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PACIFIC SALMON -- SUCCULENT AND SAVORY

By Kathryn L. Osterhaug
Home Economist, Branch of Commercial Fisheries

To the man in the street "salmon is salmon," probably because no one has ever explained to him about the five branches of the royal Oncorhynchus family. The genus Oncorhynchus is found only in the Pacific, where it is regarded as the "king of fishes," for it is one of the most valuable fishery resources of the Pacific Coast of the United States, Canada, and Alaska. The chinook might be called the king of kings for he is commonly known as a king salmon. The four other branches of this illustrious family include the red or sockeye, silver or coho, pink, and chum salmon. Though their general appearance is similar, they do show characteristic variations in size and coloring, as well as in their natural habits and length of life.

Some descriptive data on each of the five species might be helpful in trying to distinguish between them.

King salmon (Oncorhynchus tshawytscha) is also known as spring or chinook salmon. It is the largest of them all with an average weight of twenty-two pounds, though some have been found to weigh three or four times this amount. Their color is silver with round black spots on the back and tail. Four to six years is the average life span of king salmon.

Sockeye (Oncorhynchus nerka) are also called red or blue-back salmon. Their average weight is about six pounds, and their life period ranges from four to six years. They are slender bodied fish with greenish blue above the silver on their backs.

Silver (Oncorhynchus kisutch), coho or medium red salmon are of a silver color which gradually merges into green on the back and have small black spots on the upper half of their tails. Their average weight is nine-and-one-half pounds, and they are from three to four years of age at maturity.

Pink salmon (Oncorhynchus gorbuscha) are the smallest of all the species--four pounds probably because their life period is only two years. Their color is silvery below and bluish on the back with faint black spots on back and tail.

Chum salmon (Oncorhynchus keta) are of a silvery color, which merges into gray on the back with a faint barred effect on the side. In its three to five year life span, it acquires an average weight of nine pounds.

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MEAT VARIES IN COLOR

Salmon flesh varies in color between the different species and between different fish of the same species. For instance, king salmon varies from deep red to white, sockeye is usually a deep red, pink salmon lives up to its name and varies between dark and light pink, silver salmon is distinctly red but of a different shade than sockeye, and chum salmon is a very light pink color.

These species of salmon are caught in large quantities in the waters of California, Oregon, Washington, British Columbia, and Alaska. Whenever any kind of fish is caught in great quantities in a sparsely settled section of the country, various methods of preservation must be employed in order to market them in an acceptable form many hundreds of miles from the source of supply. This is true of salmon caught in Alaskan and British Columbian waters. Many millions of dollars worth of salmon are caught and processed in these areas; in fact, salmon is the most important industry in Alaska and is also very important in the economic life of British Columbia. Canning, freezing, salting (mild cure), and smoking are the commonly employed methods of preservation with canning far in the lead of all the others.

FIRST CANNERY BUILT IN 1864

The first salmon cannery in the United States, a very crude affair, was built in 1864 on the Sacramento River in California. Though the products of this cannery were poor by modern quality standards, it was a basis on which improvements could be made resulting in our well-known modern canneries with their efficiency and high standards of quality. The year 1879 marks the beginning of the Alaska salmon canning industry. Here the industry has been developed to its greatest perfection. With modern methods, instruments and machinery, the process is under fine control and high standards can be maintained.

FREEZING SALMON FOR MARKET

A second method of salmon preservation, which is rapidly gaining importance is freezing. Now, as in the past, the fish are frozen dressed with gills and viscera removed, but not otherwise cut up. The fish are stacked in the freezing rooms much like cord wood and sent to market without further preparation. Before being sold to the consumer, they are thawed and cut into steaks and chunks by the retailer to meet the requirements of the individual purchaser. In recent years, there has been a movement toward marketing food of all kinds in small packages that is also being felt in the fish industry. Fish frozen in one-pound packages is found more and more in our retail food stores. The innovation is being taken up by the Alaska fishing industry, and soon we may find frozen Alaskan salmon steaks in the markets throughout the country much as we are now accustomed to the canned product.

PRESERVING BY SALTING

A third very important method used to preserve salmon is by salting or what is known as mild-curing. Mild cured salmon is shipped in barrels in brine. It is usually further processed by cold smoking before being sold to the final consumer as the very tasty smoked salmon, a product which has a longer storage life than the equally delicious, hot smoked kippered salmon, whose storage life is (but little longer than that of fresh fish and which is prepared from frozen, white-meated, king salmon.

Whether fresh, frozen, salted, smoked, or canned, salmon is a deliciously nutritious body-building food. It is exceptionally high in energy value, and its protein content is large and of good quality. Iodine, in exceptionally large quantities and in a readily available form, and calcium and phosphorus are the important minerals provided by salmon. The vitamins present in salmon include vitamin A, thiamin, riboflavin, and vitamin D. Of these, iodine and vitamin D are most noteworthy because appreciable quantities of these valuable food factors are seldom found in our common foodstuffs.

In spite of the many ingenious salmon preservation and processing methods, few people will disagree with the statement that salmon is never better than when freshly caught. Aside from its great commercial importance, salmon is also important in the sportfishing realm, and it is the sports-fisherman who can really appreciate the goodness of strictly fresh fish. Eaten for breakfast on the same morning that they are caught is really the peak of perfection, but, of course, that is an ideal which can seldom be attained. The criteria for judging the freshness of salmon are the same as for any other species of fish. Firm flesh, bright, protruding eyes, and absence of any "fishy" or other disagreeable odor are the points by which to judge the quality of a dressed fish. Much salmon is sold in the form of steaks, chunks, and fillets on the retail market, however, and the difficulty of judging the quality of these cuts is much greater than it is for the whole or dressed fish, each of which retain the head. The only means left for judging are texture and odor.

In order to maintain the quality of fresh fish during the necessary brief storage period before it is consumed, it should be kept at the lowest possible temperature without freezing.

RULES FOR COOKING

High quality, well cared for fresh salmon cannot, unfortunately, guarantee a cooked product which is succulent and savory. In order to do this, it is necessary that the cook follow certain fish cookery rules. Cook the salmon until it is done, but not overcooked, and cook it at a low or medium temperature, never a high temperature. High temperatures and excessively long cooking cause the fish to lose its natural juiciness and succulent flavor.

After thawing, frozen salmon is treated in a manner identical with that used for the unfrozen fish. During the thawing period, the temperature of the fish flesh should not be allowed to rise above 50 degrees F. In fact, 40 to 45 degrees F. is the recommended temperature for thawing fish. The lower shelves of a household refrigerator are ideal for this purpose. Standard cooking methods such as broiling, baking and pan broiling are the most popular for salmon because its natural richness and flavor are sufficient without any additions of fat or other flavorings.

Because so much of the Pacific salmon catch is marketed as the canned product, it is important to have a variety of methods for serving it. The simplest method is to serve the fish, either chilled or heated, plain or with an appropriate sauce. It is also excellent in salads, casserole dishes and creamed either by itself or with an added ingredient such as mushrooms, peas, or slices of hard cooked egg. Other suggestions are salmon loaves, pies, souffles and timbales. Leftover baked

or steamed salmon can be served in the same manner as the canned product. When using canned salmon, do not throw away the bones, for they are cooked soft enough to be entirely edible and they contain valuable amounts of calcium and phosphorus. In fact, canned salmon with backbone included compares favorably with milk in calcium content.

The following recipes are suggestions for serving the various forms of salmon found on our markets.

Breaded Baked Salmon Steaks

2 pounds salmon steaks
1 tablespoon salt
1 cup milk
2 cups fine toasted bread crumbs
4 tablespoons melted shortening

Add the salt to the milk and stir until dissolved. Dip the fish into the salted milk and roll in crumbs. (Use the left hand for dipping and the right hand for rolling in crumbs.) Arrange on a shallow oiled baking sheet and sprinkle each piece sparingly with melted fat. Bake in a 375° F. oven for 20 minutes. Serve with tartar sauce. Serves 6.

Tartar Sauce

1 cup salad dressing
1 tablespoon minced sweet pickle
1 tablespoon minced onion
1 tablespoon minced parsley
1 tablespoon minced capers (optional)

Mix all ingredients and serve.

Baked Salmon with Sweet Pickle Dressing

3 to 4 pounds salmon, drawn	4 slices bacon
1½ teaspoons salt	sweet pickle stuffing

Fish may be baked with or without the head and tail as desired. Clean, wash, and dry the fish. Sprinkle inside and out with salt and let stand for 10 minutes to absorb salt.

Stuff fish loosely, and close with skewers. Place fish on a greased rack in a baking pan. Lay slices of bacon over the top. Bake in a moderate oven 350° F. for 30 to 50 minutes, allowing 12 minutes per pound. If fish seems dry while baking, baste occasionally with drippings or melted fat. Remove to a hot platter, pull out the skewers and garnish. Serve immediately on a hot platter with or without a sauce as desired. Serves 6.

Sweet Pickle Dressing

1 cup fine bread cubes	1/2 tablespoon minced parsley
1/4 teaspoon salt	2 tablespoons melted shortening
Dash of pepper	1 tablespoon chopped sweet pickle
1 tablespoon chopped onion	1/2 tablespoon lemon juice

Mix all ingredients in order given.

Serve with escalloped potatoes, green beans and corn on the cob.

Broiled Salmon Steaks

2 pounds salmon steaks
1 teaspoon salt
1/4 teaspoon pepper
4 tablespoons butter or other fat, melted

Sprinkle both sides of each steak with salt and pepper and let stand 10 minutes to absorb the salt. Lay steaks on a preheated greased broiler pan and brush with melted fat. Place pan in preheated broiler about 2 inches from the heat, cook for 5 to 8 minutes or until slightly brown, baste with melted fat, and repeat process on other side. Turn carefully. Remove carefully to a hot platter, garnish, and serve at once. Serves 6.

Serve with whipped potatoes, buttered broccoli and a tossed vegetable salad.

Salmon Salad

1 $\frac{1}{2}$ -pound can of salmon	2 tablespoons lemon juice
2 $\frac{1}{2}$ cups shredded lettuce	$\frac{1}{2}$ teaspoon salt
3/4 cup diced celery	1/8 teaspoon pepper
1/2 cup minced green peppers	3 medium tomatoes
3 tablespoons salad oil	1/2 cup mayonnaise

Drain the oil and liquid from salmon. Combine the lettuce, celery and green pepper. Add the spices, salad oil and lemon juice. Mix lightly with a fork. Place this mixture in a salad bowl. Break the salmon into large flakes and spread over the top. Garnish with the mayonnaise and tomatoes cut in wedges. Serve immediately. Serves 6.

Broiled Kippered Salmon

2 pounds kippered salmon
2 tablespoons butter or butter substitute
1/4 teaspoon pepper

Place the fish, skin side up on the bottom of a broiling pan and place in a preheated (350° F.) oven 3 inches from the source of heat. Broil for 10 minutes. Turn skin side down, dot with butter and sprinkle with pepper. Broil 5 minutes longer or until brown. Serves 6.

Serve with baked potatoes and cole slaw.

Salmon Gismo

1 pound can of salmon
2 cups cooked rice
1 cup cooked peas
Cheese Sauce:
 $1\frac{1}{2}$ tablespoons shortening
 2 tablespoons flour
 $\frac{1}{2}$ teaspoon salt
 $\frac{1}{8}$ teaspoon pepper
 liquid from canned salmon plus
 enough milk to make $1\frac{3}{4}$ cups
 $\frac{1}{4}$ pound cheddar cheese, grated
 $\frac{1}{2}$ cup buttered crumbs

To prepare cheese sauce, melt shortening and blend in flour, salt and pepper. Add liquid and cook, stirring constantly until slightly thickened. Stir in the grated cheese and continue heating only until cheese has melted.

Drain liquid from salmon and save. Flake salmon and combine with rice, peas and cheese sauce. Place mixture in an oiled casserole. Cover with buttered crumbs and bake in a 375° F. oven for 20 minutes. Serves 6.

Serve with a combination vegetable salad and whole wheat muffins. This makes a complete lunch or supper.

Kedgeree

1 pound kippered salmon, flaked
2 cups cooked rice
4 hard cooked eggs, chopped
 $\frac{1}{4}$ cup melted butter
 $\frac{1}{4}$ cup finely chopped parsley
 $\frac{1}{2}$ cup milk, heated
 $\frac{1}{8}$ teaspoon pepper

Combine all of the ingredients in the top of a double boiler and heat thoroughly.

Serve for breakfast with a broiled grapefruit and a stack of buttered toast.