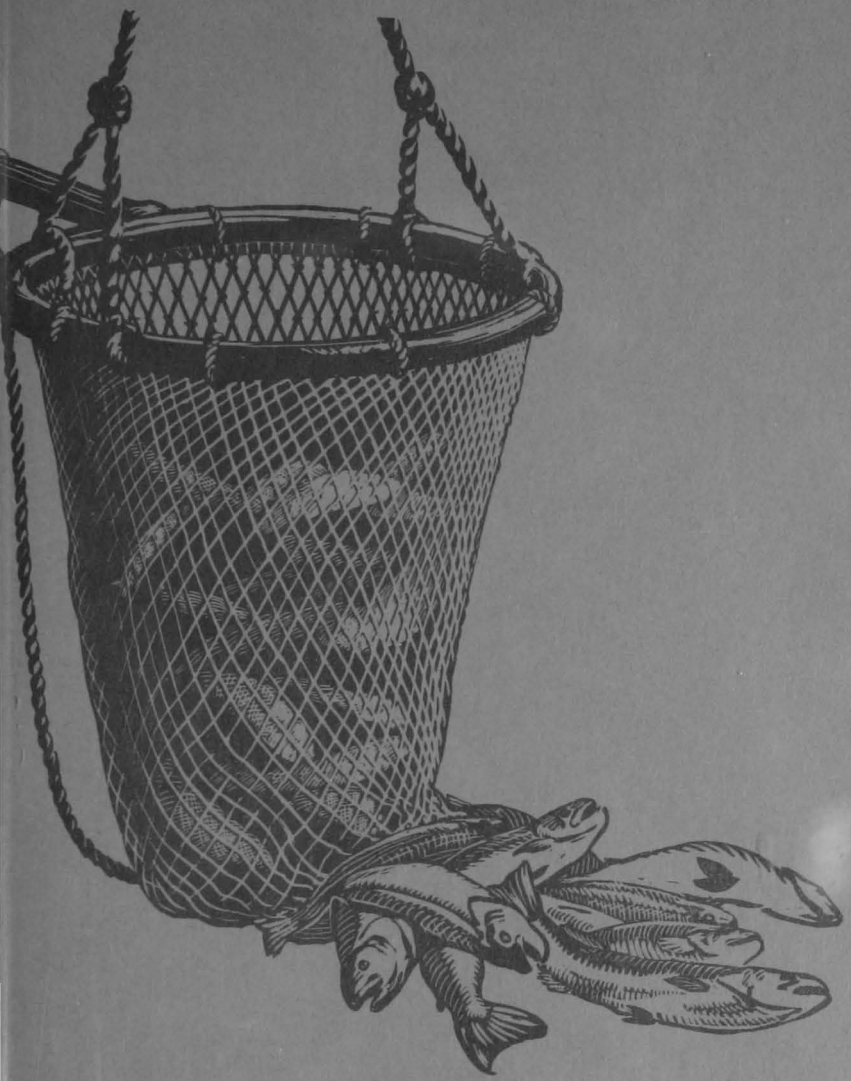
GUIDE FOR BUYING FRESH AND FROZEN FISH AND SHELLFISH



UNITED STATES DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
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PREFACE

THIS PUBLICATION is intended to help consumers, food buyers, and others associated with the food trades to know more about fish and shellfish products. It is a guide to the availability of fishery products, and describes general market forms, types of containers, purchasing criteria, and handling and storage techniques with respect to fish and shellfish. Fish cookery is not discussed in detail in this publication. A number of booklets containing recipes and cooking techniques for fishery products are available through the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402.

This "Guide for Buying Fresh and Frozen Fish and Shellfish" is a revision of "Fresh and Frozen Fish Buying Manual," Circular 20, first published in 1954. Issued 1954. Reprinted 1955, 1956, and 1959. The Branch of Marketing, Bureau of Commercial Fisheries, prepared this publication with the cooperation of other Branches and Offices.

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A GUIDE FOR BUYING FRESH AND FROZEN FISH AND SHELLFISH

Preliminary figures indicate landings from U.S. commercial fisheries in 1963 amounted to 4.75 billion pounds. The total amount paid to fishermen for their products was $378 million.

Of the total domestic landings in 1963, edible fish and shellfish for human consumption accounted for 2.5 billion pounds, while 2.25 billion pounds were used for industrial products and animal food.

Imports of edible fishery products during 1963 totaled about 1.1 billion pounds. Record receipts in 1962 amounted to 1.2 billion pounds.

The following species accounted for about 85 percent of the U.S. production of edible fishery products in 1963:

FISH:	*1963 catch (thousand pounds)*	*Marketed mainly as*
Tuna and tunalike fishes	320, 000	Canned.
Salmon, Pacific	279, 000	Canned, frozen, and fresh.
Mackerel, Jack and Pacific	136, 000	Do.
Haddock	124, 000	Frozen and fresh.
Ocean perch, Atlantic	108, 000	Frozen.
Flounder and sole	172, 800	Frozen and fresh.
Atlantic	125, 300	
Pacific	47, 500	
Herring, Sea; (sardines, Maine)	152, 000	Canned.
Whiting	93, 000	Frozen.
Halibut, Pacific	45, 500	Frozen and fresh.
Cod, Atlantic	42, 000	Do.
Scup or porgy	42, 000	Fresh.
Mullet	42, 000	Frozen and fresh.
Sardines, Pacific	7, 000	Canned.

SHELLFISH:	*1965 catch (thousands pounds)*	*Marketed mainly as*
Crabs:		
Blue	142, 500	
Dungeness	22, 500	
King	77, 000	
Miscellaneous	3, 000	
	245, 000	Canned, fresh, and cooked meat.
Shrimp	240, 000	Fresh, frozen, and canned.
Oysters	56, 000	Do.
Clams:		
Hard	68, 000	
Surf	38, 000	
	106, 000	Fresh and canned.
Lobsters, northern	30, 000	Fresh and cooked meat.
Scallops, sea	20, 500	Fresh and frozen.

MARKET FORMS OF FISH

Fresh and frozen fish are marketed in various forms or cuts. The edible portion will vary from 100 percent for fillets to about 45 percent for whole fish. Knowing these cuts and their special uses is important in buying or selling fish. The following are the best known market forms:

Whole or Round.—Fish as they come from the water. Before cooking, fish should be scaled and the entrails removed and, if desired, head, tail, and fins removed. Fish then may be used for baking, or may be sliced, filleted, or cut into steaks or chunks. The edible portion averages about 45 percent, but varies with the size and kind of fish. Small fish, like smelt, are often cooked with only the entrails removed.

Drawn.—Whole fish that have been eviscerated. Edible portion about 48 percent.

Dressed or Pan-Dressed.—Whole fish with scales and entrails removed, and usually with the head, tail, and fins removed. Ready to cook as purchased. Edible portion about 67 percent.

Steaks.—Cross-section slices from large dressed fish usually about three-fourths of an inch thick. Ready to cook as purchased. Edible portion about 84 percent.

Fillets.—Sides of fish cut lengthwise from the backbone. Practically boneless and have little or no waste. Ready for cooking as purchased. A fillet cut from one side of a fish is called a single fillet. This is the type most generally seen in the market.

Butterfly Fillets.—The two sides of the fish, corresponding to two single fillets, held together by the uncut flesh and skin of the belly.

Sticks.—Elongated pieces of fish cut from blocks of frozen fillets. Each stick weighing not less than three-fourths of an ounce and not more than 1¼ ounces with the largest dimension at least three times that of the next largest dimension.

Portions.—Uniformly shaped pieces of boneless fish cut from blocks of frozen fillets. A portion has a thickness of three-eighths of an inch or more and is much larger than a fish stick.

MARKET FORMS OF SHELLFISH

Some shellfish are marketed alive. Other market forms, depending on the variety, include cooked whole in the shell, headless, fresh meat (shucked), and cooked meat.

In Shell.—Hard and soft blue crabs, lobsters, clams, and oysters should be alive if bought fresh in the shell. Edible portion varies widely Crabs and lobsters may also be cooked in the shell before marketing.

Shucked.—Clam, oyster, and scallop meats after the shell is removed. In this form, 100 percent edible.

Headless.—Usually only the tail part of shrimp is marketed. Spiny-lobster tails are also a common market form. About 85 percent edible.

Cooked Meat.—The edible portion is picked from cooked shellfish. Crab, some shrimp, and lobster meat are marketed in this manner in containers. It is 100 percent edible.

Ask your merchant for help.—Your merchant will be glad to help you select the market form of fish and shellfish best suited for your needs. When ordering, tell him how you plan to cook and serve your fishery products.

CONTAINERS

In general, the distribution of fishery products is expedited when the usual commercial fishery containers are used. Listed below are the most frequently used containers with an indication of net weights of packs.

	Containers and net weights
FRESH FISH:	
Whole, drawn, and dressed:	
Most varieties:	
Fresh-water	Boxes—25, 40, 50, 60, 100 lbs.
Salt-water	Boxes—15, 100, 125, 150, 200 lbs.; Barrels—125, 150, 250 lbs.
Some small fish:	
Fresh-water	Boxes—10 to 20 lbs.
Salt-water	Boxes—10 to 30 lbs.; Tight barrels—75 lbs.
Fillets and steaks:	
Fresh-water	Tins—20, 25 lbs.
Salt-water	Tins—10, 15, 20, 25, 30 lbs.
FROZEN FISH:	
Whole, drawn, and dressed:	
Most varieties:	
Fresh-water	Boxes—60, 70, 100 lbs.
Salt-water	Boxes—50, 100, 150, 200 lbs.
Some small fish:	
Fresh-water	Boxes—10, 20 lbs.
Salt-water	Boxes and packages—1, 5, 10, 15, 20, 25 lbs.
Fillets and steaks:	
Fresh-water	Packages—1, 5, 10 lbs.
Salt-water	Packages—12 oz.; 1, 5, 10, 15, 20, 25 lbs.

	Containers and net weights
FROZEN FISH—Continued	
Fish portions:	
Unbreaded, breaded, and precooked	Packages—8, 10, 12, 14 oz.; 1, 3, 4, 5, 6 lbs.
Fish sticks:	
Breaded and precooked	Packages—8, 10, 12, 14 oz.; 1, 3, 4, 5, 6 lbs.
SHELLFISH:	
Clams and oysters:	
In shell	Bags—100, 225, 250 lbs.
Shucked:	
Fresh	Tins—½ pt., 1 pt.; 1 qt.; ½, 1, 5 gals.
Frozen	Tins and packages—12 oz., 5 lbs.
Crabs:	
Hard: Live	Bushel baskets; barrels, 100 lbs.
Crabs:	
Soft:	
Live	Trunks—60, 80 lbs.
Frozen	Packages—Up to 1 lb.
Dungeness eviscerated frozen	1½–2½ lb. poly bags
Crab meat, cooked:	
Blue	Tins—1 lb.
Dungeness	Tins—1, 5 lbs.
King	Packages—6 oz., 3 lbs.
Lobsters, live	Barrels—50, 100 lbs.; boxes—25, 50 lbs.
Lobster meat, cooked, fresh and frozen	Tins—6 oz., 14 oz.; 1, 5 lbs.
Scallops, sea:	
Fresh meats	Tins—1 gal.; bags—30, 40 lbs.
Frozen meats	Tins—1 gal.; packages, 10 oz.; 1, 5, 10 lbs.
Frozen breaded and precooked	Packages—7 oz.; 1, 2, 5 lbs.
Scallops, bay: Fresh meat	Tins—1 gal.
Shrimp, headless:	
Fresh	Boxes—100 lbs.
Frozen	Tins and packages—6, 12 oz.; packages—1, 2½, 5, 10 lbs.
Breaded, frozen	Packages—8, 10, 12 oz.; 4, 5, lbs.
Shrimp meat, cooked, peeled and deveined	Tins and packages—4, 8, 12, oz.; 1, 5 lbs.

BUYING FRESH FISH

Most varieties of fish are more abundant in some months than in others (see *When to Buy*, pp. 36–46). Local fish dealers can usually give information about seasonal offerings, and indicate the varieties that can be obtained at the best price advantage. Lesser known species often can be as satisfactory as the better-known, higher priced species.

Determination of Quality for Whole and Drawn Fish

Fresh fish have the following characteristics:

1. FLESH: Firm, elastic flesh, not separating from the bones, indicates that fish are fresh and have been handled carefully.

2. ODOR: Fresh and mild. A fish just taken from the water has practically no "fishy" odor. The fishy odor becomes more pronounced with passage of time, but it should not be disagreeably strong when the fish are bought.

3. EYES: Bright, clear, and full. The eyes of fresh fish are bright and transparent; as the fish become stale, the eyes become cloudy and often turn pink. When fish are fresh the eyes often protrude, but with increasing staleness they tend to become sunken.

4. GILLS: Red, and free from slime. The color gradually fades with age to a light pink, then gray, and finally brownish or greenish.

5. SKIN: Shiny, with color unfaded. When first taken from the water, most fish have an iridescent appearance. Each species has its characteristic markings and colors that fade and become less pronounced as the fish loses freshness.

Determination of Quality for Fillets and Steaks

Fresh fillets and steaks have the following characteristics:

1. FLESH: Fresh-cut in appearance; the color should resemble that of freshly dressed fish. It should be firm in texture, without traces of browning about the edges and without a dried-out look.

2. ODOR: Fresh and mild.

3. WRAPPING: If the fillets or steaks are wrapped, the wrapping should be of moisture-vapor-proof material. There should be little or no air space between the fish and the wrapping.

How Much to Buy

About one-third to one-half pound of the edible portion of fish and shellfish per person is considered an adequate serving (see *Edible Portion*, pp. 11–12). To provide this serving, the following approximate amounts can be used as a guide for purchasing the different forms:

	Pounds per person
Fillets, steaks, or sticks	⅓
Dressed fish	½
Whole or round fish	1

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BUYING FROZEN FISH

Certain fishery products that are sold in the frozen form are usually packed during seasons of abundance and held in cold storage until ready for distribution. Thus, the consumer is afforded the opportunity of selecting different species of fish and shellfish throughout the year.

High-quality frozen fish that are properly processed, packaged, and held at 0° F. or below will remain in good condition for relatively long periods of time.

Determination of Quality for Frozen Fish

Frozen fish of good quality have the following characteristics:

1. FLESH: Should be solidly frozen when bought. There should be no discoloration, or brownish tinge in the flesh. Almost all deterioration in quality is prevented when fish is properly held in the frozen state. Frozen fish that has thawed and then been refrozen is poorer in quality.

2. ODOR: Frozen fish should have little or no odor. A strong fishy odor means poor quality.

3. WRAPPING: Most frozen fillets and steaks are wrapped either individually or in packages of various weights. The wrapping should be of moisture-vapor-proof material. There should be little or no air space between the fish and the wrapping.

How Much to Buy

In buying frozen fish, the allowance for each serving is the same as for fresh fish (see *Buying Fresh Fish*, p. 4).

BUYING SHELLFISH

Market forms of some of the more important species of shellfish are described here.

Shrimp

Shrimp are usually sold as follows:

Fresh, whole (heads on)—mainly near production points.
Fresh or frozen, headless, but with shells on.
Fresh or frozen, cooked, generally peeled (shells removed and meat deveined.)
Frozen, breaded (raw and cooked) after being peeled and deveined.

Fresh shrimp have a mild odor, and the meat is firm in texture. The color of the shell may be grayish green, pinkish tan, or light pink. When cooked, the shells turn red, and the meat takes on a similar attractive reddish tint, occasionally with some dark-red spots. When

shrimp are sold as "green shrimp," this does not refer to the color or species, but is a term used in the trade to describe shrimp that have not been cooked. Shrimp are sold on a size basis. The larger sizes are higher priced.

Clams and Oysters

Clams and oysters in the shell should be alive and the shells should close tight when tapped gently.

Strictly fresh clams are pale orange to deep orange in color and have no stale odor or taste. Fresh shucked clams are packed in little or no free liquor.

Shucked oysters should be plump and have a natural creamy color and clear liquid. There should not be more than 10 percent liquid, by weight, when shucked oysters are purchased in a container. Avoid oysters with an excess amount of liquor because this indicates poor quality and careless handling. Excessive water results in bloating of the oyster meat, and partial loss of flavor and food value. Oysters are sold according to size, the larger are more expensive.

Crabs and Lobsters

Crabs, lobsters, and spiny lobsters should show movement of the legs when they are alive. The "tail" of a live lobster curls under the body and does not hang down when the lobster is picked up.

Frozen spiny-lobster or rock-lobster tails should have clear white meat, hard-frozen when bought, and no odor.

Cooked crabs and lobsters should be bright red and free of any disagreeable odor.

Cooked crab meat is marketed from four varieties of crabs:

I. Blue crabs: the meat from blue crabs is packed as:
   1. Lump meat—whole lumps of white meat from the large body muscles that operate the swimming legs.
   2. Flake meat—small pieces of white meat from the body.
   3. Flake and lump—a combination of the first two kinds.
   4. Claw meat—brownish-tinted meat from the claws.

II. Rock crabs: Meat from the New England rock crab is marketed in only one grade, and is brownish in color.

III. Dungeness crabs: Meat from the Dungeness crabs of the Pacific coast comes from both body and claw. The claw meat is slightly red; the body meat is white. Dungeness crabs eviscerated are also sold in individual poly bags.

IV. King crabs: Meat from Alaska king crabs is primarily leg meat, which is marketed frozen. Cooked meat has a pink or red tint. Entire leg sections, cooked and frozen, are also marketed.

Soft crabs are Atlantic coast blue crabs that have shed their old hard shells. They should be alive when bought fresh. They are also available frozen.

Scallops

The large adductor muscle that controls the shell movement is the only part that is marketed as scallop meat. This muscle makes up less than 10 percent of the whole scallop. The meat of the large sea scallop is white, orange, or pink, while the meat of the smaller bay scallop is either creamy white, light tan, or pinkish. Scallops should have a sweetish odor before cooking. When bought in packages, scallops should be practically free of liquid.

How Much to Buy

The quantity of shellfish to buy varies considerably with the method of cooking and the type of recipe used. For an approximation of edible percentages of shellfish (see *Edible Portions*, pp. 11–12).

HANDLING AND STORING

Fish must be kept under refrigeration at all times in order to maintain quality. The primary causes of quality breakdown of fishery products are: (1) bacterial action, (2) oxidation of the oil or fat in the flesh, and (3) enzymic action in the flesh. Under proper storage conditions, these actions are greatly retarded and have a minimal effect on quality. When fish are frozen and stored at very low temperatures, bacterial action is practically eliminated.

Detailed information on the care and handling of fishery products is contained in the following leaflets, available without charge from the Fish and Wildlife Service, U.S. Department of the Interior, Washington, D.C., 20240:

FL 128—Refrigerated locker storage of fish for home use.
FL 213—Wrapping materials for frozen fish.
FL 278—Freezing fish at sea.
FL 321—An improved method of glazing fish for locker storage.
FL 427—Refrigeration of fish. Part I— Cold Storage design and refrigeration equipment.
FL 428—Refrigeration of fish. Part II—Handling fresh fish.
FL 429—Refrigeration of fish. Part III—Factors to be considered in the freezing and cold storage of fishery products.
FL 430—Refrigeration of fish. Part IV—Preparation, freezing and cold storage of fish, shellfish and pre-cooked fishery products.
FL 431—Refrigeration of fish. Part V—Distribution and marketing of frozen fishery products.

In addition, the U.S. Department of the Interior Film Catalog may be obtained upon request. This leaflet lists all motion pictures produced and distributed by the Bureau of Commercial Fisheries and explains the method for borrowing prints without charge, except for postage.

HANDLING AND STORING FRESH FISH

Fresh fish should be kept at a temperature constantly below 40° F. To ensure maximum storage life, however, temperatures of 31° or 32° F. are recommended. Ice is the best preservative for keeping fresh fish because it not only holds the temperature low, but also keeps the fish moist and in good condition.

Fresh-fish shipments should be examined immediately upon delivery for signs of spoilage and body damage. The fish should be packed in ice for delivery and should be well iced when received. Finely crushed ice is preferable to large pieces, because it does not bruise the fish. Fish packed in orderly arrangement hold their natural shape better. Handle fish carefully, for bruises and punctures of the flesh hasten quality breakdown.

HANDLING AND STORING FROZEN FISH

Frozen fish should be kept solidly frozen until ready for use. Fish that have been thawed should not be refrozen. Maximum storage life can be obtained by maintaining a temperature of 0° F. or below and by providing adequate moisture-vapor wrapping or glazing. If fish are placed directly in refrigerated space without suitable protective treatment, a gradual loss of moisture will occur until the fish are shrunken and dried. Dehydration not only causes an unsightly appearance and alteration in texture, but also results in loss of weight and flavor.

Thawing Frozen Fish

Additional cooking time must be allowed if frozen fish, fillets, and steaks are cooked before thawing. When fish are to be breaded and fried, or stuffed, it is more convenient to thaw them first to make handling easier.

Thawing is necessary when whole or drawn fish are to be cleaned or dressed. Methods of thawing fish are as follows:

1. Thawing at refrigerator temperature (40° to 45° F.) is the recommended method. The fish should be held at this temperature only long enough to permit ease in preparation.
2. Frozen fish may be thawed by immersing in cold running water. This is the quickest method.
3. Thawing at room temperature is least desirable because the thinner parts of the fish, such as the section near the tail, will thaw faster than other parts and may spoil if the thawing period is long.

HANDLING AND STORING SHELLFISH

When fresh shellfish is stored, the temperature should be maintained near 32° F. Only slightly higher temperatures can cause considerable

loss in quality in a few hours. Shellfish meats, either fresh or cooked, should not be exposed to bacterial contamination.

Thawing methods for frozen shellfish are the same as those for frozen fish.

CLEANING, DRESSING, AND FILLETING

Most dealers will clean, dress, or fillet fresh fish for their customers. They can perform these tasks very quickly. An experienced fishcutter can usually secure a large edible portion from a fish or shellfish.

Fish buyers who are interested in methods of cleaning, dressing, or filleting are referred to two Service publications—*Basic Fish Cookery* and *Fish Cookery for One Hundred.* Each of these booklets contains a section on cleaning, dressing, and filleting fish. For information on how to obtain these booklets, see p. 12.

FOOD VALUE OF FISH AND SHELLFISH

The seafood nutritional story is very fascinating. Fishery products are excellent sources of good quality protein, many valuable minerals, and essential B complex vitamins. Americans are more aware of the nutritional values in food today than at any time previously. When compared with most other quality protein, fish and shellfish are generally low in fats. This in itself could be a powerful sales argument to the calorie counter. Fishery products are used in formulating many special diets because of the low calorie, high protein content. Fishery products are the only sources of animal protein food in which the polyunsaturated fats are found in abundance. Many studies have shown that this type of fat is effective in reducing the cholesterol level in the blood. With more people becoming cholesterol conscious, these research results become increasingly important arguments for the wider use of fishery products. Almost universally, fish have been pointed out as the meat protein of choice in the formulation of anti-cholesterolemic diets. We must educate people to appreciate the excellent nutritive qualities of fishery products. At the 1961 National Fisheries Institute Convention, Frederick J. Stare, chairman, Department of Nutrition, Harvard University, stated that fish is a particularly desirable food from the viewpoint of modern nutrition and should be included in the diet at least four times a week.

Proteins build and repair body tissues. The protein of fish contains all of the biologically essential amino acids, the components necessary to the body for such tissue building and repair. The protein of fish contains little or no cartilaginous material; consequently,

it is easily broken down by the digestive processes and readily available to the body. Therefore, when telling the nutritional story of fish protein, we should emphasize (1) the quantity of protein, (2) the completeness and balance of the protein, (3) the characteristic ease of digestibility and assimilation of fish protein, and (4) the low bulk value of fish protein.

Minerals are essential for the performance of certain functions of the body, and the maintenance of sound teeth and bones. Nutritionally, fish contain many dietetically valuable minerals and other inorganic compounds. Iron, phosphorus, calcium, iodine, cobalt, copper, manganese, potassium, and other trace minerals necessary for the proper operation of the body are present in fish. The flesh of both salt-water and fresh-water fish is quite low in sodium content. This makes fishery products particularly adaptable for strict, low sodium diets.

Vitamins are important for growth, maintainence of healthy nerve tissues, and for the normal operations of the energy-yielding processes of the body. The vitamin content of marketed fishery products is composed largely of the B complex series which includes niacin, pantothenic acid, B_{12}, riboflavin, thiamine, and pyridoxine. An average serving of fish will supply about 10 percent of the thiamine, 15 percent of the riboflavin, and 50 percent of the niacin needed each day for good health.

Fats are used by the body for flesh and energy. The fat content of fishery products varies with the kinds of fish and the season of the year. The many species of fish afford us a degree of selectivity in regulating our dietary fat intake. Very lean fish, such as groundfish, are uniformly low in fat content and vary from 0.5 percent to not more than 2 percent fat content. Some of the "fat fish," such as salmon and mackerel, have a fat content which averages 20–25 percent of the total weight. The tables on pages 14–18 classify some of the more common fish as to fat or lean.

Research has shown that the nutritional properties of fish flesh are approximately equal for all species. In fishery products, we have a uniquely valuable food that is available in a wide variety of flavors, textures, and market forms.

EDIBLE PORTION

Servings of fresh and frozen fishery products generally are based on portions of one-third to one-half pound for each person. The edible portion varies with the market form, the variety of fish, and the production area. The following approximate percentages show how much of the market form of each fishery product is edible.

	Production area	*Edible percentage*
FISH:		
Whole or round	All	43 to 47.
Drawn (eviscerated only)	All	46 to 50.
Dressed (eviscerated, head and fins removed).	All	65 to 69.
Steaks	All	84 to 88.
Fillets	All	100.
Sticks and portions	All	100.
SHELLFISH:		
Live in shell:		
Clams:		
Hard	New England	14.5.
Do	Chesapeake	10. 0.
Do	Middle Atlantic	14.0.
Do	South Atlantic	9.5.
Do	Pacific	25.0.
Soft	New England	22.7.
Do	Chesapeake	18.5.
Surf	Middle Atlantic	20.0.
Oysters:		
Eastern	New England and Middle Atlantic.	11.0.
Do	South Atlantic	6.3.
Do	Gulf	6.5.
Pacific		11.3.
Cooked in shell:		
Crabs:		
Hard	Atlantic and Gulf	10 to 18.
Dungeness	Pacific	22 to 26.
Lobsters	New England	35 to 37.
Shucked: Clams, oysters, and bay and sea scallops.	All	100.
Headless, raw: Shrimp	South Atlantic and Gulf	50 to 60.
Cooked meat: Crabs, lobsters, and shrimp.	All	100.

FISH COOKERY

The basic rules for cooking fish are not difficult to follow. In selecting the cooking method, allowance should be made for fat content, which varies with the species (tables 1 and 2). Usually fat may be added by basting when cooking lean fish. Fat fish lose some of their fat in cooking.

Do not overcook fish. Cook just enough so that the flesh flakes easily when tested with a fork. This results in a moist and tender fish, and brings out the delicate flavor.

A series of fish-cookery bulletins have been published by the Bureau of Commercial Fisheries, Fish and Wildlife Service, U.S. Department of the Interior. The following may be obtained from the Superintendent of Documents, Government Printing Office, Washington,

D.C., 20402 at the prices indicated. A 25 percent discount is given on orders of 100 or more of any 1 bulletin sent to 1 address. Prices are subject to change without notice. (TKS is an abbreviation for Test Kitchen Series.)

Fish Cookery for One Hundred (TKS 1)	30 cents.
Basic Fish Cookery (TKS 2)	25 cents.
How to Cook Oysters (TKS 3)	20 cents.
How to Cook Salmon (TKS 4)	20 cents.
How to Cook Ocean Perch (TKS 6)	10 cents.
How to Cook Shrimp (TKS 7)	15 cents.
How to Cook Clams (TKS 8)	20 cents.
How to Cook Halibut (TKS 9)	20 cents.
How to Cook Crabs (TKS 10)	20 cents.
How to Cook Lobsters (TKS 11)	20 cents.
How to Cook Tuna (TKS 12)	20 cents.
How to Cook Scallops (TKS 13)	20 cents.
Composition of Cooked Fish Dishes (Circular 29)	25 cents.
Shrimp Tips from New Orleans (Circular 41)	25 cents.
Tips on Cooking Fish and Shellfish (Circular 50)	10 cents.
Take a Can of Salmon (Circular 60)	25 cents.
Outdoor Fish Cookery (Circular 189)	no charge.
Home Canning of Fishery Products (Conservation Bulletin 28)	15 cents.

Among some of the fishery leaflets available without charge from the Bureau of Commercial Fisheries, Fish and Wildlife Service, U.S Department of the Interior, Washington, D.C., 20240, are:

Preparation of Three Fishes of the Pacific Coast—Shark, Shad, and Ling Cod (FL 30).
Fish Cookery in the Open (FL 35).
Sauces for Seafood (FL 53).
Markets and Recipes for Fresh-Water Turtles (FL 69).
Basic Recipes for Cooking Fish (FL 106).
Tilefish Recipes (FL 404).
Pacific Coast Shrimp Recipes (FL 446).

GUIDE FOR BUYING FISH AND SHELLFISH

Some fish and shellfish are known by different names in different areas, but most have one name that is more widely used than the others.

In the following tables, the commercial species are listed alphabetically by their most common names. References are also made to other common or local names of some of the species, and the scientific names of all the species. The main producing areas for each of the species are also shown in the tables. Market size and form together with information regarding the "fat" and "lean" fish are shown for each species. *All shellfish are considered lean.*

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TABLE 1.—*Salt-water fish: Names, producing areas, weights, and market forms*

Most common name	Other common names	Scientific names	Main producing areas							Usual market size (pounds)	Usual market form					Fat or lean category	
			New England	Middle Atlantic	South Atlantic	Gulf	Pacific coast	Alaska	Imported		Whole	Drawn	Dressed	Steaks	Fillets	Fat	Lean
Barracuda, California		*Sphyraena argentea*	--	--	--	--	×	--	--	3–6	×	--	×	×	--	----	×
Bass (see Sea bass).																	
Bluefish	Tailor, skipjack	*Pomatomus saltatrix*	--	×	×	×	--	--	--	1–7	×	×	--	--	--	----	×
Blue runner	Crevalle	*Caranx crysos*	--	--	--	×	--	--	--	½–7	×	×	--	--	--	----	×
Butterfish	Harvestfish	*Poronotus triacanthus*	--	×	×	--	--	--	--	¼–1¼	×	×	--	--	--	×	----
Cod	Codfish	*Gadus morhua*	×	×	--	--	--	--	×	1½–10	--	×	×	×	×	----	×
		Gadus macrocephalus	--	--	--	--	×	×	×	1½–10	--	×	×	×	×	----	×
Croaker	Hardhead	*Micropogon undulatus*	--	×	×	--	--	--	--	½–2	×	×	--	--	×	----	×
	Tomcod	*Genyonemus lineatus*	--	--	--	--	×	--	--	1	--	×	--	--	--	----	×
Cusk		*Brosme brosme*	×	--	--	--	--	--	×	1½–10	--	×	--	×	×	----	×
Drum:																	
Black	Oyster cracker, oyster drum, sea drum.	*Pogonias cromis*	--	×	×	×	--	--	--	1–40	×	×	--	--	--	----	×
Red	Channel bass, redfish, spotted bass.	*Sciaenops ocellata*	--	--	×	×	--	--	×	2–25	×	×	--	--	×	----	×
Eel, common		*Anguilla bostoniensis*	×	×	×	--	--	--	--	1–5	×	--	×	--	--	×	----
Flounder:																	
Blackback	Winter flounder	*Pseudopleuronectes americanus.*	×	×	--	--	--	--	×	¾–2	×	--	--	×	--	----	×
Fluke	Summer flounder	*Paralichthys* sp	×	×	--	--	--	--	--	2–12	×	--	--	--	×	----	×
Dab	Sea dab	*Hippoglossoides platessoides.*	×	--	--	--	--	--	--	¾–2½	×	--	--	--	×	----	×
Gray sole		*Glyptocephalus cynoglossus.*	×	--	--	--	--	--	×	¾–4	×	--	--	--	×	----	×

Lemon sole		*Pseudopleuronectes dignabilis.*	×						×	¾–4	×				×		×
Southern		*Paralichthys lethostigmus*			×	×				2–12	×				×		×
Yellowtail	Rusty dab	*Limanda ferruginea*	×	×					×	¾–2	×				×		×
Sole (Pacific):																	
Dover	Short finned sole	*Microstomus pacificus*					×			1–2½					×		×
English	California sole	*Parophrys vetulus*					×			1–4					×		××
Petrale	Brill	*Eopsetta jordani*					×	×		1–5					×		××
Rex	Long-finned sole	*Glyptocephalus zachirus*					×	×		1–2			×				××
Grouper	"Sea Bass"	*Epinephelus* sp. *Mycteroperca* sp.			×					5–12		×	×	×	×		×
Haddock		*Melanogrammus aeglefinus.*	×						×	1½–7		×			×		×
Hake:																	
Red	Mud hake	*Urophycis chuss*	×	×						2–5	×	×	×		×		×
White	Common, squirrel hake.	*Urophycis tenuis*	×	×						2–5	×	×	×		×		×
Halibut		*Hippoglossus* sp	×				×	×	×	5–75 (some larger).		×	×	×	×		×
Herring, sea	Atlantic herring	*Clupea harengus harengus*	×	×						⅛–¼	×					×	
	Pacific herring	*Clupea harengus pallasi*					×	×	×	⅛–¼	×					×	
King mackerel	Cero, kingfish	*Scomberomorus cavalla, S. regalis.*			×	×				5–20		×		×		×	
King whiting	Kingfish, ground mullet, whiting.	*Menticirrhus* sp		×	×	×				¾–3	×	×					×
Lingcod	Blue cod, buffalo cod, cultus cod.	*Ophiodon elongatus*					×	×	×	3–20		×		×	×		×
Mackerel (see also King and Spanish mackerel).		*Scomber scombrus*	×	×					×	½–2½	×					×	
		Pneumatophorus diego					×			½–2½	×					×	
Mullet	Jumping, striped, or silver mullet.	*Mugil* sp			×	×				½–3	×						×
Ocean perch	Rosefish, redfish, red perch.	*Sebastes marinus*	×						×	½–2	×				×		×
Pollock	Boston bluefish	*Pollachius virens*	×						×	1½–12		×	×	×	×		×
Pompano	Great pompano	*Trachinotus* sp				×				½–3½	×					×	
Rockfish (see also Striped bass).	Rock cod, red cod, snapper.	*Sebastodes* sp					×		×	2–5		×			×		×
Sablefish	Black cod	*Anoplopoma fimbria*					×	×	×	3–15			×	×		×	

TABLE 1.—*Salt-water fish: Names, producing areas, weights, and market forms*—Continued

Most common name	Other common names	Scientific names	Main producing areas							Usual market size (pounds)	Usual market form					Fat or lean category	
			New England	Middle Atlantic	South Atlantic	Gulf	Pacific coast	Alaska	Imported		Whole	Drawn	Dressed	Steaks	Fillets	Fat	Lean
Salmon:																	
Atlantic		*Salmo salar*	×	--	--	--	--	--	×	5–10	×	×	--	--	×	×	----
Chinook	King	*Oncorhynchus tshawytscha*	--	--	--	--	×	×	×	5–30	--	--	×	×	×	×	----
Chum	Fall	*Oncorhynchus keta*	--	--	--	--	×	×	×	5–11	--	--	×	×	×	×	----
Pink	Humpback	*Oncorhynchus gorbuscha*	--	--	--	--	×	×	×	4–10	--	--	×	×	×	×	----
Silver	Coho	*Oncorhynchus kisutch*	--	--	--	--	×	×	×	5–18	--	--	×	×	×	×	----
Scup or porgy		*Calamus* and *Stenotomus* sp.	×	×	×	--	--	--	--	½–1½	×	×	--	--	--	----	×
Sea bass:																	
Black	Black jewfish	*Stereolepis gigas*	--	--	--	--	×	--	×	50–600	--	--	--	×	×	----	×
Common	Blackfish, black sea bass.	*Centropristes striatus*	×	×	×	--	--	--	--	½–4	×	×	--	--	×	----	×
White		*Cynoscion nobilis*	--	--	--	--	×	--	×	Up to 50	--	--	--	×	×	----	×
Sea trout or weakfish:																	
Gray		*Cynoscion regalis*	--	×	×	--	--	--	--	1–6	×	×	--	--	--	----	×
Spotted	Speckled trout	*Cynoscion nebulosus*	--	×	×	×	--	--	--	1–4	×	×	×	--	--	----	×
White	Sand trout	*Cynoscion arenarius*	--	--	--	×	--	--	--	½–1½	×	--	--	--	--	----	×
Shad	American shad, white shad.	*Alosa sapidissima*	×	×	×	--	×	--	--	1½–5	×	×	--	--	--	×	----
Sheepshead		*Archosargus* sp	--	--	×	×	--	--	--	¾–10	×	--	--	--	--	----	×
Skate	Rajafish	*Raja* sp	×	×	--	--	--	--	--	1–20	--	--	×	--	--	----	×
Smelt	Eulachon	*Thaleichthys pacificus*	--	--	--	--	×	--	×	1¼–2 oz	×	--	--	--	--	×	----
		Osmerus mordax	×	--	--	--	--	--	×	1/16–⅛	×	--	--	--	--	----	×
	Silver	*Hypomesus pretiosus*	--	--	--	--	×	--	×	1¼–2 oz	×	--	--	--	--	×	----

Snapper, red		*Lutjanus blackfordii*	--	--	--	×	--	--	--	2–20	--	×	--	×	×	----	×
Sole (see Flounder)																		
Spanish mackerel		*Scomberomorus maculatus*	--	--	×	×	--	--	--	1–4	×	×	--	--	--	×	----
Spot		*Leiostomus xanthurus*	--	×	×	--	--	--	--	¼–1¼	×	×	--	--	--	----	×
Striped bass	Rockfish	*Roccus saxatilis*	--	×	×	--	--	--	--	2–25	×	--	--	×	--	----	×
Swellfish	Puffer, swelltoad, globefish, blowfish.	*Sphaeroides maculatus*	--	×	--	--	--	--	--	2–10 per lb	--	--	×	--	--	----	×
Swordfish	Broadbill	*Xiphias gladius*	×	×	--	--	×	--	×	50–400	--	--	×	×	--	----	×
Tilefish		*Lopholatilus chamaeleonticeps.*	×	×	--	--	--	--	--	4–18	×	×	×	×	--	----	×
Tuna:																		
Albacore	Longfin tuna	*Germo alalunga*	--	--	--	--	×	--	×	15–25	×	--	--	--	--	×	----
Blufin	Horsemackeral	*Thynnus* sp	×	×	--	--	--	--	--	75–1,000	×	--	×	--	--	×	----
Little	Bonito, albacore	*Euthynnus alletteratus*	×	×	--	--	--	--	--	4–10	--	×	--	--	--	×	----
Whiting	Silver hake	*Merluccius bilinearis*	×	×	--	--	--	--	--	4–18	×	×	×	--	×	----	×
Wolffish	Ocean catfish	*Anarhichas lupus*	×	--	--	--	--	--	×	8	--	×	×	×	×	----	×

TABLE 2.—*Fresh-water fish: Names, producing areas, weights, and market forms*

Most common name	Other common names	Scientific name	Main producing areas				Usual market form (pounds)	Usual market form					Fat or lean category	
			Great Lakes	Other U.S. lakes	Inland rivers	Imported		Whole	Drawn	Dressed	Steaks	Fillets	Fat	Lean
Buffalofish	Winter carp	*Ictiobus* sp		×	×		3–25	×	×	×	×			×
Carp	Summer or German carp.	*Cyprinus carpio*	×	×	×		2–8	×		×				×
Catfish and Bullheads		*Ameiurus* sp., *Ictalurus* sp.	×	×	×		1–40	×		×				×
Chub	Longjaw, blackfin, bluefin.	*Leucichthys* sp	×			×	3–8 per lb		×				×	
Lake herring	Bluefin, cisco	*Leucichthys artedi*	×			×	⅓–1	×	×			×		×
Lake trout		*Salvelinus* (Cristivomer) *namaycush.*	×			×	1½–10		×	×		×	×	
Pickerel	Jack, grass pike, northern pike.	*Esox reticulatus, E. lucius*	×		×		2–10	×		×		×		×
Sauger	Sand pike	*Stizostedion canadense*	×			×	1–1½	×		×		×		×
Sheepshead	Fresh-water drum, gaspergou.	*Aplodinotus grunniens*	×	×	×	×	1½–5	×						×
Smelt		*Osmerus mordax*	×			×	8–30 per lb	×		×				×
Suckers	Mullet, redfin	*Catostomidae* sp	×	×	×	×	1½–6	×	×	×				×
Trout	Rainbow trout	*Salmo* sp. (hatchery raised in U.S.).			×	×	⅓–2		×	×			×	
Whitefish		*Coregonus clupeaformis*	×			×	1½–6	×	×	×		×	×	
Yellow perch	Lake perch	*Perca flavescens*	×	×	×	×	½–¾	×				×		×
Yellow pike	Pike perch, walleye	*Stizostedion vitreum vitreum.*	×	×		×	1½–4	×		×		×		×

TABLE 3.—*Shellfish: Names, producing areas, weights, and market forms*

Most common name	Other common name	Scientific name	Main producing areas							Usual market condition			
			New England	Middle Atlantic	South Atlantic	Gulf	Pacific coast	Alaska	Imported	Live in shell (pounds)	Shucked meats (number per gallon)	Headless, raw (pounds)	Cooked meats (size container)
Abalone	Red, pink	*Haliotis*	--	--	--	--	×	--	×	----------	----------	Steaks, 3–8 per pound.	1 lb. cans.
Clams:													
Butter	----------	*Saxidomus nuttali*	--	--	--	--	×	×	×	100 per sack.	100–250	----------	----------
Hard	Quahog, Sharp, hard-shell clam.	*Venus mercenaria*	×	×	×	--	--	--	--	80 per bushel.	100–250	----------	----------
Little neck	----------	*Paphia staminea*	--	--	--	--	×	×	×	80 per box	----------	----------	----------
Razor	----------	*Siliqua patula*	--	--	--	--	×	×	×	----------	----------	----------	----------
Soft	Soft-shell clam	*Mya arenaria*	×	×	--	--	--	--	--	45 per bushel.	200–700	----------	----------
Surf	Skimmer	*Spisula solidissima*	--	×	--	--	--	--	--	----------	100–300	----------	----------
Crabs:													
Blue:													
Hard	Hard-shell crab	*Callinectes sapidus*	--	×	×	×	--	--	--	¼–1	----------	----------	1 lb. tins.
Soft	Soft-shell crab	*Callinectes sapidus*	--	×	×	×	--	--	--	⅐–⅓	----------	----------	----------
Dungeness.	----------	*Cancer magister*	--	--	--	--	×	×	×	1¼–2½ lbs	----------	----------	3¾–6½ oz., 1–5-lb. tins.
King	Alaska king	*Paralithodes camschatica.*	--	--	--	--	--	×	--	6–20	----------	----------	6-oz., 3-lb. cans 1–5-lb. pkgs.
Rock	----------	*Cancer irroratus*	×	--	--	--	--	--	--	⅓	----------	----------	1 lb. tins.
Cuttlefish	Sepia	*Sepia* sp	--	--	--	--	--	--	×	----------	----------	----------	----------
Lobsters	----------	*Homarus americanus.*	×	--	--	--	--	--	×	¾–4	----------	----------	1-lb. tins.

TABLE 3.—*Shellfish: Names, producing areas, weights, and market forms*—Continued

Most common name	Other common name	Scientific name	Main producing areas							Usual market condition			
			New England	Middle Atlantic	South Atlantic	Gulf	Pacific coast	Alaska	Imported	Live in shell (pounds)	Shucked meats (number per gallon)	Headless, raw (pounds)	Cooked meats (size container)
Lobsters, spiny	Sea crawfish	*Panulirus argus*			X	X			X	1–4		½–2 lbs	
	Rock lobster	*Panulirus interruptus.*					X		X	1–4		½–2 lbs	
Mussels, sea		*Mytilus edulis*	X	X						55 per bushel.			
Octopus	Pulpi, devilfish	*Paroctopus appollyon.*					X		X				
Oysters:													
Eastern	Cove	*Crassostrea virginica.*	X	X	X	X				80 per bushel.	150–200		
Pacific	Japanese	*Crassostrea gigas*					X			80 per sack	48–240		
Olympia	Western	*Ostrea lurida*					X			120 per sack	2, 200–2, 400		
Scallops:													
Bay		*Pecten irradians*	X	X	X	X					250–350		
Sea		*Pecten magellanicus*	X	X					X		100–150		
Calico		*Pecten gibbus*				X							
Shrimp	White shrimp, prawn.	*Penaeus setiferus*			X	X			X			12–17 per lb.	6-, 8-, 12-oz., 1-5-lb tins.
	Pink grooved shrimp.	*Penaeus duorarum*			X	X			X			12–70 per lb.	6-, 8-, 12-oz., 1-5-lb. tins.
	Brown grooved shrimp.	*Penaeus aztecus*			X	X			X			12–70 per lb.	6-, 8-, 12-oz., 1-5-lb. tins.
	Ocean shrimp and pink shrimp.	*Pandalus jordani*					X	X				100–275/lb	1-, 5-lb. tins.
Squid	Inkfish	*Loligo pealii*	X	X					X				
		Loligo opalescens					X						

MARKET CLASSIFICATIONS AND SPECIFICATIONS

No size standards for fish are fixed by Federal statute. Some States have regulations only on the minimum length or weight at which certain fish or shellfish may be caught or sold. In various sections of the country, general terms denoting classifications of size and weight have been developed by the fishing trade.

The market classifications and specifications of fish and shellfish commonly sold in the larger consuming markets or areas—Boston, New York, the Gulf States, Seattle, and Chicago—are representative of the trade practice in most markets of the United States. Tables 4–8.

TABLE 4.—*Boston wholesale market classification*

[The terms and classifications in this table are those developed and commonly accepted by the trade in Boston, Massachusetts. An asterisk (*) denotes market sizes and weights established by the Commonwealth of Massachusetts]

Species	Market classification	Approximate weight, size, or number	Usual market forms [1] (as landed)
SALT-WATER FISH			
Butterfish*	Large	¾ lb. and over	Round.
	Mixed	⅛ lb. and over	Do.
	Small	Under ⅛ lb	Do.
Cod*	Whale	Over 25 lbs	Drawn.
	Large	10 to 25 lbs	Do.
	Market	2½ to 10 lbs	Do.
	Scrod	1½ to 2½ lbs	Do.
	Snapper	Under 1½ lbs	Do.
Cusk*		Over 3 lbs	Do.
	Scrod	1½ to 3 lbs	Do.
Flounders:			
Blackback*	Large	¾ lb. and over	Round.
	Small	Under ¾ lb	Do.
Dab, sea*		1 lb. and over	Do.
	Small	Under 1 lb	Do.
Fluke*	Large	4 lbs. and over	Do.
	Medium	3 to 4 lbs	Do.
	Small	1½ to 3 lbs	Do.
Gray sole*	Large	2 lbs. and over	Do.
	Small	Under 2 lbs	Do.
Lemon sole*		3 lbs. and over	Do.
Yellowtail*	Large	1 lb. and over	Do.
	Small	Under 1 lb	Do.
Haddock*	Large	Over 2½ lbs	Drawn.
	Scrod	1½ to 2½ lbs	Do.
	Snapper	Under 1½ lbs	Do.
Hake:			
Red		½ to 1½ lbs	Round.
White*	Large	6 lbs. and over	Dressed.
	Medium	Over 2½ to 6 lbs	Do.
	Small	1½ to 2½ lbs. incl	Do.

See footnote at end of table.

TABLE 4.—*Boston wholesale market classification*—Continued

[The terms and classifications in this table are those developed and commonly accepted by the trade in Boston, Massachusetts. An asterisk (*) denotes market sizes and weights established by the Commonwealth of Massachusetts]

Species	Market classification	Approximate weight, size, or number	Usual market forms [1] (as landed)
SALT-WATER FISH—Con.			
Halibut:			
Eastern*	Whale	Over 125 lbs	Drawn.
	Large	60 to 125 lbs	Do.
	Medium	12 to 60 lbs	Do.
	Chicken	7 to 12 lbs	Do.
	Snapper	Under 7 lbs	Do.
Western	Whale	Over 80 lbs	Dressed.
	Large	60 to 80 lbs	Do.
	Medium	10 to 60 lbs	Do.
	Chicken	5 to 10 lbs	Do.
Herring, sea	Sardines	Mixed sizes	Round.
Mackerel*	Large	2¼ lbs. and over	Do.
	Medium	1½ to 2¼ lbs	Do.
	Small	1 to 1½ lbs	Do.
	Tinker	½ to 1 lb	Do.
	Tack or spike	Under ½ lb	Do.
Ocean perch*	Mixed	½ to 3 lbs	Do.
Pollock*	Large	4 lbs. and over	Drawn.
	Scrod	1½ to 4 lbs	Do.
Shark	Mackerel shark	25 to 200 lbs	Dressed.
Skate (rajafish)		1 to 10 lbs	Dressed (saddles).
Smelt:			
Native	Green:		
	Medium	5½ to 7 inches (12 to 14 per lb.).	Round.
	Small	Under 5½ inches (15 or more per lb.).	Do.
Sea	Large	Over 7 inches (10 or less per lb.).	Do.
Canadian	Extra	Over 7 inches (8 to 10 per lb.).	Do.
	No. 1	5½ to 7 inches (12 to 14 per lb.).	Do.
	Medium	Under 5½ inches (15 or more per lb.).	Do.
Striped bass	Jumbo	Over 15 lbs	Do.
	Large	10 to 15 lbs	Do.
	Medium	5 to 10 lbs	Do.
	Small	3 to 5 lbs	Do.
Swordfish*	Large	110 lbs. and over	Dressed.
	Pups	Under 110 lbs	Do.
Tuna		75 to 1,000 lbs	Round, dressed.
Whiting*	Round	½ to 4 lbs	Round.
	Dressed	½ to 4 lbs	Drawn.
	Steak	½ to 4 lbs	Dressed.
Wolffish (catfish)		2 to 30 lbs	Drawn.

See footnote at end of table.

TABLE 4.—*Boston wholesale market classification*—Continued

[The terms and classifications in this table are those developed and commonly accepted by the trade in Boston, Massachusetts. An asterisk (*) denotes market sizes and weights established by the Commonwealth of Massachusetts]

Species	Market classification	Approximate weight, size, or number	Usual market forms [1] (as landed)
SHELLFISH			
Clams:			
Hard	Sharp	100 to 125 per gal	Shucked.
		160 to 200 per bu	In shell.
	Cherrystone	325 to 360 per bu	Do.
	Littleneck	500 to 640 per bu	Do.
Soft	Large	200 to 300 per gal	Shucked.
	Medium	350 to 500 per gal	Do.
	Small	500 to 700 per gal	Do.
		800 to 1,000 per bu	In shell.
Crabs, rock		⅓ to ½ pound, depending on the season.	Live.
Crab meat	Flake	½ and 1 pound can	Fresh-cooked.
	Broken	1 pound can	Do.
Lobsters	Two claw:		
	Jumbo	3 pounds and over	Live.
	Select	1¼ to 3 pounds	Do.
	Chicken	1 pound average	Do.
	Weaks	All sizes	Do.
	One claw, cull	All sizes	Do.
Mussels		Preferred size 2½ inches and over. 45 lbs. per bushel. Sold by pound.	In shell.
Oysters	Count	135 to 160 per gal	Shucked.
	Select	180 to 230 per gal	Do.
	Standard	300 to 350 per gal	Do.
	Large	500 per barrel	In shell.
	Medium	700 to 750 per barrel	Do.
	Small	900 to 1,050 per barrel.	Do.
	Extra small	1,050 to 1,200 per barrel.	Do.
Scallops:			
Bay*		500 to 850 per gal. (9 lbs. per gal.).	Shucked.
Sea*		110 to 170 per gal	Do.

[1] Round=as caught; Drawn=eviscerated; Dressed=eviscerated and heads off; sold fresh on ice and frozen.

TABLE 5.—*New York wholesale market classifications*

[The terms and classifications in the table below are used by the trade in New York's Fulton Fish Market.

Species	Market classification	Approximate weight, size, or number	Usual market form [1]
SALT-WATER FINFISH			
Bluefish	Large	2½ lbs. and up	Round, drawn.
	Medium	1½ lbs. and up	Do.
	Small	¾ to 1½ lbs	Do.
	Snapper	Under ¾ lb	Round.
Butterfish	Jumbo	½ lb. and up	Do.
	Large	200 to 300 per 100 lbs	Do.
	Medium	300 to 350 per 100 lbs	Do.
	Small	Over 350 per 100 lbs	Do.
Cod	Whale	20 lbs. and up	Drawn.
	Large	8 to 20 lbs	Do.
	Market	2½ to 8 lbs	Do.
	Scrod	1½ to 2½ lbs	Do.
	Steak	5 lbs. and up	Dressed.
Croaker	Large	1½ lbs. and up	Round.
	Medium	¾ to 1½ lbs	Do.
	Small	½ to ¾ lb	Do.
	Pins	Under ½ lb	Do.
Eels, common	Large	2 lbs. and up	Round (live, dead), (dressed, skinned).
	Medium	1 to 2 lbs	Do.
	Small	Under 1 lb	Round (live, dead).
Flounders:			
Blackback	Large	1½ lbs. and up	Round.
	Medium	¾ to 1½ lbs	Do.
	Small	Under ¾ lb	Do.
Fluke	Jumbo	4 lbs. and up	Do.
	Large	2 to 4 lbs	Do.
	Medium	1½ to 2 lbs	Do.
Dabs, sea		1 lb. and up	Do.
Gary sole	Large	2 lbs. and up	Do.
	Small	Under 2 lbs	Do.
Lemon sole		3 lbs. and up	Do.
Yellowtail (Dab)	Large	2½ lbs. and up	Do.
	Mixed	1½ to 2½ lbs.	Do.
Haddock	Large	2 lbs. and up	Drawn.
	Scrod	1 to 2 lbs	Do.
	Small scrod	Under 1 lb	Do.
Hake:			
Red		½ to 2 lbs	Dressed.
White	Large	3 lbs. and up	Do.
	Medium	1 to 3 lbs	Drawn.
Halibut:			
Eastern White	Whale	Over 80 lbs	Dressed, drawn.
	Large	50 to 80 lbs	Do.
	Medium	10 to 50 lbs	Do.
	Chicken	5 to 10 lbs	Do.
	Snapper	Under 5 lbs	Do.
Western	Whale	Over 80 lbs	Dressed.
	Large	60 to 80 lbs	Do.
	Medium	10 to 60 lbs	Do.
	Chicken	5 to 10 lbs	Do.

See footnote at end of table.

TABLE 5.—*New York wholesale market classifications*—Continued

[The terms and classifications in the table below are used by the trade in New York's Fulton Fish Market.]

Species	Market classification	Approximate weight, size, or number	Usual market form [1]
SALT-WATER FINFISH—Con.			
Herring, sea	Large	½ lb. and up	Round.
	Small	Under ½ lb	Do.
King mackerel	Jumbo	12 lbs. and up	Drawn.
	Large	8 to 12 lbs	Do.
	Medium	5 to 8 lbs	Do.
	Small	Under 5 lbs	Do.
King whiting (kingfish).	Large	Over 1 lb	Round.
	Small	Under 1 lb	Do.
Mackerel	Large	1¼ lbs. and up	Do.
	Medium	¾ to 1¼ lbs	Do.
	Tinker	½ to ¾ lb	Do.
	Small	Under ½ lb	Do.
Mullet	Large	1 lb. and up	Do.
	Medium	¾ to 1 lb	Do.
	Small	Under ¾ lb	Do.
Pollock	Steak	4 lbs. and up	Dressed.
	Market	Do	Drawn.
	Scrod	1 to 4 lbs	Do.
Pompano	Large	1½ to 2½ lbs	Round.
	Medium	¾ to 1¼ lbs	Do.
	Small	Under ¾ lb	Do.
Salmon:			
Atlantic		5 lbs. and up	Round, dressed, drawn.
Chinook (king).	Large	10 lbs. and up	Dressed.
	Medium	5 to 10 lbs	Do.
Chum (fall)		7 to 10 lbs	Do.
Silver (coho)	Large	Do	Do.
	Medium	4 to 7 lbs	Do.
Scup (porgy)	Large	1 to 2 lbs	Round.
	Medium	½ to 1 lb	Do.
	Small	Under ½ lb	Do.
Sea bass	Large	1¼ lbs. and up	Do.
	Medium	¾ to 1 lb	Do.
	Small	Under ½ lb	Do.
Sea trout:			
Gray	Large	3½ lbs. and up	Drawn.
	Large-medium	1½ to 3½ lbs	Round.
	Medium	1¼ to 1½ lbs	Do.
	Small	¾ to 1¼ lbs	Do.
	Pin	Under ½ lb	Do.
Spotted	Large	Over 3½ lbs	Round, drawn.
	Medium	1½ to 3½ lbs	Do.
	Small	Under 1½ lbs	Do.
Shad	Roe	3 lbs. and up	Round.
	Buck	1½ lbs. and up	Do.
	Cut	2 lbs. and up	Drawn.
	Skip	¾ to 1½ lbs	Round.
Shad roe	Jumbo	14 oz. and up	Per pair
	Large	10 to 14 oz	Do.
	Medium	8 to 10 oz	Do.
	Small	Under 8 oz	Do.

See footnote at end of table.

TABLE 5.—*New York wholesale market classifications*—Continued

[The terms and classifications in the table below are used by the trade in New York's Fulton Fish Market.

Species	Market classification	Approximate weight, size, or number	Usual market form [1]
SALT-WATER FINFISH—Con.			
Skate (rajafish)	Wing	Any size	Dressed. (saddles).
Smelt:			
New Brunswick.	Jumbo	7 inches and over	Round.
	No. 1's	5¾ to 7 inches	Do.
	Medium	4½ to 5¾ inches	Do.
	Small	Under 4½ inches	Do.
Great Lakes.	Jumbo	4 to 6 fish per lb	Do.
	No. 1's	7 to 10 fish per lb	Do.
	Medium	Over 10 fish per lb	Do.
Snapper, red	Large	5 lbs. and up	Drawn.
	Medium	2 to 5 lbs	Do.
	Small	Under 2 lbs	Do.
Spanish mackerel.	Large	1½ lbs. and up	Do.
	Small	Under 1½ lbs	Do.
Spot	Large	¾ lb. and up	Round.
	Medium	½ to ¾ lb	Do.
	Small	Under ½ lb	Do.
Striped bass	Jumbo	15 lbs. and up	Do.
	Large	5 to 15 lbs	Do.
	Medium	2 to 5 lbs	Do.
Swellfish (blowfish).		All sizes	Dressed, skinned.
Swordfish:			
Fresh	Large	Over 100 lbs	Dressed.
	Pups	Under 100 lbs	Do.
Frozen	Dressed	Over 100 lbs	Do.
	Fillet or Split	50 lbs. and up	Sides.
	Chunk	40 to 100 lbs	Portion.
Tautog (blackfish).		½ lb. and up	Round.
Tilefish	Large	7 lbs. and up	Drawn.
	Medium	4 to 7 lbs	Do.
	Kitten	Under 4 lbs	Do.
Tuna:			
Bluefin		75 to 1,000 lbs	Chunk.
Little		2 to 10 lbs	Drawn.
Whiting		¼ lb. and up	Dressed.
FRESH WATER FINFISH			
Blue pike	Jumbo	1½ lbs. and up	Round.
	Regular	½ to 1½ lbs	Do.
Buffalofish	Jumbo	7 lbs. and up	Round, Dressed.
	No. 1's	4 to 7 lbs	Do.
Carp	Jumbo	7 lbs. and up	Round.
	No. 1's	4 to 7 lbs	Do.
	Medium	Under 4 lbs	Do.
Lake herring	Large	3 per lb	Do.
	Regular	4 per lb. and up	Do.
Sauger		½ to 1½ lbs	Do.
Sucker (mullet)	Mixed	1 to 3 lbs	Do.

See footnote at end of table.

TABLE 5.—*New York wholesale market classifications*—Continued

The terms and classifications in the table below are used by the trade in New York's Fulton Fish Market.]

Species	Market classification	Approximate weight, size, or number	Usual market form [1]
FRESH WATER FINFISH—Con.			
Trout		8 oz. to 1½ lbs	Round, drawn.
Whitefish	Jumbo	3 lbs. and up	Dressed.
	No. 1's	1½ to 3 lbs	Do.
	Medium	1 to 1½ lbs	Do.
	Dressed	Mixed sizes	Do.
Yellow pike	Large	3½ lbs. and up	Round.
	No. 1's	1½ to 3 lbs	Do.
	No. 2's	1 to 1½ lbs	Do.
SHELLFISH, ETC.			
Clams:			
Hard	Chowder, large	125 per bu	In shell.
	Medium	180 per bu	Do.
	Cherrystone	300 to 325 per bu	Do.
	Little neck	450 to 650 per bu	Do.
Soft	Large	400 per bu	Do.
	Medium or steamers.	400 to 600 per bu	Do.
	Large	200 to 250 per gal	Shucked.
	Medium	350 to 400 per gal	Do.
Conchs		All sizes	In shell.
Crabs:			
Hard		All sizes	Alive.
Soft	Jumbo	5½ inches across back	Do.
	Large prime	5 to 5½ inches across back.	Do.
	Prime	4½ to 5 inches across back.	Do.
	Hotel prime	4 to 4½ inches across back.	Do.
	Large medium	3½ to 4 inches across back.	Do.
	Medium	Under 3½ inches across back.	Do.
	Cull	All sizes	Do.
Crab meat	Jumbo lump	All large lump	Cooked.
	Lump	Lump only	Do.
	Mixed, mostly lump.	More than ½ lump	Do.
	Mixed, mostly flake.	Topped with lump	Do.
	Flake	All white flake meat	Do.
	Claw	Claw meat	Do.
Cuttlefish (Sepia).		½ to ¾ lb. and up	Round.
Lobsters:			
Common	Jumbo	Over 3 lbs	Live.
	Large	1½ to 2½ lbs	Do.
	Quarter	1¼ to 1½ lbs	Do.
	Chicken	¾ to 1 lb	Do.
Spiny	Jumbo	16 oz. and over	Tail.
	Large	12 to 16 oz	Do.
	Medium	9 to 12 oz	Do.
	Small	6 to 9 oz	Do.

See footnote at end of table.

TABLE 5.—*New York wholesale market classifications*—Continued

[The terms and classifications in the table below are used by the trade in New York's Fulton Fish Market.]

Species	Market classification	Approximate weight, size, or number	Usual market form [1]
SHELLFISH, ETC.—Continued			
Lobster meat		14 oz. per can	Cooked.
Mussels, bay		All sizes	In shell.
Octopus (pulpo)		1 lb. and up	Round.
Oysters	Medium	200 per bu	In shell.
	Half shell	325 per bu	Do.
	Blue point	400 per bu	Do.
	Count	Under 160 per gal	Shucked.
	Extra select	160 to 210 per gal	Do.
	Select	210 to 300 per gal	Do.
	Standard	300 to 500 per gal	Do.
Scallops:			
Bay	Large	¾ inch in diameter	Do.
	Medium	½ to ¾ inch in diameter.	Do.
Sea		All sizes	Do.
Shrimp		Under 10 shrimp per lb.	Headless.
		15 to 20 shrimp per lb.	Do.
		21 to 25 shrimp per lb.	Do.
		26 to 30 shrimp per lb.	Do.
		31 to 35 shrimp per lb.	Do.
		36 to 40 shrimp per lb.	Do.
		41 to 45 shrimp per lb.	Do.
		46 to 50 shrimp per lb.	Do.
		51 to 60 shrimp per lb.	Do.
		Over 60 shrimp per lb.	Do.
	Peeled and deveined.	15 to 20 shrimp per lb.	Shucked.
		20 to 25 shrimp per lb.	Do.
		26 to 30 shrimp per lb.	Do.
Squid		All sizes	Round.
Frog legs	Extra large or Jumbo.	2 to 3 pairs per lb	Legs and saddle.
	Large	4 to 5 pairs per lb	Do.
	Medium	6 to 8 pairs per lb	Do.
	Small	9 to 12 pairs per lb	Do.

[1] Round=as caught; drawn=eviscerated; dressed=eviscerated and heads off; sold fresh on ice, and frozen.

TABLE 6.—*Gulf States wholesale market classifications*

[The terms and classifications in this table are used by the trade in the Gulf States wholesale markets, especially at New Orleans, La.]

Species	Market classification	Approximate weight, size, or number	Usual market form [1]
SALT-WATER FISH			
Bluefish		¾ to 4 lbs	Round, drawn.
Blue runner		½ to 1 lb	Do.
Croaker		¼ to 1 lb	Round.
Drum:			
Black	Bulls	15 to 40 lbs	Round, drawn.
	Large	4 to 15 lbs	Do.
	Medium	1 to 4 lbs	Do.
	Small	¼ to 1 lb	Round.
Red	Bulls	15 to 40 lbs	Round, drawn.
	Medium	3 to 15 lbs	Do.
	Rats	1½ to 3 lbs	Round.
Flounder	Large	1½ to 5 lbs	Round, drawn.
	Medium	¾ to 1½ lbs	Round.
	Small	½ to ¾ lb	Do.
Grouper		3 to 20 lbs	Round, drawn, headless.
Jewfish (warsaw)		30 to 500 lbs	Do.
King mackerel		4 to 20 lbs	Drawn.
King whiting (ground mullet).		½ to 2 lbs	Round, drawn.
Mullet		¼ to 1 lb	Round.
Pompano		½ to 3½ lbs	Do.
Sea catfish		1 to 3 lbs	Round, drawn.
Sea trout:			
Spotted	Large	1 to 4 lbs	Do.
	Medium	¾ to 1 lb	Do.
	Small	½ to ¾ lb	Do.
White			Do.
Sheepshead			Do.
Snapper, red		1 to 20 lbs	Drawn, headless.
Spanish mackerel		½ to 3 lbs	Drawn.
FRESH-WATER FISH			
Buffalofish		3 to 20 lbs	Round, drawn.
Catfish		1 to 40 lbs	Do.
Sheepshead (gaspergou).		1 to 5 lbs	Round, drawn.

See footnote at end of table.

TABLE 6.—*Gulf States wholesale market classifications*—Continued

[The terms and classifications in this table are used by the trade in the Gulf States wholesale markets, especially at New Orleans, La.]

Species	Market classification	Approximate weight, size, or number	Usual market form [1]
SHELLFISH, ETC			
Crabs:			
Hard		All sizes	Live.
Soft	Jumbo	5½ inches and up	Do.
	Large	4½ to 5½ inches	Do.
	Medium	3½ to 4½ inches	Do.
	Small	Under 2 inches	
Crab meat	Backfin lump meat (all white lump).	½-pound and 1-pound cans, snap-on lid, also pasteurized, hermetically sealed cans.	Cooked.
	Special (flake topped with lump).		
	White flake		
	Claw (meat from claws).		
Crayfish (freshwater).		15 to 25 per pound	Live.
Oysters	Counts	160 meats per gal.	Shucked in gallons, pints, and 12 oz.
	Extra selects	161 to 210 meats per gal.	
	Selects	211 to 300 meats per gal.	
	Standards	301 to 500 meats per gal.	
		15 to 20 dozen per bu.	
		20 to 30 dozen per sack.	
		40 to 60 dozen small bbl.	
		60 to 90 dozen large bbl.	
Diamondback terrapin.	Cows	1½ to 2 lb	Live.
	Heifers	1 lb	Do.
	Bulls	½ to 1 lb	Do.
Frogs		½ to 1 lb	Do.
Shrimp (brown or white).	Jumbo	Under 15 per lb.	Heads on 210 pounds per barrel.
	Large	16 to 25 per lb.	
	Medium	26 to 40 per lb.	
	Small	41 to 60 per lb.	
	Very small	61 and over per lb.	
		Under 15 per lb.	Heads off.
		15 to 20 per lb.	
		21 to 25 per lb.	
		26 to 30 per lb.	
		31 to 40 per lb.	
		41 to 50 per lb.	
		51 to 67 per lb.	
		68 and over per lb.	
Turtles:			
Fresh-water		2 to 100 lbs.	Live, dressed.
Sea		10 to 200 lbs.	Do.

[1] Round=as caught; drawn=eviscerated only; dressed=eviscerated and heads off; sold fresh on ice, and frozen.

TABLE 7.—*Seattle wholesale market classification*

[The terms and classifications in this table are used by the trade in Seattle, Washington.]

Species	Market classification	Approximate weight, size, or number	Usual market forms [1]
SALT-WATER FISH			
Cod		3 pounds and over	Round, dressed.
Flounders:			
Dover		10 to 16 inches	Round.
English	Large	13 inches and over	Do.
	Small	11½ to 13 inches	Do.
Petrale		16 to 18 inches	Do.
Rex		11½ inches and over	Do.
Rock		11½ inches and over	Do.
Sand		11½ inches and over	Do.
Halibut	Whale	Over 80 pounds	Dressed.
	Large	60 to 80 pounds	Do.
	Medium	10 to 60 pounds	Do.
	Chicken	5 to 10 pounds	Do.
Herring sea		4 to 6 fish per pound	Round.
Lingcod		5 pounds and over	Dressed, some round.
Rockfish		2 to 5 pounds	Round, dressed.
Sablefish (black cod).	Large	5 pounds and over	Dressed, some round.
	Small	Under 5 pounds	Do.
Salmon:			
Chinook (king).	Large red	12 pounds and over	Drawn, dressed.
	Medium	8 to 12 pounds	Do.
	Small red	5 to 8 pounds	Do.
	White	26 inches and over	Do.
Chum (fall)		5 to 11 pounds	Round.
Pink (humpback).		4 to 10 lbs	Round, few drawn.
Silver (coho)		6 to 18 lbs	Round, drawn, dressed.
Sole (See Flounders).			
Smelt:			
Eulachon		8 to 12 fish per lb	Round, drawn.
Silver		8 to 12 fish per lb	Do.
Tuna, albacore		10 to 25 lbs	Do.

See footnote at end of table.

TABLE 7.—*Seattle wholesale market classification*—Continued

[The terms and classifications in this table are used by the trade in Seattle, Washington.]

Species	Market classification	Approximate weight, size, or number	Usual market forms [1]
SHELLFISH, ETC.			
Clams:			
Butter		Sack—100 lbs	In shell.
		Box—80 lbs	Do.
Littleneck		Sack—100 lbs	Do.
		Box—80 lbs	Do.
Razor		3½ in. and over	Do.
Crabs, Dungeness	Ocean	24 lbs. per doz	Live, also fresh cooked in shell.
	Puget Sound	22 lbs. per doz	Do.
Crab meat: Dungeness and King.	Regular	1- and 5-lb. cans	Fresh-cooked.
Oysters:			
Olympia		2,200 to 2,400 count per gal.	Shucked.
		Sack—120 lbs	In shell.
	Large	Not more than 64 per gal.	Shucked.
Pacific	Medium	65 to 104 count per gal.	Do.
	Small	105 to 144 count per gal.	Do.
	Extra Small	More than 144 count per gal.	Do.
		Sack—80 lbs	In shell.
Scallops	Bay	Sack—60 lbs	Do.
		Gallon—8½ lbs	Shucked.
Shrimp	Local		Fresh-cooked.
Shrimp meat	Alaska	1- and 5-lb. cans	Do.
Octopus			Round.
Squid	Local	5 to 6 per lb	Do.

[1] Round=as caught; drawn=eviscerated only; dressed=eviscerated and heads off; sold fresh on ice, and frozen.

TABLE 8.—*Chicago wholesale market classifications*

[The terms and classifications in this table are used by the trade in Chicago, Illinois. These are not fixed legal standards, they are mutually agreed on by dealers in the market. Fish will vary in weight according to season. In all cases, fish must meet legal requirements of the various States, for weight or for length]

Species	Market classification	Approximate weight, size, or number	Usual market forms [1]
FRESH-WATER FISH			
Blue pike	Lake Erie	¼–½ lb	Round.
Buffalofish	Jumbo	8 lbs. and over	Do.
	No. 1	4–8 lbs	Do.
	Medium	2–4 lbs	Do.
Bullheads	Jumbo	¾ lbs. and over	Dressed, skinned.
	Large	½ lb	Do.
Carp	Jumbo	8 lbs. and over	Round.
	No. 1	4–8 lbs	Do.
	Medium	2–4 lbs	Do.
Catfish	Large	3–4 lbs. and over	Dressed, skinned.
	No. 1	1½–3 lbs	Do.
Lake herring	Bluefin (Lake Superior).	3–4 lbs. and over	Mostly drawn.
	Regular	4–7 fish per lb	Do.
Lake trout	Large	8–10 lbs	Drawn (heads on).
	Medium	4–8 lbs	Do.
	No. 1	2–4 lbs	Do.
	Headless	10 lbs. and over	Dressed.
Pickerel (jacks)	Large	4–6 lbs. and over	Mostly dressed.
	Medium	1½–3 lbs	Mostly round.
Sauger	Large (Manitoba)	¾–1 lb	Round, dressed.
	Medium (Manitoba).	½–¾ lb	Do.
	Lake Erie	½ lb	Do.
Sheepshead	Soft meats, large	5 lbs. and over	Round.
	Soft meats, medium.	1½–5 lbs	Do.
	Hard meats	2–5 lbs	Do.
Smelt (lake)	Jumbo	4–6 fish per lb	Do.
	No. 1	7–10 fish per lb	Do.
	Medium	10 fish per lb. or over.	Do.
Suckers	Jumbo	4–6 lbs	Mostly drawn.
	Medium	2–4 lbs	Do.
	Mullet	2–6 lbs	Round.
Sunfish	Large (Canadian)	¾–1 lb	Do.
	Medium (Canadian).	½–¾ lb	Do.
White bass	Lake Erie	½–1½ lbs	Do.
Whitefish	Jumbo	4 lbs. and over	Mostly drawn.
	Large	3½–4 lbs	Do.
	Medium	3 lbs	Do.
	No. 1	1½–3 lbs	Do.
Yellow perch	Jumbo (native)	½–¾ lb	Round.
	Jumbo (Canadian)	¾ lb	Do.
	Large (native)	3 fish per lb	Do.
	Large (Canadian)	2 fish per lb	Do.
	Medium (native)	4 fish per lb	Do.
Yellow pike	Jumbo	4 lbs. and over	Mostly round.
	Large	2–4 lbs	Round, drawn, dressed.
	No. 1 hard (Lake Erie).	2½–3½ lbs	Round.
	No. 2 hard (Lake Erie).	1–2½ lbs	Do.

[1] Round=as caught; drawn=eviscerated; dressed=eviscerated and heads off.

Where no standard has been issued, the general provisions of the law apply.

The U.S. Public Health Service is particularly interested in shellfish. Through cooperative arrangements, this agency endorses the sanitation control program of the States meeting the minimum requirements it specifies. These pertain mainly to sanitary control, origin, labeling, and shipment of clams, mussels, and oysters.

The U.S. Federal Trade Commission, in preventing deceptive advertising and sales practices, issues cease-and-desist orders against unfair restraint of trade. It in effect fixes standards of identity by limiting the use of certain names to particular species.

The U.S. Department of the Interior administers the Black Bass Act. On July 16, 1952, this act was amended to include the interstate shipment of any fish, and now makes it illegal to ship, transport, possess, purchase, or sell fish "at any time contrary to the law of the State, Territory, or the District of Columbia, in which it was caught, killed, taken, sold, purchase, or possessed." For example, a fish, illegal in size or weight in one State, cannot be shipped to another State and sold, even though the second State does not impose the same limitations.

SEASONAL VARIATIONS IN THE MARKET SUPPLY

Fresh Fish and Shellfish

Although many species of fresh fish are available at almost anytime of the year, certain species are especially abundant during a particular season. Seasonal variations in the supply of fresh fishery products in some of the major areas may be determined by referring to tables 9 through 19. These tables give a general picture of the shifts in availability of the various species. In some instances they cover large areas. In others, the tables are limited to single cities that are important markets, distribution centers, or landing ports.

The month during which the largest receipts occurred has been given a value of 100; receipts in other months have been expressed as percentages of the largest month. The higher index numbers indicate a greater available supply of a species. In general, it should prove advantageous to buy fresh fishery products in those months which have the higher index numbers.

TABLE 9.—*Maine landings index, 1963*

Species	Largest monthly volume (thousand pounds)	Percentage of largest monthly volume											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
SALT-WATER FISH													
Cod	443	22	20	33	40	100	69	38	33	18	29	21	18
Cusk	82	17	12	41	51	100	79	61	67	67	53	14	10
Flounder:													
Blackback	9	15	44	87	100	74	56	68	40	37	9	1	19
Dab	84	28	37	79	100	99	46	32	33	41	22	13	11
Gray sole	154	11	15	33	100	57	75	43	42	47	25	9	5
Yellowtail													
Haddock	444	36	23	5	48	43	4	52	59	100	89	44	6
Hake, white	1,183	2	1	2	1	4	34	100	95	43	16	3	2
Halibut	30	1	2	31	43	100	56	18	27	21	9	1	1
Mackerel	146						2	81	100	13	12		
Ocean perch	8,313	39	41	52	42	88	100	100	95	59	69	48	36
Pollock	649	19	10	11	30	58	100	49	20	20	37	22	6
Smelt	47	58	100	36	43	7					9	6	46
Tuna, bluefin	889						1	2	100				
Whiting	8,806						47	100	33	1			
Wolffish (catfish)	11	36	5	43	100	92	78	40	40	7	11	2	6
SHELLFISH													
Clams:													
Hard	2					8							100
Soft	261	30	37	43	50	66	86	100	86	73	50	42	39
Crabs	405	5	5	18	30	49	50	76	79	50	17	16	100
Lobsters	2,545	13	9	9	19	33	28	49	82	97	100	60	36
Scallops, sea	163	46	47	20	100	68	83	77	67	36	46	65	47

TABLE 10.—*Massachusetts landings index, 1963*

Species	Largest monthly volume (thousand pounds)	Percentage of largest monthly volume											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
SALT-WATER FISH													
Cod	3,911	54	50	57	100	81	71	92	79	60	79	48	32
Cusk	261	46	45	55	100	36	12	24	37	30	41	33	24
Flounder:													
Gray sole	310	37	31	100	84	78	98	52	57	55	60	45	66
Lemon sole	322	26	12	15	52	100	80	52	62	64	79	36	30
Yellowtail	6,968	82	62	81	71	89	69	100	98	91	96	74	73
Blackback	1,616	33	11	27	59	100	93	58	66	53	95	90	38
Dab	813	22	21	35	57	100	66	44	75	39	54	30	23
Fluke	485	72	100	88	53	14	22	37	44	32	4	2	2
Haddock:													
Large	6,617	48	65	100	94	87	80	65	70	65	72	45	41
Scrod	7,955	44	48	84	100	52	56	53	62	49	46	26	17
Hake	435	27	13	11	5	9	11	26	38	68	100	92	33
Halibut	36	19	22	39	100	64	57	21	30	26	27	17	11
Mackerel	712					53	14	62	100	28	5	4	3
Ocean perch	7,231	25	28	31	33	100	94	88	75	39	35	32	31
Pollock	1,663	73	46	28	51	58	30	29	43	64	100	93	
Scup (porgy)	446	5	5	9	6	14	100	7	4	7	9		
Tilefish	20	93	47	100	91	86	2	3					
Whiting	18,948			3	5	8	66	100	67	35	45	11	1
Wolffish	171	23	23	28	100	83	56	11	8	4	6	4	2
SHELLFISH													
Scallops, sea	2,002	49	39	54	75	88	93	98	100	67	62	59	35

TABLE 11.—*New York landings and receipts index, 1963*

Species	Largest monthly volume (thousand pounds)	Percentage of largest monthly volume											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
SALT-WATER FISH													
Bluefish	381	54	59	48	51	53	100	77	80	66	59	29	41
Butterfish	614	90	69	100	62	52	66	65	72	55	85	46	50
Cod (all)	1,387	96	78	89	100	98	91	94	80	69	82	70	81
Croaker	42	76	100	17	12	5	7	12	10	17	38	55	64
Eels, common	73	18	14	23	36	36	40	27	41	42	33	37	100
Flounders:													
Blackback	1,721	39	20	41	73	99	88	65	66	56	100	89	54
Dabs, sea	265	24	17	52	85	100	56	54	71	34	41	21	32
Fluke	543	76	87	82	50	52	100	73	60	29	12	4	6
Sole, gray	342	53	48	95	100	94	95	64	72	62	63	52	64
Sole, lemon	232	34	23	23	54	91	96	76	72	69	100	37	51
Yellowtail	1,193	97	85	100	92	53	42	57	45	61	54	40	82
Haddock	507	40	92	100	78	47	47	50	45	52	50	26	36
Hake	180	24	5	5	11	15	22	43	66	100	99	64	37
Halibut	355	26	56	60	79	94	100	85	79	63	41	15	15
Herring, sea, large	45	69	87	100	44	7	-----	2	-----	2	2	4	96
Herring, sea (sardine)	57	19	42	100	81	96	74	56	61	32	75	53	86
King mackerel	166	71	85	100	90	54	18	32	34	30	5	15	55
Mackerel	401	2	-----	-----	18	84	63	92	100	73	81	26	21
Mullet	192	67	53	41	33	37	26	43	60	97	95	94	100
Pollock	196	100	76	65	65	63	60	53	49	78	73	69	99
Red hake	270	56	29	33	70	30	22	38	37	23	36	68	100
Salmon, Atlantic	100	-----	-----	-----	-----	2	100	51	3	-----	-----	-----	-----
Salmon, king, red	208	-----	-----	1	11	76	85	100	67	37	23	6	-----
Salmon, silver	95	-----	-----	-----	-----	-----	1	65	85	100	94	15	6
Scup (porgy)	2,066	57	53	85	100	84	82	67	47	39	52	28	31
Sea bass	238	86	87	80	73	91	100	70	49	29	40	44	54
Shad	402	3	20	73	100	59	2	-----	-----	-----	-----	-----	-----
Smelts	94	50	1	16	100	22	6	11	12	30	49	10	29
Snappers, red	149	75	84	72	82	100	90	75	92	76	90	98	85
Spanish mackerel	108	81	96	100	58	4	1	2	1	3	25	54	84
Spot	63	2	6	11	25	30	54	59	38	100	90	29	5
Striped bass	382	21	9	88	100	55	44	33	25	23	80	73	52
Swellfish	121	2	-----	12	100	86	60	40	39	65	53	27	9
Tilefish	63	78	43	25	100	65	35	3	-----	-----	-----	2	3
Swordfish	353	2	-----	-----	4	17	27	79	83	100	77	40	32
Tuna	111	3	1	2	3	9	100	73	84	68	50	5	8
Whiting	1,108	58	38	64	74	73	80	91	83	82	99	99	100
SHELLFISH													
Clams, hard	373	73	58	79	84	78	84	95	100	82	76	70	79
Clams, soft	60	38	30	62	62	62	68	87	100	82	68	58	47
Crab meat	108	56	48	69	69	78	84	100	89	76	72	57	61
Crabs, hard	351	24	16	18	16	25	30	57	90	100	81	36	37
Crabs, soft	190	-----	-----	-----	7	51	66	90	100	31	5	-----	-----
Lobsters, live	1,008	64	54	70	69	100	86	91	87	75	74	74	90
Lobster meat	99	4	4	4	5	86	100	35	83	42	21	6	24
Mussels, bay	64	73	58	73	97	80	73	78	75	67	100	56	41
Oysters, shell	41	56	51	71	41	-----	-----	-----	-----	63	100	88	88
Oysters, shucked	62	79	61	61	26	-----	-----	-----	-----	27	84	92	100
Scallops, sea	376	50	65	76	91	89	82	87	100	81	68	57	56
Squid	447	33	25	42	49	100	40	33	36	34	45	44	45
Shrimp	609	33	5	2	3	4	10	81	100	67	64	57	55

TABLE 12.—*Maryland landings index, 1963*

Species	Largest monthly volume (thousand pounds)	Percentage of largest monthly volume											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
SALT-WATER FISH													
Bluefish	18	----	----	----	----	7	100	2	17	35	30	16	----
Butterfish	24	1	----	6	4	25	3	1	2	7	19	100	8
Cod	79	100	80	23	----	----	----	----	----	----	----	1	----
Croaker	Negligible	----	----	----	----	----	----	----	----	----	----	----	----
Eels, common	72	1	----	4	100	34	8	4	5	8	6	12	1
Flounder, fluke	106	36	13	36	22	28	60	89	78	42	100	9	3
Mackerel	4	----	----	----	100	----	----	----	1	1	1	5	----
Scup (porgy)	27	12	8	45	100	1	2	----	----	5	11	57	19
Sea bass	71	26	17	58	8	99	100	42	15	19	20	8	14
Sea trout (weakfish), gray	35	----	----	----	----	3	3	----	18	64	100	61	1
Shad	333	----	----	11	100	94	3	----	----	----	----	----	----
Spot	3	1	----	----	1	5	4	15	71	94	100	----	----
Striped bass	980	17	7	97	100	20	3	2	10	9	13	7	12
Sturgeon	2	----	----	----	34	31	72	----	----	34	92	100	17
Swellfish	219	----	----	----	34	100	14	10	3	90	21	----	----
White perch	613	25	23	100	22	4	4	----	2	1	5	2	4
Whiting	98	2	1	8	8	25	4	----	----	----	----	48	100
FRESH-WATER FISH													
Carp	27	7	2	86	61	63	35	32	42	100	60	58	9
Catfish and bullheads	67	2	5	61	100	62	18	20	3	9	46	31	41
Yellow perch	62	6	7	100	3	----	1	2	----	----	3	9	10
SHELLFISH													
Crabs, blue	4,782	----	----	----	----	11	35	85	100	97	57	10	1
Clams:*													
Hard	72	41	91	80	74	19	26	19	33	15	100	92	77
Soft	989	45	43	33	29	38	57	100	67	84	63	44	90
Surf	13	100	78	50	----	51	77	59	61	10	----	----	----
Conchs*	13	----	----	----	8	39	58	100	44	35	1	----	----
Oysters*	1,896	40	35	18	19	----	----	----	----	54	59	100	52
Squid	10	16	8	100	41	46	16	7	17	12	44	24	48
Turtles, snapper	29	----	----	----	6	20	100	28	----	----	----	----	----

*Reported in pounds of meat.

TABLE 13.—*Florida landings index, 1963*

Species	Largest monthly volume (thousand pounds)	Percentage of largest monthly volume											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
SALT-WATER FISH													
Bluefish	330	79	76	80	67	20	11	12	29	20	20	44	100
Drum:													
Black	38	35	22	59	43	35	36	48	19	34	44	49	100
Red	152	100	65	82	43	22	16	19	64	96	47	50	62
Flounder	73	21	10	22	37	94	33	40	43	39	100	84	21
Grouper	914	43	38	43	45	41	50	69	100	64	33	50	69
King mackerel	1,766	39	49	100	20	7	3	4	9	5	2	4	22
King whiting	225	81	26	60	48	21	48	39	48	7	20	77	100
Mullet:													
Black	5,228	34	26	29	23	21	32	47	63	67	79	100	88
Silver	124	28	57	67	100	60	23	37	50	25	34	17	20
Pompano	123	54	27	59	58	34	19	28	56	42	30	55	100
Sea trout, spotted	442	79	81	66	46	35	34	42	41	42	55	79	100
Snapper, red	610	72	86	85	77	89	73	91	85	65	79	75	100
Spanish mackerel	2,413	62	34	42	17	3	1	3	4	1	10	13	100
FRESH-WATER FISH													
Catfish**	680	67	77	100	77	35	32	22	23	28	52	71	56
SHELLFISH													
Clams, hard*	3	33	7	5	2	.....	.....	.....	8	.....	1	4	100
Crabs, hard	2,744	29	28	50	62	65	77	85	100	60	64	41	27
Lobsters, spiny	696	32	18	30	.....	.....	.....	.....	100	91	70	74	81
Oysters*	695	100	83	73	59	32	19	17	27	37	54	53	57
Shrimp (heads on)	4,722	65	71	67	84	82	57	53	35	38	90	78	100

*Reported in pounds of meat.
**Represents that portion of the total catch handled by dealers of marine species.

TABLE 14.—*Virginia landings index, 1963*

Species	Largest monthly volume (thousand pounds)	Percentage of largest monthly volume											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
SALT-WATER FISH													
Bluefish	234	1	-----	-----	4	100	15	20	31	39	31	3	1
Butterfish	307	100	32	8	43	33	3	8	91	85	35	13	3
Croaker	53	-----	-----	-----	5	5	1	4	16	100	96	-----	-----
Drum, black	92	-----	-----	-----	9	100	11	9	-----	34	23	43	-----
Eels, common	90	-----	-----	2	7	79	23	52	36	56	67	100	54
Flounder, fluke	251	100	64	85	63	29	31	64	64	31	51	55	46
Mackerel	66	6	-----	2	100	5	2	-----	-----	1	-----	-----	1
Mullet	5	-----	-----	-----	100	-----	-----	12	80	54	67	-----	-----
Scup (porgy)	2,904	45	40	77	100	17	-----	-----	-----	-----	10	12	28
Sea bass	1,023	98	100	87	44	34	9	5	3	1	2	11	29
Sea trout:													
Gray	218	-----	-----	7	-----	68	100	82	88	85	60	12	-----
Spotted	4	-----	-----	-----	-----	16	-----	5	47	93	100	14	-----
Shad	989	-----	-----	99	100	33	1	-----	-----	-----	-----	-----	-----
Spot	454	-----	-----	-----	-----	-----	27	56	66	100	64	4	-----
Striped bass	842	2	5	100	57	25	8	17	3	8	15	55	40
Swellfish	413	2	-----	-----	100	100	37	8	5	9	7	2	1
White perch	92	22	16	100	25	21	9	7	6	11	21	99	11
Whiting	60	18	3	22	100	31	1	-----	1	-----	-----	3	17
FRESH-WATER FISH													
Catfish and bullheads	277	1	4	53	58	67	65	51	69	84	100	58	12
Carp	37	29	59	65	40	100	13	37	14	29	14	42	29
SHELLFISH													
Crabs, blue	6,771	91	36	13	20	35	21	69	100	91	99	22	73
Clams, hard*	305	33	28	56	54	71	100	90	90	51	39	43	32
Conchs	95	65	100	63	5	16	10	9	6	8	11	7	36
Lobsters	7	14	3	35	98	100	-----	31	15	5	6	31	5
Oysters*	2,429	69	28	18	3	4	1	3	2	24	76	100	83
Scallops, sea*	29	-----	-----	-----	-----	-----	-----	-----	100	52	-----	4	-----
Squid	88	-----	20	33	42	12	2	-----	1	-----	10	100	68
Turtles, snapper	31	-----	-----	-----	27	99	100	65	56	23	-----	-----	-----

*Reported in pounds of meat.

TABLE 15.—*Georgia, North Carolina, South Carolina, combined landings index, 1963*

Species	Largest monthly volume (thousand pounds)	Percentage of largest monthly volume											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
SALT-WATER FISH													
Bluefish	239	3	1	1	34	43	28	28	54	87	100	5	4
Butterfish	60	26	12	2	1	13	19	28	20	47	100	57	10
Croaker	456	100	91	15	17	27	2	15	20	9	51	78	83
Drum:													
Black	12	73	11	16	35	5	5	4	25	21	100	92	53
Red or redfish	19	74	1	2	15	38	6	80	100	30	12	12	2
Eels, common	21	1	1	14	9	100	17	2	1	4	18	14	6
Flounder	943	42	13	29	13	2	4	12	9	12	16	100	46
Hickory shad	161	35	43	100	-----	-----	-----	-----	-----	-----	-----	-----	-----
King mackerel	28	-----	-----	-----	5	11	8	9	15	7	18	100	33
King whiting or "kingfish"	211	73	61	46	87	47	20	38	31	32	76	100	77
Mullet	1,388	27	15	8	2	2	1	5	13	82	100	38	4
Pompano	75	-----	-----	-----	-----	-----	-----	10	6	100	34	34	-----
Scup (porgy)	88	100	31	77	1	2	8	3	-----	2	-----	2	-----
Sea bass	321	63	100	61	6	1	-----	1	-----	6	1	22	26
Sea trout:													
Gray	443	100	60	34	15	22	9	7	12	15	17	55	52
Spotted	65	8	10	6	2	8	15	36	49	87	100	94	25
Shad	673	6	32	100	29	3	-----	-----	-----	-----	-----	-----	-----
Spanish mackerel	45	-----	-----	-----	-----	5	91	71	100	48	8	-----	-----
Spot	1,917	1	-----	-----	-----	1	3	8	4	44	100	29	-----
Striped bass	217	100	14	65	40	4	1	4	6	11	27	21	48
Sturgeon	44	4	1	47	100	27	7	1	-----	1	-----	15	23
Swellfish	208	2	-----	100	89	1	-----	-----	-----	-----	2	17	12
White perch	109	23	15	62	100	5	-----	-----	2	2	6	1	24
FRESH-WATER FISH													
Carp	52	52	100	99	19	4	-----	3	9	3	3	3	25
Catfish and bullheads	323	25	20	100	90	56	36	14	8	14	45	52	21
SHELLFISH													
Clams, hard	96	37	48	100	52	47	44	27	32	6	4	8	17
Crabs, blue, hard	5,204	22	20	76	67	68	85	97	100	71	79	94	31
Oysters	694	100	85	91	85	10	-----	-----	-----	6	64	90	34
Scallops, bay	73	90	100	96	46	25	2	-----	-----	-----	-----	-----	82
Shrimp (heads on)	2,977	3	-----	1	1	1	25	100	85	64	45	28	16
Turtles, snapper	7	-----	-----	-----	3	69	100	62	24	1	3	-----	-----

TABLE 16.—*Gulf States (excluding Florida) receipts and landings index, 1963*

Species	Largest monthly volume (thousand pounds)	Percentage of largest monthly volume											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
SALT-WATER FISH													
Croaker	18	----	----	----	3	10	19	18	100	71	42	4	----
Drum:													
Black	289	100	87	94	37	33	24	35	28	26	31	45	69
Red	142	100	86	59	36	53	55	76	66	57	64	87	94
Flounder	122	20	7	12	19	39	34	37	39	42	75	100	36
Grouper	84	48	63	46	78	79	100	91	71	84	39	77	61
King whiting or "kingfish"	114	45	40	45	31	100	85	87	95	58	95	79	58
Mullet	261	64	72	100	71	56	42	39	60	35	54	53	51
Sea catfish	61	100	1	4	29	32	29	25	13	23	21	13	2
Sea trout:													
Spotted	237	100	56	67	61	62	42	35	44	28	47	80	85
White	69	2	3	58	100	28	13	13	17	16	49	17	8
Sheepshead	37	95	61	90	60	41	53	74	32	28	43	98	100
Snapper, red	625	42	44	37	54	58	52	58	49	71	77	100	61
FRESH-WATER FISH													
Buffalofish	1,003	17	17	21	26	17	20	20	22	16	100	27	28
Carp	27	38	45	65	70	100	80	36	57	37	45	30	32
Catfish and bullheads	1,160	29	31	72	100	55	37	43	36	42	56	49	29
Garfish	159	43	48	53	47	33	41	36	34	100	50	42	85
Sheepshead (gaspergou)	98	31	40	70	100	65	56	35	36	27	49	71	43
SHELLFISH, ETC.													
Crabs, blue:													
Hard	1,691	11	15	46	86	93	98	100	62	31	37	26	8
Soft and peeler	36	----	----	19	100	52	16	23	38	13	6	----	----
Crawfish	558	1	2	12	22	100	23	----	----	----	----	----	1
Oysters	3,304	98	100	93	83	28	5	4	5	16	23	33	52
Shrimp (heads-on)	28,588	11	10	9	10	46	61	72	66	87	100	56	33

Includes: Alabama, Louisiana, Mississippi, and Texas.

TABLE 17.—*California landings index, 1963*

Species	Largest monthly volume (thousand pounds)	Percentage of largest monthly volume											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
SALT-WATER FISH													
Barracuda	90	10	34	31	44	49	**100**	35	12	6	24	19	24
Bonito	1,349	**100**	69	48	-----	-----	2	3	2	12	25	24	11
Flounder and sole	2,356	64	42	47	57	65	70	80	**100**	86	53	43	53
Grouper	64	57	85	40	-----	22	-----	19	17	-----	12	11	**100**
Hake	26	1	-----	1	5	**100**	48	7	58	16	1	-----	-----
King croaker	96	31	**100**	71	79	37	32	23	14	25	57	16	61
Lingcod	165	36	24	23	44	63	60	75	**100**	79	40	16	36
Perch	37	68	25	76	**100**	3	1	35	54	27	18	4	23
Pompano	13	-----	**100**	17	16	32	50	82	57	27	35	8	8
Rockfish	1,073	88	76	61	71	80	68	63	**100**	85	67	56	58
Sablefish	156	**100**	50	**100**	86	87	65	64	97	81	41	63	71
Salmon	2,168	-----	-----	-----	26	79	70	**100**	56	19	-----	-----	-----
Sea bass	161	45	69	27	32	54	35	61	95	**100**	98	43	47
Smelt	61	6	11	9	41	**100**	90	61	36	52	22	12	9
Swordfish	29	1	-----	-----	-----	-----	34	99	**100**	18	54	-----	-----
FRESH-WATER FISH													
Carp	18	**100**	75	36	46	2	49	40	26	55	60	33	1
SHELLFISH													
Abalone	503	63	-----	41	57	99	70	**100**	81	60	64	62	71
Crab, Dungeness	696	52	81	8	12	10	2	-----	-----	-----	-----	**100**	62
Lobster, spiny	209	28	17	12	-----	-----	-----	-----	-----	-----	**100**	60	46
Shrimp	456	-----	-----	-----	-----	79	92	**100**	-----	45	17	-----	1
Octopus	12	17	64	37	38	40	18	31	42	-----	20	51	**100**
Oysters, Pacific*	1,205	93	90	**100**	68	-----	-----	-----	1	6	14	14	11
Squid	2,263	92	66	18	47	**100**	66	43	19	14	-----	3	34

*Shown on basis of round weight which included the weight of shells.

TABLE 18.—*Seattle, Wash., receipts and landings, 1963*

Species	Largest monthly volume (thousand pounds)	Percentage of largest monthly volume											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
SALT-WATER FISH													
Cod, true	249	28	76	**100**	89	58	49	57	39	26	38	47	74
Flounder and sole	424	28	38	60	60	48	68	48	75	53	76	99	**100**
Halibut	5,108	49	25	28	62	70	78	**100**	76	19	49	27	33
Lingcod	192	14	13	22	55	56	73	98	**100**	75	31	15	22
Perch, Pacific, Ocean	832	15	48	70	53	**100**	72	53	42	55	62	33	23
Rockfish	700	35	37	40	**100**	30	31	18	37	34	28	21	26
Sablefish	712	6	-----	1	2	3	20	10	33	**100**	98	53	22
Salmon:													
Chinook (king)	1,149	8	7	2	21	51	61	88	**100**	49	49	7	4
Chum (fall)	1,845	13	5	9	5	5	8	2	9	8	66	**100**	20
Pink	3,339	-----	-----	-----	-----	-----	1	12	**100**	43	2	-----	-----
Silver	2,101	19	9	7	2	1	6	58	**100**	54	86	41	25
SHELLFISH													
Crabs	1,128	30	39	85	45	32	44	36	**100**	23	80	88	80
Crab meat	323	17	10	**100**	73	15	29	92	56	5	68	16	12
Oysters, shucked	313	84	78	82	98	71	8	4	3	9	23	**100**	70

TABLE 19.—*Chicago, Ill., receipts index, 1963*

Species	Largest monthly volume (thousand pounds)	Percentage of largest monthly volume											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
FRESH-WATER FISH													
Brook trout	4	29	44	59	41	44	54	61	63	61	**100**	46	44
Buffalofish	401	86	88	**100**	91	95	64	74	71	63	91	62	84
Bullhead	27	81	37	70	32	**100**	11	11	21	31	50	20	19
Carp	176	64	65	**100**	70	61	51	49	43	53	46	33	47
Catfish	160	78	47	73	84	79	74	72	88	63	**100**	64	57
Chub	445	50	6	3	56	96	63	75	79	86	**100**	----	----
Crappie	11	8	1	32	70	**100**	5	10	44	7	44	28	17
Eels	4	----	----	----	----	2	17	29	59	**100**	68	66	61
Lake herring	145	96	62	55	66	**100**	72	68	61	94	82	61	84
Lake trout	197	6	11	27	20	12	47	60	90	**100**	69	7	16
Menominee	1	----	17	----	**100**	25	----	25	----	33	25	8	8
Pickerel (jacks)	61	28	33	56	**100**	24	29	31	57	72	35	38	22
Sauger	75	68	54	27	5	7	16	27	25	28	13	10	**100**
Sheepshead	141	77	66	**100**	83	75	58	75	76	63	69	79	67
Smelt	134	44	39	54	**100**	71	70	36	12	52	23	11	9
Suckers	44	37	38	43	**100**	15	6	11	3	38	18	16	6
Sunfish	23	24	29	14	72	96	29	27	29	33	**100**	53	32
Tullibee	11	14	----	8	57	60	**100**	28	----	82	97	----	22
White bass	26	25	19	----	77	**100**	64	72	2	9	26	22	1
Whitefish	663	81	89	89	81	40	94	**100**	78	88	76	58	66
Yellow perch	158	67	52	91	53	48	85	**100**	99	59	48	45	65
Yellow pike	290	24	21	31	67	27	**100**	85	89	88	74	28	53

SEASONAL VARIATIONS IN THE MARKET SUPPLY

Frozen Fish and Shellfish

Supplies of frozen fishery products usually increase seasonally during periods of peak landings. Most frozen fish and shellfish are more widely distributed than the fresh product and are available throughout the year. Table 20 indicates the relative volume of frozen inventories of selected fishery products in each month, expressed as percentages of the largest month's holdings.

TABLE 20.—*U.S. cold-storage holdings index*

Item	Holdings in largest month	Percentage of largest month's holdings											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
SALT-WATER FISH	*Thousand pounds*												
Blocks	29,296	83	71	52	32	35	40	53	74	93	100	84	80
Fillets and steaks:													
Cod	10,278	94	83	64	58	68	70	75	75	87	80	85	100
Flounder	8,089	76	66	42	29	26	33	45	60	70	80	91	100
Haddock	7,149	75	71	54	63	87	88	98	91	100	89	90	88
Halibut	5,301	55	49	42	42	45	37	41	52	57	62	82	100
Ocean perch	15,919	85	63	47	32	35	45	57	66	82	87	83	100
Pollock	1,039	100	95	67	53	33	45	43	44	38	30	49	79
Salmon	1,645	09	36	16	15	09	07	06	07	14	07	26	100
Whiting	2,585	100	83	64	43	36	30	41	69	72	78	79	79
Other	6,550	100	85	76	71	74	75	77	88	94	89	91	94
Fish sticks and portions (raw and cooked)	12,892	90	95	79	65	93	96	100	91	87	80	90	93
Round, dressed, etc.:													
Halibut	26,934	69	57	47	34	44	64	74	97	100	95	94	84
Mackerel (except spanish)	1,119	77	87	77	75	56	50	45	59	100	92	93	71
Sablefish	3,164	100	97	90	79	68	61	54	49	52	65	74	86
Salmon:													
Chinook or king	5,825	74	59	51	37	33	34	37	54	64	82	100	89
Silver or coho	5,180	100	81	60	49	33	20	17	53	68	83	78	78
Chum or keta	1,942	70	57	56	43	41	32	37	81	35	54	63	100
Other	2,736	39	32	31	25	21	24	31	75	85	100	69	59
Smelt	3,112	100	88	76	56	51	52	41	41	40	41	47	46
Swordfish	3,150	79	58	63	61	62	70	55	67	61	80	92	100
Tuna	3,576	37	21	03	10	04	04	06	17	38	100	49	37
Whiting, headed and gutted	11,996	95	72	56	41	26	14	40	97	99	100	99	86
Other (except bait)	18,254	100	86	78	63	66	67	54	57	78	66	60	63
FRESH-WATER FISH													
Fillets and steaks	2,444	59	52	37	35	45	33	32	34	37	32	100	58
Round, dressed, etc.:													
Chubs	1,890	76	68	41	28	28	44	43	53	60	68	94	100
Trout	1,330	94	80	80	79	79	87	69	85	83	89	92	100
Whitefish	1,828	100	97	86	72	58	42	52	58	58	69	79	77
Other (except bait)	3,473	84	71	55	58	50	48	82	62	58	85	100	97
BAIT AND ANIMAL FOOD (salt and fresh water)	21,480	58	47	49	57	61	84	98	100	61	57	35	27
SHELLFISH													
Crabs (including crabmeat)	4,893	45	38	41	48	58	52	56	61	68	71	96	100
Spiny lobster (tails)	6,665	100	89	93	96	90	99	99	97	98	76	69	75
Oyster meats	1,992	36	46	47	67	100	92	80	90	72	69	60	61
Scallop meats	3,551	77	67	56	44	42	48	66	70	82	89	86	100
Shrimp:													
Raw (headless, shell-on)	42,142	75	68	67	66	59	57	57	60	59	65	89	100
All other (including breaded)	14,635	56	67	73	72	77	74	66	79	90	89	95	100
Total shrimp	56,777	70	68	68	68	64	61	59	65	67	71	90	100
Squid	1,423	59	58	53	43	39	100	96	78	61	73	80	75
Other	2,451	62	47	49	42	50	57	63	86	62	100	82	86
CURED FISH													
Herring, salted	10,121	67	60	72	88	100	92	91	62	66	58	50	65
Salmon, mild-cured	4,997	80	76	65	57	49	50	59	80	100	100	94	88
Other salted	2,824	100	95	90	91	94	95	97	89	84	80	74	55
Smoked fish	703	76	64	70	75	66	100	81	69	80	76	87	88

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