The prepared fish should be washed thoroughly in fresh water and then soaked in a brine of 1/2 cup of salt in one gallon of water for 30-60 minutes. This will draw any blood from the fish and cut any remaining skin slime.

After the fish are drained for 5-10 minutes, they should be dredged (or coated) with salt. The fish are now ready to be placed in the container in layers.
A good container for brining is a stoneware crock. Put a layer of salt in the bottom, then a layer of fish skin side down (or backs down if whole). Add a thin layer of salt and another layer of fish at right angles to the preceding layer. Do not let the fish in a single layer overlap any more than is necessary. Stagger the layers so that the fish are distributed as evenly as possible. Place the top layer of the fish skin side up (or backs up) and add a generous amount of salt.

The amount of salt used for the entire salting should be between a quarter to a third the weight of the fish. This amount is dependent upon the purity of the salt, the size of the grain, the temperature (warm weather requires more salt), and the size and fat content of the fish.

Put a loose wooden cover on the top layer and a weight on top of that to compress the fish and force out the brine. Small fish will generally be completely brined in about 48 hours, while larger, fatter fish may take 10-14 days.

When brining is completed, scrub the fish in a fresh full-brine solution (one quart of salt for each gallon of water) with a stiff brush. Then repack in the crock, with a light sprinkling of salt between layers. Make sure the layers are well pressed.

Fill the crock with a fresh full-brine solution and store in a cool, dark place. The fish will keep like this for about 9 months, if the brine is closely watched. At any sign of fermentation, the fish should be washed and repacked.
Light Cure

The procedure for a light cure is the same, but it can be used only for fresh (less than 48 hours old), lean fish and only in cool temperatures. The amount of salt used for a light cure or gaspe is generally in the proportion of 1 to 10. This may vary, as in a heavy cure, depending on the temperature, the type of fish, and other factors. After the fish are cured, they should be removed from the brine, put in a container, and stored in the refrigerator. They can be kept chilled for a short period of time or they may be dried and chilled.

Light-cured fish are yellow when removed from the brine; when dried, they have amber-colored translucent flesh and taste somewhat like cheese. Light-cured fish cannot be kept nearly as long as heavily cured fish.

Curing Herring

Herring are handled differently. They should be brined immediately after being caught (not held on ice). They can be brined whole, gibbed, or thoroughly cleaned.

Traditionally they are gibbed. In this process, the herring is held with its back to the palm, the head between the thumb and forefinger, leaving the throat clear. A short bladed knife is inserted under the gill cover. With the edge of the blade toward the stomach, a sharp twist upward and outward removes the throat, pectoral fins, gills, and main gut in one operation. Since the strong taste associated with whole or gibbed fish has become less popular today, it is preferable to clean the fish thoroughly, removing all the viscera and the head.

Thoroughly scrub the herring in a brine solution to remove scales and leach out the blood, then drain. Layer the herring in the crock with their backs down, except the top layer which should be backs up. The brine solution of the herring should be replaced every two months.

Dry Salting

The dry-salting process requires more care and effort than the brine method. And though fish (particularly fat fish) are more likely to spoil during the dry-salting process once the fish are "struck through", drying decreases the likelihood of spoilage. This is the traditional
method for curing cod in the New England area and North Atlantic. Dry-salted cod, cusk, haddock, and mackerel can be bought in many parts of the country in wooden boxes or tubs.

Fish to be dry-salted should be bled immediately when caught. Cut the throat and remove the gills, and ice the fish; when ready to salt, clean the fish and cut it along the backbone so the flesh lies flat. Clean the fish thoroughly, inside and out, removing all traces of black skin, blood, etc. Wash in a brine of one cup of salt for each gallon of water. Scrub the fish to be sure it's clean and then drain well. Remove as much moisture as possible.

Using the finest salt available, dredge the fish in salt. Put a layer of salt in the bottom of the container to be used. The container should drain well, to allow the brine to flow away from the fish and not remain trapped in the bottom. The fish should be placed skin side down with salt spread between each layer of fish. The top layer should be placed skin side up and then thoroughly salted. The usual proportion of salt is 25-33 percent of the weight of the fish. More or less may be needed depending upon the temperature, the salt used, and the condition of the fish. A top with a weight on it can facilitate the flow of brine from the fish.

Usually the fish should be left for about 48 hours to a week, depending upon the humidity and the temperature. Under warm and dry conditions, the time could be shorter.
Once the fish are "struck through" they should be removed from the salt and scrubbed well with a brine solution so that no salt remains on the surface. Drain the fish well. They are now ready to be dried.

Drying should be done in the shade (sunlight will discolor the fish) in an area with free-flowing air circulation. A hardware-cloth screen raised on legs a few feet off the ground can be used. The fish should be placed skinside down on the screen. Prop cheesecloth over the fish so flies do not spoil them. They should be turned several times the first day.

The screens must be brought indoors at night for the moisture could allow mold to grow on the fish. If the weather turns bad and the fish can't be taken outside, the fish should be salted lightly. This salt should be brushed off when they are again put out of doors.

Rapid drying produces a superior product with a clear colored flesh. The best way to tell when the fish have dried sufficiently is to pinch the thick section of the flesh. If your fingers don't leave an impression, the fish are ready for packing.

Dry salted fish are usually wrapped in wax paper and packed in wooden boxes or tubs. If these are unavailable at home, you can wrap the fish and place them in the freezer. Even in wooden containers with airtight lids, they should be kept in a cool, dry place.

For the majority of recipes, dry salted fish should be freshened by soaking in fresh water from one half hour to twelve hours before preparing. Salted fish which have been freshened can be used in nearly any standard recipe calling for fish or fillets.
VI-E: TIPS FOR COOKING AND SERVING

How To Cook Fish

Fish are delicious -- if cooked properly. We cook fish to develop their flavor, to soften the small amount of connective tissue present, and to make the protein easier to digest. Cooking fish at too high a temperature or for too long a time toughens them, dries them out, and destroys their fine flavor.

How can you tell when fish are cooked? Raw fish have a watery, translucent look. During the cooking process the watery juices become milky colored, giving the flesh an opaque, whitish tint. This color change is unmistakable. When the flesh has taken on this opaque whitish tint to the center of the thickest part, fish are completely cooked. At this point the flesh will easily separate into flakes, and if there are bones present, the flesh will come away from them readily.

Most cooked fish tend to break up easily, so handle fish as little and as gently as possible during and after cooking to preserve their appearance.

Baking: Baking is a form of dry heat cooking and is one of the easiest ways to cook fish. But "bake fish easy" is the most important guide to follow in fish cookery. Fish like a preheated, moderate oven set at 350°F for a relatively short period of time. This keeps the moistness and flavor in the fish, prevents drying, and keeps the fish tender and palatable. Fish not baked in a sauce or with a topping are basted with melted fat or oil to keep the surface moist.

Can fish be baked from the frozen state? Yes, provided the cooking time is increased to allow for thawing during the baking process and provided the recipe does not call for special handling such as stuffing or rolling.
Broiling: Broiling, like baking, is a dry heat method of cookery but in broiling the heat is direct, intense, and comes from only one source. Thin foods tend to dry out under the broiler, so when planning to use this method, choose pan-dressed fish, fillets, or steaks which are about 1 inch thick in preference to the thinner ones. If frozen, the fish should be thawed. Baste fish well with melted fat or oil or a basting sauce before placing them under the broiler. Baste again while broiling to keep the fish moist.

Follow the range manufacturer's directions for the operation of the broiler and preheating. The length of time it takes to broil fish depends on the thickness and the distance they are placed from the heat. As a general guide, have the surface of the fish about 3 to 4 inches from the source of heat and place thicker cuts farther from the heat than thin ones.

Cooking time will usually range from 10 to 15 minutes to reach the "fish flake easily" stage. As a rule, the fish do not need to be turned because the heat of the pan will cook the underside adequately. Turn the thicker pieces, such as pan-dressed fish, when half the allotted cooking time is up. Baste again with fat or sauce. Always serve broiled fish sizzling hot.

Charcoal Broiling: Charcoal broiling is a dry heat method of cooking over hot coals and in recent years has become a popular form of recreation. Fish, because they cook so quickly, are a natural for this method of cookery.

Pan-dressed fish, fillets, and steaks are all suitable for charcoal broiling. If frozen, the fish should be thawed in advance. Because fish flake easily as their cooking nears completion, use of a well-greased, long-handed, hinged wire grill is recommended.

Since charcoal broiling is a dry heat cooking method, thicker cuts of fish are preferable as they tend to dry out less during the process than thin ones. Also, baste the fish generously with a sauce that contains some fat before and while cooking to keep the fish juicy and flavorful.

Fish are usually cooked about 4 inches from moderately hot coals for 10 to 20 minutes, depending on the thickness of the fish.
Smoking (for flavor only): Smoking fish for flavor is a simple technique that requires a minimum of effort and equipment, and the fish smoked in this manner can be used in various recipes from appetizers to salads and casseroles. It is not a method of preserving fish, however. Items needed for smoking are a hooded or covered grill, (either gas, electric, or charcoal), briquets, one pound of hickory or other hardwood chips (if a charcoal grill is to be used), water, salt, oil, and fish. The best smoked fish is produced from "fat" fish like bluefish, mullet, mackerel, herring, and shad to name a few; however, other species can be used.

A. **Soak the chips** in two quarts of water until the fire is ready (or at least as long as the fish marinate).

B. **Marinate the fish** in a brine of one cup of salt dissolved in one gallon of water for the length of time in the table below.

C. **Start the fire** using fewer briquets than for an average broiling fire. Adjust the temperature on gas or electric grills according to the table. When the coals have burned to a red color, spread evenly over the bottom of the grill.

D. **Cover the charcoal** with one third of the wet chips. This not only produces the smoke but also lowers the temperature of the fire.

E. **Grease the grill** generously and keep oil handy for basting.

F. **Drain and dry the fish** and place it on the grill skin side down.

G. **Baste the fish** at the start and as needed during cooking to prevent the fish from drying out.

H. **Cover the grill** with the hood.

I. **Smoke the fish** for the amount of time indicated in the table below.

J. **Add the remainder** of the chips as they are needed to produce smoke.

K. **Fish are done** when they turn a golden brown and flake easily when tested with a fork.
<table>
<thead>
<tr>
<th>Size and Shape</th>
<th>How Long to Marinate in Brine</th>
<th>Cook at (°F)</th>
<th>How Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fillets or steaks (1/2 inch thick)</td>
<td>30 min</td>
<td>150°-175°</td>
<td>1 hr</td>
</tr>
<tr>
<td></td>
<td></td>
<td>200°</td>
<td>30 min</td>
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<td></td>
<td></td>
<td>250°</td>
<td>20 min</td>
</tr>
<tr>
<td>Fillets or steaks (3/4 inch thick)</td>
<td>45 min</td>
<td>150-175°</td>
<td>1 hr + 30 min</td>
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<tr>
<td></td>
<td></td>
<td>200°</td>
<td>30-45 min</td>
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<td></td>
<td></td>
<td>250°</td>
<td>30 min</td>
</tr>
<tr>
<td>Fillets or steaks (1 1/2 inch thick)</td>
<td>1 hr</td>
<td>150-175°</td>
<td>2 hr</td>
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<td></td>
<td></td>
<td>200°</td>
<td>1 hr + 15 min</td>
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<tr>
<td></td>
<td></td>
<td>250°</td>
<td>45-50 min</td>
</tr>
</tbody>
</table>

**Frying:** Frying is a method of cooking food in fat. For frying, choose a fat that may be heated to a high temperature without danger of smoking. This is necessary because a smoking fat begins to decompose and will give the food an unpleasant flavor. Vegetable oils and fats are preferable to fats of animal origin.

The temperature of the fat is extremely important. Too high heat will brown the outside of the fish before the centers are cooked. Too low heat will give a pale, greasy, and fat-soaked product. The most satisfactory frying temperature for fish is 350°F.

Frozen fish must be thawed before frying. Separate the pieces and cut to uniform size.

After frying, drain the fish immediately on absorbent paper to remove excess fat. Keep the fish warm in a low oven until all pieces are cooked, then serve immediately.

**Deep-fat frying:** Deep fat frying is a term applied to cooking in a deep layer of fat. It is a quick method of cooking and is an excellent way to cook tender foods and precooked foods.

For deep-fat frying you need a heavy, deep saucepan or French fryer with straight sides, a fry basket to fit the fryer, a deep-fat frying thermometer, or an electric fryer with automatic temperature control.
Use enough fat to float the fish but do not fill the fryer more than half full. You must allow room for the fish and for the bubbling fat.

The fish may be dipped in a liquid and coated with a breading, or dipped in batter. The coating will keep the fish moist during frying and will give them a delicious crispness.

Place only one layer of fish at a time in the fry basket and allow enough room so that the pieces do not touch. This prevents the temperature of the fat from dropping suddenly and assures thorough cooking and even browning. When the fat has heated to the proper temperature, lower the basket into the fryer slowly to prevent excessive bubbling. If the fat is at the right temperature when the fish are added, a crust forms almost immediately, holding in the juices and at the same time preventing the fat from soaking in. Fry until the fish are golden brown and flake easily, usually about 3 to 5 minutes.

**Oven-frying:** Oven-frying is not actually a true frying method but a hot oven method. Oven-fried fish resembles fried fish. This method of cooking fish was developed by Evelene Spencer, a former Bureau Home Economist, and is sometimes referred to as the Spencer method.

For oven-frying, the fish are cut into serving-size portions, dipped in salted milk, and coated with toasted, fine, dry crumbs. The fish are then placed on a shallow, well greased baking pan. A little melted fat or oil is poured over the fish, which are baked in an extremely hot oven (550°F). Nice features of oven-frying are that the fish don't require turning, basting, or careful watching, and that the cooking time is short, usually 10 to 15 minutes. The crumb coating and the high temperature prevent flavorful juices from escaping and give an attractive, brown crust.

**Pan-frying:** Pan-frying is a term applied to cooking in a small amount of fat in a frying pan. Of all the ways of cooking fish, pan-frying is probably the most frequently used -- and most frequently abused -- method. When well controlled, it is an excellent way of cooking pan-dressed fish, fillets, and steaks.

The general procedure is to dip the fish in a liquid and then coat them with a breading. Heat about 1/8 inch of fat in the bottom of a
heavy frying pan. For pans with a temperature control, the right temperature is 350°F. Place one layer of breaded fish in the hot fat, taking care not to overload the pan and thus cool the fat. Fry until brown on one side, then turn and brown the other side. Cooking time will vary with the thickness of the fish. In general, allow about 8 to 10 minutes.

**Poaching:** Poaching is a method of cooking in a simmering liquid. In poaching, the fish are placed in a single layer in a shallow, wide pan, such as a large frying pan, and covered lightly with liquid. The liquid used in poaching may be lightly salted water, water seasoned with spices and herbs, milk, or a mixture of white wine and water, to name just a few. As with other methods of fish cookery, it is important not to overcook the fish. Simmer the fish in the liquid in a covered pan just until the fish flakes easily, usually 5 to 10 minutes. Because the poaching liquid contains flavorful juices, the liquid is often reduced and thickened to make a sauce for the fish.

Poaching is a favorite method of cooking fish -- and with good reason. As an entree, poached fish can be served simply with a sauce or used as the main ingredient of a casserole or other combination dish. Chilled and flaked, poached fish makes a delicious salad.

**Steaming:** Steaming is a method of cooking fish by means of the steam generated from boiling water. When cooked over moisture in a tightly covered pan, the fish retain their natural juices and flavors. A steam cooker is ideal, but any deep pan with a tight cover is satisfactory. If a steaming rack is not available, anything may be used that prevents the fish from touching the water. The water used for steaming may be plain, or seasoned with various spices, herbs, or wine. When the water boils rapidly, the fish are placed on the rack, the pan is covered tightly, and the fish are steamed for 5 to 10 minutes or until they flake easily when tested with a fork. Steamed fish may be served in the same way as poached fish.
# Timetable for Cooking Fish

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<tr>
<th>Method of Cooking</th>
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<th>Amount for 6</th>
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VI-F: BASIC SHELLFISH RECIPES

Boiled Blue Crabs

24 live, hard-shell, blue crabs
6 quarts boiling water
1/3 cup salt


Fried Soft-Shell Blue Crabs

12 soft-shell blue crabs 2 eggs, beaten
1/4 cup milk 2 teaspoons salt
3/4 cup flour 3/4 cup dry bread crumbs

Dress crabs by cutting off the face just back of the eyes. Remove the apron; remove the spongy parts (the gills, stomach, and intestines) under the points of the body covering. Rinse in cold water; drain. Combine egg, milk, and salt. Combine flour and crumbs. Dip crabs in egg mixture and roll in flour-and-crumb mixture.

Pan-Fried: Place crabs in a heavy frying pan which contains about 1/8 inch of fat, hot but not smoking. Fry at moderate heat. When crabs are brown on one side, turn carefully and brown the other side. Cooking time approximately 8 to 10 minutes. Drain on absorbent paper. Serves 6.

Deep-Fat Fried: Fry in a basket in deep fat, 375°F for 3 to 4 minutes or until brown. Drain on absorbent paper. Serves 6.

NOTE: A commercial breading may be used. Follow the directions on the package.
Baked Crab Meat in Shells

1 pound crab meat
1/4 cup butter or other fat, melted
1/2 cup milk
1/2 teaspoon salt
1/4 cup grated cheese

1/2 cup chopped onion
2 tablespoons flour
1/2 cup tomato sauce
Dash pepper
1/2 cup soft bread crumbs

Remove any shell or cartilage from crab meat. Cook onion in butter until tender. Blend in flour. Add milk gradually and cook until thick, stirring constantly. Add tomato sauce, seasonings, and crab meat. Place in 6 well-greased, individual shells or 5-ounce custard cups. Combine cheese and crumbs; sprinkle over top of each shell. Bake in a moderate oven, 350°F for 20 to 25 minutes or until brown. Serves 6.

Stuffed Crab (Brennan's)

1 medium-sized onion, chopped fine
1/2 cup shallots (green onions) chopped fine
1 stick butter
2 cups coarse bread crumbs, dampened with oyster water or fish stock

1/2 teaspoon salt
1/2 teaspoon black pepper
Dash cayenne
1/2 pound crabmeat
1 tablespoon chopped parsley
2 bay leaves
1/2 cup buttered bread crumbs

In a medium-sized skillet, saute onion and shallots in butter. Add dampened bread crumbs and cook 3-5 minutes. Add bay leaves, salt, pepper, cayenne, crabmeat, and parsley; mix thoroughly, and heat through. Remove from heat and remove bay leaves. Pack stuffing into 4 crab shells and cover with buttered bread crumbs. Bake in shallow baking dish 15-20 minutes at 350°F. Serves 4.

Crab Meat Salad

1 pound crab meat
2 tablespoons chopped onion
2 tablespoons chopped sweet pickle
1/2 teaspoon salt
Lettuce

1/2 cup mayonnaise or salad dressing
1 cup chopped celery
2 hard-cooked, eggs, chopped
Dash pepper

Remove any shell or cartilage from crab meat, being careful not to break the meat into small pieces. Combine all ingredients except lettuce. Chill. Serve on lettuce. Serves 6.
Alaska King Crab Ole

1 pound Alaska king crab  
1/2 cup capers  
3/4 cup lemon juice  
1 cup olive oil  
1 pound avocados  
1/2 ripe olives (sliced)  
1/4 cup lime juice  
1 1/2 tablespoons cilantro

Thaw and flake crab meat. Peel and dice avocados. Combine juices, oil and cilantro; blend well. Pour over remaining ingredients and toss; chill well. Serve as an appetizer with tortilla chips. Serves 8 appetizer portions.

Alaska King Crab Salad in Cucumber Boat

8 ounce Alaska king crab  
1 1/2 tablespoons lemon juice  
1/2 teaspoon dill weed  
Salt and pepper to taste  
1 large cucumber  
1/4 cup mayonnaise  
1 tablespoon minced onion


Alaska King Crab Seafoam Salad Spread

4 ounce Alaska king crab  
1 ounce gherkins (dill)  
2 teaspoon horseradish  
1 ounce roast beef  
1 cup whipped cream


Deviled King Crab en Casserole

9 pound Alaska king crab  
4 tablespoons prepared mustard  
1 quart bread crumbs  
1 gallon white sauce (medium)  
Salt and pepper to taste  
Butter as needed

Thaw crab and flake. Add mustard, salt and pepper to white sauce. Adjust seasoning and blend in king crab meat. Pour mixture into individual casseroles or shallow hotel pan. Sprinkle liberally with bread crumbs and dot with butter. Place in moderate oven until top is nicely browned and crab is heated through. Serves 48.
Alaska King Crab Legs au Bleu

5 - 6 ounces Alaska king crab  Dry vermouth
(whole legs)
Blue cheese

Thaw crab meat. Place in shallow oven-proof dish. Pour vermouth over crab and marinate 20 minutes, turning occasionally. Sprinkle the crumbled blue cheese over crab. Place under broiler until cheese melts and crab is heated through, about 4-5 minutes. Baste once with the vermouth marinade. Serves 1.

BOILED LOBSTER

Live Whole Lobsters

2 live lobsters (1 pound each)  3 quarts boiling water
3 tablespoons salt  Melted butter

Plunge lobsters head first into boiling salted water. Cover and return to boiling point. Simmer for 20 minutes. Drain. Place lobster on its back. With a sharp knife cut in half lengthwise. Remove the stomach, which is just back of the head, and the intestinal vein, which runs from the stomach to the tip of the tail. Do not discard the green liver and coral roe; they are delicious. Crack claws. Serve with butter. Serves 2.

For the recipes requiring cooked lobster meat, cool lobsters and remove meat. Two live lobsters, 1 pound each, yield approximately 1/2 pound cooked lobster meat.

Spiny Lobster Tails

6 frozen spiny lobster tails  2 quarts boiling water
(5 to 8 ounces each)  Melted butter
1/3 cup salt

Place lobster tails in boiling salted water. Cover and return to boiling point. Simmer for 10 to 15 minutes, depending on size of lobster tails. Drain. Cut in half lengthwise. Serve with butter. Serves 6.

For the recipes requiring cooked lobster meat, cool spiny lobster tails and remove meat. One and one-half pounds frozen spiny lobster tails yield approximately 3/4 pound cooked meat.
BROILED LOBSTERS

Live Whole Lobsters
2 live lobsters (1 pound each)             1 tablespoon butter, or margarine, melted
1/4 teaspoon salt                            Dash white pepper
Dash paprika                                         1/4 cup butter or margarine, melted
1 tablespoon lemon juice

Place lobster on its back; insert a sharp knife between body shell and tail segment, cutting down to sever the spinal cord. Cut in half lengthwise. Remove the stomach, which is just back of the head, and the intestinal vein, which runs from the stomach to the tip of the tail. Do not discard the green liver and coral roe; they are delicious. Crack claws. Lay lobsters open as flat as possible on a broiler pan. Brush lobster meat with butter. Sprinkle with salt, pepper, and paprika. Broil about 4 inches from source of heat for 12 to 15 minutes or until lightly browned. Combine butter and lemon juice; serve with lobsters. Serves 2.

Spiny Lobster Tails
6 frozen spiny lobster tails (5 to 8 ounces each)       1/3 cup butter or margarine, melted
1/2 teaspoon salt                                             Dash white pepper
Dash paprika                                                3/4 cup butter or margarine, melted
3 tablespoons lemon juice

Thaw lobster tails. Cut in half lengthwise. Lay lobster tails open as flat as possible on a broiler pan. Brush lobster meat with butter. Sprinkle with salt, pepper, and paprika. Broil about 4 inches from source of heat for 10 to 15 minutes, depending on size of lobster tails. Combine butter and lemon juice; serve with lobster tails. Serves 6.

HOW TO BOIL SHRIMP

Boiling is the basic method of cooking raw shrimp. The shrimp may be boiled, then peeled; or they may be peeled, then boiled. The order is largely a matter of personal preference; about the only difference is in the amount of salt used in the boiling water.
Either way, 1 1/2 pounds of raw shrimp yield about 3/4 pound of cooked, peeled, and cleaned shrimp, ready to eat immediately or to be chilled for later use in any of the recipes that call for cooked shrimp.

To boil before peeling:
1 1/2 pounds shrimp 1 quart water
1/4 cup salt

To boil after peeling:
1 1/2 pounds shrimp 1 quart water
2 tablespoons salt

Shrimp Salad
3/4 pound cooked shrimp 2 tablespoons chopped sweet pickle
1 tablespoon grated onion Dash pepper
1/2 teaspoon salt Lettuce
1/4 cup mayonnaise or salad dressing

Cut large shrimp in half. Combine all ingredients, except lettuce; chill. Serve on lettuce. Serves 6.

Fried Oysters
1 quart select oysters 2 eggs, broken
2 tablespoons milk 1 teaspoon salt
1/8 teaspoon pepper 1 cup bread crumbs, cracker crumbs, or cornmeal

Drain oysters. Mix eggs, milk, and seasonings. Dip oysters in egg mixture and roll in crumbs. Fry in hot fat; when brown on one side turn and brown other side. Cooking time about 5 minutes. Drain on absorbent paper. Serve immediately with slices of lemon or Tartar sauce. Serves 6.
Oyster Stew

1 pint oysters  
1 quart milk  
1/8 teaspoon pepper  
4 tablespoons butter  
1 1/2 teaspoons salt  
Paprika

Melt butter, add drained oysters, and cook 3 minutes or until edges curl. Add milk, salt, and pepper, and bring almost to boiling point.

Steamed Clams

6 pounds shell clams ("steamers")  
1/2 cup boiling water  
Butter or margarine

Wash clams thoroughly. Place in a steamer, add water, and cover.
Steam for 5 to 10 minutes or until clams open. Serve hot in the shell with melted butter. Serves 6.

Clams Oregano (for two dozen cherry stone clams)

2 tablespoons olive oil  
1 medium onion  
1 teaspoon basil  
2 teaspoons lemon juice  
1 cup fresh bread crumbs  
2 tablespoons butter  
1 clove garlic  
1 tablespoon oregano  
1/2 cup chopped parsley

Saute onion and garlic in olive oil and butter. Combine remaining ingredients. Spread on clams, bake 10 minutes in 350°F oven or freeze.

New England Clam Chowder

1 pint clams  
1/4 cup chopped onion  
1 cup diced potatoes  
Dash pepper  
Parsley  
1/4 cup chopped bacon or salt  
pork  
1 cup clam liquor and water  
1/2 teaspoon salt  
2 cups milk

Drain clams and save liquor. Chop. Fry bacon until lightly brown.
Add onion and cook until tender. Add liquor, potatoes, seasonings, and clams. Cook about 15 minutes or until potatoes are tender. Add milk; heat. Garnish with chopped parsley sprinkled over the top. Serves 6.
Manhattan Clam Chowder

1 pint clams
1/2 cup chopped onion
1 cup chopped celery
1 cup diced potatoes
1 teaspoon salt
2 cups tomato juice

1/4 cup chopped bacon or salt pork
1/2 cup chopped green pepper
1 cup clam liquor and water
1/4 teaspoon thyme
Dash cayenne

Drain clams and save liquor. Chop. Fry bacon until lightly brown.
Add onion, green pepper, and celery; cook until tender. Add liquor,
potatoes, seasonings, and clams. Cook about 15 minutes or until potatoes
are tender. Add tomato juice; heat. Serves 6.

Broiled Scallops

1 1/2 pounds scallops, fresh or frozen
1/2 teaspoon salt
Dash paprika
3/4 cup butter or margarine, melted

1/3 cup butter or margarine, melted
Dash white pepper
2 tablespoons chopped parsley
3 tablespoons lemon juice

Thaw frozen scallops. Remove any shell particles and wash. Cut
large scallops in half. Place on a greased broiler pan. Combine butter,
salt, pepper, and paprika. Brush scallops with seasoned butter. Broil
about 3 inches from source of heat for 3 to 4 minutes. Turn carefully.
Brush other side with seasoned butter and broil 3 to 4 minutes longer.
Sprinkle with parsley. Combine butter and lemon juice; serve with
scallops. Serves 6.

Fried Scallops

2 pounds scallops, fresh or frozen
1 tablespoon milk
Dash pepper

1/2 cup dry bread crumbs
1 egg, beaten
1 teaspoon salt
1/2 cup flour

Thaw frozen scallops. Remove any shell particles and wash. Cut
large scallops in half. Combine egg, milk, and seasonings. Combine
flour and crumbs. Dip scallops in egg mixture and roll in flour-and-
crumb mixture.

NOTE: A commercial breading may be used. Follow the directions on the
package.
Pan-Fried: Place scallops in a heavy frying pan which contains about 1/8 inch of fat, hot but not smoking. Fry at moderate heat. When scallops are brown on one side, turn carefully and brown the other side. Cooking time approximately 4 to 6 minutes. Drain on absorbent paper. Serves 6.

Deep-Fat Fried: Fry scallops in a basket in deep fat, 350°F for 2 to 3 minutes or until brown. Drain on absorbent paper. Serves 6.

California Abalone Steak

Tenderize abalone -- using light strokes, pound slices (3/8" thick) with the smooth end of a mallet until the meat is limp and velvety, a state which has been compared to a limp pancake. Dip into flour, then into lightly beaten egg, and then into cracker meal. Pan-fry quickly in butter (45 to 55 seconds TOTAL time), turning once; overcooking toughens abalone.

Breaded Abalone

Dredge slices of abalone in flour, then dip them in eggs beaten with water, and roll them in crumbs. Saute in butter as in the recipe above.

Fried Abalone

Slice and tenderize abalone and cut into thin strips. Heat fat or oil in a deep fryer to 370°. Dip the pieces of abalone into beer batter for frying and fry until delicately browned. Salt and pepper to taste.

Abalone Chowder

This is made in the same way you make clam chowder, except abalone is cooked in chicken broth until tender and then ground. The ground abalone is added to the potatoes while they are cooking.

Keys Conch Steak

Tenderize conch -- pound with a sharp edged instrument (edge of plate) or parboil and pound until flesh is tender. Dip into batter and deep-fry in fat or oil heated to 390°.
Fried Conch
1 conch sliced
1 cup cracker meal
2 eggs, slightly beaten

Dip slices into cracker meal, then into eggs, then into meal again.
Season well and deep-fry in fat heated to 390°. Serves 2.

Conch Chowder
24 conchs
1/2 pound butter
4 cups water
6 large carrots diced
2 green peppers, diced
8 potatoes diced

3 onions, diced
4 cups canned tomatoes
2 bay leaves
1/2 cup flour
1/4 cup salad oil
salt and pepper

Grind conchs in a food grinder. Simmer the pieces in the butter until tender. Mix water, vegetables, and bay leaves in a large kettle and simmer until vegetables are tender. Add conch meat and butter to the kettle and continue to simmer. Brown flour in the oil, stir the roux into the chowder, and simmer until thickened. Season to taste. Serves 6.
VI-G: BASIC FINFISH RECIPES

Broiled Fillets or Steaks

2 pounds fish fillets or steaks, fresh or frozen
2 tablespoons melted fat or oil
1/2 teaspoon paprika
2 tablespoons lemon juice
1 teaspoon salt
Dash pepper

Thaw fish if frozen. Cut fish into 6 portions. Place fish in a single layer, skin side down, on a well-greased baking pan, 15 by 10 by 1 inches. Combine remaining ingredients and mix well. Pour sauce over fish. Broil about 4 inches from source of heat for 10 to 15 minutes or until fish flake easily when tested with a fork. Baste once during broiling with sauce in pan. Makes 6 servings.

Broiled Pan-Dressed Fish

3 pounds pan-dressed fish, fresh or frozen
1/4 cup melted fat or oil
1/4 cup lemon juice
1 1/2 teaspoons salt
3/4 teaspoon paprika
Dash pepper

Thaw fish if frozen. Cut fish into 6 portions. Place fish in a single layer, skin side down, on a well-greased baking pan, 15 by 10 by 1 inches. Combine remaining ingredients and mix well. Brush fish inside and out with sauce. Broil about 4 inches from source of heat for 5 to 8 minutes. Turn carefully and baste with sauce. Broil 5 to 8 minutes longer or until fish flake easily when tested with a fork. Makes 6 servings.

Baked Stuffed Fish

1 dressed fish (3 pounds fresh or frozen)
Salt
2 tablespoons melted fat or oil
Pepper
Bread stuffing

Thaw fish if frozen. Clean, wash, and dry fish. Sprinkle inside with salt and pepper. Place fish on a well-greased bake and serve platter, 18 by 13 inches. Stuff fish loosely. Brush fish with fat.
Bake in a moderate oven, 350°F for 45 to 60 minutes or until fish flakes easily when tested with a fork. Makes 6 servings.

Bread Stuffing

- 1/2 cup chopped celery
- 1/4 cup chopped onion
- 1/4 cup butter or margarine, melted
- 1 quart dry bread cubes
- Dash pepper

1 egg, beaten
1/2 teaspoon sage
1/2 teaspoon salt
1/4 teaspoon thyme

Cook celery and onion in butter until tender. Combine all ingredients and mix well. Makes 3 cups stuffing.

Fried Pan-Dressed Fish

- 3 pounds pan-dressed fish, fresh or frozen
- 1/4 cup milk
- 1 egg, beaten
- 1 teaspoon salt
- Dash pepper
- 1 1/2 cups dry bread, cereal or cracker crumbs
- Fat for frying

Thaw fish if frozen. Clean, wash, and dry fish. Combine milk, egg, salt, and pepper. Dip fish in milk and roll in crumbs. Place fish in a single layer in hot fat, in a 10-inch frying pan. Fry at a moderate heat for 4 to 5 minutes or until brown. Turn carefully. Fry 4 to 5 minutes longer or until fish are brown and flake easily when tested with a fork. Drain on absorbent paper. Makes 6 servings.

Barbecued Fillets or Steaks

- 2 pounds fish fillets or steaks, fresh or frozen
- 1/4 cup chopped onion
- 2 tablespoons chopped green pepper
- 1 clove garlic, finely chopped
- 2 tablespoons melted fat or oil
- 1/4 teaspoon pepper
- 1 can (8 ounces) tomato sauce
- 2 tablespoons lemon juice
- 1 tablespoon Worcestershire sauce
- 1 tablespoon sugar
- 2 teaspoons salt

Thaw fish if frozen. Cook onion, green pepper, and garlic in fat until tender. Add remaining ingredients and simmer for 5 minutes, stirring occasionally. Cool. Cut fish into 6 portions. Place fish in a single layer in a shallow baking dish. Pour sauce over fish and let stand for 30 minutes, turning once. Remove fish, reserving sauce for basting. Place fish in well-greased, hinged, wire grills. Cook about 4 inches from moderately hot coals for 5 to 8 minutes. Baste with sauce.
Turn. Cook for 5 to 8 minutes longer or until fish flake easily when tested with a fork. Makes 6 servings.

Deep-Fat Fried Fillets or Steaks

2 pounds fish fillets or steaks, fresh or frozen
1/4 cup milk
1 egg beaten
1 teaspoon salt

Dash pepper
1 1/2 cups dry bread, cereal, or cracker crumbs
Fat for frying

Thaw fish if frozen. Cut fish into 6 portions. Combine milk, egg, salt, and pepper. Dip fish in milk and roll in crumbs. Place in a single layer in a frying basket. Fry in deep fat, 350°F for 3 to 5 minutes or until fish are brown and flake easily when tested with a fork. Drain on absorbent paper. Makes 6 servings.

NOTE: A commercial breading may be used. Follow the directions on the package.

Oven-Fried Fillets or Steaks

2 pounds fish fillets or steaks, fresh or frozen
1 teaspoon salt
1/4 cup melted fat or oil

1/2 cup milk
1 1/2 cups cereal crumbs or toasted dry bread crumbs

Thaw fish if frozen. Cut fish into 6 portions. Combine milk and salt. Dip fish in milk and roll in crumbs. Place fish in a single layer, skin side down, on a well-greased baking pan, 15 by 10 by 1 inches. Pour fat over fish. Bake in an extremely hot oven, 500°F for 10 to 15 minutes or until fish are brown and flake easily when tested with a fork. Makes 6 servings.

Poached Fish with Egg Sauce

2 pounds fish fillets or steaks, fresh or frozen
2 cups boiling water
1/4 cup lemon juice
1 small onion, thinly sliced
1 teaspoon salt

3 peppercorns
2 sprigs parsley
1 bay leaf
Egg sauce
Paprika

Thaw fish if frozen. Remove skin and bones from fish. Cut fish into 6 portions. Place fish in a well-greased 10-inch frying pan. Add remaining ingredients. Cover and simmer for 5 to 10 minutes or until
fish flake easily when tested with a fork. Carefully remove fish to a hot platter. Pour Egg Sauce over the fish. Sprinkle with paprika.

Makes 6 servings.

Egg Sauce:

- 1/4 cup butter or margarine
- 2 tablespoons flour
- 3/4 teaspoon powdered mustard
- 1/2 teaspoon salt
- Dash pepper
- 1 1/4 cups milk
- 2 hard-cooked eggs, chopped
- 1 tablespoon chopped parsley


Steamed Fish

- 1 1/2 pounds fish fillets, steaks, or pan-dressed fish, fresh or frozen
- 1 1/2 teaspoons salt
- 1 quart boiling water
- 1 tablespoon salt

Thaw fish if frozen. Place fish in a well-greased steamer insert pan. Sprinkle fish with salt. Cover and cook over boiling water for 5 to 10 minutes or until fish flake easily when tested with a fork. Cool. Remove skin and bones. Makes 2 cups cooked fish.
VI-H: RECIPES BEYOND THE BASICS

Smoked Fish Spread

1 1/2 pounds smoked fish
2 teaspoons minced onion
2 teaspoons finely chopped celery
1 clove garlic, minced
2 tablespoons finely chopped sweet pickle
1 1/4 cup mayonnaise
1 tablespoon mustard (creole or brown mustard adds some zip!)
Dash Worcestershire sauce
2 tablespoons chopped parsley

Mix all ingredients together, place in mold and chill at least 1 hour. Garnish and serve with crackers or bread. Makes 3 1/2 cups.

Fish Timbales

1 cup bread crumbs
2 cups flaked poached fish (save liquid)
1 teaspoon grated onion
1/4 teaspoon white pepper
3 eggs, separated
3/4 cup heavy cream
1/4 cup white wine
1 teaspoon salt
nutmeg

Butter 6 ramekins. Soak crumbs in cream for 10 minutes. Add fish, wine and seasoning and mix well in a blender. Add the yolks and beat until smooth. Fold stiffly beaten whites into fish mixture and pour into ramekins (fill them). Place in bain-marie, cover with foil and bake for 30 minutes at 350°. Remove from oven, cool 5 minutes, unmold, and serve with the following sauce.

3 tablespoons butter
3 tablespoons flour
1 cup poaching liquid

Make roux with butter and flour. Add liquid and stir until thick. Add catsup or tomato paste just to color and 3/4 cup cooked shrimp.

Coulibiac

Brioche dough (or pastry dough)
1 1-pound can sockeye salmon (seasoned with 1/8 teaspoon dry dill weed)
2 hard cooked eggs
Egg wash (1 egg and 1 teaspoon water)
1/2 pound mushrooms, sliced
1/4 pound butter
2 tablespoons lemon juice

VI-57
2 cups cooked rice with 1 cup chopped parsley added salt
cayenne pepper black pepper

Roll dough into 1/4" thick rectangle. Place on parchment lined pan. Begin layering the ingredients (centered lengthwise, off center crosswise) in the following order:

3/4 of the rice mixture all of the salmon mushrooms rest of rice eggs cayenne and black pepper

Pour butter over all. Pull short lengthwise side up, trim crosswise ends if necessary and pull up, pull long lengthwise side up and over and seal all around top. Use excess dough for decorations. Paint pastry with egg wash. Cook at 375° until pastry is done.

Pompano En Papillote

2 pound pompano fillets or other fish fillets, fresh or frozen
1 can (6 1/2-7 oz.) crabmeat, drained, flaked, and cartilage removed
1/4 pound cooked, peeled and deveined shrimp, fresh or frozen
3 cups water
1 teaspoon salt
2 lemon slices
1 bay leaf

1/8 teaspoon dried thyme leaves, crushed Parchment or brown paper
2 tablespoons cooking oil
1/2 cup chopped green onion 1 clove garlic, minced
2 tablespoons margarine or butter
3 tablespoons flour
1/4 teaspoon salt
2 slightly beaten egg yolks
3 tablespoons dry white wine

Thaw fish if frozen. Chop shrimp. In 10-inch frying pan bring water, 1 teaspoon salt, lemon, bay leaf, and thyme to a boil. Add fish, cover, and simmer for about 10 minutes or until fish flakes easily when tested with fork. Carefully remove fish. Cut 6 pieces parchment or brown paper into heart shapes about 10x12 inches each. Brush paper with oil. Place one fillet on half of each heart. In saucepan melt margarine. Add onion and garlic and cook until tender. Blend in flour and 1/4 teaspoon salt. Add reserved stock. Cook, stirring constantly, until thickened. Gradually stir small amount of hot mixture into egg yolks; add to remaining sauce, stirring constantly. Heat just until mixture thickens. Stir in wine, crabmeat, and shrimp. Heat. Spoon about 1/2 cup sauce over each fillet. Fold other half of each paper heart over
fillet to form individual cases. Seal, starting at top of heart, by turning edges up and folding, twisting tip of heart to hold case closed. Place cases in shallow baking pan. Bake in hot oven, 400°F, for 10-15 minutes. To serve, cut cases open with large X design on top; fold back each segment. Makes 6 servings.

**Atlantic City Flamed Sea Bass**

- 2 pounds sea bass fillets or other fish fillets, fresh or frozen
- 2/3 cup margarine or butter, melted
- 1 teaspoon paprika
- 1 bunch parsley
- 2 tablespoons fennel seeds
- 1/2 cup brandy

Thaw fish if frozen. Divide into serving size portions. Place fish in a well-greased baking dish, 12 by 12 inches, with the skin side down. Combine margarine and paprika; brush fish with sauce. Reserve remaining sauce for serving with fish. Bake fish in moderate oven, 350°F, for 15-20 minutes or until fish flakes easily when tested with fork. Cover serving platter with parsley, sprinkle fennel seeds over parsley. Place fish on top of parsley. Pour reserved margarine mixture over fish. Heat brandy and flame; pour over fish. Makes 6 servings.

**Stuffed Flounder**

- 4 flounders, medium size
- 1 1/2 pounds shrimp, peeled and deveined
- 1/2 pound crab meat, fresh or canned
- 1/2 cup chopped celery
- 1 cup chopped onions
- 4 cloves garlic, minced
- 1/2 cup cooking oil
- 3 stale buns soaked in water
- 4 eggs
- 1/2 cup cracker meal or bread crumbs
- 1/2 cup green onion tops and parsley, chopped
- salt, pepper and cayenne

Boil shrimp. Put oil, celery, onions and garlic in heavy pot. Cook over medium heat in uncovered pot, until onions are wilted. Chop shrimp, and add to onion mixture. Then add crab meat, soaked buns and 2 unbeaten eggs. Mix well. Add 2 egg whites and mix. Then add 2 egg yolks, cracker meal or bread crumbs, green onion tops and parsley. Season generously with salt, black pepper and cayenne.

Split flounders lengthwise, removing bones, or make butterfly fillets. Stuff with the prepared mixture. Brush egg yolk across tops of fish and broil 10 minutes on one side. Turn over and broil 10 minutes on other side. Serve piping hot with drawn or garlic butter. Serves 4.
Garlic Butter:
1 pound butter
5 cloves garlic
1/2 lemon

Melt butter, add garlic and lemon juice and heat for about 3 minutes.

Trout Almondine

| 4 pounds fresh trout, cleaned | 1/4 cup chopped parsley |
| 1 egg | 1/2 teaspoon corn starch |
| 1/2 pint milk | 1 cup all-purpose flour |
| 1 5-ounce can almonds | Salt, pepper and cayenne |
| 1/2 cup cold water | Cooking oil |

Beat egg and milk together, set aside. Split trout lengthwise. Season generously with salt, pepper, and cayenne. Dip in egg and milk mixture, then roll in white flour. Put 1/2 inch cooking oil in heavy pot over high heat. Fry trout in uncovered pot. When trout is golden brown on both sides, set it aside. Grind almonds and put in heavy skillet until almonds are brown. Drain off 2/3 of the butter. Dissolve corn starch in 1/2 cup cold water and add to the fried almonds. Season with salt, pepper and cayenne to taste. Pour this mixture over fried trout. Garnish top with parsley. Serves 4.

Cocktail Quiche

| 1/2 cup mayonnaise | 1/2 cup milk |
| 2 beaten eggs | 8 ounces Swiss cheese |
| 1 2/3 cups flaked crabmeat | Sliced pastry for 9 inch quiche |
| 1/3 cup sliced green onion | pan or cream cheese pastry for miniature muffin tins |
| 2 tablespoons flour |

Combine mayonnaise, flour, egg and milk. Mix until blended. Stir in crabmeat, cheese and green onion. Pour into pastry lined pan. Bake at 350°F for 40-45 minutes.

Coquilles St. Jacques

| 1 cup dry white wine | 1/4 pound mushrooms, finely sliced |
| 3/4 cup water | 1 tablespoon chopped parsley |
| 1 bay leaf | 2 egg yolks |
| 1 tablespoon lemon juice | 4 tablespoons cream |
| 2 tablespoons butter | 4 tablespoons butter |
| Fresh bread crumbs | 4 tablespoons flour |
| 3 whole shallots |
| 1 pound scallops |

Simmer scallops and mushrooms in mixture of wine, 3/4 cup of water,
liver juice, bay leaf, parsley and shallots for 5 minutes. Remove and strain, reserving liquid. Make a medium white sauce with 4 tablespoons butter, 4 tablespoons flour, and 1 3/4 cups poaching liquid. Stir 2 egg yolks into 4 tablespoons cream and add to the sauce. Season to taste. Place scallops in shells and spoon sauce over. Add mushrooms around edges. Sprinkle with bread crumbs, dot with butter and heat in a 450° oven until lightly browned. Serve at once.

Pilgrims Clam Pie

3 dozen shell clams or 3 cans
(8 oz. each) minced clams
1 1/2 cups water
1/4 cup margarine or butter
1/2 cup sliced fresh mushrooms
2 tablespoons minced onion
1/4 cup all-purpose flour
1/8 teaspoon liquid hot pepper
1/4 teaspoon dry mustard
1/4 teaspoon salt
1/8 teaspoon white pepper
1 cup reserved clam liquor
1 cup half and half
1 tablespoon lemon juice
2 tablespoons chopped parsley
2 tablespoons chopped pimiento
Pastry for a 9 inch pie
1 egg, beaten

Wash clam shells thoroughly. Place clams in a large pot with water. Bring to a boil and simmer for 8-10 minutes or until clams open. Remove clams from shell and cut into fourths. Reserve 1 cup of clam liquor. (Or: if using canned clams, drain and reserve 1 cup of liquor). In a skillet melt margarine, add mushrooms and onion, and cook until tender. Stir in flour, mustard, liquid, hot pepper, salt, and pepper. Gradually add clam liquor and half and half. Cook, stirring constantly, until thick. Stir in lemon juice, parsley, pimiento, and clams. Pour mixture into a 9-inch round deep dish pie plate (about 2 inches deep). Roll out pastry dough and place on top of mixture in pie plate; secure dough to the rim of the pie plate by crimping. Vent pastry. Brush with beaten egg. Bake in a hot oven, 375°F, for 25-30 minutes or until pastry is browned. Makes 6 servings.

Squid Sauce for Pasta or Rice

1 pound squid
4 tablespoons olive oil
1 large onion
4 anchovy fillets, mashed
1 teaspoon parsley, chopped
1-2 cloves garlic, minced
1 tablespoon freshly grated parmesan cheese
1/3 cup dry red wine
1 cup peeled tomatoes, crushed
(fresh or canned Italian)
1 teaspoon oregano
1 tablespoon fresh chopped basil (1 teaspoon dry)
Salt
Freshly ground pepper
Clean squid, removing eyes, beak, skin and intestines, wash well. Slit mantle and chop (along with tentacles if desired) into small pieces. Heat olive oil in skillet until haze forms over the top. Add onion and anchovies and brown lightly. Add squid pieces and cook over medium heat about 10 minutes. Add garlic, pepper, oregano, and basil. Cook 30 minutes longer. Add tomatoes and parmesan. Cover and simmer about 30 minutes. Add salt and wine. Replace cover and simmer 2-3 minutes. Serve over pasta or rice.

**Squid Tempura**

<table>
<thead>
<tr>
<th>1/2 pound squid, cut into rings</th>
<th>8 baby onions</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 prawns, shelled, with the tail left on</td>
<td>8 slices potato</td>
</tr>
<tr>
<td>1 green pepper, cut into rings</td>
<td>1 cup flour</td>
</tr>
<tr>
<td>8 large mushrooms</td>
<td>2 eggs</td>
</tr>
<tr>
<td>8 slices eggplant</td>
<td>water</td>
</tr>
<tr>
<td></td>
<td>oil for frying</td>
</tr>
</tbody>
</table>

Sift flour. Add water to eggs to make 2 cups. Pour the liquid on the flour, mixing with swift and as few strokes as possible to avoid the development of gluten. Pat the ingredients dry with paper towel, then coat with the batter. Cook them in oil heated to 350°F. Serve with soy sauce and lemon wedges. Grated white radish and ginger root may be added to soy sauce for piquant taste. Makes 3-4 servings.

**Squid in Tomato Sauce**

| 2 pounds squid | 1/4 cup water |
| 1 cup sliced onion | 1 tablespoon flour |
| 1 clove garlic, minced | 1 teaspoon salt |
| 2 tablespoons cooking oil | Cooked rice or spaghetti (or other pasta) |
| 1 can (1 pound) tomatoes | |
| 1/2 teaspoon basil | |

Clean squid, cut into 1/2-inch rings. Cook onion and garlic in oil until onion is limp, not brown. Add tomatoes and basil, simmer for 5 minutes. Add squid rings. Cover, simmer 10 minutes or until squid is cooked. Blend water, flour, and salt. Stir into sauce, cook, stirring constantly until thickened. Serve on cooked rice, spaghetti, or your choice of pasta. Makes 4 to 6 servings.
Oysters Rockefeller

1 pint oysters, select or counts, fresh or frozen
1/4 cup margarine or butter
1/4 cup chopped celery
1/4 cup chopped green onion
2 tablespoons chopped parsley
1 package (10 oz.) frozen chopped spinach
1 tablespoon anisette
1/4 teaspoon salt
Rock salt
18 baking shells
1/4 cup dry bread crumbs
1 tablespoon melted margarine or butter

Thaw oysters if frozen. In small saucepan melt 1/4 cup of margarine. Add celery, green onion, and parsley. Cover and cook 5 minutes or until tender. Combine cooked vegetables with spinach in blender container. Add anisette and salt. Chop vegetables in blender until almost pureed, stopping once or twice to push vegetables into knife blades. (Vegetables may be run through a food mill.) Make a layer of rock salt in pie tins. Place small baking shells or ramekins on top. (The rock salt is used mainly to hold shells upright; however, it also helps to keep oysters hot to serve.) Place the oysters in the shells or ramekins. Top each oyster with spinach mixture. Combine bread crumbs and 1 tablespoon melted margarine; sprinkle over oysters. Bake in a very hot oven, 450°F, for 10 minutes. Serve immediately in pie tins. Makes 6 appetizer servings of 3 oysters each.

Oysters Bienville

1 bunch green onions, finely chopped
1/4 pound butter
3 tablespoons flour
1 pint chicken or fish bouillon or broth
1 can chopped mushrooms
1/4 cup cheddar cheese
1/8 teaspoon paprika
3 egg yolks
3 ounces white wine
1/2 cup evaporated milk
Salt, pepper and hot pepper sauce to taste
1/2 pound shrimp, finely chopped
1 teaspoon oregano

This recipe, used as a casserole dish, will serve 4-6 persons. It can also be used as a sauce to cover approximately 4 dozen oysters on the half-shell.

Sauce:

Mix shrimp, mushrooms and 1 1/2 ounces of wine together. Set aside. Brown onions in butter; add flour and stir over low flame until mixture is a light brown. Add chicken or fish bouillon or broth which has been heated, slowly stirring all the while. Add shrimp, mushrooms and wine mixture until sauce is smooth and begins to thicken. Set aside
to cool slightly.

Beat egg yolks well, but not too long, with 1 1/2 ounces of wine and the evaporated milk. Slowly pour the warm sauce into this egg-wine-milk mixture, and stir constantly so it will stay smooth and not curdle. (Add liquor from pre-baked oyster shells and season to taste). Replace the whole mixture on the fire and cook over low heat for 10-15 minutes until thick, stirring constantly to prevent lumping or scorching. If too thin, add flour or cornstarch to thicken. Pour into four separate casseroles or ramekins and place 10 to 12 oysters in the middle of the mixture; cover with more sauce. Sprinkle well with cheddar cheese, place in 400°F oven and bake until golden brown.

CAUTION: Make sure oysters are placed between layers of sauce, as they will get extremely hard if cooked on the bottom.

**Shrimp in Lobster Sauce**

| 1 pound raw shrimp, peeled, deveined and washed | 1 tablespoon soy sauce |
| 1 tablespoon sherry | 1/2 teaspoon salt |
| 2 tablespoons fermented black beans, chopped | 1/4 teaspoon sugar |
| 1 teaspoon garlic, finely minced | 1 scallion, finely minced |
| 1/4 pound lean pork, finely chopped | 2 tablespoons corn starch |
| | 1 1/2 cups chicken stock |
| | 1 egg |
| | 5 tablespoons oil |

Mix soy sauce and sugar in a small bowl. Mix corn starch with stock. Add a little oil to pan and heat. Add shrimp and cook just until done. Add sherry and turn out onto plate. Add a little more oil to pan and heat. Add garlic, then pork and stir fry. Then add one item at a time: beans, soy mixture, corn starch/stock, shrimp and finally egg to thicken.

**Creole Bouillabaisse**

| 1 pound red drum fillets or other fish fillets, fresh or frozen | 1/4 cup all-purpose flour |
| 1 pound sea trout fillets or other fish fillets, fresh or frozen | 1 cup chopped onion |
| 1/2 pound raw shrimp, peeled, deveined, fresh or frozen | 1/2 cup chopped celery |
| 1 pint oysters, fresh or frozen | 1 clove garlic, minced |
| 1 can (6 1/2 oz.) crabmeat, drained, cartilage removed | 5 cups water |
| | 1 can (1 lb.) tomatoes, undrained cut up |
| | 1/2 cup dry white wine |
| | 2 tablespoons chopped parsley |
| | 1 tablespoon lemon juice |
| | 1 bay leaf |
2 tablespoons butter or margarine
2 tablespoons olive oil
1/2 teaspoon salt
1/4 teaspoon saffron
1/4 teaspoon cayenne pepper

Thaw fish if frozen. Remove skin and bones from fish. Cut each fish into 6 or 8 portions. In a 4 to 5 quart dutch oven, melt margarine. Add olive oil and blend in flour. Cook, stirring constantly, until light brown in color. Add onion, celery, and garlic. Cook, stirring constantly, until vegetables begin to brown. Gradually stir in water. Add tomatoes, wine, parsley, lemon juice, bay leaf, salt, saffron, cayenne pepper, and about 1/4 of the fish. Bring to a boil and simmer for 20 minutes. Add remaining fish and cook 5-8 minutes longer. Add shrimp, oysters, and crabmeat. Cook another 3 minutes or until all the seafood is done. Makes 8 servings.

Pickled Rock Shrimp

2 pounds cooked, peeled and deveined rock shrimp or other shrimp, fresh or frozen
1/2 cup salad oil
1/2 cup lime juice
1/2 cup sliced onion
6 lemon slices
1 tablespoon capers with liquid
1 tablespoon chopped parsley
1/2 teaspoon salt
1/2 teaspoon dried dill weed
1/8 teaspoon liquid hot pepper

Thaw shrimp if frozen. Combine remaining ingredients. Pour marinade over shrimp; toss lightly. Cover and chill several hours, stirring occasionally. Drain. Makes 60 to 70 hors d'oeuvres.

NOTE: This may be served over salad greens as an appetizer, makes 12 to 15 appetizer servings.

Paella or Saffron Rice with Seafood and Chicken

1 live lobster (1 1/2-2 pounds)
6 medium-sized raw shrimp in their shell
6 small hard-shelled clams
6 mussels
3 chorizos, or substitute 1/2 pound garlic-seasoned smoked pork sausage
1 chicken (1 1/2-2 pounds), cut into 12 serving pieces
2 teaspoons salt
1 large tomato, peeled, seeded and finely chopped
3 cups raw medium or long grain regular milled rice or imported short grain rice
1/4 teaspoon ground saffron or saffron threads pulverized with a mortar and pestle or with back of spoon
6 cups boiling water
Freshly ground black pepper
1/2 cup olive oil
2 ounces lean boneless pork, cut into 1/4-inch cubes
1/2 cup finely chopped onion
1 teaspoon finely chopped garlic
1 medium-size sweet red or green pepper, seeded, deribbed, cut into strips 1 1/2 inches long and
1/4 inch wide

1/2 cup fresh peas (1/2 lb.)
or 1/2 cup thoroughly defrosted frozen peas
2 lemons, cut lengthwise into 6 wedges each

With a cleaver or large, heavy knife, chop off the tail section of
the lobster at the point where it joins the body and twist or cut off
the large claws. Remove and discard the gelatinous sac (stomach) in the
head and the long intestinal vein attached to it. Without removing the
shell, cut the tail crosswise into 1-inch thick slices and split the
body of the lobster in half lengthwise, then crosswise in quarters; set
aside.

Shell the shrimp, leaving the tails intact. With a small sharp
knife, devein the shrimp by making a shallow incision down their backs
and lifting out the intestinal vein with the point of the knife. Scrub
the clams and mussels thoroughly with a stiff brush or soapless steel-
mesh scouring pad under cold running water and remove the black, ropelike
tufts from the mussels. Set the shrimp, clams and mussels aside on
separate plates.

Place the sausages in an 8-10 inch skillet and prick them in two or
three places with the point of a small sharp knife. Add enough cold
water to cover them completely and bring to a boil over high heat.
Reduce the heat to low and simmer uncovered for 5 minutes. Drain on
paper towels and slice them into 1/4-inch rounds.

Pat the chicken dry with paper towels and season with 1 teaspoon
salt and a few grindings of pepper. In a heavy skillet (10-12 inch),
heat 1/4 cup olive oil over high heat until a light haze forms above it.
Add the chicken skin side down, and brown it well, turning the pieces
with tongs and regulating the heat so they color evenly without burning.
As the pieces become a rich golden brown, remove them to a plate.

Add the lobster to the skillet. Turning the pieces frequently,
cook over high heat for 2-5 minutes or until the shell begins to turn
pink. Set the lobster aside on a separate plate and add the sausage to
the pan. Brown the slices quickly on both sides, then spread them on
paper towels to drain.
To make the sofrito, discard all the fat remaining in the skillet and in its place add the remaining 1/4 cup olive oil. Heat until a light haze forms above it, add the pork and brown it quickly on all sides over high heat. Add the onions, garlic, pepper strips and tomato. Stirring constantly, cook briskly until most of the liquid in the pan evaporates and the mixture is thick enough to hold its shape lightly in a spoon. Set the sofrito aside.

About a half hour before you plan to serve the paella, preheat the oven to 400°F. In a 14-inch paella pan or a skillet or casserole at least 11-inches in diameter and 2-2 1/2 inches deep, combine the sofrito, rice, the remaining teaspoon of salt and the saffron. Pour in the boiling water and, stirring constantly, bring to a boil over high heat. Remove the pan from the heat immediately. (Taste the liquid for seasoning and add more salt if necessary.) Arrange the chicken, lobster, sausage, shrimp, clams and mussels on top of the rice and scatter the peas at random over the whole. Set the pan on the floor of the oven and bake uncovered for 25-30 minutes until all the liquid has been absorbed by the rice and the grains are tender but not too soft. At no point should the paella be stirred after it goes in the oven.

When the paella is done, remove it from the oven and drape a kitchen towel loosely over the top. Let it stand for 5-8 minutes. Then garnish the paella with the lemon wedges and serve at the table directly from the pan.

**Japanese Broil**

8 small eels or large eels cut into 1 1/2- to 2-inch lengths
Salt
8 skewers

1 cup soy sauce (use Japanese soy sauce, not Chinese)
1 tablespoon sake wine, white cooking wine or sherry
4 tablespoons sugar

Mix soy sauce, wine and sugar well and boil for 2 minutes. Thread eels onto skewers and season them with salt. Broil over a charcoal fire for 20 minutes, brushing with sauce frequently and turning when first side is browned; or eels can be cooked in the oven without skewers. Serve hot with or over rice. Makes 4 servings.
Seafood Gumbo

1 pound okra, sliced
1/4 cup shortening
2 tablespoons flour
1 onion, chopped
1 bunch green onion, chopped
1/2 cup celery, chopped
1 can (10 1/2 oz.) tomatoes
2 sprigs parsley chopped
1 bay leaf
1 sprig thyme
2 quarts water
salt and pepper
1 pound shrimp, cleaned
1/2 pound crab meat, or 1
dozens crabs
1 teaspoon fileé, if desired

Fry okra in 2 tablespoons of shortening until it ceases to "rove", about 30-45 minutes. In another saucepan, make roux with remaining shortening and flour. Add onions and tomatoes, parsley, bay leaf, thyme and water. Simmer for 30 minutes. Season. Add peeled, deveined and washed shrimp, and crab meat (or crabs), and simmer for 30 minutes longer. Remove from heat. If desired, stir in fileé just before serving (never cook fileé). Gumbo is better cooked early in the day and refrigerated for several hours. Reheat and serve with cooked rice.

NOTE: If live, hard-shell crabs are used, scald and clean them, removing the spongy substance and the "sandbag" on the under part. Break off and crack the claws, and cut the body in half.

Turtle Soup (Soupe a la Tortue)

2 pounds turtle meat
1 tablespoon shortening
1 tablespoon butter
2 tablespoons flour (browned)
2 tomatoes
1 large onion
1 sprig of thyme
2 sprigs parsley
1 bay leaf
1 clove garlic, finely minced
1 square inch ham
1 dozen cloves, tied in muslin
6 allspice, finely mashed
2 quarts water
2 hard boiled eggs
1 glass sherry or white wine
Salt and cayenne to taste

Clean the turtle by washing thoroughly in cold water. Then put the meat into a saucepan and parboil for ten minutes. Carefully save this stock of water. Chop onion very finely, and cut the ham into fine pieces. Cut the turtle meat into one-inch pieces, mash the allspice very finely, and mince the parsley, thyme, and bay leaf. Then brown the onions in the mixture of shortening and butter, and almost immediately add the turtle meat. Brown together for ten minutes and add the ham. As this continues to brown, add the cloves of garlic, thyme, bay leaf and allspice. Mix all together, stirring almost constantly to prevent burning. Then add the well-rubbed tablespoons of flour, stirring con-
stantly. Scald and skin the tomatoes and chop them finely, and add to the turtle meat. When well browned, pour over three quarts of the water in which the turtle was parboiled, season with salt and pepper and cayenne to taste, and let it boil slowly for a full hour, stirring frequently. After one hour taste the soup and, if not sufficiently seasoned, add seasoning of salt, pepper and cayenne again.

Let it cook for about an hour longer until turtle is thoroughly tender. This may be ascertained by piercing it with a fork. Take it off the stove and strain through a colander into the tureen. Add the whites and yolks of two hard boiled eggs, chopped finely, and one glass of wine. Slice a lemon thinly and add to the soup and serve hot.

How to Serve Turtle Soup: Great care should be taken in serving the soup. Bear in mind that boiling the soup a second time, or warming it over, deprives it of much of its delicious flavor. To avoid this, fill two tureens with boiling water; let them stand a few minutes, then dry the insides thoroughly and place in a "bain-marie" or a hot-water bath. Fill the tureens with the soup and cover tightly. Bring them to the table, adding some dainty slices of lemon just before serving. If the meat is served, use only the most delicate portions.

Sushi Rolls (Seaweed stuffed with vinegared rice)

There are many different versions of this recipe, some more involved than others. The following version is somewhat "Americanized". Dried mushrooms and nori are available in specialty and ethnic food stores.

Vinegared Rice:

1/4 cup rice vinegar  
2 cups raw rice (washed until the water runs clear)  
3 tablespoons sugar  
2 teaspoons salt  
1 tablespoon sherry (or rice wine if available)

Mix vinegar, sugar, salt and sherry together. Wash and cook the rice with the equal amount of water. When the rice is done and still hot, place on a shallow platter, pouring the vinegar mixture over the rice and mixing with a few, swift strokes at the same time. Allow rice to cool.
Sushi:

6 cups vinegared rice
(recipe above)
6 dried mushrooms
9 shrimp
2 eggs
6 sheets nori cut in half
lengthwise
18 sprigs coriander or spinach
leaves

Soak mushrooms in 1 cup warm water until soft (about 20 minutes). Squeeze lightly, remove stem, slice in 1/2 inch pieces, and cook in 2 tablespoons soy sauce, 1 tablespoon sugar and 1/2 cup of the soaking liquid. Parboil coriander or spinach for 30 seconds or so. Drain and cool. Skewer the raw cleaned shrimp lengthwise with a toothpick to prevent curling and cook in boiling water just until done. Drain and cool. Beat eggs one at a time and fry in approximately 2 teaspoons oil to make crepes. Cool and slice in 1/2 inch strips.

To assemble: Place a nori sheet flat. Spread a fistful of rice on, leaving 1 1/2-2 inches on far side. Lay egg slices on, then coriander or spinach, then mushrooms, then whole shrimp. Roll up tightly, pushing hard to eliminate air spaces (a bamboo mat will help). Refrigerate for 10 minutes. Slice in rounds and serve at room temperature with soy sauce.

Seaweed Salad

A few strands wakame
1 cucumber, sliced
crab meat

Use wakame (lobe-leafed undaria), which is a type of seaweed sold dried. Restore it to a fresh state by briefly soaking in warm water. After soaking, cut the hard stems off. Mix wakame with sliced cucumber and crab meat, add a mixture of salt, vinegar, and sugar to taste and serve in a porcelain bowl.

Seaweed Vegetarian Dish

Soak hijiki (spindle-shaped bladder leaf) in water for a few hours until soft. Fry in oil sliced carrots and/or onion. Add hijiki, soy sauce, and sugar at the end of frying.
Fillets in Nori Wrappers

2 pounds fish fillets (white, firm fish) 1 teaspoon red pepper or 
10 sheets dried nori cayenne 
1/2 cup whole wheat flour 2 to 3 eggs, beaten 
1/2 cup wheat germ peanut oil

Wash fish and pat dry with a clean towel. Cut fillets to about 2 inches by 4 inches.

Cut nori sheets in fours. Wrap the nori around the fillets.

Combine the flour, wheat germ, and red pepper. Paint each wrapper with beaten egg and roll in the flour mixture. Coat about 6 to 8 at a time and fry in hot peanut oil until they become a rich golden brown. Then turn and fry the other side.

Serve hot. Makes 4 to 6 servings.

Carrot Cake with Nori Flakes

Varying amounts of nori can be used in this recipe. Doubling the seaweed will produce an extra-nutty, rich taste.

1/2 cup melted butter 2 eggs
1 sheet dried nori 1/2 cup honey
1 cup finely grated raw carrot 2 teaspoons baking powder
1 1/4 cups whole wheat flour 1/2 cup fresh lemon juice

Preheat oven to 350°F. Melt the butter in a saucepan. Tear the nori into pieces about the size of peas, and add to the melted butter to hydrate (about 5 minutes). Combine all ingredients. Mix well. Pour into well-buttered 5-cup mold or bread pan. Bake 1 hour. Let cool 10 minutes before removing from pan. Cool completely before serving. Makes 6 servings.
VI-I: SAUCES

Cocktail Sauce

1/2 cup catsup
1 tablespoon horseradish
1/2 teaspoon celery salt
6 tablespoons lemon juice
3 drops hot pepper sauce
1/4 teaspoon salt

Blend all ingredients and chill. Serves 6.

Tartar Sauce

1/2 cup mayonnaise
1 tablespoon pickles, minced
1 tablespoon olives, minced
1 tablespoon onion, minced
1 tablespoon parsley, minced

Mix thoroughly and chill.

Clam Dip

1 can (7 ounces) minced clams
2 packages (3 ounces each) cream cheese
1/4 teaspoon salt
2 teaspoons grated onion
Potato chips
1 teaspoon Worcestershire sauce
3 drops hot pepper sauce
2 teaspoons lemon juice
1 teaspoon chopped parsley

Drain clams. Save liquor. Soften cheese at room temperature.
Combine all ingredients except potato chips and liquor; blend into a paste. Gradually add about 1/4 cup clam liquor and beat until consistency of whipped cream. Chill. Serve in a bowl surrounded by potato chips. Makes about 1 pint dip.

Crab Dip

1 cup mayonnaise
1/2 cup sour cream
1 tablespoon chopped parsley
8-12 ounces crab meat
1 tablespoon sherry
1 teaspoon lemon juice
salt and pepper

Combine all ingredients and chill. Makes 2 cups.
Remoulade Sauce

1/4 cup tarragon vinegar  
2 tablespoons prepared brown mustard  
1 tablespoon catsup  
1 1/2 teaspoon paprika  
1/2 teaspoon salt
1/4 teaspoon cayenne pepper  
1/2 cup salad oil  
1/4 cup chopped celery  
1/4 cup chopped green onion  
1 tablespoon chopped parsley

In small bowl combine vinegar, mustard, catsup, paprika, salt and cayenne. Slowly add salad oil, beating constantly (may also be done in blender). Stir in celery, green onion, and parsley. Allow to stand 3-4 hours to blend flavors. Makes 1 1/4 cup sauce.

Blender Hollandaise Sauce

3 egg yolks  
2 tablespoons lemon juice  
dash cayenne pepper  
1/2 cup margarine or butter

Place egg yolks, lemon juice and cayenne pepper in blender container. Cover; quickly turn blender on and off. Heat margarine until melted and almost boiling. Turn blender on high speed; slowly pour margarine in, blending until thick and fluffy, about 30 seconds. Heat over warm, not hot, water until ready to serve. Makes 1 cup.

Blender Bearnaise Sauce

1 tablespoon chopped green onion  
2 teaspoons lemon juice  
1/4 cup dry white wine  
1/2 teaspoon dried tarragon leaves  
1/4 teaspoon dried chervil leaves  
3 egg yolks  
1/8 teaspoon cayenne pepper  
1/2 cup margarine or butter

In small saucepan combine green onion, lemon juice, white wine, tarragon, and chervil. Simmer until mixture is reduced to about 2 tablespoons. Cool. Place egg yolks, cayenne and herb mixture in blender container. Cover; quickly turn blender on and off. Heat margarine until melted and almost boiling. Turn blender on high speed; slowly pour margarine in, blending until thick and fluffy, about 30 seconds. Heat over warm, not hot, water until ready to serve. Makes 1 cup.
Mustard Sauce

1/4 cup margarine or butter 1/4 teaspoon liquid hot pepper sauce
3 tablespoons all-purpose flour
1 1/2 tablespoons dry mustard
1/2 teaspoon salt
2 cups half and half
1 egg yolk, beaten

In a saucepan melt margarine. Blend in flour, mustard, salt and liquid hot pepper. Gradually stir in half and half; cook until thickened, stirring constantly. Heat until thickened. Serve sauce over fish. Makes approximately 2 cups.
VI-J: GARNISHES

The importance of garnishes cannot be emphasized too much. No matter how nutritious and carefully prepared the food on a menu is, the visual appeal can be a determining factor in whether the food is eaten or not. Menus should be carefully planned to include garnishes that will be appealing to your eye as well as your appetite. Some of the more common garnishes are listed below to be used alone or in combination. For more substantial menu items, some tangy-sweet flavor combinations are suggested on the next page. All garnishes should be edible and should enhance the recipe they are used with.

<table>
<thead>
<tr>
<th>Garnishes</th>
<th>Suggested Preparation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Artichoke Heart</td>
<td>Sliced</td>
</tr>
<tr>
<td>Basil Leaves, fresh</td>
<td>Whole or chopped</td>
</tr>
<tr>
<td>Beets</td>
<td>Cooked whole or sliced</td>
</tr>
<tr>
<td>Capers</td>
<td>Sprinkled sparingly</td>
</tr>
<tr>
<td>Carrots</td>
<td>Tops, sticks, curls, or shredded</td>
</tr>
<tr>
<td>Chives</td>
<td>Chopped</td>
</tr>
<tr>
<td>Cranberry sauce (jellied)</td>
<td>Cutouts</td>
</tr>
<tr>
<td>Cucumbers</td>
<td>Slices, sticks, basket</td>
</tr>
<tr>
<td>Dill</td>
<td>Sprigs or chopped</td>
</tr>
<tr>
<td>Grapes, green or purple</td>
<td>Plain or frosted</td>
</tr>
<tr>
<td>Green or red peppers</td>
<td>Sticks or rings</td>
</tr>
<tr>
<td>Hard-cooked eggs</td>
<td>Slices, wedges, deviled, or grated yolks</td>
</tr>
<tr>
<td>Kiwi fruit</td>
<td>Sliced</td>
</tr>
<tr>
<td>Lemons or limes</td>
<td>Slices, twists, wedges, curls</td>
</tr>
<tr>
<td>Lettuce, red leaf, Boston, bibb, Romaine</td>
<td>Leaves or shredded</td>
</tr>
<tr>
<td>Mint</td>
<td>Sprigs or chopped</td>
</tr>
<tr>
<td>Nut meats</td>
<td>Toasted whole, halved, slivered or chopped</td>
</tr>
<tr>
<td>Oranges, fresh or canned mandarin</td>
<td>Slices, twists, wedges</td>
</tr>
<tr>
<td>Paprika</td>
<td>Sprinkled sparingly</td>
</tr>
<tr>
<td>Parsley</td>
<td>Sprigs or chopped</td>
</tr>
<tr>
<td>Pickles</td>
<td>Whole, sliced, chopped, fans</td>
</tr>
<tr>
<td>Radishes</td>
<td>Whole, sliced or roses</td>
</tr>
<tr>
<td>Tomatoes, Cherry</td>
<td>Sliced</td>
</tr>
<tr>
<td>Water cress</td>
<td>Sprigs or chopped</td>
</tr>
<tr>
<td>Scallions</td>
<td>Shredded and curled from root end</td>
</tr>
</tbody>
</table>

VI-77
 "Side-Boys" for seafood curry including kumquats, coconut, vegetable or fruit chutney, chopped peanuts, chopped onions, chopped raisins, etc.

- Broiled orange sections dipped in honey and shredded coconut
- Broiled peach halves sprinkled with oregano-seasoned bread crumbs
- Fruit and/or vegetable kabobs
- Cherry tomatoes filled with seasoned cottage cheese
- Golden broiled pineapple slices teamed with vivid spiced crab apples
- Grape or mint jelly in small pear halves
- Heated tomato halves topped with drained warm sauerkraut with caraway seeds
- Orange cups filled with cranberry sauce or lemon-cranberry relish
- Thin unpeeled orange slices topped with tiny plain or sugared grape clusters. Add mint or watercress sprigs.
- Whole tomatoes filled with cole slaw. Cut tomatoes almost through into sixths and spread open to give petal effect before adding cole slaw.