

Chapter 14



Understanding Fish and Shellfish

At one time, fresh fish was enjoyed only in limited areas—along the seacoast and, to a lesser extent, around lakes and rivers. Today, thanks to modern refrigeration and freezing technology, fish products are enjoyed much more widely.

For the cook, the difficulties of understanding fish and shellfish are, in some ways, the reverse of those for meat. With meat, we are presented with only a few animals but a bewildering array of cuts from each. With fish, we see only a few cuts but hundreds of species, each with its own characteristics and cooking requirements.

For this reason, it is especially important that students learn the basic principles of structure, handling, and cooking so they can utilize the many varieties of seafood in a systematic way.

Fish products are divided into two categories: *fin fish*, or fish with fins and internal skeletons, and *shellfish*, or fish with external shells but no internal bone structure. Because these two categories have many differences, it is helpful to look at them separately, as we do in this chapter.

After reading this chapter, you should be able to

1. Explain how the cooking qualities of fish are affected by its lack of connective tissue.
2. Determine doneness in cooked fish.
3. Demonstrate the appropriate cooking methods for fat and lean fish.
4. List seven basic market forms of fish.
5. Dress and fillet round fish and flatfish.
6. List and describe common varieties of saltwater and freshwater fin fish used in North American food service.
7. Identify the characteristics of fresh fish, and contrast them with characteristics of not-so-fresh fish.
8. Store fish and fish products.
9. Understand the popular varieties of shellfish, and discuss their characteristics.
10. Outline the special safe handling and cooking procedures for shellfish.
11. Open clams and oysters, split lobsters, and peel and devein shrimp.

FIN FISH

Composition and Structure

The edible flesh of fish, like that of meat and poultry, consists of water, proteins, fats, and small amounts of minerals, vitamins, and other substances. The differences, however, are perhaps more important than the similarities.

Fish has very little connective tissue. This is one of the most important differences between fish and meat. It means that

1. *Fish cooks very quickly*, even at low heat (just enough heat to coagulate the proteins).
2. *Fish is naturally tender*. Toughness is the result not of connective tissue but of the toughening of the protein by high heat.
3. *Moist-heat cooking methods* are used not to create tenderness but to preserve moistness and provide variety.
4. *Cooked fish must be handled very carefully* or it will fall apart.

Special Problems in Cooking Fish

Doneness and Flaking

When fish is cooked, the flesh breaks apart into its natural separations. This is called *flaking*. Most books, somewhat misleadingly, say that fish is done when it flakes easily. Unfortunately, some cooks interpret this as “nearly falling apart.” Because fish continues to cook in its retained heat even when removed from the fire, it is often dreadfully overcooked by the time it reaches the customer. *Fish is very delicate and is easily overcooked.*

Observe these tests for doneness:

1. The fish just *separates into flakes*—that is, it is beginning to flake but does not yet fall apart easily.
2. If bone is present, the flesh separates from the bone, and the bone is no longer pink.
3. The flesh has turned from translucent to opaque (usually white, depending on the kind of fish).

Remember, the major flaw in fish preparation is *overcooking*.

Cooking Fat Fish and Lean Fish

The fat content of fish ranges from 0.5 percent to 20 percent.

Lean fish are those that are low in fat. Examples: flounder, sole, cod, red snapper, bass, perch, halibut, pike.

Fat fish are those that are high in fat. Examples: salmon, tuna, trout, butterfish, mackerel.

COOKING LEAN FISH

Because lean fish has almost no fat, it can easily become dry, especially if overcooked. It is often served with sauces to enhance moistness and give richness.

Moist-heat methods. Lean fish is especially well suited to poaching. This method preserves moistness.

Dry-heat methods. Lean fish, if it is broiled or baked, should be basted with butter or oil. Take special care not to overcook it, or the fish will be dry.

Dry-heat methods with fat. Lean fish may be fried or sautéed. The fish gains palatability from the added fat.

COOKING FAT FISH

The fat in these fish enables them to tolerate more heat without becoming dry.

Moist-heat methods. Fat fish, like lean fish, can be cooked by moist heat. Poached salmon and trout are very popular.

Dry-heat methods. Fat fish are well suited to broiling and baking. The dry heat helps eliminate excessive oiliness.

Dry-heat methods with fat. Large fat fish, like salmon, and stronger-flavored fish, like bluefish and mackerel, may be cooked in fat, but care should be taken to avoid excessive greasiness. Smaller ones, like trout, are often pan-fried. Drain the fish well before serving.

Cutting Fish

Market Forms

Fish are available in several forms, as illustrated in Figure 14.1. Or they may be cut by the cook into these forms, depending on how they are to be cooked.

Buying Processed Fish Versus Cutting Them Yourself

Most food-service establishments purchase fish in the forms in which they intend to cook them. They find it less expensive to pay the purveyor to do the cutting than to hire and train the personnel and to allocate the storage and workspace to do it in-house.

Some restaurants still buy whole fish. Here are a few reasons why they do:

1. Their clientele demands it. Some high-priced luxury restaurants stake their reputations on using only the freshest, most unprocessed ingredients. They are able to charge enough to cover their high labor costs.
2. They are located in the heart of a fresh fish market, where fresh whole fish, delivered daily, are economical. They can best take advantage of seasonal bargains.
3. They are high-volume specialty restaurants and find it more economical to clean the fish themselves and watch the market for the best prices every day.
4. They make fish stocks and use the bones.
5. They serve the whole fish. Examples: sautéed or poached trout presented whole; whole cold poached fish as a buffet display.

Your purchasing decisions will depend on what you plan to do with the fish and what forms are most economical for those purposes.

Figure 14.1 Market forms of fish.



(a) Whole or round: completely intact, as caught



(b) Drawn: viscera removed



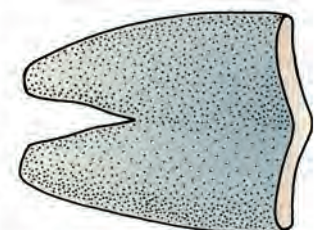
(c) Dressed: viscera, scales, head, tail, and fins removed



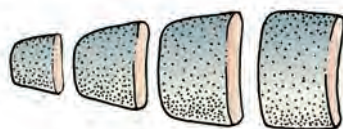
(d) Steaks: cross-section slices, each containing a section of backbone



(e) Fillets: boneless sides of fish, with skin on or off



(f) Butterfly fillets: both sides of a fish still joined, but with bones removed



(g) Sticks or tranches: cross-section slices of fillets

Figure 14.2 Dressing a fish.



(a) Scale the fish. Lay the fish flat on the work surface. Rub a scaling tool or the back of a knife against the scales from tail to head. Repeat until all the scales are removed. Rinse. (Exceptions: Trout, with very tiny scales, and scaleless fish, like catfish, are not scaled.)



(b) Eviscerate. Slit the belly and pull out the viscera. Rinse the cavity.



(c) Cut off the tail and fins. Scissors are easiest to use.



(d) Remove the head. Cut through the flesh just behind gills. Cut or break the backbone at the cut and pull off the head.



(e) The fish is *dressed*.

Dressing and Filleting

Although most of you will work with ready-to-cook fish products, you should know how to clean and fillet whole fish.

1. Dressing.

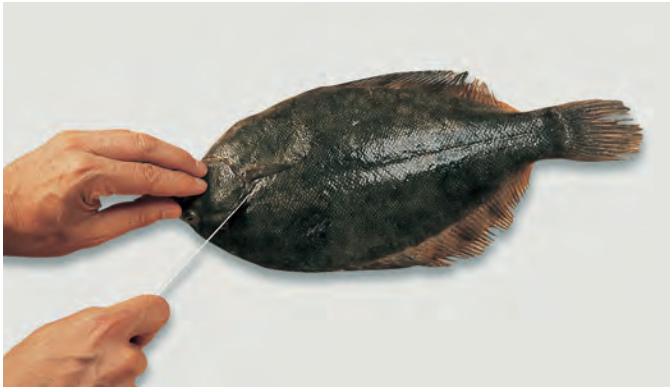
Figure 14.2 illustrates how to dress a whole fish.

2. Filleting.

There are two basic shapes of fish: *flatfish* (like flounder and sole) and *round fish* (like cod and trout). They are filleted differently. Flatfish have four fillets; round fish have two. Figures 14.3 and 14.4 show the two methods for filleting these fish.

After a large fish, such as salmon, is filleted, it may be necessary for some recipes to cut the fillets into thinner slices, or escalopes. Figure 14.5 shows this procedure.

Figure 14.3 Filleting flatfish.



(a) Use a thin-bladed, flexible knife. Cut off the head, just behind the gills. (This step is optional.)



(b) Make a cut from head to tail just to one side of the center line, down to the backbone.



(c) Turn the knife so it is almost parallel to the table. Making long, smooth cuts, cut horizontally against the backbone toward the outer edge of the fish. Gently separate the fillet from the bone.



(d) Remove the fillet completely. Repeat to remove the three remaining fillets.



(e) To skin, place the fillet skin side down on the work surface with the tail pointing toward you. Holding the skin at the tail end, slide the knife between the skin and flesh, scraping against the skin to avoid cutting into the fillet. *Note:* Dover or English sole is skinned before filleting. Cut through the skin at the tail. Holding the tail with one hand, peel off the skin toward the head. *Caution:* Do not do this with flounder. You will tear the flesh.

Figure 14.4 Filleting round fish.



(a) Cut into the top of the fish along one side of the backbone from head to tail. Cut against the bone with smooth strokes of the knife to separate the flesh from the bone.



(b) Cut under the flesh toward the tail; detach it.



(c) Cut along the curved rib bones and finish detaching the fillet at the head end. Turn the fish over and repeat to remove the second fillet. Lightly run your finger along the flesh side of the fillets to see if any bones remain in them. Using a needlenose pliers, pull out any you find. Skin the fillets as for flatfish.

KEY POINTS TO REVIEW

- How does the amount of connective tissue in fish affect its cooking qualities?
- How is fish tested for doneness?
- What are some examples of fat fish and lean fish? What are appropriate cooking methods for each type?
- What are the basic market forms of fish?
- How is filleting flatfish different from filleting round fish?

Figure 14.5 Cutting escalopes of salmon.



(a) Holding the knife at a sharp angle, cut a thin slice of the fillet, slicing toward the tail or thin end.



(b) The cut slice. Weigh the slice to check for accuracy of cutting, then continue making slices.

Varieties and Characteristics

Hundreds of varieties of fish are eaten around the world. However, relatively few species account for the majority of the fish used in food service in the United States and Canada. Below are the most common varieties that are used fresh. Some are illustrated in the following photographs.

There is a significant difference in flavor between freshwater fish and saltwater fish, because saltwater fish, as might be expected, have more salt in their flesh. The following survey of fish varieties divides them into these two basic categories. However, some fish may spend part of their lives in the ocean and part in fresh water. Salmon, for example, lives in the ocean but migrates up rivers to lay eggs, or *spawn*. Fish that live in salt water but spawn in fresh water are called *anadromous*. Shad and arctic char are two other examples of anadromous fish. On the other hand, fish that live in fresh water but swim downstream to spawn in the ocean are called *catadromous*. Eel is a catadromous fish.

In the following listing, fish are categorized by where they spend most of their adult lives. Thus, anadromous fish such as salmon are listed with saltwater fish, while the catadromous fish such as eel are listed with freshwater fish.

Saltwater Fish—Flatfish

These are all popular in commercial kitchens. Flatfish have lean, white flesh and a mild, delicate flavor. They are all very flat, oval in shape, with both eyes on one side of the head.

You should note that, in North American waters, there are no true sole. All fish marketed as sole, such as lemon sole, gray sole, and Pacific Dover sole, are actually flounder. True Dover sole, from Atlantic waters off Europe, is the only actual sole in this list. Also, be aware that both true Dover sole and the flounder called Pacific Dover sole are both sometimes called English sole.



Flounder

FLOUNDER

Type: Lean.

Varieties: Winter flounder, lemon sole, gray sole, Pacific Dover sole, sand dab.

Characteristics: White flesh; fine flakes; mild, sweet flavor.

Weight: ½ to 5 lb (0.2 to 2.3 kg).

SOLE (DOVER SOLE OR ENGLISH SOLE)

Type: Lean.

Characteristics: Narrower, more elongated than flounder. Flesh similar to flounder, but firmer in texture. One of the most prized of all fish. Expensive.

Weight: 1 to 2 lb (0.5 to 1 kg).



Dover sole

HALIBUT

Type: Lean.

Characteristics: Looks like a giant flounder, with thicker flesh, delicate flavor. Cut into steaks and fillets.

Weight: 4 to 100 lb or more (2 to 45 kg).



Halibut

Courtesy of Alaska Seafood Marketing Institute

TURBOT

Type: Lean.

Characteristics: Large, broad flatfish. White, firm, delicate flesh.

Weight: 1 to 25 lb (0.5 to 11 kg).



Turbot

Saltwater Fish—Round Fish

ARCTIC CHAR

Type: Fat. Anadromous.

Characteristics: Similar to both salmon and trout, to which it is related. Flesh is similar to salmon but with less fat, although with more fat than trout.

Weight: Usually around 4 lb (1.8 kg), but can be as large as 25 lb (11 kg).

BLACK SEA BASS

Type: Lean.

Characteristics: Small, black-skinned fish with firm, delicate, sweet white flesh.

Weight: Up to 3 lb (1.5 kg).



Black sea bass

BLUEFISH

Type: Fat.

Characteristics: Flavorful, oily flesh that is bluish when raw, grayish when cooked. Abundant and inexpensive.

Weight: 1 to 10 lb (0.5 to 4.5 kg).



Bluefish

CHILEAN SEA BASS

Type: Fat.

Varieties: This fish is not a bass; the name is a marketing term for the Patagonian toothfish. Because, due to its popularity, it has been seriously overfished, numbers have declined dramatically. Fishing is highly regulated, and imports to North America must be labeled as legally caught, although there is much illegal fish on the market. Many chefs have agreed to stop serving this fish in order to slow or halt the illegal fishing that threatens its survival.

Characteristics: White, oily flesh with large flakes, firm texture, and mild flavor.

Weight: Usually around 20 lb (9 kg), although it can be much larger.



Cod

COD

Type: Lean.

Varieties: Small, young cod is called *scrod*.

Characteristics: Lean, white, delicately flavored flesh with large flakes. One of the most widely used food fish in North America. Most fish sticks and similar items are made from cod.

Weights: Scrod: 1 to 2½ lb (0.5 to 1 kg). Cod: 2½ to 25 lb and up (1 to 11 kg).

ESCOLAR

Type: Fat.

Characteristics: A firm, white, oily fish containing a fat that is not metabolized by the human body. Because of this fat, some people become ill when eating this fish. The fat seems to act like a laxative. In the United States, the Food and Drug Administration banned escolar in 1990, but its sale is once again legal. Food-service operators who serve escolar should advise customers of its potential dangers.

Weight: 65 to 110 lb (30 to 35 kg).



Grouper

GROUPER

Type: Lean.

Characteristics: Many varieties with varying shape and skin color. Firm white fish, similar in texture and flavor to red snapper. Tough skin.

Weight: Up to 700 lb (300 kg), but most groupers on the market weigh 5 to 15 lb (2.3 to 7 kg).

HADDOCK

Type: Lean.

Varieties: Finnan haddie is smoked haddock, not a separate kind of fish.

Characteristics: Similar to cod, but generally smaller.

Weight: 1 to 5 lb (0.5 to 2.3 kg).



Herring

HERRING

Type: Fat.

Characteristics: Small, full-flavored, oily fish. Most herring sold to food-service and retail establishments is pickled or smoked rather than fresh, but fresh herring is sometimes available. Smoked herring are sometimes called *kippers*. Fresh herring are excellent butterflied or left whole and grilled. Because of their high fat content, they do not keep well, so they should be checked carefully for freshness when purchased.

Weight: Up to 8 oz (240 g).



Blue runner, a type of jack

JACK

Type: Fat.

Varieties: Members of the jack family include kingfish, blue runner, yellowtail, amberjack, and golden thread. The best-known jack is the pompano, listed separately.

Characteristics: Smooth, shiny skin; firm, oily flesh; strong flavor. Some varieties are much stronger in flavor than others.

Weight: Varies greatly depending on variety.



Jack

JOHN DORY

Also known as *St. Peter's fish*, *St Pierre*.

Type: Lean.

Characteristics: Identified by the characteristic black spot (“St. Peter’s thumbprint”) on each side of the body behind the head. Firm, sweet, white flesh with fine flakes; broad, thin fillets.

Weight: About 2 lb (900 g) average.



Boston mackerel



Spanish mackerel

MACKEREL

Type: Fat.

Varieties: Spanish and Boston mackerel are the most common small varieties. King mackerel is larger, usually cut into steaks.

Characteristics: Fat, firm flesh with rich flavor and slightly dark color.

Weight: ½ to 5 lb (0.2 to 2.3 kg).

MAHI-MAHI

Also known as *dorado* and *dolphinfish* (not related to the mammal called dolphin).

Type: Lean.

Characteristics: Firm, fine-textured, pinkish flesh with rich, sweet taste. Becomes very dry when overcooked, so best cooked with moist heat or with fat or served with a sauce.

Weight: 5 to 40 lb (2.3 to 18 kg).



Mahi-mahi

MONKFISH

Also known as *lotte*, *anglerfish*, *bellyfish*.

Type: Lean.

Characteristics: Large, ugly fish, but only tail is used. White, very firm flesh with fine texture, somewhat like lobster. Rich flavor. Holds up well in soups and stews, but dries out easily if cooked dry without fat.

Weight: 5 to 50 lb (2.3 to 23 kg).



Monkfish

OCEAN PERCH

Type: Lean.

Varieties: Many. Red-skinned varieties (redfish) are especially popular and more expensive.

Characteristics: Mild, somewhat bony.

Weight: Depends on variety, but typically about 1 lb (0.5 kg).

ORANGE ROUGHY

Type: Lean.

Characteristics: A South Pacific fish increasingly available in some markets. Texture and flavor similar to red snapper.

Weight: ¾ to 2 lb (0.3 to 1 kg).



Pompano

POMPANO

Type: Fat.

Characteristics: Small fish with rich, sweet-flavored flesh. Expensive. A variety of jack (see entry above).

Weight: ¾ to 2 lb (0.3 to 1 kg).



Porgy

PORGY

Type: Lean.

Characteristics: Small, oval fish. Sweet and mild, but quite bony.

Weight: Up to 2 lb (1 kg).

RED MULLET

Also known as *rouget barbet* (roo-zhay bar-bay), *rouget*.

Type: Lean.

Varieties: A member of the goatfish family. In addition to the Mediterranean variety discussed here, similar varieties are found in North American waters.



Red mullet

Characteristics: Mediterranean fish resembling a small red snapper. Rich flavor, with a slight taste of shrimp or lobster. Always cooked with skin on, because much of the desired flavor comes from the skin.

Weight: Usually 12 oz (350 g) or less.



Red snapper

RED SNAPPER

Type: Lean.

Characteristics: Firm, delicate, sweet white flesh with large flakes. Large, coarse bones. Skin is red. Highly prized, and popular in restaurants.

Weight: 1 to 15 lb (0.5 to 7 kg).



Salmon

SALMON

Type: Fat. Anadromous.

Varieties: Atlantic, chinook, sockeye, coho, chum, humpback.

Characteristics: Rich pink to red flesh, with somewhat meaty texture and flavor. One of the most prized of all fish. Much is canned or smoked.

Weight: 4 to 25 lb (2 to 11 kg).

SARDINE

See Herring. True sardines are closely related to herring, but are scarce. Most fish sold as sardines are actually small herring. Usually sold canned.



Sardine

SHAD

Type: Fat. Anadromous.

Characteristics: Oily, rich flavor and many bones in several rows in each fillet. Its roe (egg sacs) is especially prized. Fresh shad is highly seasonal (February to June).

Weight: 1½ to 5 lb (0.7 to 2.3 kg).

SHARK

Type: Fat.

Varieties: Mako shark is the variety usually used.

Characteristics: Firm texture, similar to swordfish, but softer and a little moister and with finer grain; less expensive. Has cartilage skeleton, no bones. Usually cut into steaks.

Weight: 25 to 40 lb (11 to 18 kg).

SKATE

Also known as *ray*.

Type: Lean.

Characteristics: May be sold whole, but often only the triangular wings are marketed. Skeleton is cartilage, not bone; tough skin, gray on top, white on bottom. Flesh consists of sweet, white, gelatinous strips of meat extending the width of the wings; two fillets per wing, one above and one below the cartilage.

Weight: Some varieties weigh up to a ton, but most sold for food weigh 1 to 4 lb (0.5 to 2 kg) per wing.



Skate wings, top view (left) and bottom view (right)

STRIPED BASS

Type: Lean.

Varieties: Wild striped bass is highly prized but available in only small numbers in recent years. Farmed striped bass, developed in response to demand, is a cross between white bass and wild striped bass.

Characteristics: Firm, white, delicately flavored fish with large flakes.

Weight: 1 to 10 lb (0.5 to 4.5 kg).



Striped bass

SWORDFISH

Type: Fat.

Characteristics: Very large, fat fish with dense, meaty, not flaky, texture. High yield. Sold mostly as steaks. Expensive.

Weight: Up to 1,000 lb (450 kg).

TILEFISH

Type: Lean.

Characteristics: Firm, sweet, mild white flesh, pinkish when raw. Used mostly for steaks, but smaller ones can be filleted or poached whole.

Weight: 4 to 8 lb (1.8 to 3.6 kg).



Tilefish

TRIGGERFISH

Type: Lean.

Characteristics: Tough-skinned fish with firm, meaty, white to gray-white flesh. Low yield because of large head.

Weight: About 2 lb (900 g) average.



Triggerfish

TUNA

Type: Fat.

Varieties: Yellowfin and bluefin have red flesh, gray when cooked. Albacore (more often canned than used fresh) has pink flesh, off-white when cooked. Some other varieties are also available.

Characteristics: Meaty texture and appearance. Belly cuts much fattier than back (“loin”). Red-fleshed varieties often served raw as sashimi or sushi. When cooked, usually cut into steaks and grilled. Should not be cooked well done, or will be very dry.

Weight: Depends on variety. May be several hundred pounds (100 kg and up).

WAHOO OR ONO

Type: Fat.

Characteristics: Firm flesh similar in texture to mackerel and tuna, to which it is related. Pale pink flesh turns white when cooked. The biology of this fish is not well known, and there are concerns about overfishing. It is a popular sport fish.

Weight: 11 to 80 lb (5 to 35 kg), but can be much larger.



Weakfish

WEAKFISH

Also called *sea trout*, but unrelated to trout.

Type: Lean.

Characteristics: Mild, light-gray flesh with soft texture.

Weight: Up to 10 lb (4.5 kg).



Whiting

WHITING

Type: Lean.

Characteristics: Fragile, white flesh with mild flavor. Fillets must be handled carefully or they will break up.

Weight: ¼ to 3 lb (0.1 to 1.4 kg).



Catfish

Freshwater Fish

CATFISH

Type: Fat to somewhat lean, depending on origin.

Varieties: Bullhead is similar, but it is not the same species.

Characteristics: Firm flesh with abundant flavor. Layer of fat directly under skin. Catfish has no scales and is usually skinned before frying or pan-frying. Farmed catfish is milder and usually leaner than wild catfish.

Weight: 1 to 8 lb (0.5 to 3.6 kg).

EEL

Type: Fat.

Characteristics: A long, slender, snakelike fish with a slippery skin. Flesh is firm, mild, and oily. Must be alive until shortly before cooking or flesh will be mushy. Skin before cooking and fillet or cut into 1½-in. (4-cm) lengths. Popular in Japanese restaurants (where it is called *unagi*), served filleted and grilled, basted with a soy-based glaze.

Weight: Typically 2 to 4 lb (900 g to 1.8 kg), but can be much smaller or larger.



Eel

PERCH

Type: Lean.

Varieties: Yellow perch is the most common. Walleyed pike is actually a perch, not a pike. Zander (French: *sandre*) is a popular European perch sometimes mislabeled in North America as European walleye, although it is different from, and usually less expensive than, true walleye.

Characteristics: Mild-flavored, flaky white flesh with firm texture and fine grain.

Weight: ½ to 5 lb (0.2 to 2.3 kg).



Perch

PIKE

Type: Lean.

Varieties: Northern pike is most common in North America. Walleyed pike or walleye is not a pike but a perch.

Characteristics: Firm white flesh similar to perch but not as thick, and with many small bones.

Weight: 2 to 12 lb (1 to 5.4 kg).

TILAPIA

Type: Lean.

Characteristics: Nearly always from aquafarms, because wild tilapia often taste muddy. Firm, mild white flesh.

Weight: Up to 3 lb (1.4 kg); usually about 1½ lb (700 g).



Tilapia

TROUT

Type: Fat.

Varieties: Lake trout, river trout, brook trout, rainbow trout, steelhead trout, many local varieties.

Characteristics: Soft, fine-textured flesh with rich, delicate flavor. Color of flesh may be white, pink, or reddish.

Weight: Lake trout: 4 to 10 lb (2 to 4.5 kg). Others: ½ to 3 lb (0.2 to 1.4 kg).



Trout

WHITEFISH

Type: Fat.

Characteristics: Flaky, white flesh with somewhat sweet flavor.

Weight: 1½ to 6 lb (0.7 to 2.7 kg).



Whitefish

ZANDER (SEE PERCH)

Handling and Storage

Fish and shellfish are among the most perishable foods you will handle. It is especially important to store them carefully and use them quickly. The fishy taste that turns many people away from fish is actually a sign of decomposition. Fresh fish tastes and smells sweet and fresh.

Guidelines for checking fish quality are summarized in Table 14.1.

Table 14.1 Checklist for Fish Freshness

CHARACTERISTICS	FRESH FISH	NOT-SO-FRESH FISH
Overall appearance	Good appearance, clear slime, moist and pliable fins	Dry or cloudy appearance, dried fins, bruises or cuts in flesh
Odor (see Note)	Fresh and mild, no off-odors	Strong fishy odor
Eyes	Clear, shiny, bulging	Cloudy, sunken
Gills	Red or pink	Gray or brown
Texture of flesh	Firm, elastic	Soft, dents easily
Scales	Shiny, tight on skin	Loose, not shiny
Belly cavity	No belly burn; natural-colored flesh, pink or red along backbone (see Note)	Belly burn: browned, decomposed flesh along ribs and backbone

Note: Because most fish is not purchased whole or dressed but as fillets, steaks, or other portions, odor must be your primary check for freshness. Belly burn results when the intestines are left in the cavity too long, resulting in spoilage.

Storing Fresh Fish

OBJECTIVES

1. To maintain temperature of 29° to 32°F (−2° to 0°C).
2. To keep the fish moist.
3. To prevent fish odors and flavors from transferring to other foods.
4. To protect the delicate flesh from being bruised or crushed.

METHODS

1. On crushed ice—the preferred method. Use drip pans to allow for drainage of melted ice. Change ice daily. Cover container or store in separate box away from other foods. Whole fish should be *drawn*—that is, viscera removed (see Figure 14.1)—as soon as possible because the entrails deteriorate quickly. Whole or drawn fish are not wrapped. Cut fish (fillets, steaks, portions) should be wrapped or left in original moistureproof wrap.
2. In refrigerated box at 29° to 32°F (−2° to 0°C) if crushed ice storage is not available or practical. Wrap all fish or leave in original moistureproof wrap.

STORAGE TIME

Fresh fish may be stored 1 or 2 days. If it must be kept longer, you may (1) wrap and freeze it immediately, or (2) cook and then refrigerate it for later use in recipes calling for cooked fish.

Check stored fish for freshness just before you use it. Even if it was fresh when received, it may not be fresh after a few days in storage.

Frozen, Canned, and Other Processed Fish

FEDERAL INSPECTION

In the United States, the National Oceanic and Atmospheric Administration (NOAA) and the Department of Commerce conduct voluntary seafood inspection programs to promote

the safety of processed fish and shellfish. Processors who wish to take part in the programs must pay for the service, but they may then use official seals or marks on their product packaging and in advertising, including the PUFI seal (Processed Under Federal Inspection, Figure 14.6) and the U.S. Grade A shield (Figure 14.7). The PUFI seal indicates the product is packed under federal inspection and is safe and wholesome, of good quality, and properly labeled. In addition, companies that operate with a written HACCP quality management program (see p. 33) may take advantage of the Department of Commerce's HACCP-based inspection program.

FROZEN FISH

Frozen seafood products account for more of the fish served today than do fresh. If it were not for the wide availability of frozen seafood products, commercial kitchens would serve much less fish than they do.

CHECKING QUALITY

1. Frozen products should be frozen, not thawed, when received.
2. Look for fresh, sweet odor or none at all. Strong, fishy odor means poor handling.
3. Items should be well wrapped, with no freezer burn.
4. Some frozen fish is glazed with a thin layer of ice to prevent drying. Check for shiny surface to make sure glaze has not melted off or evaporated.

STORAGE

1. Store at 0°F (−18°C) or colder.
2. Keep well wrapped to prevent freezer burn.
3. Maximum storage time:
 - Fat fish: 2 months.
 - Lean fish: 6 months.
4. Rotate stock—first in, first out.

THAWING AND HANDLING

1. Frozen raw fish.
 - Thaw in refrigerator, never at room temperature. Allow 18 to 36 hours, depending on size. Alternative method, if pressed for time: Keep in original moistureproof wrapper and thaw under cold running water.
 - Small pieces (fillets, steaks, portions) up to 8 oz (250 g) can be cooked from frozen state to make handling easier and to prevent excessive drip loss. Large fish should be thawed for more even cooking from surface to interior.
 - Fillets or other portions to be breaded or prepared in some other way before cooking may be partially thawed (for example, for a few seconds in a microwave) and then prepped and cooked. They will be easier to handle than if fully thawed.
 - Handle thawed fish as you would fresh fish.
 - Do not refreeze.
2. Breaded and battered fish, fully prepared entrées, and other frozen, prepared fish items.
 - Read and follow package directions.
 - Most of these items are cooked from the frozen state, usually in the deep fryer, oven, microwave, or steamer.

CANNED FISH

1. Check cans for signs of damage. Discard swollen cans (or return to the supplier).
2. Store, like other canned goods, in a cool, dry place.
3. Opened canned fish should be placed in covered containers, labeled with the contents and date, and refrigerated. It will keep for 2 or 3 days.



Figure 14.6 Seafood PUFI seal (U.S.)



Figure 14.7 Seafood grade shield (U.S.)

KEY POINTS TO REVIEW

- What are the four main kinds of salt-water flatfish used in food service? List examples of saltwater round fish and freshwater fish and briefly describe each.
- What are the key signs of freshness in fish?
- How should fresh fish be stored? How should frozen fish be stored and thawed?

SHELLFISH

Shellfish are distinguished from fin fish by their hard outer shells and their lack of backbone or internal skeleton.

There are two classifications of shellfish:

1. **Mollusks** are soft sea animals that fall into three main categories:
 - **Bivalves**, which have a pair of hinged shells (such as clams and oysters).
 - **Univalves**, which have a single shell (such as abalone and conch).
 - **Cephalopods** (such as octopus, squid, and cuttlefish).

From the scientist's point of view, there are other mollusks as well, but they do not concern us here.

2. **Crustaceans** are animals with segmented shells and jointed legs.

Mollusks

The most important mollusks in commercial kitchens are oysters, clams, mussels, scallops, squid, and octopus.

Oysters

CHARACTERISTICS

1. Oysters have rough, irregular shells. The bottom shell is slightly bowl-shaped. The top shell is flat.
2. The flesh of the oyster is extremely soft and delicate and contains a high percentage of water.
3. Oysters are available all year, even in months without an *R* in their names, but they are at their best in the fall, winter, and spring.
4. There are four main varieties in the United States and Canada, depending on their origin. Note in particular that the dozens of varieties of Eastern oysters are all the same species; their flavors differ, however, depending on the environment in which they grew.

Eastern: Known by many local names, depending on their place of origin, such as Bluepoint (Long Island), Box Oyster (Long Island), Chesapeake Bay, Chincoteague (Virginia), Cotuit (Nantucket), Kent Island (Maryland), Malpeque (Prince Edward Island, Canada), Patuxent (Maryland), Apalachicola (Florida), Breton Sound (Louisiana), Wellfleet (Massachusetts).

Olympia: Very small, from the Pacific coast.

Belon: European oyster now grown in North America. Shells are flatter than those of Eastern oysters. More properly called *European flat oysters*, reserving the term *Belon* for those flat oysters grown near the mouth of the Loire River in France. Prized for their intense, briny flavor.

Japanese or Pacific: Usually large oysters from the Pacific coast. The much smaller kumamoto oyster is of the same species.

MARKET FORMS

1. Live, in the shell.
2. Shucked—fresh or frozen. Shucked oysters are graded by size as follows.



St. James River oysters



Pine Island oysters

Grade	Number per Gallon (3.8 liters)
Extra Large or Counts	160 or fewer
Large or Extra Selects	161 to 210
Medium or Selects	211 to 300
Small or Standards	301 to 500
Very Small	Over 500

3. Canned—rarely used in food service.

CHECKING FRESHNESS

1. Oysters in the shell must be alive to be good to eat. Tightly closed shells, or shells that close when jostled, indicate live oysters. Discard dead ones.
2. Live or shucked oysters should have a very mild, sweet smell. Strong odors indicate spoilage.

OPENING OYSTERS

1. Scrub shells thoroughly before opening.
2. Oysters to be served raw must be opened in a way that leaves the bottom shell intact and the tender oyster undamaged. The technique illustrated in Figure 14.8 is one common way of opening oysters. Your instructor may wish to show you another method.
3. Oysters to be cooked may be opened by spreading them on a sheet pan and placing them in a hot oven just until the shells open. Remove from shells and cook immediately. Discard any that do not open.

STORAGE

1. Keep live oysters in a cold, wet place in the cartons or sacks in which they arrived. They should keep at least 1 week.
2. Store fresh shucked oysters in their original container in the refrigerator at 30° to 34°F (–1° to 1°C). They will keep up to 1 week.
3. Keep frozen oysters in the freezer at 0°F (–18°C) or colder, until ready for use. Thaw in refrigerator 24 hours or more, depending on size of container.

COOKING OYSTERS

1. Cook just enough to heat through to keep oysters juicy and plump. Overcooking makes them shrunken and dry.
2. Cooking methods: Poaching, deep-frying, baking on the half-shell with toppings, in soups and stews.

Clams

CHARACTERISTICS

There are two major kinds of clams from the east coast of North America: hard shell and soft shell. The West Coast also has some local varieties.

1. *Hard-shell clams* or *quahogs*. These go by different names, depending on size.

Littlenecks are the smallest. They are the most tender for eating raw or for steaming.

Cherrystones are medium-sized, and perhaps the most common. They can be eaten raw and are good for steaming, though tougher than littlenecks.

Chowders, the largest, are also called *quahogs* in the Northeast. Rather tough, they are chopped for cooking in chowders or cut into strips for frying.

Figure 14.8 Opening oysters.



(a) Examine the shell to see that it is tightly closed, indicating a live oyster. Rinse the shell under cold running water. Hold oyster in left hand, as shown. (Left-handers will hold oyster in right hand.) Hold the oyster knife near the tip as shown. Insert the knife between the shells near the hinge.



(b) Twist the knife to break the hinge.



(c) Slide the knife under the top shell and cut through the adductor muscle (which closes the shells) near the top shell. Try not to cut the flesh of the oyster, or it will lose plumpness. Remove the top shell.



(d) Carefully cut the lower end of the muscle from the bottom shell to loosen oyster. Remove any particles of shell from the oyster before serving.



Clams, clockwise from top left: steamers, littlenecks, cherrystones, chowder clams.



Cockles

2. *Soft-shell clams*. These are sometimes called *longnecks* because of the long tube that protrudes from between the shells. They have very thin shells that do not close completely. They are also called *steamers* because the usual way to serve them is to steam them and serve them with their own broth and with melted butter for dipping.
3. *Cockles*. These are not actually clams. They are from a different family, even though they look like tiny clams that are usually no more than 1 in. (2.5 cm) across. They can be cooked like clams and are almost always served in the shell.

MARKET FORMS (HARD-SHELL CLAMS)

1. Live, in the shell.
2. Shucked, fresh or frozen.
3. Canned, whole or chopped.

CHECKING FRESHNESS

Same as for oysters. Clams in the shell must be alive. Live and shucked clams should smell fresh.

OPENING CLAMS

1. Scrub shells thoroughly before opening.
2. Hard-shell clams are sometimes sandy inside, and soft-shell clams nearly always are. They can be flushed as follows:
 - Make a salt brine, using $\frac{1}{3}$ cup salt per gallon of water (20 mL salt per liter).
 - Soak the clams in the brine 20 minutes.
 - Drain and repeat until the clams are free of sand.
 - Some chefs put cornmeal in the water and refrigerate the clams in it for a day. The clams eat the cornmeal and expel the sand.
 - Rinse in fresh water before using.
3. Opening hard-shell clams is different from opening oysters. This technique is illustrated in Figure 14.9.
4. Like oysters, clams to be cooked may be opened by spreading on sheet pans and placing in a hot oven just until the shells open. Discard any that do not open because they were likely dead before cooking.

STORAGE

Same as for oysters.

COOKING CLAMS

1. Clams become tough and rubbery if overcooked. Cook just enough to heat through.
2. When steaming clams in the shell, steam just until shells open.
3. Cooking methods: Steaming, poaching, deep-frying, baking on the half-shell with toppings, simmering in soups and chowders.

Mussels

CHARACTERISTICS

The most common mussels resemble small black or dark-blue clams. Their shells are not as heavy as clamshells. Their flesh is yellow to orange in color and firm but tender when cooked. Mussels are harvested worldwide and are also extensively farmed.

Figure 14.9 Opening clams.



(a) Examine the shell to see that it is tightly closed, indicating a live clam. Rinse the shell under cold running water. Avoid jostling the clam too much, or it will “clam up” tighter. Hold clam in left hand as shown (or in right hand if you are left-handed). Place the sharp edge of the clam knife against the crack between the shells.



(b) Squeeze with the fingers of the left hand, forcing the knife between the shells.



(c) Change the angle of the blade as shown in the illustration and slide the knife against the top shell to cut the adductor muscles (clams have two; oysters have only one). Be careful not to cut or pierce the soft clam.



(d) Open the clam and finish detaching the meat from the upper shell.



(e) Cut the muscles against the lower shell to loosen the clam completely. Discard the top shell. Remove any particles of shell from the clam before serving.

Green mussels, from New Zealand and Southeast Asia, are larger and have a lighter-colored gray or tan shell with a green edge. Green mussels often command premium prices.

MARKET FORMS

Most mussels are sold alive in the shell. Many are also sold shucked and packed in brine.

CHECKING FRESHNESS

1. Like oysters and clams, mussels must be alive to be good to eat. Check for tightly closed shells or shells that just close when jostled.
2. Discard any mussels that are very light in weight or seem to be hollow. Also, discard any that are much too heavy—they are probably full of sand.



Mussels, left to right: green, blue (wild), blue (farm-raised)

CLEANING

1. Clean shells thoroughly:
 - Scrub well under cold running water.
 - Scrape off barnacles, if any, with a clam knife.
 - Remove the beard, a fibrous appendage protruding from between the shells (see Figure 14.10). Do not do this until just before cooking, because it may kill the shellfish.
2. Mussels may be sandy inside if not commercially grown. They may be soaked in brine and flour or cornmeal like clams (see previous section) to rid them of sand.



New Zealand green lips



Figure 14.10 When cleaning mussels, pull off the fibrous beard that extends from between the shells.

STORAGE

Keep refrigerated at 32° to 35°F (0° to 2°C) and protect from light. Store in original sack and keep sack damp.

COOKING

Unlike oysters and clams, mussels are almost never served raw. They are usually steamed and served in their cooking broth, in soups, or chilled and served with mayonnaise-type sauces. Cook only until shells open and mussels are heated through. Do not overcook. Discard any that are not open after cooking.

Scallops

CHARACTERISTICS

1. Scallops are almost always sold shucked. The only part we usually eat is the *adductor muscle*, which closes the shell. If live scallops in the shell are available, leave the orange, crescent-shaped coral attached to the adductor muscle when shucking.
2. There are two main kinds of scallop:
 - Bay scallops*: Small, with delicate flavor and texture; expensive; 32 to 40 per lb (70 to 88 per kg) on average.
 - Sea scallops*: Larger, not as delicate as bay scallops, but still tender unless overcooked; 10 to 15 per lb (22 to 33 per kg) on average.
3. Scallops are creamy white in color and have a sweet flavor.
4. They are available all year.

MARKET FORMS

1. Fresh, shucked. Sold by volume or weight.
2. Frozen.
 - IQF (individually quick frozen).
 - In 5-lb (2.3-kg) blocks.



Scallops with roe or coral

CHECKING FRESHNESS

A sweet, clean smell is a sign of freshness. Strong fishy odor or a brownish color is a sign of age or spoilage.

HANDLING

1. Shucked scallops can be cooked without further preparation. They are improved, however, if you pull off the small, tough tendon or sinew on the side of each, as shown in Figure 14.11.
2. Large sea scallops are sometimes cut into smaller pieces before cooking.



Figure 14.11 Removing the tendon from the side of a scallop

STORAGE

Keep scallops covered and refrigerated at 30° to 34°F (−1° to 1°C). Do not let them rest directly on ice, or they will lose flavor and become watery.

COOKING SCALLOPS

Scallops are cooked in almost every way that fish are cooked. The most popular methods are sautéing, deep-frying, broiling, and poaching.

Cephalopods

Cephalopods are classified as mollusks, even though they have no external shell. The term *cephalopod* means “head-foot,” referring to the fact that these animals have tentacles, or “legs,” attached to the head and surrounding the mouth. The most important cephalopods in the North American kitchen are squid and octopus. A third type, cuttlefish, is similar to squid but is usually seen only in limited markets.

Squid

Squid are usually referred to on menus by their Italian name, *calamari*. They are soft-bodied animals somewhat resembling octopus, but they have 10 tentacles, 2 of them longer than the others.

Squid must be skinned and eviscerated. The head, beak, and the internal plastic-like quill are discarded. The hollow body and tentacles are eaten. Figure 14.12 illustrates how to clean squid.

Somewhat chewy, squid are cut up and either fried quickly or simmered about 45 minutes in a seasoned liquid or sauce.

Note: The similar *cuttlefish* has a shorter, thicker body than does squid. Instead of a thin, transparent interior quill, it has a hard, chalky cuttlebone.

Octopus

Octopus (the name means “eight feet”) range in size from less than an ounce to many pounds. All sizes are firm-textured, even chewy, but the larger sizes are usually considered too tough to eat. Because of its texture, octopus requires either mechanical tenderization (such as pounding with a mallet) or long, slow cooking in a court bouillon.

Like squid, octopus is cleaned by cutting off the tentacles, discarding the head and beak, and eviscerating the body cavity. Pull the skin off the body pouch and tentacles; it may be necessary to parboil the octopus a few minutes to loosen the skin. The skin is reddish gray, turning purple-red when cooked.

Figure 14.12 Cleaning squid.



(a) Pull off the head. The interior organs will come out with it.



(b) Pull off the skin.



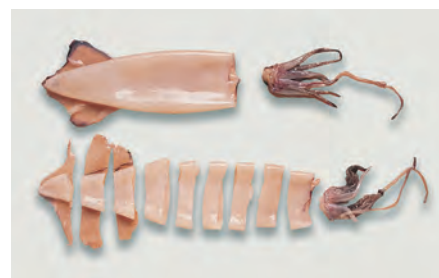
(c) Pull out the plastic-like quill from the body sac. Rinse out the sac to clean it well.



(d) Cut off the tentacles just above the eyes. Discard the head and organs.



(e) Be sure to remove the hard beak, which is found at the center of the tentacle cluster, as shown by the tip of the knife in this picture.



(f) The body sac may be left whole for stuffing or cut into rings for frying, sautéing, or stewing.

Crustaceans

The most important crustaceans in commercial kitchens are lobsters, rock lobsters or langoustes, shrimp, and crabs.

Lobsters

CHARACTERISTICS

1. The northern lobster is perhaps the most prized of all shellfish. It has a large, flexible tail, four pairs of legs, and two large claws. Its shell is dark green or bluish green but turns red when cooked.
2. Meat from the tail, claws, and legs is eaten. It is white and sweet, with a distinctive taste. Claw meat is considered especially good. The *coral* (roe or eggs), which is dark green when raw and red when cooked, and the green *tomalley* (liver) in the thorax or body portion are also eaten.
3. Lobsters are classified by weight.

Chicken	1 lb (450 g)
Quarters	1¼ lb (575 g)
Selects	1½ to 2¼ lb (675 to 1025 g)
Jumbos	over 2½ lb (1130 g)
4. Lobsters weighing over 20 lb (9 kg) have been caught, but they are rare.

Figure 14.13 Splitting a lobster for broiling



(a) Place the lobster on its back on a cutting board. With a firm thrust of a French knife, pierce the head.



(b) Bring the knife down firmly through the center of the lobster to split it in half.



(c) With the hands, crack the back of the shell by spreading the lobster open.



(d) Pull out and discard stomach, a sac just behind the eyes.



(e) If desired, remove the tomalley for use in the crumb stuffing.



(f) With a sharp blow of the back of the knife, crack the claws.



(g) The lobster is ready for broiling. If it is broiled as shown, the end of the tail should be weighted to keep it from curling.



(h) You may also split the tail all the way through and curl up the two sides as shown. In this position, weighting the tail is not necessary. Note the claws have been broken off and placed beside the lobster.

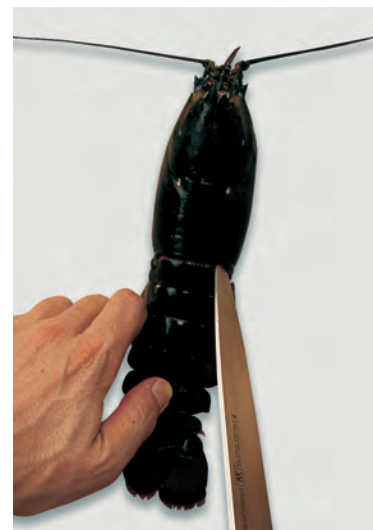
Figure 14.14 Cutting a lobster for sautés and stews.



(a) Place the lobster on the cutting board. Pierce the head with a firm thrust of the knife point to kill the lobster quickly.



(b) Cut off the legs and claws.



(c) Remove the tail section from the thorax, either by breaking it off or by inserting the knife behind the thorax as shown and cutting through the flesh.



(d) Cut the thorax in half lengthwise.



(e) Remove and discard the stomach, a sac just behind the eyes.



(f) Remove the tomalley and coral for use in the sauce to accompany the lobster.

- Yield: A 1-lb lobster yields about $\frac{1}{4}$ lb cooked meat, or a 500-g lobster yields about 125 g cooked meat.
- Sometimes customers request female lobsters in order to get the coral, so you should be able to tell females from males. Look at the pairs of tiny legs (called *swimmerets*) under the tail. If the pair closest to the front is soft and flexible, the lobster is female. If it is hard, the lobster is male.

MARKET FORMS

- Live.
- Cooked meat, fresh or frozen.

CHECKING FRESHNESS

- Live lobster must be alive when cooked. This is indicated by movement of the legs and claws and by a tightly curled tail.
- If the lobster is dead when cooked, the meat will fall apart. If it is alive, the meat will be firm and the tail will spring back when straightened.
- Sleepers (dying lobsters) should be cooked immediately so the meat will still be usable.
- Cooked lobster meat (fresh or thawed) should smell fresh and sweet.



(g) Cut the tail into pieces where the segments join. This is a small lobster. Large tails should be cut into more pieces (at least four or five) so each piece is not too large.



(h) The cut-up lobster, ready to cook.

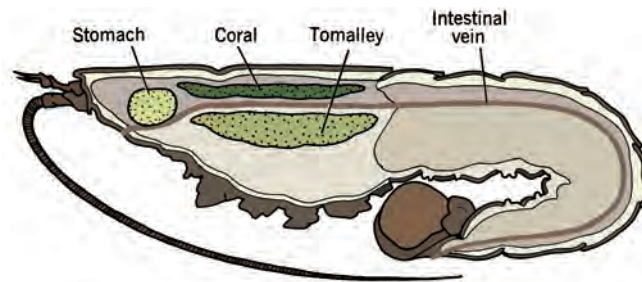


Figure 14.15 Cross-section of a female lobster showing the location of the stomach, tomalley, coral, and vein.

HANDLING

1. Live lobsters are either cooked live or cut up before cooking (as for broiling or sautéing). Live lobsters are plunged headfirst into boiling water to kill them instantly. They are then simmered 5 to 6 minutes per lb (500 g). If served hot, they are drained well and split in half, and the claws are cracked.
2. Splitting and cutting up live lobsters is necessary for certain preparations. Figure 14.13 shows splitting a lobster for broiling. Figure 14.14 shows cutting up a lobster for sautés and stews. Note that the methods are somewhat different.
3. The thorax section contains three parts you should recognize. Figure 14.15 shows their location.
 - The stomach, or sac, located just behind the eyes, is often sandy and should be discarded.
 - The tomalley, or liver, is pale green. It is eaten plain or removed, mashed, and added to sauces that accompany the lobster.
 - The coral, or roe, is red when cooked and dark green when raw. It is present only in females. Like the tomalley, it is considered a delicacy.
 - The intestinal vein may be removed from the split lobster if it contains dark material, but is often left in if it is clear.

STORAGE

1. Live lobsters can be kept in two ways:
 - Packed in moist seaweed or in moist, heavy paper, kept in a cool place.
 - In saltwater. Special lobster tanks are used in restaurants for display and so customers can select their own lobster. Air must be bubbled through the water to keep the lobsters alive.
2. Cooked lobster meat must be covered and refrigerated at 30° to 34°F (–1° to 1°C). It is very perishable and should be used in 1 or 2 days.

COOKING LOBSTERS

1. Lobster meat becomes tough if cooked at too high a temperature or for too long. Boiling too long will also make the meat dry. Whole lobster is usually cooked by dropping into boiling water and then simmering 5 to 6 minutes per lb (500 g). For jumbo lobsters, reduce the cooking time slightly.
2. Whole or cut-up lobster can be cooked by simmering in water or court bouillon, simmering in sauce or soup, sautéing, baking, or broiling.

Rock Lobsters

CHARACTERISTICS

1. Rock lobsters are also known as *spiny lobsters* or *langoustes*. They are warm-water relatives of northern lobsters but have no claws. Only the tails are marketed, sold as lobster tails.

2. The flesh of the rock lobster tail is similar to that of the northern or Maine lobster, but it is drier and coarser, with less flavor.
3. Rock lobster tails weigh 2 to 12 oz (60 to 340 g).
4. *Langoustines*, or *langostinos*, are smaller relatives of the rock lobster. These small shellfish are often marketed as *rock shrimp*. When out of the shell, they look like shrimp, but their flavor is milder and sweeter than shrimp. *Scampi* (plural form of *scampo*) refers not to shrimp but to a variety of langoustine from Italian waters. The name *scampi* is often used, incorrectly, for large shrimp broiled with butter and garlic.

MARKET FORMS

Nearly all rock lobster tails are sold IQF (individually quick frozen).

HANDLING AND COOKING

1. Rock lobsters are handled and cooked much like northern lobsters. The most common cooking methods are steaming, simmering, and broiling.
2. Tails to be broiled will be moister if poached 5 minutes before splitting and broiling.
3. Tails steamed or simmered whole should have the shells split before serving as a convenience to the customer.

Shrimp

CHARACTERISTICS

1. Shrimp are small crustaceans that look somewhat like tiny, clawless lobsters. Only the tail is marketed and eaten, as a rule.
2. Shrimp come in many varieties, depending on where they are caught, but the particular variety is usually of little importance to the cook.
3. Shrimp are classified by count per pound—the higher the count, the smaller the shrimp. (For example, 16/20 means 16 to 20 per pound.) Classification systems differ by market—that is, in different markets a given size shrimp may have different names.
4. Large shrimp are more expensive per pound but require less work to peel and devein.
5. Yield: 1 lb raw shrimp (tails) in the shell yield about ½ lb peeled, cooked shrimp (500 g raw yields 250 g peeled, cooked).
6. The term *prawn* is sometimes used for large shrimp, sometimes for langoustines (see above). Use of the term varies from region to region.

MARKET FORMS

1. *Green shrimp* are raw shrimp in the shell.
Fresh: Not widely available, except near source of supply.
Frozen: In 5-lb (2.3-kg) blocks.
2. P/D (peeled, deveined): Usually IQF (individually quick frozen).
3. PDC (peeled, deveined, and cooked): Usually IQF.

Note: IQF shrimp are usually glazed (see p. 455).

CHECKING FRESHNESS

1. Frozen shrimp should be solidly frozen when received.
2. Glazed shrimp should be shiny, with no freezer burn.
3. All shrimp should smell fresh and sweet. A strong fishy or iodine smell indicates age or spoilage.

Figure 14.16 Peeling and deveining shrimp.



(a) Pull off the legs with your forefinger.



(b) Peel back the shell as shown and remove.



(c) For deep-fried and broiled shrimp, leave on the tail section of the shell for appearance. This also gives you something to hold when dipping the shrimp in batter.



(d) For most other preparations, remove the tail section of the shell.

STORING

1. Like other frozen fish, shrimp should be kept frozen at 0°F (−18°C) or lower until ready for use.
2. Thaw in refrigerator, allowing sufficient slack time.
3. Fresh or thawed shrimp in the shell are stored on crushed ice, like whole fish.
4. Peeled shrimp lose soluble nutrients and flavor when stored unwrapped on ice. They should be wrapped before placing on ice or covered and simply refrigerated.

HANDLING

1. Shrimp served hot must normally be peeled and deveined before cooking. Figure 14.16 shows how.
2. Shrimp to be served cold may be peeled after cooking to preserve flavor.
3. Large shrimp are sometimes butterflied, as shown in Figure 14.16f. This is done for appearance (makes shrimp seem larger, with more surface area for breading) and to speed cooking by reducing thickness.

COOKING SHRIMP

Like most shellfish, shrimp become tough and rubbery when cooked at too high a heat. Shrimp can be cooked by simmering, deep-frying, sautéing, broiling, and baking.

Crabs

Six kinds of crab are important in commercial kitchens.

1. **Alaskan king crab.**
Largest of the crabs, weighing 6 to 20 lb (2.7 to 9 kg). The meat can be removed in large chunks, making it especially attractive to serve in restaurants. It is expensive.
2. **Alaskan snow crab.**
Smaller than the king crab. Often used as a less expensive substitute.
3. **Dungeness crab.**
Another West Coast crab, weighing 1½ to 4 lb (0.7 to 1.8 kg). The meat is very sweet.
4. **Blue crab.**
Small crab from the East Coast, weighing about 5 oz (150 g). Most frozen crabmeat is from blue crabs.
5. **Soft-shell crab.**
Actually a molting blue crab, harvested before the new shell has hardened. It is sautéed or fried and eaten shell and all; only the gills and head are removed.
Soft-shell crabs must be cleaned before being cooked. The procedure is shown in Figure 14.17.



(e) With a paring knife, make a shallow cut down the back of the shrimp and pull out the intestinal vein, which is just below the surface.



(f) To butterfly shrimp, make the cut in step (e) deeper so the shrimp can be spread open as shown.

Figure 14.17 Cleaning soft-shell crabs.



(a) Soft-shell crabs, seen from the bottom and top.



(b) Cut off the head just behind the eyes.



(c) Pull out the stomach sac.



(d) Pull back one side of the soft top shell to reveal the feathery gills.



(e) Pull off the gills. Repeat on the other side.



(f) Cut off the apron on the underside. The wide apron indicates this is a female crab. Males have a much narrower apron.

6. Stone crab.

Popular in the Southeast. Only the claws are eaten.

MARKET FORMS

1. Live. Crabs taste best when fresh, but very few (except soft-shell crabs) are purchased live because of the labor required to pick the meat. An average blue crab yields less than 1 oz (30 g) meat.
2. Cooked, frozen, in the shell.
 - King crab legs, whole and split.
 - Snow and stone crab claws.
 - Soft-shell crabs, whole.
3. Cooked, frozen meat. All varieties.

FRESHNESS AND STORAGE

1. Live crabs should be kept alive until cooked. They are packed in damp seaweed and kept cool.
2. Frozen crabmeat should be treated like any other frozen fish. It is very perishable when thawed.

HANDLING AND COOKING

1. Hard-shell crabs are picked of their meat after cooking.
 - Simmer 10 to 15 minutes in salted water ($\frac{1}{2}$ cup salt/gal or 30 mL/L). Cool rapidly in ice water.



Blue crab



Dungeness crab



Alaskan king crab legs



Alaskan snow crab legs

- Break off the pointed shell on the underside (called the *apron*) and remove the top shell.
 - Remove and discard the spongy gills and the stomach, which is just behind the eyes.
 - Pick out the body meat.
 - Crack the legs and claws with a mallet or the back of a heavy knife and pick out the meat.
2. Soft-shell crabs.
 - With a knife or shears, cut off the head section, just behind the eyes.
 - Lift the pointed, outside corners of the top shell and pull out the spongy gills.
 - Cut off the apron, the small flap on the underside.
 - Dredge the crab in flour for sautéing, or bread or batter it for deep-frying.
 3. Frozen crabmeat.
 - Crabmeat is usually watery. You may need to squeeze out excess moisture before cooking. Whenever possible, save the liquid for use in sauces and soups.
 - Frozen crabmeat is already cooked. It needs only to be heated through to be prepared for serving.

Crayfish

Crayfish or *crawfish* (the preferred term in the southern United States) are freshwater relatives of the lobster. Not long ago, they were used almost exclusively in Southern regional cuisine and in French restaurants. With the spreading popularity of Southern cuisines, including Creole and Cajun, they have become more widely available.

Crayfish are marketed live and frozen (peeled tail meat or whole).

Miscellaneous Seafood

Several other seafood items play a role in food-service kitchens. They are classified with fish, even though some of them spend part or all of their lives on land, like frogs and snails.

Snails or escargots are popular hors d'oeuvres when baked in their shells with a highly seasoned butter. Fresh snails require long, slow cooking before being baked with escargot butter, but canned snails are fully cooked and ready to prepare. Canned snails can be improved, however, by first simmering them in white wine and seasonings.

Frogs' legs are often compared to chicken in taste and texture (but then, so are a lot of things). Only the hind legs are used, and they are sold in pairs. They may be sautéed, deep-fried, or poached and served with a sauce.

Surimi is a processed seafood product made by grinding lean, inexpensive white fish, combining it with flavorings, and forming it into various shapes. The most popular shapes are shredded crab and crab leg segments, but other items, such as lobster claws, are also available. Coloring is added for a realistic appearance. Originally from Japan, surimi has found growing acceptance in North America because of the reasonably good quality of the product and the high cost of crab and lobster.

KEY POINTS TO REVIEW

- What are the four most important kinds of shelled mollusk in food service? Describe the characteristics and handling of each kind.
- What are the two most important kinds of cephalopod in food service? Describe the characteristics and handling of each kind.
- What are five kinds of crustacean used in food service? Describe the characteristics and handling of each kind.

TERMS FOR REVIEW

fin fish	dressed	cephalopod	rock shrimp
shellfish	anadromous	crustacean	scampi
flaking	catadromous	cockle	prawn
lean fish	drawn	calamari	crayfish
fat fish	mollusk	coral	surimi
flatfish	bivalve	tomalley	
round fish	univalve	langoustine/langostino	

QUESTIONS FOR DISCUSSION

1. Fish has very little connective tissue. How does this affect the ways in which you handle it and cook it?
2. Based on what you learned about fat and lean fish and about individual species of fish, suggest at least one cooking method for each of the following.

Mackerel	Salmon
Cod	Perch
Flounder	Swordfish
Trout	Whitefish
Red snapper	Halibut
3. List and describe the major market forms of fresh fish.
4. What are the differences between filleting flatfish and round fish? Describe or demonstrate.
5. You have just received delivery of fresh whole red snapper and fresh cod fillets. What should you check before accepting the shipment? After accepting the fish, what do you do with them?
6. You are making a casserole of shrimp with a prepared Newburg sauce and frozen, glazed cooked shrimp. When you add the frozen shrimp to the sauce, it thins out so much it is no longer usable. Why did this happen, and how could you have prevented it?
7. What is the most important indication of freshness in fresh oysters, clams, lobsters, and crabs? Describe how you would preserve this freshness.
8. How does opening oysters differ from opening clams, and how is it similar?
9. What happens to most kinds of shellfish when they are overcooked?

Chapter 15



Cooking Fish and Shellfish

Because most fish and shellfish have little connective tissue, the procedures for cooking them are somewhat different from those for cooking meats and poultry. When we cook meats, we are often concerned with tenderizing the product. Fish is naturally tender, however, and cooking—especially overcooking—is more likely to toughen the product and dry it out.

In this chapter, we apply basic cooking principles to the preparation of fish dishes. Our goals are to cook the product just to doneness, to preserve moisture and texture, and to preserve and enhance natural flavors.

Of course, your study of these procedures depends on your understanding of the basic information on fish in the previous chapter. In particular, you may want to review the sections on testing for doneness and on fat and lean fish and their appropriate cooking methods.

After reading this chapter, you should be able to

1. Cook fish and shellfish by baking.
2. Cook fish and shellfish by broiling.
3. Cook fish and shellfish by sautéing and pan-frying.
4. Cook fish and shellfish by deep-frying.
5. Cook fish and shellfish by poaching in court bouillon.
6. Cook fish and shellfish by poaching in fumet and wine.
7. Cook fish and shellfish by mixed cooking techniques.
8. Prepare dishes made of raw seafood.

Baking

Whole fish and fish portions may be cooked by baking in an oven. Although large whole fish may be baked, this is usually not practical in volume food service. The method is more often used with steaks and fillets and with small fish. Baking is also a popular method for preparing shellfish such as stuffed clams or oysters.

Baking is often combined with other cooking methods. For example, partially broiled fish can be finished by baking. Baked fish casseroles are usually made with cooked fish.

Whole fish or portions of fish baked in the oven may also be referred to as roasted, as is currently the fashion. The term *roasting* may be applied both to basic baking and to moist baking, discussed below.

Guidelines for Baking Fish

1. Fat fish are better for baking because they are less likely to dry out.
2. Lean fish may be baked successfully if great care is taken not to overcook them. Basting with butter or oil helps prevent drying.
3. In most cases, baking temperatures are from 350° to 400°F (175° to 200°C). Large fish are best baked at the lower end of this range so they bake more evenly.

It is also possible to bake thin fillets or slices of fillets (cut like scaloppine) at very high temperatures. Great care must be used in this case because the fish may cook in a minute or less, and a few seconds too long might ruin it. The effect of the high heat is almost like broiling, and the normal guidelines for broiling thin fish fillets should be followed, as explained in the next section.

4. It is not possible to give specific baking times because fish vary so much in shape and composition. Different ingredients and types of baking pans also affect the baking time. The following guideline is helpful, however: Measure the thickness of the fish at the thickest point. At 400°F (200°C), baking time is about 10 minutes per inch (2.5 cm) of thickness.
5. Serving baked fish with a sauce or seasoned butter enhances its moistness and improves palatability. Serving with lemon also enhances the fish.
6. If fish is baked with a moist topping or sauce, strictly speaking, it is no longer being cooked by a dry-heat method. However, because the basic procedure is the same, the fish is treated as if it were.

Procedure for Baking Fish

1. Collect all equipment and food supplies.
2. Prepare and season fish (whole, steaks, fillets) as directed in the recipe.
3. Place the fish on oiled or buttered baking sheets. Brush tops with oil or butter.
Alternative method: Dip fish in oil or melted butter to coat both sides. Place on baking sheets.
4. Apply toppings, if desired. Examples: seasoned bread crumbs, lemon slices, mushrooms or other vegetable garnish, and sauces.
5. Bake at 350° to 400°F (175° to 200°C) until done. If the fish is lean and has no moist topping, baste with oil or butter during baking.

Moist Baking or Braising

As we noted above, if fish is baked with moist ingredients or with liquids, strictly speaking, the method is no longer a dry-heat method, although such preparations are included in this section. In French cooking, baking fish—usually whole fish or large pieces—with vegetables and liquid is called *braising*. To avoid confusion with the braising method as applied to meats, however, we avoid that term and refer to such dishes as *baked*.

This procedure is the same as the basic procedure for baking fish described above, with the following special features:

1. The baking pan should be just large enough to hold the fish, so you will not need too much liquid.
2. The bottom of the pan is buttered or oiled, then covered with a layer of sliced or chopped vegetables, such as carrots, onions, shallots, and mushrooms. The vegetables may be raw or first sautéed gently in butter or oil. The fish is then placed on top of the vegetables.

3. Frequently, a small amount of liquid, such as equal parts wine and fish stock, is added. Just enough liquid is used to cover the fish about halfway or less. During baking, the fish is basted with this liquid.
4. The fish may be baked uncovered or covered only lightly. It should not be covered tightly, however, because the liquid must be able to reduce somewhat so it will become more concentrated and more flavorful. Remember also that liquid will be released from the fish, diluting the cooking liquid.
5. For service, the fish is removed from the dish. The liquid is strained, degreased, reduced, and finished in various ways, such as by adding butter, cream, or velouté sauce.

You can see that this is a sort of combination technique. Because it often uses wine and other liquids, the method is, in some ways, similar to poaching in wine, as explained on page 500.



Baked Cod Fillets Portugaise

PORTIONS: 24 PORTION SIZE: 5 OZ (150 G) FISH, 2 FL OZ (60 ML) SAUCE

U.S.	METRIC	INGREDIENTS	PROCEDURE
24	24	Cod fillets, 5-oz (150-g) portions	<ol style="list-style-type: none"> 1. Place cod fillets on a well-oiled baking sheet or baking pan, flesh side up (that is, skin side down). 2. Brush the fish lightly with lemon juice. Then brush generously with the butter or oil and season lightly with salt and pepper. 3. Place the pan in a preheated 350°F (175°C) oven until done, about 10–15 minutes. 4. Halfway through the cooking time, check the fish and, if the tops appear to be drying out, brush with more butter or oil.
⅓ cup	75 mL	Lemon juice	
8 fl oz	250 mL	Melted butter or oil	
to taste	to taste	Salt	
to taste	to taste	White pepper	
1½ qt	1.5 L	Portugaise Sauce (p. 191)	<ol style="list-style-type: none"> 5. Serve each portion with 2 fl oz (60 mL) sauce. Nap the sauce across the center of the portion. Do not cover the entire fillet.

Per serving: Calories, 170; Protein, 16 g; Fat, 10 g (53% cal.); Cholesterol, 60 mg; Carbohydrates, 4 g; Fiber, 1 g; Sodium, 250 mg.

VARIATIONS

Many other fish may be baked according to the basic recipe, such as

Haddock (fillets or steaks)	Pike (fillets)	Halibut (steaks or fillets)	Salmon (fillets or steaks)
Snapper (fillets)	Perch (fillets)	Bluefish (fillets)	Swordfish (steaks)
Bass (fillets)	Flounder (fillets)	Mackerel (fillets)	Whitefish (fillets)

Other appropriate sauces may be used, such as

Melted butter	Tomato and tomato-based sauces such as Creole (not for salmon or for very delicate fish like flounder)
Beurre noisette	Mustard (for strong-flavored fish only, such as mackerel or bluefish)
Maitre d'hôtel butter	Curry (not for salmon or other fat fish)

Baked Fish with Tomatoes and Mushrooms

PORTIONS: 10 PORTION SIZE: 1 FISH

U.S.	METRIC	INGREDIENTS
10	10	Small whole fish, about 12 oz (375 g) each (see Note)
to taste	to taste	Salt
to taste	to taste	Pepper
pinch	pinch	Dried thyme
10	10	Parsley sprigs
as needed	as needed	Olive oil
8 oz	250 g	Onion, small dice
1 oz	30 g	Shallots, minced
8 oz	250 g	Mushrooms, chopped
1 lb	500 g	Tomato concassé
8 fl oz	250 mL	Dry white wine

Per serving: Calories, 350; Protein, 55 g; Fat, 9 g (24% cal.); Cholesterol, 120 mg; Carbohydrates, 6 g; Fiber, 1 g; Sodium, 210 mg.

Note: Many types of fish can be used, including sea bass, red snapper, porgy, perch, and trout. As an alternative, use thick steaks or thick pieces of fillet from larger fish such as cod or tilefish.

VARIATIONS

Baked Fish à la Menagère

Use butter instead of olive oil. Substitute sliced leeks for part or all of the onion. Omit the tomatoes. Add 4 oz (125 g) sliced carrot and cook it with the leek. Slice the mushrooms instead of chopping them, and add them to the pan raw. Add 1 cup (250 mL) fish stock along with the wine. After straining and reducing the cooking liquid in step 9, thicken it very lightly with a little *beurre manié*. Enrich the sauce with a little raw butter or cream.

PROCEDURE

- Scale and clean the fish, but leave the heads on. Season the fish inside and out with salt and pepper, and put a small pinch of thyme and a sprig of parsley in the cavity of each.
- Select as many baking pans as necessary to just hold the fish in a single layer. Oil the pans with a little olive oil.
- Sauté the onions and shallots in a little olive oil about 1 minute. Add the mushrooms and sauté lightly.
- Put the sautéed vegetables and the tomatoes in the bottoms of the baking pans.
- Put the fish in the pans. Oil the tops lightly. Pour in the wine.
- Bake at 400°F (200°C) until the fish is done. The time will vary but will average 15–20 minutes. Baste often with the liquid in the pan.
- Remove the fish and keep them warm until they are plated.
- Remove the vegetables from the pans with a slotted spoon and check for seasonings. Serve a spoonful of the vegetables with the fish, placing it under or alongside each fish.
- Strain, degrease, and reduce the cooking liquid slightly. Just before serving, moisten each portion with 1–2 tbsp (15–30 mL) of the liquid.

Baked Stuffed Mackerel

PORTION: 10 PORTION SIZE: 1 FISH, WITH STUFFING

U.S.	METRIC	INGREDIENTS
10	10	Mackerel, 8–12 oz (250–375 g) each, or other small fish
8 oz	250 g	Fresh bread crumbs
3 fl oz	90 mL	Melted butter
1 tbsp	15 mL	Chopped parsley
½ tsp	2 mL	Dried thyme
1	1	Egg, beaten
¼ tsp	1 mL	Grated lemon zest
2 fl oz	60 mL	Lemon juice
to taste	to taste	Salt
as needed	as needed	Oil or melted butter

Per serving: Calories, 600; Protein, 43 g; Fat, 41 g (63% cal.); Cholesterol, 165 mg; Carbohydrates, 12 g; Fiber, 1 g; Sodium, 330 mg.

PROCEDURE

- Fillet the fish (**Figure 14.4**), but leave the skin on.
- Combine the crumbs, butter, and herbs in a bowl. Toss lightly until mixed.
- Mix the beaten egg, lemon zest, and lemon juice. Add to the crumbs and mix gently. Season to taste.
- Place 10 fillets (that is, half of each fish) on a well-oiled baking sheet, skin side down.
- Top each fillet with 1½ oz (50 g) stuffing. (Portion with a No. 24 scoop.) Shape the stuffing to fit the length of the fish.
- Place the second fillet on top and press down lightly.
- Brush the fish with oil or melted butter.
- Bake at 350°F (175°C) until done, about 15–20 minutes.

Baked Pike Fillets English Style

PORTIONS: 12 PORTION SIZE: 1 FILLET, 5–6 OZ (150–180 G)

U.S.	METRIC	INGREDIENTS	PROCEDURE
12	12	Pike fillets, 5–6 oz (150–180 g) each	1. Brush the fillets lightly with lemon juice and season with salt and pepper.
1 fl oz	30 mL	Lemon juice	2. Dip both sides of each fillet in the butter and then in the bread crumbs. Press the crumbs on lightly so they adhere.
to taste	to taste	Salt	3. Place the fillets flesh side up (skin side down) on a sheet pan (if cooking in quantity) or on sizzler platters (if cooking to order).
to taste	to taste	White pepper	4. Place in an oven heated to 400°F (200°C) and bake until fish is done and crumbs are lightly browned.
5 oz	150 g	Melted butter	
12 oz, or as needed	360 g, or as needed	Bread crumbs, dry	5. Place the fish on hot plates. Spoon a thin band of butter sauce onto the plate partway around the fish.
12 fl oz	360 mL	Herb Butter Sauce (p. 194, optional)	6. Place a lemon wedge on each plate and serve immediately.
12	12	Lemon wedges	

Per serving: Calories, 350; Protein, 33 g; Fat, 14 g (36% cal.); Cholesterol, 155 mg; Carbohydrates, 22 g; Fiber, 1 g; Sodium, 370 mg.

Baked Clams Oreganata

PORTIONS: 10 PORTION SIZE: 3 CLAMS (APPETIZER PORTION)

U.S.	METRIC	INGREDIENTS	PROCEDURE
30	30	Cherrystone clams	1. Open the clams (see Figure 14.9 for technique). Catch the juice in a bowl.
			2. Remove the clams from the shell. Place them in a strainer over the bowl of juice. Let them drain 15 minutes in the refrigerator. Save the 30 best half-shells.
			3. Chop the clams into small pieces.
2 fl oz	60 mL	Olive oil	4. Heat the oil in a sauté pan. Add the onion and garlic. Sauté about 1 minute, but do not brown.
1 oz	30 g	Onions, shallots, or scallions, chopped fine	5. Add <i>half</i> the clam juice and reduce by three-fourths over high heat.
1 tsp	5 mL	Finely chopped garlic	6. Remove from the heat and add the lemon juice, crumbs, parsley, oregano, and white pepper. Mix gently to avoid making the crumbs pasty.
1 fl oz	30 mL	Lemon juice	7. Taste and adjust seasonings if necessary. (Clams are usually very salty.)
10 oz	300 g	Fresh bread crumbs	8. Cool the mixture. Mix in the chopped clams.
1 tbsp	15 mL	Chopped parsley	9. Fill the 30 clamshells with the mixture. Sprinkle with parmesan cheese and (very lightly!) with paprika.
¾ tsp	3 mL	Dried oregano	10. Place on a sheet pan and refrigerate until needed.
⅓ tsp	0.5 mL	White pepper	
⅓ cup	25 g	Parmesan cheese	11. For each order, bake 3 clams in a hot oven (450°F/230°C) until they are hot and the top is brown.
as needed	as needed	Paprika	12. Garnish with lemon wedge.
10	10	Lemon wedges	

Per serving: Calories, 180; Protein, 10 g; Fat, 8 g (41% cal.); Cholesterol, 20 mg; Carbohydrates, 16 g; Fiber, 1 g; Sodium, 230 mg.

Note: Clams and oysters are often baked on a bed of rock salt to hold them steady. The rock salt also holds heat well.



Baked Clams Oreganata

Pan-Smoked Salmon Fillet with Pepper Salad

PORTIONS: 12 PORTION SIZE: 4 OZ (125 G) FISH, 4 OZ (125 G) GARNISH

U.S.	METRIC	INGREDIENTS
3 lb	1.5 kg	Salmon fillets
1 fl oz	30 mL	Vegetable oil
¾ tsp	3 mL	Ground coriander
¾ tsp	3 mL	Ground cumin
¼ tsp	1 mL	Ground cloves
½ tsp	2 mL	Ground fennel
½ tsp	2 mL	Black pepper
1 tsp	5 mL	Salt
3 lb	1.5 kg	Roasted Pepper Salad (p. 730)

PROCEDURE

1. Cut the salmon fillets into 4-oz (125-g) portions.
2. Brush the salmon lightly with oil.
3. Combine the spices and salt. Sprinkle over the fish to coat them in a light, even layer.
4. Set up a smoke-roasting system as shown in **Figure 4.1**. Heat the pan of wood chips or sawdust on top of the stove until smoke appears. Lay the salmon fillets on the rack, cover, and turn the heat to medium-low. Smoke-roast for 2 minutes.
5. Transfer the pan to an oven preheated to 400°F (200°C) and continue roasting another 8–10 minutes, or until the fish is just cooked through.
6. Arrange the salmon fillets and the pepper salad on plates. Serve immediately.

Per serving: Calories, 370; Protein, 29 g; Fat, 25 g (60% cal.); Cholesterol, 70 mg; Carbohydrates, 9 g; Fiber, 2 g; Sodium, 470 mg.



Pan-Smoked Salmon Fillet with Pepper Salad

Baked Oysters with Balsamic Vinegar, Arugula, and Pine Nuts

PORTIONS: 12 PORTION SIZE: 3 OYSTERS (APPETIZER PORTION)

U.S.	METRIC	INGREDIENTS
36	36	Oysters
½ oz	15 mL	Balsamic vinegar
1 oz	30 g	Arugula, chopped
1 oz	30 g	Pine nuts, toasted
1½ fl oz	45 mL	Olive oil

PROCEDURE

1. Open the oysters as shown in **Figure 14.8**. Arrange the oysters on a sheet pan.
2. Top each oyster with a few drops of balsamic vinegar, then with a little chopped arugula, a few pine nuts, and, finally, about ¼ tsp (1.2 mL) olive oil. If the oysters are not salty, you may wish to add a little salt.
3. Bake at 450°F (230°C) for a few minutes, just until the oysters are hot. Serve immediately.

Per serving: Calories, 70; Protein, 3 g; Fat, 6 g (77% cal.); Cholesterol, 15 mg; Carbohydrates, 2 g; Fiber, 0 g; Sodium, 75 mg.

Roasted Monkfish with Spinach and White Beans

PORTIONS: 12 PORTION SIZE: 6–8 OZ (180–240 G) FISH, 3 OZ (90 G) BEANS, 2 OZ (60 G) SPINACH

U. S.	METRIC	INGREDIENTS
6–12	6–12	Garlic cloves
12	12	Monkfish tails, boned, skinned, and trimmed, 6–8 oz (180–240 g) each
to taste	to taste	Salt
to taste	to taste	White pepper
as needed	as needed	Flour
3 oz	90 g	Butter
3 fl oz	90 mL	Olive oil
12 fl oz	360 mL	White wine

2 lb 4 oz	1.1 kg	Cooked white kidney beans, cannellini beans, or navy beans
to taste	to taste	Butter or olive oil
1 lb 8 oz	720 g	Cooked spinach, buttered

Per serving: Calories, 450; Protein, 36 g; Fat, 18 g (36% cal.); Cholesterol, 65 mg; Carbohydrates, 30 g; Fiber, 11 g; Sodium, 135 mg.

PROCEDURE

1. Cut the garlic cloves lengthwise into slivers.
2. Lard the monkfish with the garlic by making slits in the fish with the point of a paring knife and inserting the slivers in them.
3. Season the fish with salt and pepper. Dust the fish lightly with flour and shake off excess.
4. Heat the butter and oil in a sauté pan. Brown the monkfish on all sides.
5. Add the wine and transfer the pan to an oven heated to 400°F (200°C). Roast 4–5 minutes, or until the fish is cooked. (*Note:* The pan must not be too large, or too much liquid will evaporate.)
6. Remove the fish from the pan and keep warm.
7. Add the beans to the pan and set over moderate heat. Cook until the beans are hot and the liquid, if any, is reduced so that the beans are quite moist but without excess liquid. Adjust the seasonings. Add a little butter or olive oil if desired.
8. Spoon 3 oz (90 g) beans onto the center of each dinner plate and spread them out slightly.
9. Place 2 oz (60 g) spinach in a small mound in the center of the beans.
10. Cut each monkfish tail into 3 pieces and arrange on or around the spinach.



Roasted Monkfish with Spinach and White Beans

Broiling and Grilling

Broiled and grilled seafood items, like grilled meats, are increasingly popular. Customers perceive them as simpler and more healthful and, because they are prepared quickly, as fitting the faster pace of modern life.

Grilled dishes are, in their purest form, simple and straightforward, but they lend themselves to many variations in presentation. By varying sauces, vegetable accompaniments, and garnishes, you can offer a great assortment of grilled fish on the menu. And, because the sauces and accompaniments are generally prepared ahead of time, these dishes are still quick to prepare, even if the presentation is elaborate.

A slightly crisped, browned, or grill-marked surface is important to the appeal of grilled or broiled fish. Do not cover the item with sauce, and do not serve too much sauce. A small piece of seasoned butter or a drizzle of a flavorful condiment or sauce can be used to decorate the top of the item. In most other cases, it is better to place sauces on the side. Appropriate healthful sauces include vegetable coulis and salsas. For richer dishes, *beurre blanc* is a good accompaniment, especially for lean fish like halibut.

Another popular approach is to serve the fish without a sauce, except perhaps for a small dab of a condiment such as a relish or chutney, and to complement the fish with an attractive variety of vegetables.

Guidelines for Broiling or Grilling Fish

1. Because of the intense heat of the broiler, great care is needed to avoid overcooking the fish.
2. Select appropriate fish for broiling or grilling. Small slices and thin fillets are usually too delicate to be placed directly on the grid of a broiler or grill. Arrange them on oiled sheet pans, broiler platters, or other baking dishes or pans, and cook under a broiler. Whole fish or thick slices of firm fish such as salmon, shark, and swordfish can be placed directly on the grill if care is taken to avoid breaking them up. Be sure the grid is clean and oiled to prevent sticking.
3. Fat fish is best for broiling because it doesn't get as dry as lean fish. However, all fish, fat or lean, should be coated with a fat before broiling to reduce drying.
4. Lean fish may be dredged in flour before dipping in oil or melted butter. The flour helps form a flavorful browned crust.
5. Instead of being dredged with flour, fish may be coated with fat and then with bread crumbs or cornmeal. Use caution, however, as bread crumbs burn very easily. Use this technique only with items that cook quickly.
6. If the fish has an attractive skin (such as red snapper and black sea bass), the skin may be left on and used as the presentation side. This enhances appearance and also helps hold the delicate flesh together. Make sure the fish is thoroughly scaled. To prevent splitting during cooking, score the skin with a sharp knife, making a series of parallel cuts across the fish or cutting in a diamond pattern for larger fish. For small fillets, scoring may not be necessary.
7. Broil fish to order and serve immediately.
8. Broiled fish may be garnished lightly with paprika if more color is desired, but don't overdo it. A common fault in broiling or baking fish is coating them with a heavy layer of paprika, which ruins their delicate flavor.
9. Thick cuts should be turned once during broiling in order to cook evenly. Thin pieces may be arranged on an oiled pan and broiled on one side only. Lobster is also broiled without turning.

Procedure for Broiling or Grilling Fish

1. Collect all equipment and food supplies.
2. Prepare the fish as required: Season and coat with oil or butter, with flour and then fat, or with fat and then bread crumbs or cornmeal.
3. Preheat the broiler or grill.
4. With a wire brush, remove burned or charred particles of food from the broiler grate or grill. Brush the grate with an oiled cloth to coat it lightly with oil.
5. Broil thick cuts on both sides, turning once. Broil thin pieces on one side only.
6. Serve immediately, with appropriate sauce and garnish.

KEY POINTS TO REVIEW

- What are the steps in the basic procedure for baking fish? Describe guidelines for success in baking fish.
- What is braising of fish, and how does it compare to baking?
- What are the steps in the basic procedure for broiling or grilling fish? Describe guidelines for success in broiling and grilling fish.



Broiled Fish Steaks Maître d’Hôtel

PORTIONS: AS NEEDED PORTION SIZE: 5–6 OZ (150–175 G)

U.S.	METRIC	INGREDIENTS
as needed	as needed	Fish steaks, 5–6 oz (150–175 g) each (see Note)
to taste	to taste	Salt
to taste	to taste	White pepper
as needed	as needed	Oil or melted butter

PROCEDURE

1. Season the steaks with salt and pepper.
2. Place the oil or melted butter in a small pan. Dip both sides of the steaks in it to coat completely.
3. Place on the rack of a preheated broiler. Broil under medium heat until half cooked. Turn over with a spatula. At this point, it may be necessary to brush the tops of the steaks with more oil or butter if they are becoming dry.
4. Complete the cooking on the second side.
5. Plate the fish. Place a slice of seasoned butter on top of each steak. Garnish the plate with a lemon wedge. Serve immediately.

VARIATIONS

For lean white fish (halibut, cod, etc.), dredge in flour and shake off excess before dipping in the melted butter or oil. Broil as in basic recipe. Other compound butters may be used in place of maître d’hôtel butter. For fat fish, omit the butter and serve the fish with a small quantity of flavorful vinaigrette.

as needed	as needed	Maître d’Hôtel Butter (p. 194)
as needed	as needed	Lemon wedges

Per serving: Calories, 320; Protein, 27 g; Fat, 22 g (63% cal.); Cholesterol, 105 mg; Carbohydrates, 2 g; Fiber, 1 g; Sodium, 2460 mg.

Note: Salmon, tuna, and swordfish steaks are ideal for broiling, but they are also expensive. Other fish steaks that may be broiled include cod, haddock, halibut, king mackerel, and large bluefish.

Fillets may also be broiled using this recipe if they are thick or firm enough to avoid breaking up on the grill.

Grilled Tuna with Balsamic Vinaigrette and Sweet-Sour Baby Onions

PORTIONS: 4 PORTION SIZE: 5–6 OZ (150–180 G) TUNA

U.S.	METRIC	INGREDIENTS	PROCEDURE
1 fl oz	30 mL	Balsamic vinegar	<ol style="list-style-type: none"> 1. Make a vinaigrette (see p. 703 for procedure) with the vinegar, water, herbs, salt, pepper, and olive oil. 2. Mix in the diced red pepper. 3. Season the tuna steaks with a little salt and brush with a little of the vinaigrette. 4. Grill the steaks until rare or medium rare. 5. For each portion, arrange the onions in the center of the plate. 6. Cut the steak in half to display the interior. Arrange the two halves on top of the onions. 7. Spoon a little vinaigrette around the tuna.
½ oz	15 mL	Water	
¼ tsp	1 mL	Parsley, chopped	
¼ tsp	1 mL	Chives, chopped	
to taste	to taste	Salt	
to taste	to taste	White pepper	
2½ fl oz	75 mL	Olive oil	
1 oz	30 g	Roasted red pepper (p. 143), small dice	
4	4	Tuna steaks, 5–6 oz (150–180 g) each	
to taste	to taste	Salt	
8 oz	240 g	Cipolline in Agrodolce (p. 571)	
<p>Per serving: Calories, 450; Protein, 36 g; Fat, 26 g (54% cal.); Cholesterol, 65 mg; Carbohydrates, 14 g; Fiber, 1 g; Sodium, 220 mg.</p>			



Grilled Tuna with Balsamic Vinaigrette and Sweet-Sour Baby Onions

Grilled Mahi-Mahi with Fruit Salsa

PORTIONS: 12 PORTION SIZE: 6 OZ (180 G)

U.S.	METRIC	INGREDIENTS	PROCEDURE
3 fl oz	90 mL	Lemon juice	<ol style="list-style-type: none"> 1. In a nonreactive container, mix together the lemon juice, salt, white pepper, and cayenne. 2. Place the fish fillets in the mixture, turning them to coat all sides. Let stand 15 minutes. 3. Remove the fish from the marinade. Dip the fillets in the oil and remove, letting the excess oil drip off. 4. Grill the fillets on a preheated, seasoned grill or broiler. Grill until just done. Do not overcook, or the fish will be dry.
1 tsp	5 mL	Salt	
¼ tsp	1 mL	White pepper	
⅓ tsp	0.5 mL	Cayenne	
12	12	Mahi-mahi fillets, 6 oz (180 g) each	
4 fl oz, or as needed	125 mL, or as needed	Vegetable oil	<ol style="list-style-type: none"> 5. Plate the fillets. Next to each fillet, place 1½ oz (50 g) fruit salsa.
1 lb 2 oz	600 g	Fruit Salsa (p. 215)	
<p>Per serving: Calories, 210; Protein, 32 g; Fat, 6 g (27% cal.); Cholesterol, 125 mg; Carbohydrates, 5 g; Fiber, 1 g; Sodium, 170 mg.</p>			

Broiled Mako Shark Steaks with Browned Garlic Vinaigrette

PORTIONS: 10 PORTION SIZE: 6 OZ (175 G)

U.S.	METRIC	INGREDIENTS	PROCEDURE
15–20	15–20	Garlic cloves	<ol style="list-style-type: none"> 1. Cut the garlic cloves crosswise into thick slices. 2. Heat the oil in a small sauté pan over moderate heat. Add the garlic and sauté gently until light golden brown. Do not allow the garlic to become too dark, or it will be bitter. 3. Remove the browned garlic with a slotted spoon. Reserve the garlic and the oil separately.
8 fl oz	250 mL	Olive oil	
10	10	Mako shark steaks, about 6 oz (175 g) each	<ol style="list-style-type: none"> 4. Brush the shark steaks with about half the garlic-flavored oil from step 3. Season to taste with salt and pepper. 5. Place the steaks on a heated broiler or grill and broil until just done. Do not overcook, or the steaks will be dry.
to taste	to taste	Salt	
to taste	to taste	Pepper	<ol style="list-style-type: none"> 6. Beat the remaining oil from step 3 with the additional oil and the vinegar to make a basic vinaigrette. Season to taste with salt and pepper. 7. Plate the shark steaks and top with the browned garlic from step 3. Drizzle about 1 fl oz (30 mL) vinaigrette around the fish. Sprinkle with chopped parsley.
4 fl oz	125 mL	Olive oil	
2 fl oz	60 mL	Red wine vinegar	
to taste	to taste	Salt	
to taste	to taste	Pepper	
2 tbsp	30 mL	Chopped parsley	
<p>Per serving: Calories, 530; Protein, 36 g; Fat, 42 g (71 % cal.); Cholesterol, 85 mg; Carbohydrates, 2 g; Fiber, 0 g; Sodium, 135 mg.</p>			

VARIATION

Substitute other firm fish steaks, such as swordfish or tuna, for the shark.

Broiled Salmon in Escabeche

PORTIONS: 12 PORTION SIZE: 5–6 OZ (150–180 G)

U.S.	METRIC	INGREDIENTS
4 fl oz	120 mL	Lime juice
1 tsp	5 mL	Salt
½ tsp	2 mL	Pepper
½ tsp	2 mL	Ground cumin
½ tsp	2 mL	Ground allspice
12	12	Salmon steaks, 5–6 oz (150–180 g) each
<hr/>		
2 fl oz	60 mL	Vegetable oil
12 oz	360 g	Onion, sliced ⅛ in. (3 mm) thick
6	6	Garlic cloves, peeled and halved
4	4	Pickled jalapeños, sliced
		Sachet:
6	6	Whole cloves
½ tsp	2 mL	Whole allspice
1 tsp	5 mL	Peppercorns
½ tsp	2 mL	Cumin seed
3	3	Bay leaves, broken
1 tsp	5 mL	Dried oregano
1-in. piece	2–3 cm piece	Cinnamon stick
6 fl oz	180 mL	Cider vinegar
1 pt	500 mL	Water
<hr/>		
as needed	as needed	Vegetable oil
as needed	as needed	Cilantro leaves

Per serving: Calories, 260; Protein, 31 g; Fat, 12 g (43% cal.); Cholesterol, 80 mg; Carbohydrates, 5 g; Fiber, 0 g; Sodium, 150 mg.

VARIATION

For a more traditional escabeche, add the fish to the hot vinegar mixture and cool. After 1 hour, refrigerate the fish in the liquid. To serve, rewarm to room temperature or slightly warmer.

PROCEDURE

1. In a nonreactive container, mix together the lime juice, salt, pepper, ground cumin, and ground allspice.
 2. Place the salmon steaks in the mixture, turning them to coat both sides.
 3. Refrigerate 30–60 minutes.
-
4. Heat the oil in a sauté pan over moderate heat.
 5. Add the onion. Sauté until lightly browned.
 6. Add the garlic and jalapeños. Sauté 2–3 minutes.
 7. Add the sachet, vinegar, and water. Simmer over low heat until reduced by half.
 8. Remove the salmon from the marinade and pat dry with clean towels.
 9. Dip the salmon in oil and remove, letting the excess oil drip off.
 10. Broil the steaks on a preheated, seasoned broiler or on a grill. Broil until just done. Do not overcook, or the fish will be dry.
 11. Serve each steak with about 1½ fl oz (45 mL) onion, spice, and vinegar mixture. Top with a few cilantro leaves.



Broiled Salmon in Escabeche

ESCABECHE

The word *escabeche* (ess ka bey chay) is Spanish for “brine,” and *en escabeche* means “pickled.” Many foods *en escabeche* are popular in the cuisines of Mexico, especially seafood and vegetables. The method originated as a way to preserve foods by pickling them in vinegar and spices. Today, with refrigeration available, they are enjoyed for their flavors more than their keeping qualities.

In a true escabeche, the food is left in the vinegar mixture for a time at room temperature or refrigerated long enough for it to develop a pickled taste. It is later served at room temperature or rewarmed. In addition, fish prepared this way is often pan-fried in oil before being pickled. The accompanying recipe is modified from the traditional methods for a lighter flavor. The fish is grilled rather than pan-fried, and the spice and vinegar mixture is served with it as a sauce rather than being used to pickle it.

Broiled Lobster

PORTIONS: 1 PORTION SIZE: 1 LOBSTER

U.S.	METRIC	INGREDIENTS	PROCEDURE
1	1	Live lobster, 1–1½ lb (450–700 g)	1. Split the lobster as shown in Figure 14.13 . Remove and discard the stomach (just behind the eyes) and the vein that runs through the tail. The liver and coral may be left in or removed and added to the stuffing (step 3), as desired.
1 tsp	5 mL	Finely chopped shallot	2. Sauté the shallot in the butter just until it starts to become tender.
1 tbsp	15 g	Butter	3. Optional step: Chop the lobster coral and liver (tomalley) and add to the pan. Sauté just until firm, 10–20 seconds.
1 oz	30 g	Dry bread crumbs	4. Add the bread crumbs and brown them lightly in the butter. Remove from the heat.
3 tbsp	45 mL	Chopped parsley	5. Add the parsley. Season the crumbs with salt and pepper.
to taste	to taste	Salt	
to taste	to taste	Pepper	
as needed	as needed	Melted butter	6. Place the lobster shell side down on a small sheet pan or in a shallow baking pan. Fill the body cavity with the crumb mixture. Do not put the crumbs over the tail meat.
			7. Brush the tail well with melted butter.
			8. Place a few of the legs on top of the stuffing. If the lobster was split by the first method, shown in Figure 14.13g , weight the end of the tail to keep it from curling.
			9. Place the lobster under the broiler at least 6 in. (15 cm) from the heat. Broil until the crumbs are well browned.
			10. At this point, the lobster will probably not be completely cooked, unless it is very small and the broiler heat very low. Place the pan with the lobster in a hot oven to finish cooking.
2 fl oz	60 mL	Melted butter	
as needed	as needed	Lemon wedges	11. Remove the lobster from the heat and serve immediately with a small cup of melted butter and with lemon garnish.
<p>Per serving: Calories, 760; Protein, 12 g; Fat, 71 g (82% cal.); Cholesterol, 210 mg; Carbohydrates, 22 g; Fiber, 1 g; Sodium, 1090 mg.</p>			<p>VARIATION</p> <p>Broiled Rock Lobster Tail</p> <p>Rock lobster is usually dry if broiled like lobster. A better method is to poach it in salted water (see p. 500) until just cooked. Then split the tails, brush with butter, and run under the broiler 1–2 minutes.</p>

Broiled Shrimp, Scampi Style

PORTIONS: 10 PORTION SIZE: 4½ OZ (125 G)

U.S.	METRIC	INGREDIENTS
50	50	Shrimp, size 16/20

6 oz	175 g	Butter
½ cup	125 mL	Oil, preferably olive oil (see Note)
1 tbsp	15 mL	Garlic, very finely chopped
1 fl oz	30 mL	Lemon juice
2 tbsp	30 mL	Chopped parsley
to taste	to taste	Salt
to taste	to taste	Pepper

Per serving: Calories, 250; Protein, 7 g; Fat, 25 g (88% cal.); Cholesterol, 95 mg; Carbohydrates, 1 g; Fiber, 0 g; Sodium, 210 mg.

Note: All butter may be used, instead of a mixture of butter and oil. Or, if you are using a good-quality olive oil, use more oil and less butter or all olive oil.

Serve this dish with rice or with plenty of bread to soak up the flavorful butter.

PROCEDURE

1. Peel, devein, and butterfly the shrimp as shown in **Figure 14.16**. Leave tails on.
2. Place shrimp in individual service casserole dishes or in a shallow baking pan, tails up and cut side down. (Shrimp will curl more when cooked, so tails stand up as shrimp are broiled.)
3. Keep refrigerated until needed.
4. Heat butter and oil in a saucepan until the butter is melted.
5. Add the garlic, lemon juice, parsley, salt, and pepper.
6. Pour the butter sauce over the shrimp.
7. Place under the broiler at medium heat. Broil until the tops are lightly browned. (Don't worry if the tips of the tails burn a little; this is normal.)
8. Transfer the shrimp to the oven above the broiler for a few minutes to finish cooking.

VARIATIONS

The shrimp can be marinated 1–2 hours in the oil, chopped garlic, lemon juice, and seasonings. Add the butter at cooking time. Or omit the butter when cooking, and serve small cups of garlic butter on the side.

Shrimp Brochettes

Marinate the shrimp as indicated above. Put the shrimp on skewers and broil, basting several times with the marinade and melted butter.

Broiled Scallops

Place the scallops in individual service casseroles (5–6 oz/150–175 g per portion). Top each portion with 1 tbsp (15 mL) dry bread crumbs. Pour the butter sauce over the scallops and broil as in basic recipe.

Broiled Fish Fillets or Steaks with Garlic Butter

Use fillets or steaks of any lean, white fish. Place fish on sheet pans and prepare according to procedure for Broiled Scallops, using the bread crumbs.

Oysters Casino

PORTIONS: 12 PORTION: 3 OYSTERS (APPETIZER PORTION)

U.S.	METRIC	INGREDIENTS	PROCEDURE
36	36	Oysters	<ol style="list-style-type: none"> 1. Open oysters as shown in Figure 14.8. Discard top shell. 2. Place oysters on a sheet pan or in a shallow baking pan (see Note).
½ lb	225 g	Butter	<ol style="list-style-type: none"> 3. Place the butter in the bowl of a mixer and beat with the paddle attachment until soft and smooth. 4. Add the green pepper, pimiento, shallots, parsley, and lemon juice. Mix until evenly combined. Season to taste with salt and pepper. (Casino butter can be rolled in parchment, refrigerated or frozen, and sliced to order.) 5. Cook the bacon in the oven or on the griddle until about half cooked. Drain. 6. Cut each strip into 4 pieces. 7. Place about 2 tsp (10 mL) butter mixture on top of each oyster. 8. Top each oyster with a piece of bacon. 9. Run the oysters under the broiler until the bacon is brown and the oysters are hot. Do not overcook.
2 oz	60 g	Green bell pepper, chopped fine	
1 oz	30 g	Pimiento, chopped fine	
1 oz	30 g	Shallots, chopped fine	
¼ cup	60 mL	Chopped parsley	
1 fl oz	30 mL	Lemon juice	
to taste	to taste	Salt	
to taste	to taste	White pepper	
9 strips	9 strips	Bacon	
<p>Per serving: Calories, 610; Protein, 26 g; Fat, 51 g (75% cal.); Cholesterol, 230 mg; Carbohydrates, 12 g; Fiber, 0 g; Sodium, 860 mg.</p> <p>Note: Broiled or baked oysters and clams are often placed on beds of rock salt to hold them steady.</p>			

VARIATIONS

Clams Casino

Prepare as in basic recipe, using cherrystone or littleneck clams.



Oysters Casino

Sautéing and Pan-Frying

As in meat cookery, the exact distinction between sautéing and pan-frying fish is impossible to draw. For many purposes, the two terms are used interchangeably.

A classic method for sautéing fish is called *à la meunière* (mun yair). In this preparation, the product is dredged in flour and sautéed in clarified butter or oil. It is then plated and sprinkled with lemon juice and chopped parsley, and freshly prepared hot brown butter (beurre noisette) is poured over it. When the hot butter hits the lemon juice, it creates a froth. The fish should then be served at once.

Other sautéed fish preparations may call for Standard Breading Procedure (p. 152) or for dredging the fish with a product other than flour, such as cornmeal. Also, a variety of garnishes may be used.

The procedures and variations just described apply to most popular sautéed and pan-fried fish recipes. In general, because most types of fin fish are so delicate, especially if filleted, they do not lend themselves to a great many sautéing variations. Rather, variety is created with accompaniments, sauces, and garnishes. On the other hand, firm shellfish, like shrimp and scallops, are easy to sauté, and there is a greater variety of recipes for them.

Guidelines for Sautéing and Pan-Frying Fish and Shellfish

1. Lean fish are especially well suited to sautéing because the cooking method supplies fat the fish lack. Fat fish may also be sautéed, as long as you take care not to get it too greasy.
2. Sautéed fish is usually given a coating of flour, breading, or other starchy product before sautéing. This forms a crust that browns attractively, enhances the flavor, and helps hold the fish together and prevent sticking.
3. Fish may be soaked in milk briefly before dredging in flour. This helps the flour form a good crust.
4. Clarified butter and oil are the preferred fats for sautéing and pan-frying. Whole butter is likely to burn, unless the fish items are very small.
5. Use a minimum of fat. About $\frac{1}{8}$ inch (3 mm), or enough to cover the bottom of the pan, is enough.
6. Observe the guidelines for the basic sautéing procedure (p. 334). In particular, be sure the pan is hot before adding the fish to it. After the item has begun to cook, adjust the heat as necessary. Small items, such as shrimp and scallops, are sautéed over high heat. Larger items, such as whole fish or thick steaks, require lower heat to cook evenly.
7. Very large fish may be browned in fat and then finished in the oven, uncovered.
8. Brown the most attractive side—the presentation side—first. For fillets, this is usually the flesh side or the side against the bone, not the skin side.
9. Handle fish carefully during and after cooking to avoid breaking the fish or the crisp crust.
10. Sauté or fry to order and serve immediately.

Procedure for Cooking Fish à la Meunière

1. Collect all equipment and food supplies.
2. Heat a small amount of clarified butter in a sauté pan.
3. Season the fish and dredge in flour. Shake off excess.
4. Place the fish in the pan, presentation side down.
5. Sauté the fish, turning once with a spatula, until both sides are brown and the fish is just cooked through.
6. Remove the fish from the pan with a spatula and place on a serving plate, presentation side up.
7. Sprinkle the fish with lemon juice and chopped parsley.
8. Heat some raw butter in the sauté pan until it turns light brown. Pour it over the fish immediately.
9. Serve at once.



Fillets of Sole Meunière

PORTIONS: 10 PORTION SIZE: 4 OZ (125 G)

U.S.	METRIC	INGREDIENTS
20	20	Sole fillets, 2 oz (60 g) each
to taste	to taste	Salt
to taste	to taste	White pepper
3 oz	90 g	Flour
6 oz	175 g	Clarified butter or oil, or a mixture of butter and oil

PROCEDURE

1. Have all ingredients ready, but do not season and flour the fish until immediately before cooking.
2. Unless you are cooking to order, use as many sauté pans as necessary to hold all the fillets, or cook them in several batches. Place the sauté pans over medium heat so they will be ready as soon as the fish is floured.
3. Season the fillets with salt and pepper. Place the clarified butter in the hot pans to heat. Dredge the fish in flour and shake off excess. Place the fish in the pans flesh side (presentation side) down.
4. Sauté until lightly browned. Turn over with a spatula and brown the other side. Be careful not to break the fillets when turning.
5. Remove the fillets from the pan with a spatula, being careful not to break them. Plate the fish on hot dinner plates.
6. Sprinkle the fish with lemon juice and chopped parsley.
7. Heat the butter in small saucepan or sauté pan until it turns light brown (beurre noisette).
8. Pour the hot butter over the fish.
9. Quickly place a lemon slice on top of each fillet and serve immediately.

1 fl oz	30 mL	Lemon juice
¼ cup	60 mL	Chopped parsley
5 oz	150 g	Butter
20	20	Slices of peeled lemon

Per serving: Calories, 370; Protein, 20 g; Fat, 29 g (71% cal.); Cholesterol, 130 mg; Carbohydrates, 7 g; Fiber, 0 g; Sodium, 370 mg.

VARIATIONS

Other white fish fillets, as well as shellfish such as scallops and shrimp, may be cooked by the same procedure.

Placing the fish in milk before dredging in flour helps form an attractive, well-browned crust. However, the fish must be drained well before flouring, or the flour coating may be heavy and pasty.

Fillets of Fish Doré

Sauté the fish as in the basic recipe, but serve without the lemon juice, chopped parsley, and beurre noisette. Garnish the plate with lemon and parsley sprig. (*Doré* means “golden.”)

Trout Meunière

Prepare whole, drawn trout as in the basic recipe. Dip the fish in milk before dredging in flour to form a better crust.

Fish Sauté Amandine

Prepare as in the basic recipe. Brown sliced almonds in the butter used for garnishing. Omit garnish of lemon slices, and garnish plate with lemon wedges.

Fish Sauté Grenobloise

Prepare as in the basic recipe. Garnish the fish with capers and diced, peeled lemon sections in addition to the chopped parsley before pouring on the brown butter.

Sautéed Soft-Shell Crabs

Prepare as in the basic recipe. Serve 2 per portion. Chopped parsley and lemon slices may be omitted.



Scallops Meunière

Sautéed Scallops with Tomato, Garlic, and Parsley

PORTIONS: 10 PORTION SIZE: 4 OZ (125 G)

U.S.	METRIC	INGREDIENTS
2½ lb	1.25 kg	Bay or sea scallops
2 fl oz	60 mL	Olive oil
2 fl oz	60 mL	Clarified butter
2 tsp	10 mL	Finely chopped garlic
4 oz	125 g	Drained, chopped canned or fresh tomato
¼ cup	60 mL	Chopped parsley
to taste	to taste	Salt

Per serving: Calories, 160; Protein, 9 g; Fat, 13 g (73% cal.); Cholesterol, 35 mg; Carbohydrates, 2 g; Fiber, 0 g; Sodium, 310 mg.

VARIATIONS

Omitting the tomato makes a slightly different but equally good dish.

Sautéed Shrimp

Use peeled, deveined shrimp. Sauté as in basic recipe.

PROCEDURE

1. If you are using sea scallops and they are very large, cut them in halves or quarters. Dry the scallops with paper towels.
2. Heat the oil and butter in a large sauté pan until it is very hot.
3. Place the scallops in the sauté pan and sauté quickly. Shake the pan often to keep the scallops from sticking.
4. When the scallops are about half cooked, add the garlic. Continue to sauté until the scallops are lightly browned.
5. Add the tomato and parsley and sauté a few seconds, just enough to heat the tomato.
6. Add salt to taste and serve immediately.

Escalope of Salmon with Red Wine Sauce

PORTIONS: 12 PORTION SIZE: 4 OZ (120 G) SALMON, 1½ FL OZ (45 ML) SAUCE

U.S.	METRIC	INGREDIENTS
4 lb (approx.) as needed	2 kg (approx.) as needed	Salmon fillet (see Note)
18 fl oz	540 mL	Clarified butter
		Beurre Rouge for Fish (p. 194)

Per serving: Calories, 590; Protein, 36 g; Fat, 46 g (71% cal.); Cholesterol, 200 mg; Carbohydrates, 1 g; Fiber, 0 g; Sodium, 390 mg.

Note: The weight given for the salmon includes skin, which is discarded after the escalopes are cut. If you are using skinless fillets, the weight needed is less.

VARIATIONS

Escalope of Salmon with Herb Cream

In place of the beurre rouge, serve the fish with Herbed Cream Sauce (p. 205).

PROCEDURE

1. Following the procedure in **Figure 14.5**, cut twelve 4-oz (120 g) escalopes from the fillet.
2. Heat a thin film of oil over high heat in as many sauté pans as needed to hold the salmon.
3. Sauté the salmon escalopes about 1–2 minutes per side. Remove and drain briefly on paper towels to absorb excess butter.
4. Plate the salmon. Spoon 1½ fl oz (45 mL) of sauce around each escalope.



Escalope of Salmon with Red Wine Sauce

Crab Cakes with Roasted Pepper Rémoulade

PORTIONS: 16 PORTION SIZE: 4 OZ (125 G)

U.S.	METRIC	INGREDIENTS
3 lb	1.4 kg	Crabmeat
4 oz	125 g	Fresh bread crumbs
6 oz	175 g	Mayonnaise
4	4	Eggs, beaten
2 tsp	10 mL	Prepared mustard
2 tsp	10 mL	Worcestershire sauce
2 tsp	10 mL	Salt
½ tsp	2 mL	White pepper
3 tbsp	45 mL	Chopped parsley
8	8	Scallions, chopped fine
as needed	as needed	Clarified butter, for cooking
3 oz	90 g	Roasted red bell peppers, peeled, cored, and seeded (see Figure 16.13)
1 pt	500 mL	Rémoulade Sauce (p. 216)
16	16	Lemon wedges

Per serving: Calories, 440; Protein, 21 g; Fat, 36 g (72% cal.); Cholesterol, 145 mg; Carbohydrates, 7 g; Fiber, 0 g; Sodium, 1070 mg.

Note: This mixture has very little bread filler, so it may be somewhat difficult to handle. If desired, add more bread crumbs to make a firmer mixture that will pack more easily into cakes. The texture of the crabmeat may also affect the texture of the cakes and the quantity of bread crumbs needed.

PROCEDURE

1. Pick over the crabmeat to remove any bits of shell.
2. Mix together the bread crumbs, mayonnaise, eggs, mustard, Worcestershire sauce, salt, pepper, parsley, and scallions. Fold in the crabmeat.
3. Form by hand into round cakes. For each portion, allow 1 large cake, about 4 oz (125 g), or 2 small cakes, about 2 oz (60 g) each (see Note).
4. Pan-fry the cakes in butter until browned on both sides and cooked through.
5. Cut the roasted peppers into brunoise. Mix into the rémoulade.
6. Serve each crab cake with 1 fl oz (30 mL) sauce and 1 lemon wedge.

Cornmeal-Crusted Soft-Shell Crabs with Cornmeal Pancakes and Roasted Tomatoes

PORTIONS: 10 PORTION SIZE: 1 CRAB, 1 PANCAKE, 2 TOMATO HALVES

U.S.	METRIC	INGREDIENTS
10	10	Plum tomatoes
10	10	Pancakes (p. 827), made without sugar and with half white flour and half cornmeal
10	10	Soft-shell crabs
8 oz	250 mL	Milk
5 oz	150g	Cornmeal
4 fl oz	125 mL	Oil
6 oz	175 g	Butter
to taste	to taste	Salt
5 fl oz	150 mL	Rémoulade Sauce (p. 216)

Per serving: Calories, 420; Protein, 16 g; Fat, 27 g (57% cal.); Cholesterol, 120 mg; Carbohydrates, 30 g; Fiber, 2 g; Sodium, 500 mg.

PROCEDURE

1. Cut the tomatoes in half lengthwise. Carefully squeeze the tomatoes to remove most of the seeds. Place the tomatoes cut side down on an oiled sheet pan. Bake at 250°F (120°C) for 1½ hours, or until they are soft and shriveled but not browned.
2. Prepare the pancakes. Keep both the pancakes and the tomatoes warm.
3. Clean the crabs as shown in **Figure 14.17**.
4. Dip the crabs in milk. Drain, then dredge in cornmeal. Discard leftover milk.
5. Heat the oil and butter in enough sauté pans to hold the crabs in a single layer (or pan-fry in separate batches). Place the crabs in the pan upside down and cook over moderate heat until lightly browned. Salt lightly to taste while the crabs are cooking. Turn over and brown the other side. Remove from the pan and drain a few seconds on paper towels to remove excess fat.
6. For each portion, place 1 pancake in the center of a plate. Top with 2 tomato halves, cut side up. Top with crab. Place 1 tbsp (15 mL) rémoulade sauce on the plate beside the crab.

Peppered Haddock with Garlic Mashed Potatoes and Parsley Sauce

PORTIONS: 12 PORTION SIZE: 5 OZ (150 G) PLUS GARNISH

U.S.	METRIC	INGREDIENTS	PROCEDURE
10 fl oz	300 mL	Olive oil	<ol style="list-style-type: none"> 1. Prepare the sauce: Combine the oil, lemon juice, chopped parsley, and salt in a blender. Process until the parsley is puréed.
1 fl oz	30 mL	Lemon juice	
½ cup	125 mL	Chopped parsley	
½ tsp	2 mL	Salt	
3 lb 12 oz	1.8 kg	Haddock fillets, cut into 5-oz (150-g) portions	<ol style="list-style-type: none"> 2. Coat the fish fillets evenly with a light sprinkling of crushed peppercorns. Season with salt. 3. Heat the olive oil in as many sauté pans as necessary to hold the fish in a single layer. 4. Place the fish in the pans, presentation side down, and sauté over moderate heat until lightly browned and about half cooked. Turn over and finish the cooking. 5. Place a 3-oz (90-g) portion of potatoes in the center of each plate. Top with the fish fillet. Drizzle about 1 fl oz (30 mL) sauce in a circle around the fish.
2 tbsp	30 mL	Crushed black peppercorns	
1 tsp	5 mL	Salt	
2 fl oz	60 mL	Olive oil	
2 lb 4 oz	1.1 kg	Garlic Mashed Potatoes (p. 611)	

Per serving: Calories, 480; Protein, 28 g; Fat, 33 g (62% cal.); Cholesterol, 95 mg; Carbohydrates, 17 g; Fiber, 2 g; Sodium, 420 mg.

VARIATIONS

Other firm-fleshed white fish, such as cod, sea bass, striped bass, red snapper, or grouper, may be substituted.

Peppered Haddock with Purée of Flageolet Beans

Substitute Purée of Flageolet Beans with Garlic (p. 637) for the potatoes.



Peppered Haddock with Garlic Mashed Potatoes, Parsley Sauce, and Fried Parsley

Spicy Shrimp or Scallop Sauté

PORTIONS: 10 PORTION SIZE: 4 OZ (125 G)

U.S.	METRIC	INGREDIENTS
1 tsp	5 mL	Paprika
¼ tsp	1 mL	Cayenne
¼ tsp	1 mL	Black pepper
½ tsp	2 mL	White pepper
¼ tsp	1 mL	Dried thyme
¼ tsp	1 mL	Dried basil
¼ tsp	1 mL	Dried oregano
½ tsp	2 mL	Salt
2½ lb	1.25 kg	Peeled, deveined shrimp or scallops
6 oz	175 g	Onion, sliced
1	1	Garlic clove, chopped
as needed	as needed	Clarified butter

Per serving: Calories, 160; Protein, 18 g; Fat, 9 g (50% cal.); Cholesterol, 185 mg; Carbohydrates, 2 g; Fiber, 0 g; Sodium, 390 mg.

VARIATION

For spicy fish fillets, season fish well with the dry seasoning mix in the basic recipe. Then dredge them in flour and sauté as for meunière.

PROCEDURE

1. Mix together the spices, herbs, and salt.
2. If the shrimp or scallops are wet, dry them with paper towels. If you are using sea scallops and they are large, cut them into halves or quarters.
3. Toss the shrimp or scallops with the dry seasonings.
4. Sauté the onion and garlic in a little clarified butter until they are tender and only lightly browned. Remove them from the pan and set them aside.
5. Add a little more butter to the pan and sauté the seafood just until it is cooked.
6. Return the onion and garlic to the pan and toss to combine. Serve immediately, accompanied by white rice.



Spicy Shrimp Sauté; Steamed Rice; Sautéed Grated Zucchini

Shrimp and Cucumber in Thai Red Curry

PORTIONS: 12 PORTION SIZE: 6 OZ (180 G)

U.S.	METRIC	INGREDIENTS
2 fl oz	60 mL	Vegetable oil
2½ lb	1.2 kg	Shrimp, medium to large, peeled and deveined
12 oz	375 g	Cucumber, peeled, seeded, medium dice
18 fl oz	550 mL	Thai Red Curry Sauce (p. 210)

Per serving: Calories, 200; Protein, 17 g; Fat, 16 g (65% cal.); Cholesterol, 140 mg; Carbohydrates, 2 g; Fiber, 2 g; Sodium, 450 mg.

Note: This method of making a curry is designed for advance preparation and quick, last-minute cooking. A more traditional method is to make the sauce as an integral sauce. Stir-fry the shrimp, add curry paste (see sauce recipe, p. 210), and cook until aromatic. Add the coconut milk, other liquids, flavorings, and any other ingredients indicated in the sauce recipe, and finish cooking.

PROCEDURE

1. Heat the oil in a sauté pan or wok over high heat.
2. Add the shrimp and stir-fry until well seared.
3. Add the cucumber and stir-fry 1 minute.
4. Add the curry sauce. Cook a few minutes longer, or until the shrimp are completely cooked.
5. Serve with rice.



Shrimp and Cucumber in Thai Red Curry

Skate with Caper Butter

PORTIONS: 12 PORTION SIZE: 4 OZ (125 G)

U.S.	METRIC	INGREDIENTS
12	12	Skate fillets, 4 oz (125 g) each
to taste	to taste	Salt
to taste	to taste	White pepper
3 fl oz	90 mL	Vegetable oil
3 fl oz	90 mL	Clarified butter
as needed	as needed	Flour

1 oz	30 g	Shallots, chopped fine
6 fl oz	180 mL	White wine
1 fl oz	30 mL	Lemon juice
12 tbsp	180 mL	Capers, drained
12 oz	360 g	Butter, cut into small pieces
to taste	to taste	Salt

Per serving: Calories, 450; Protein, 2 g; Fat, 37 g (90% cal.); Cholesterol, 115 mg; Carbohydrates, 5 g; Fiber, 0 g; Sodium, 510 mg.

PROCEDURE

1. Season the fillets with salt and white pepper.
2. Heat the oil and clarified butter in a sauté pan over moderate heat.
3. Dredge the fillets in flour and shake off excess.
4. Sauté the fish, browning it lightly on both sides, until done.
5. Place the fillets on hot dinner plates.
6. Drain the butter and oil from the sauté pan, leaving a thin film on the bottom.
7. Add the shallots and sauté just until they are soft.
8. Add the wine. Reduce until about 1 fl oz (30 mL) remains.
9. Add the lemon juice and capers.
10. Whip in the raw butter as for making beurre blanc (p. 193).
11. Season the caper butter to taste with salt.
12. Pour the butter over the fish fillets.

VARIATION

For a different kind of caper butter, plate the sautéed skate and top each portion with 1 tbsp (15 mL) capers. Pour hot beurre noisette over the fish, using 1–2 tbsp (15–30 mL) butter per portion.

Pan-Fried Catfish with Shrimp Etouffée

PORTIONS: 12 PORTION SIZE: 4 OZ (125 G) CATFISH, 3½ OZ (100 G) ETOUFFÉE

U.S.	METRIC	INGREDIENTS
3 oz	90 g	Butter
1½ lb	750 g	Shrimp, small, peeled, and deveined
6 oz	180 g	Onion, chopped
3 oz	90 g	Green bell pepper, chopped
3 oz	90 g	Celery, chopped
2 oz	60 g	Scallion, sliced thin
2	2	Garlic cloves, chopped
3 tbsp	45 mL	Flour
12 fl oz	375 mL	Water or fish stock
¼ tsp	1 mL	Dried thyme
½ tsp	2 mL	Paprika
¼ tsp	1 mL	Cayenne
¼ tsp	1 mL	Black pepper
1 tbsp	15 mL	Worcestershire sauce
4 tbsp	60 mL	Chopped parsley
to taste	to taste	Salt

1½ tsp	7 mL	Salt
1½ tsp	7 mL	Paprika
¼ tsp	1 mL	Cayenne
½ tsp	2 mL	Dried thyme
¼ tsp	1 mL	Black pepper
¼ tsp	1 mL	White pepper
3 lb	1.4 kg	Catfish fillets
as needed	as needed	Clarified butter

Per serving: Calories, 270; Protein, 32 g; Fat, 13 g (44% cal.); Cholesterol, 165 mg; Carbohydrates, 5 g; Fiber, 1 g; Sodium, 560 mg.

PROCEDURE

1. Heat the butter in a sauté pan over moderate heat.
2. Add the shrimp. Sauté just until they turn pink.
3. Remove the shrimp from the pan with a slotted spoon, leaving the butter in the pan.
4. Add the onion, green pepper, celery, scallions, and garlic to the pan. Sauté until soft.
5. Stir in the flour to make a roux. Continue to cook until the roux is brown.
6. Stir in the water or stock. Bring to a simmer, stirring constantly, and simmer until thickened and no longer tasting of raw flour.
7. Add the shrimp, thyme, paprika, cayenne, pepper, and Worcestershire sauce. Simmer 3–4 minutes, or until the shrimp are cooked.
8. Stir in the parsley.
9. Add salt to taste.
10. Mix together the salt and spices.
11. Cut the catfish fillets into 4-oz (125-g) portions.
12. Sprinkle the fillets with the spice mixture to coat both sides lightly.
13. Sauté the catfish in clarified butter until lightly browned on both sides and cooked through.
14. To serve, portion the shrimp etouffée on hot dinner plates. Top with the catfish fillets.
15. Serve with rice.



Pan-Fried Catfish with Shrimp Etouffée

Deep-Frying

KEY POINTS TO REVIEW

- What are the steps in the basic procedure for sautéing fish à la meunière?
- What are the guidelines for success in sautéing and pan-frying fish?
- What kinds of fish and seafood items are most appropriate for deep-frying?
- Why is fish usually breaded or battered before being deep-fried?

Deep-frying is perhaps the most popular method of preparing fish in North America. While fried fish may not be the most subtle or refined preparation, it can be of very high quality if the fish is fresh and not overcooked, the frying fat is of good quality, and the item is served without delay after cooking.

Lean fish—either small whole fish or small portions such as fillets or sticks—and shellfish such as shrimp, clams, oysters, and scallops are best for deep-frying.

Fish to be fried is breaded or battered to protect it from the frying fat and to protect the frying fat from it. Also, the breading or batter provides a crisp, flavorful, and attractive coating.

Frozen breaded fish portions are widely used. They should be fried without thawing.

Fried fish is usually served with lemon and/or a cold sauce such as tartar, rémoulade, or cocktail sauce on the side.

Frying and breading procedures are discussed in detail in Chapter 7. There is no need to repeat them here, but you should review those sections if necessary. Also, the batter recipes on page 599 are suitable for fish as well as for vegetables.



Fried Breaded Fish Fillets

PORTIONS: 25 PORTION SIZE: 4 OZ (125 G)

U.S.	METRIC	INGREDIENTS	PROCEDURE
		Standard Breading Procedure (see Note):	
4 oz	125 g	Flour	1. Set up a breading station (see p. 153): Place the flour in one pan, the eggs beaten with milk in a shallow bowl, and the bread crumbs in another pan.
4	4	Whole eggs, beaten	
1 cup	250 mL	Milk	
1¼ lb	625 g	Dry bread crumbs	
25	25	4-oz (125-g) fillets of lean, white fish, such as haddock, perch, pike, bass, sole, or flounder	2. Season the fish lightly with salt and white pepper. 3. Bread the fish fillets by passing them through the flour, egg wash, and crumbs. Press the crumbs on firmly. (See p. 153 for detailed breading instructions.) 4. Fry the fillets until golden brown in deep fat heated to 350°F (175°C).
to taste	to taste	Salt	
to taste	to taste	White pepper	5. Drain and serve immediately. Garnish each portion with a parsley sprig and lemon wedge. Serve with 1 fl oz (25 mL) tartar sauce.
25	25	Parsley sprigs	
25	25	Lemon wedges	
25 fl oz	750 mL	Tartar sauce	

Per serving: Calories, 490; Protein, 25 g; Fat 36 g (66% cal.); Cholesterol, 115 mg; Carbohydrates, 16 g; Fiber, 1 g; Sodium, 430 mg.

Note: Quantities given for breading materials are only guidelines. You may need more or less, depending on the shapes of the fish pieces, the care used in breading, and other factors. In any case, you will need enough so even the last piece to be breaded can be coated easily and completely.

VARIATIONS

Breaded fish fillets may also be pan-fried in butter or oil (see previous section).

Fried Breaded Scallops

Prepare as in the basic recipe. Use wire baskets in the breading station to simplify the procedure, as explained on page 152.

Fried Breaded Shrimp

Peel, devein, and butterfly shrimp, as shown in **Figure 14.16**. Leave tails on. Bread and fry as in the basic recipe.

Fried Oysters or Clams

Prepare like scallops.

Fish and Chips

PORTIONS: 12 PORTION SIZE: 8 OZ (240 G) FISH, 6 OZ (180 G) FRENCH FRIES

U.S.	METRIC	INGREDIENTS
		Batter (see Note):
7½ oz	225 g	Flour
½ tsp	2 mL	Salt
¼ tsp	1 mL	White pepper
12 fl oz	360 mL	Beer
12	12	Cod fillets, 8 oz (240 g) each
as needed	as needed	Flour for dredging
4½ lb	2.2 kg	French Fries (p. 625)
24 fl oz	7200 mL	Rémoulade Sauce (p. 216) or Tartar Sauce (p. 216)

Per serving: Calories, 1040; Protein, 46 g; Fat 72 g (62% cal.); Cholesterol, 130 mg; Carbohydrates, 50 g; Fiber, 3 g; Sodium, 970 mg.

Note: The quantity of batter needed varies greatly, depending on the fish. Thin fillets need more batter per unit of weight of fish because there is more surface area per unit of weight.

VARIATIONS

Substitute club soda for the beer in the batter.

Instead of the cod, use another lean, white fish, such as haddock, flounder, halibut, sole, or snapper.

Fisherman's Platter

Instead of using only one type of fish, use a variety of fish and seafood. For example: two kinds of fish fillets plus squid rings and shrimp.

PROCEDURE

1. Mix together the flour, salt, and pepper in a bowl.
2. Gradually beat in the beer to make a smooth batter. This step must be done just before cooking, or the batter will lose its carbonation. The carbonation from the beer provides leavening.
3. Dredge the fillets in flour. Shake off excess.
4. One at a time, dip the fillets in the batter and then drop into a deep fryer heated to 350°F (175°C). Fry until golden.
5. Drain on absorbent paper.
6. Serve with French fries on plates or in paper-lined baskets. Serve each portion with 2 fl oz (60 mL) rémoulade or tartar sauce in a cup.



Fish and Chips

Cod Cakes

PORTIONS: 25 PORTION SIZE: 2 CAKES, 2½ OZ (75 G) EACH

U.S.	METRIC	INGREDIENTS
4 lb	1.8 kg	Cooked cod
4 lb	1.8 kg	Potato purée (p. 611)
3	3	Whole eggs
2	2	Egg yolks
to taste	to taste	Salt
to taste	to taste	White pepper
pinch	pinch	Ground ginger
Standard Breading Procedure:		
as needed	as needed	Flour
as needed	as needed	Egg wash
as needed	as needed	Bread crumbs
as desired	as desired	Tomato sauce <i>or</i> tartar sauce

Per serving: Calories, 280; Protein, 23 g; Fat, 6 g (19% cal.); Cholesterol, 110 mg; Carbohydrates, 33 g; Fiber, 2 g; Sodium, 360 mg.

PROCEDURE

1. Flake the fish until it is well shredded.
2. Combine with the potato, egg, and egg yolk. Mix well.
3. Season to taste with salt, pepper, and a little ground ginger.
4. Scale the mixture into 2½-oz (75-g) portions. Shape into round, slightly flattened cakes.
5. Pass the cakes through the Standard Breading Procedure (p. 153).
6. Deep-fry at 350°F (175°C) until golden brown.

7. Serve 2 cakes per portion. Accompany with tomato sauce or tartar sauce.

VARIATION

Salmon or Tuna Cakes

Prepare as in the basic recipe, using well-drained canned salmon or tuna.

If you have duchesse potato mixture on hand, simply combine equal parts fish and duchesse mixture. No additional eggs are needed, as the potatoes already contain eggs.



Salmon Cakes with Mixed Greens

Deep-Fried Calamari with Spicy Tomato Sauce and Aioli

PORTIONS: 12 PORTIONS SIZE: 6 OZ (175 G) SQUID, 2 FL OZ (60 ML) EACH SAUCE

U.S.	METRIC	INGREDIENTS
4½ lb	2.25 kg	Small cleaned squid (see Figure 14.12)
4 fl oz	125 mL	Lemon juice
1 lb	500 g	Flour
3 tbsp	45 mL	Salt

PROCEDURE

1. Slice the body sacs of the squid crosswise into rings. Leave the tentacle sections whole, or cut them in half if they are large.
2. Combine the squid with the lemon juice and marinate, refrigerated, 2–3 hours.
3. Mix the flour and salt.
4. Drain the squid and dry on clean towels. Immediately before cooking, toss the squid with the flour, then shake in a large strainer to remove excess flour.
5. Deep-fry at 350°F (175°C) just until lightly golden. Remove from the fryer and drain.
6. Heat the tomato sauce and season to taste with the hot pepper sauce.
7. Heap the fried squid in the center of the serving plates, accompanied by 2 fl oz (60 mL) of each of the sauces in small cups. If desired, top with a little deep-fried parsley.

1½ pt	750 mL	Italian Tomato Sauce for Pasta (p. 664)
to taste	to taste	Hot red pepper sauce
1½ pt	750 mL	Aioli I (p. 217) or Aioli II (p. 707)
as desired	as desired	Optional garnish: deep-fried parsley leaves

Per serving: Calories, 700; Protein, 30 g; Fat, 50 g (64% cal.); Cholesterol, 395 mg; Carbohydrates, 33 g; Fiber, 2 g; Sodium, 1710 mg.

VARIATION

For other versions of deep-fried calamari, bread the squid (see Standard Breading Procedure, p. 153) or dip in batter, using one of the batter recipes for Onion Rings (p. 599); the recipe for Beer Batter is recommended. Follow steps 6–8 in the onion ring recipe for battering and frying.



Deep-Fried Calamari with Spicy Tomato Sauce and Aioli

Shrimp and Vegetable Tempura

PORTIONS: 16 PORTION SIZE: 3 SHRIMP, PLUS VEGETABLES

U.S.	METRIC	INGREDIENTS	PROCEDURE
48	48	Large shrimp	<ol style="list-style-type: none"> 1. Peel the shrimp, leaving the tails attached. Devein and butterfly them. 2. Core and seed the peppers. Cut each one lengthwise in 8 wedges or strips. 3. Peel the sweet potatoes. Cut into slices about $\frac{1}{8}$ in. (4 mm) thick. 4. Clean the mushrooms and trim the bottoms of the stems.
4	4	Green bell peppers	
1 lb 4 oz	600 g	Sweet potatoes	
32	32	Small mushrooms (or halves or quarters of large mushrooms)	
1½ lb	750 g	Cake flour or other low-gluten flour	<ol style="list-style-type: none"> 5. Sift the flour into a mixing bowl. 6. Mix together the water and egg yolks. 7. Mix the liquid into the flour until just combined. Do not worry about a few lumps. The batter should be somewhat thinner than pancake batter.
1½ pt	750 mL	Water, ice cold	
6	6	Egg yolks	
1½ pt	750 mL	Dashi (p. 169)	<ol style="list-style-type: none"> 8. Make a dipping sauce by combining the dashi, soy sauce, and mirin.
5 fl oz	150 mL	Soy sauce	
3 fl oz	100 mL	Mirin (sweet rice wine)	
as needed	as needed	Flour for dredging	<ol style="list-style-type: none"> 9. Divide the shrimp and vegetables equally into 16 portions. Fry the vegetables first, then the shrimp, by dredging with flour, shaking off the excess, then dipping in the batter and dropping into clean frying fat at 350°F (175°C). Fry just until lightly golden. 10. Drain and serve at once. Tempura is traditionally served on a bamboo tray covered with a clean piece of absorbent paper. Accompany with about 2 fl oz (60 mL) dipping sauce in a shallow bowl. Put a small mound each of grated daikon and grated ginger on each serving tray. The diner mixes these to taste into the dipping sauce.
8 oz	250 g	Daikon (large white Japanese radish), grated	
3 tbsp	45 mL	Grated fresh ginger root	
<p>Per serving: Calories, 380; Protein, 11 g; Fat 12 g (28% cal.); Cholesterol, 115 mg; Carbohydrates, 56 g; Fiber, 3 g; Sodium, 560 mg.</p>			

TEMPURA

Tempura (TEM-poo-rah) is not a native Japanese dish but rather originated with the deep-fried dishes Portuguese traders and missionaries introduced to Japan in the sixteenth century. Japanese cooks transformed the dish by perfecting a particularly light, lacy batter and by serving the tempura with a dipping broth based on dashi (p. 169) and soy sauce and flavored with grated ginger and daikon radish.

Poaching and Simmering

Poaching is cooking in a liquid at very low heat. Fillets and other small portions are sometimes cooked in a small amount of liquid, usually fish fumet and/or wine, and served with a sauce made of the poaching liquid. This procedure is called *shallow poaching*, because the item is only partially submerged in the liquid. Whole fish and thick steaks may be cooked completely submerged in a seasoned liquid called *court bouillon*. The liquid is not used to make a sauce, and the fish may be served hot or cold. This procedure is called the *submersion method*. Because these are two distinct procedures, we discuss them separately.

The two methods are illustrated in their most basic form in the recipes on pages 503 and 504. In addition, this section contains recipes using a variety of techniques for preparing fish dishes by cooking in flavorful liquids.

The Submersion Method: Poaching and Simmering in Court Bouillon

Court bouillon (kooor bwee yohn) may be defined as water containing seasonings, herbs, and usually an acid, used for cooking fish. The name means “short broth” in French, so called because it is made quickly, unlike stocks.

In quantity food service, this method is perhaps used most often for cooking large whole fish to be decorated and served cold on a buffet. Slightly higher simmering temperatures are used for cooking crustaceans, such as lobster, crab, and shrimp.

The famous preparation called *truite au bleu* (blue trout) is made by poaching trout that are alive until cooking time. The fish must be alive and must not be washed in order for the fish to turn blue. Live fish have a protective slippery coating on the skin, and the blue color results from the vinegar in the court bouillon reacting with this coating.

Guidelines for Poaching Fish in Court Bouillon

1. Both fat and lean fish may be cooked by this method.
2. Seasoned liquid for cooking fish may be as simple as salted water. More often, however, it contains flavoring ingredients such as spices, herbs, and mirepoix, and acid ingredients such as lemon juice, vinegar, and white wine.
3. Cook flavoring ingredients in court bouillon to extract the flavors before cooking the fish.
4. Cooking temperature is 160° to 180°F (70° to 80°C), well below boiling. A temperature of 160°F (70°C) is sufficient to cook fish, and it reduces the likelihood of overcooking. Higher temperatures are harmful to the delicate texture and flavor of fish.
Lobsters, crabs, and shrimp may be cooked at a simmer because their textures are less fragile. The terms *boiled lobster* and *boiled fish* are often used but inaccurate. Lobster and fish should never be boiled.
5. Start shellfish, small fish, and portion cuts in hot liquid to preserve flavors. Start large fish in cold liquid to cook more evenly and to avoid sudden contractions that would split the skin and spoil the appearance.
6. Special fish poachers with racks are best for poaching. They allow the fish to be removed from the liquid without damage. If these utensils are not available, wrap the fish in cheesecloth so it can be lifted out easily, or tie the fish loosely to a board.
7. Serve poached fish with an appropriate sauce, such as hollandaise for hot fish and a mayonnaise-based sauce for cold fish. Mild vinaigrettes go well with both hot and cold poached fish.

Procedure for Poaching Fish in Court Bouillon

1. Collect all equipment and food supplies.
2. Prepare court bouillon.
3. Place the fish in a suitable pan with liquid to cover.
Start small fish and portions in simmering liquid.
Start shellfish in boiling liquid.
Start large fish in cold liquid.
4. Cook fish at below the simmer, 160° to 180°F (70° to 80°C). Lobsters, crabs, and shrimp may be cooked at a gentle simmer.
5. If fish is to be served hot, remove from liquid and serve immediately.
6. If fish is to be served cold, stop the cooking by adding ice to the liquid, and cool the fish in the court bouillon to retain moisture.

CUISSON

The basic meaning of the French word *cuisson* is “cooking.” If you order a steak in a restaurant in Paris and are asked how you would like the *cuisson*, you are being asked whether you would like the meat cooked rare, medium, or well done.

In the context of poaching or simmering foods, *cuisson* refers to the cooking liquid, which may be used as the base of a sauce. This term is commonly used in restaurant kitchens on both sides of the Atlantic.

Shallow Poaching

The procedure of shallow-poaching fish is based on one of the great dishes of classical cuisine: sole or other white fish poached in fumet and white wine. If well prepared, it can be one of the most exquisite dishes on the menu.

This method of preparation is best for lean, delicate white fish, such as sole, halibut, turbot, haddock, cod, pike, and perch. It is also used for salmon and trout. The fish is always served with a sauce made from the *cuisson*—that is, the poaching liquid.

The procedure and recipe given here are for fillets of sole au vin blanc (in white wine). This is the basic preparation, and most other classical poached fish recipes are variations on it. Many of the variations involve only different garnishes.

Because of the delicacy of flavors, this preparation requires good-quality fish and well-made stock, and the wine should have a good flavor. A cheap, bad-tasting wine will spoil the dish.

The basic classical procedure is detailed in this section. Using this procedure as a pattern, the technique of shallow poaching can also be used for other fish preparations, substituting other cooking liquids for the fumet, wine, velouté, and cream.

Procedure for Poaching Fish in Fumet and Wine

1. Collect all equipment and food supplies. Select a pan just large enough to hold the fish portions in a single layer. This will enable you to use a minimum amount of poaching liquid. Also, use a pan with low, sloping sides. This makes it easier to remove the fragile cooked fish from the pan.
2. Butter the bottom of the pan and sprinkle with chopped shallots.
3. Arrange the fish portions in the pan in a single layer. Season them lightly.
4. Add enough fish fumet and white wine to almost cover the fish. Use no more liquid than necessary so the flavor will be more concentrated and less reduction will be required later.
5. Cover the fish with a piece of buttered parchment or other paper and cover the pan with a lid. The paper holds in the steam to cook the top of the fish. It is sometimes omitted if the pan has a tight lid, but it does help the fish cook more evenly. (Some chefs like to cut a vent hole in the center of the parchment, but this is not necessary, because the steam can easily vent from around the edges.)
6. Bring the liquid just to a simmer and finish poaching in the oven at moderate heat. Thin fillets will cook in just a few minutes. Fish may be poached on top of the range, but the oven provides more even, gentle heat from both top and bottom.
7. Drain the liquid into a wide pan and keep the fish warm. After a few minutes of standing, more liquid will drain from the fish. Add this to the rest.
8. Reduce the *cuisson* over high heat to about one-fourth its volume.
9. Add fish velouté and heavy cream and bring to a boil. Adjust seasoning with salt, white pepper, and lemon juice.
10. Strain the sauce.
11. Arrange the fish on plates for service, coat with the sauce, and serve immediately.

Variations in Sauce Production

Using a prepared velouté, as in the standard method just given, makes the sauce production very quick, and the procedure can easily be used for cooking to order.

An alternative method may be used if no velouté is available or if a large quantity of fish is being poached for banquet service:

1. Use a larger quantity of fumet and wine for cooking the fish and reduce it by only about half, depending on the amount of sauce needed.
2. Thicken the liquid with roux or beurre manié and simmer until no raw starch taste remains.
3. Finish the preparation as in the basic method.

Another popular method uses no starch thickener. Instead, the reduced poaching liquid is lightly bound with heavy cream or raw butter.

- To bind the sauce with cream, add about 2 oz (60 mL) heavy cream per portion to the reduced cooking liquid and continue to reduce until the sauce is lightly thickened.
- To bind with butter, whip raw butter into the reduced cooking liquid as for monter au beurre (p. 179). Use about ½ oz (15 g) butter or more per portion.

A further variation is known as *à la nage*, which means “swimming.” To serve poached seafood *à la nage*, reduce the cooking liquid only slightly, season, and strain it carefully. If desired, enrich the liquid with a very small quantity of butter. Serve the seafood with the liquid in a soup plate or other plate deep enough to hold the juices.

The procedure of shallow poaching in wine and fumet can be adapted to other preparations. In place of the fumet and wine in step 4, substitute other liquids as directed in the recipe. To finish the sauce, reduce the cuisson and, instead of finishing the sauce with velouté and cream, finish it as directed in the individual recipe.

Glazing

Poached fish is sometimes glazed before serving. This is done as follows:

1. According to the particular recipe, combine the finished sauce with egg yolk, hollandaise sauce, and/or lightly whipped cream. Alternatively, combine the reduction of the cooking liquid with Mornay sauce instead of fish velouté.
2. Coat the fish with the sauce and run the plate or platter under the salamander or broiler for a few seconds, or until the sauce is golden brown.

Note: It's a good idea to test a little of the sauce under the salamander before coating the fish to make sure it will brown.

Ordinary Court Bouillon for Fish

YIELD: 1 GAL (4 L)

U.S.	METRIC	INGREDIENTS
1 gal	4 L	Water
8 fl oz	250 mL	White vinegar, wine vinegar, or lemon juice
8 oz	250 g	Onions, sliced
4 oz	125 g	Celery, sliced
4 oz	125 g	Carrots, sliced
2 oz	60 g	Salt
¼ tsp	2 mL	Peppercorns, crushed
1	1	Bay leaf
½ tsp	1 mL	Dried thyme
10–12	10–12	Parsley stems

Per 1 fl oz (29.57 mL): Calories, 0; Protein, 0 g; Fat, 0 g (0% cal.); Cholesterol, 0 mg; Carbohydrates, 0 g; Fiber, 0 g; Sodium, 170 mg.

PROCEDURE

1. Combine all ingredients (**Figure 15.1**) in a stockpot or saucepot and bring to boil.
2. Reduce heat and simmer 30 minutes.
3. Strain and cool.



Figure 15.1 Court bouillon ingredients

Court Bouillon with White Wine

YIELD: 1 GAL (4 L)

U.S.	METRIC	INGREDIENTS
2 qt	2 L	Water
2 qt	2 L	White wine
4 oz	125 g	Onions, sliced
4 oz	125 g	Celery, coarsely chopped
4 oz	125 g	Leeks, coarsely chopped
1	1	Bay leaf
½ tsp	2 mL	Peppercorns, crushed
½ tsp	2 mL	Dried thyme
10–12	10–12	Parsley stems
2	2	Whole cloves
1 oz	30 g	Salt

Per 1 ounce: Calories, 40; Protein, 0 g; Fat, 0 g (0% cal.); Cholesterol, 0 mg; Carbohydrates, 2 g; Fiber, 0 g; Sodium, 274 mg.

PROCEDURE

1. Combine all ingredients in a stock pot and bring to a boil.
2. Reduce heat and simmer about 20 minutes.
3. Strain and cool.



Poached Whole Fish

PORTIONS: 10 PORTION SIZE: 4 OZ (125 G)

U.S.	METRIC	INGREDIENTS
5 lb	2.5 kg	Drawn fish <i>or</i>
4 lb	2 kg	Dressed fish (1 large or 2 or more smaller fish; see Note)
3 qt or as needed	3 L or as needed	Court bouillon, cold

PROCEDURE

1. Place the clean dressed or drawn fish on the lightly oiled rack of a fish poacher. If a rack is unavailable, wrap the fish in cheesecloth or tie it loosely on a board so it can be lifted out when cooked.
2. Place the fish in the poaching pan and pour in enough court bouillon to cover the fish completely.
3. Set the pan over moderately low heat and slowly bring barely to a simmer.
4. Reduce heat to very low and cook the fish at below the simmering point until done. The fish will feel firm, not mushy, at its thickest part, and the backbone, as seen inside the cavity, will no longer be pink. Total cooking time will vary from 5 to 20 minutes, depending on the size of the fish and the exact cooking temperature. In general, plan on about 8–10 minutes for every inch of thickness at the thickest point.
5. For serving hot: Remove fish from liquid, drain well, and serve immediately with choice of sauce.
For serving cold: Add ice to the court bouillon to stop the cooking. Cool the fish rapidly in the liquid and refrigerate. Drain when chilled.

Suggested sauces:
Hollandaise
Mousseline
Beurre noisette
Herb vinaigrette

Per serving: Calories, 220; Protein, 47 g; Fat, 2 g (9% cal.); Cholesterol, 140 mg; Carbohydrates, 0 g; Fiber, 0 g; Sodium, 320 mg.

Note: For attractive presentations, such as for buffet work, fish is often poached with the head on. Suggested fish for poaching whole:

Haddock	Red snapper	Striped bass
Cod	Salmon	Trout

VARIATION

Poached Fish Steaks

Prepare as in basic recipe, except start with boiling court bouillon. Drain the cooked fish, remove skin and center bone, and serve immediately with selected sauce. Suggested fish steaks: cod, haddock, halibut, turbot, salmon.

“Boiled” Shellfish (Lobster, Crab, Shrimp)

Prepare as for fish steaks using salted water, court bouillon, or acidulated water (4 oz lemon juice and ½ oz salt per quart of water/125 mL lemon juice and 15 g salt per liter). Water may simmer when cooking shellfish.

Sole Vin Blanc (Poached Fillets of Sole in White Wine Sauce)

PORTIONS: 8 PORTION SIZE: 4 OZ (125 G) FISH, 2 FL OZ (60 ML) SAUCE

U.S. METRIC INGREDIENTS

16	16	Sole fillets, 2 oz (60 g) each
1 oz	30 g	Butter
1 oz	30 g	Shallots, fine dice
3½ fl oz	100 mL	White wine
7 fl oz or as needed	200 mL or as needed	Fish stock

PROCEDURE

1. Fold the fillets in half or roll them up, starting with the large end (see **Figure 15.2**). Be sure the skin side of the fillet is on the inside of the fold or the roll (called *paupiette*).
 2. Butter the inside of a shallow pan or pans just large enough to hold the fish in a single layer. Sprinkle with the shallots. Lay the fillets on top of the shallots in a single layer.
 3. Pour the wine into the pan and add enough stock to almost cover the fish.
 4. Butter a piece of parchment or waxed paper cut the same size as the pan. Cover the fish closely with it, buttered side down (**Figure 15.3**). Cover the pan.
 5. Set the pan on the range and bring just barely to a simmer. Do not boil.
 6. Place the pan in a hot oven (400°F/200°C) and cook the fish until it is just barely done, about 5 minutes.
 7. Drain the poaching liquid into a broad sauté pan. Keep the fish covered in a warm, not hot, place. If more liquid collects under the fish as it stands, add this to the rest.
-
8. Reduce the poaching liquid over high heat to about one-fourth its volume.
 9. Add the velouté and bring to a simmer. Reduce to about 10 fl oz (300 mL).
 10. Beat the egg yolk, then mix in the cream to make a liaison.
 11. Whip in a little of the hot velouté to temper the liaison. Stir the tempered liaison into the sauce.
 12. Swirl in the raw butter (*monter au beurre*). Season to taste with salt, pepper, and a few drops of lemon juice if necessary.
 13. To serve, place 2 fillets on a dinner plate and coat with 2 fl oz (60 mL) sauce.

1 pt	500 mL	Fish Velouté (p. 184)
1	1	Egg yolks
2½ fl oz	75 mL	Heavy cream
4 tsp	20 g	Butter
to taste	to taste	Salt
to taste	to taste	White pepper
as needed	as needed	Lemon juice

Per serving: Calories, 260; Protein, 25 g, Fat, 14 g (51% cal.); Cholesterol, 125 mg; Carbohydrates, 4 g; Fiber 0 g; Sodium, 190 mg.



Paupiettes of Sole Dugléré; Buttered Spinach; Steamed Potatoes

VARIATIONS

Any lean white fish may be poached using this recipe or any of the variations below. For example:

Halibut	Cod	Perch	Haddock
Turbot	Pike	Scallops	

For a sauce that is lower in fat, omit the liaison and the final monter au beurre. Finish the sauce with the desired amount of heavy cream, 6–12 fl oz (175–350 mL).

À la Carte Service, Fast Method: Poach fish as in the basic recipe. Plate the fish as soon as it is cooked. Coat it with a pre-prepared white wine sauce. The poaching liquid may be reused throughout the service period and then used to make velouté for the next day's sauce. Other sauces based on fish velouté or béchamel may be used instead of white sauce:

Bercy	Normandy	Nantua
Herb	Mushroom	Mornay

Glazed Poached Fish

Prepare as in the basic recipe. Immediately before serving, fold 1 pt (500 mL) hollandaise and 8 fl oz (250 mL) heavy cream, whipped, into the sauce. Coat the fish and brown it quickly under the salamander.

Poached Fish Bonne Femme

Add 1½ lb (700 g) sliced mushrooms to the shallots in the poaching pan. Poach as in the basic recipe. Omit egg yolks. Do not strain the sauce.

Poached Fish Dugléré

Add 1½ lb (400 g) tomato concassé (p. 551) and 4 tbsp (60 mL) chopped parsley to the pan when poaching the fish. Poach as in the basic recipe. Omit liaison, but stir 5 oz (150 g) raw butter into the sauce before serving. Do not strain.

Poached Fish Mornay

Strain the reduced poaching liquid (after step 8) and add a little of it to a thick Mornay Sauce for Glazing (p. 184), just enough to thin it to the desired consistency. Coat the fish with the sauce and brown under the salamander or broiler.

Note: Scallops are often prepared à la Mornay and served in scallop shells with a duchesse potato border. The dish is called *Coquille St Jacques Mornay*. (*St Jacques* is the French term for “scallop,” and *coquille* means “shell.”)

Poached Fish Florentine

Prepare like Poached Fish Mornay, but place the cooked fish on beds of cooked, buttered spinach before coating with sauce.

Sole Paupiettes with Seafood Mousseline

Before rolling, spread the fillets with a thin layer of seafood mousseline (p. 891).

Seafood à la Nage

Double the quantity of fish stock. Omit the velouté, liaison, and final butter. After poaching, reduce the cooking liquid only slightly. Season carefully and strain. Serve the seafood with the broth.

Figure 15.2 Rolling and folding sole fillets.



(a) To make paupiettes, or rolled fillets of sole, lay the fillets on the work surface skin side up. Starting at the large end, roll tightly. As the fish cooks, the connective tissues on the skin side shrink and keep the roll tight. If you roll the fillet skin side out, it unrolls as it cooks.



(b) If the fillets are to be poached flat or folded, first make a series of very shallow cuts in the skin side as shown. This helps keep the tissues from shrinking and deforming the fillet. Fold so the flesh side is out (skin side on the inside).



Figure 15.3 When shallow-poaching fish, cover the fish with a piece of buttered parchment. (Parchment has been folded back to show the fish.)

Pesce con Salsa Verde

PORTIONS: 16 PORTION SIZE: 1 PIECE OF FISH, PLUS 1½ OZ (45 ML) SAUCE

U.S.	METRIC	INGREDIENTS	PROCEDURE
		Court bouillon:	
4 oz	125 g	Onion, sliced	1. Combine the court bouillon ingredients in a pot. Simmer 15 minutes.
1 oz	30 g	Celery, chopped	
6–8	6–8	Parsley stems	
1	1	Bay leaf	
¼ tsp	1 mL	Fennel seeds	
1½ tsp	7 mL	Salt	
1 pt	500 mL	White wine	
3 qt	3 L	Water	
		Salsa verde:	2. Soak the bread in the vinegar 15 minutes, then squeeze it out.
3 slices	3 slices	White bread, crusts removed	3. Combine the parsley, garlic, capers, and anchovies on a cutting board and chop them very well.
4 oz	125 g	Wine vinegar	4. Mash the egg yolks and the bread pulp together in a bowl. Add the chopped parsley mixture and mix until well combined.
1½ oz	50 g	Parsley, leaves only	5. Very slowly beat in the olive oil as though you were making mayonnaise. When all the oil is added, the sauce should have a creamy texture, not as thick as mayonnaise.
1	1	Garlic clove	6. Season to taste with salt and pepper.
3 tbsp	45 mL	Capers, drained	
4	4	Anchovy fillets	
3	3	Hard-cooked egg yolks	
1 pt	500 mL	Olive oil	
to taste	to taste	Salt	
to taste	to taste	Pepper	
16	16	Fish steaks, fillets, or small whole fish	7. Poach the fish in the court bouillon.
			8. Drain well. Top each portion with 1½ oz (45 mL) sauce and serve immediately.

Per serving: Calories, 510; Protein, 20 g; Fat, 45 g (81% cal.); Cholesterol, 100 mg; Carbohydrates, 4 g; Fiber, 0 g; Sodium, 340 mg.

Note: Some of the fish that can be used for this recipe are halibut, sea bass, striped bass, red snapper, bluefish, and porgy.

Scallops and Shrimp à la Nage

PORTIONS: 12 PORTION SIZE: 8 OZ (240 G)

U.S.	METRIC	INGREDIENTS	PROCEDURE
9 oz	270 g	Carrots, trimmed and peeled	1. Cut the carrots, leeks, and celery into julienne. 2. Sweat the vegetables in butter for a few minutes. 3. Add the court bouillon and simmer until the vegetables are cooked but still slightly crisp. Remove them from the court bouillon with a slotted spoon.
9 oz	270 g	Leeks, trimmed and cleaned	
6 oz	180 g	Celery, trimmed	
1½ oz	45 g	Butter	4. Return the court bouillon to a simmer. Add the shrimp and scallops. Poach them gently until they are just cooked, about 5 minutes. 5. Remove the seafood from the court bouillon with a slotted spoon and keep warm. 6. Bring the court bouillon to a boil and reduce by one-third. 7. Season and strain through cheesecloth or a fine chinois.
3 pt	1.5 L	Court Bouillon with White Wine (p. 502), strained	
1 lb 8 oz	720 g	Shrimp, peeled and deveined	
1 lb 8 oz	720 g	Scallops	8. Divide the shrimp, scallops, and vegetables among broad soup plates or other appropriate dishes for service. 9. Pour the hot court bouillon (reheated if necessary) over them. Sprinkle with chives and serve immediately.
to taste	to taste	Salt	
2 tbsp	30 mL	Chives, chopped	

Per serving: Calories, 220; Protein, 20 g; Fat, 4 g (16% cal.); Cholesterol, 115 mg; Carbohydrates, 11 g; Fiber, 1 g; Sodium, 740 mg.

VARIATIONS

A small amount of crème fraîche or herb butter may be stirred into the broth after it is reduced in step 6.

Salmon à la Nage

Omit the shrimp and scallops. For each portion, use one boneless, skinless salmon fillet, 4–5 oz (125–150 g).



Scallops and Shrimp à la Nage

Zuppa di Vongole

PORTIONS: 16

U.S.	METRIC	INGREDIENTS
15 lb	7 kg	Small clams, such as littlenecks
1 pt	500 mL	Water
<hr/>		
6 fl oz	175 mL	Olive oil
5 oz	150 g	Onion, small dice
3–5	3–5	Garlic cloves, chopped
6 tbsp	90 mL	Chopped parsley
12 fl oz	350 mL	White wine
1½ lb	700 g	Canned plum tomatoes, with juice, coarsely chopped

Per serving: Calories, 680; Protein, 93 g; Fat, 18 g (25% cal.); Cholesterol, 240 mg; Carbohydrates, 22 g; Fiber, 1 g; Sodium, 470 mg.

PROCEDURE

1. Scrub the clams under cold water to remove sand and grit from the shells.
2. Put the clams and water in a heavy covered pot and heat gently, just until the clams open. Set the clams aside. Strain and reserve the liquid.
3. Depending on how you wish to serve them, you can leave the clams in the shell or shell all but 4–6 of them per portion to use as garnish.
4. Heat the olive oil in a large pot. Sauté the onion until soft but not brown.
5. Add the garlic and cook another minute.
6. Add the parsley and the wine and boil for 1 minute.
7. Add the tomatoes and the reserved clam juice. Simmer 5 minutes.
8. Taste for seasoning and adjust if necessary.
9. Add the clams and reheat them gently. Do not overcook, or the clams will be tough.
10. Serve with plenty of crusty bread for dipping in the broth.

VARIATIONS

Zuppa di Cozze

Substitute mussels for the clams.

Zuppa di Frutti di Mare

Use a mixture of clams, mussels, squid (cut up), and shrimp (shelled). Keep all the items separate. Cook the clams and mussels as in the basic recipe. Add the squid at the same time as the tomatoes and broth. Simmer slowly, covered, until tender. Add the shrimp and cook just 1 minute before adding the clams and mussels.

Zuppa di Pesce

Use a mixture of shellfish and fin fish, as desired. Add each type of fish just long enough before the end of cooking so it cooks through without overcooking.



Zuppa di Vongole

Steaming and Mixed Cooking Techniques

The recipes in this section are placed here because they are difficult to classify as one of the basic cooking methods, although they are all based on moist-heat methods. Most of the recipes share two characteristics:

1. The item cooks in its own juices and, usually, a small amount of added liquid.
2. The item is served with its flavorful cooking liquid.

In some cases, enough liquid is added to barely cover, and the item simmers. In other cases, little liquid is added and the item cooks in the steam trapped by the pot lid.

The French term *étuver* (ay too vay) is used for this kind of procedure, in which the item cooks slowly in very little liquid. The word is usually translated as “stew,” but this may be misleading. More precisely, it means “to cook or steam in its own juices” or “to sweat.”

Note that all the procedure variations in this section are moist-heat cooking methods, but that the items are not submerged in liquid but rather steamed in an enclosed container. For this reason, simple steaming procedures are also discussed here.

In addition, this section includes two traditional recipes for dishes made with cooked seafood.

Finally, this section also contains a recipe for fish cooked *sous vide*. It is essential that you read the discussion of *sous vide* cooking, and especially the safety precautions, on pages 77–79 before you try this recipe.

Variations

Note the following three variations represented by the recipes in this section.

1. The product is cooked for a few minutes in fat over low heat, along with mirepoix or onion, to begin extracting juices. A little liquid is then added, the pot is covered, and the item is cooked. Example: Fisherman’s Stew (p. 515).
2. The product is sautéed over high heat. Then other ingredients and liquids are added and the item is cooked, covered, over low heat. Example: Lobster à l’Americaine (p. 511).
3. The product is simply placed in a pot with liquids and flavoring ingredients. The pot is covered, and the item is steamed or simmered. Example: Moules Marinière (p. 512).

Cooking en Papillote

An unusual version of the third variation above is called cooking *en papillote* (on poppy-yote), or in paper. The fish item, plus flavoring ingredients and sauce, is tightly enclosed in a piece of parchment so steam cannot escape. When the paper package is heated, the item steams in its own moisture. All the juices, flavors, and aromas are held inside the paper, which is not opened until it is placed before the customer.

Sometimes a starch-thickened sauce is used in cooking fish *en papillote*. In this case, the fish is usually precooked (poached) so it will not exude juices that would dilute and spoil the sauce. The problem with this method is that the fish is often overcooked by the time it reaches the customer.

Stovetop Steaming

The simplest method of steaming is to place the item on a rack above simmering liquid, cover the pan, and steam until done. Because it does not come in contact with seasoned liquid or fat during cooking, steamed seafood is usually delicate in flavor, even more so than submersion-poached seafood. For this reason, this method is usually used when the cook wants to emphasize the pure, natural taste of the best-quality seafood.

Three methods are available to season and flavor steamed seafood:

1. Apply salt and other seasonings directly to the item.
2. Season the steaming liquid with aromatic herbs and other ingredients. The steam rising from the liquid carries a little of the aroma to the fish. This method gives only the subtlest and most delicate flavors to fish and is most effectively used with mild-tasting seafood.
3. Serve the seafood with an appropriate sauce. Accompaniments as simple as melted butter and lemon wedges are classic accompaniments to steamed seafood.

Compartment Steaming

Several precautions should be observed if you cook fish and shellfish in a compartment steamer.

1. Watch the cooking time carefully. Fish cooks quickly, especially in the high heat of a steamer, and is easily overcooked.
2. Avoid pressure-steaming fish and shellfish, if possible. The high temperatures toughen fish protein very quickly. Lobster tails and similar items can become rubbery.

Procedure for Steaming Seafood

1. Collect all equipment and food supplies. Select a pan large enough to hold the seafood and a rack that will hold the seafood above the simmering liquid.
2. Prepare the fish or seafood items for cooking. Trim and portion as necessary. Season as desired.
3. Pour water or other cooking liquid into the pan. There should be enough to last the entire cooking period without going dry, but not so much that it comes in contact with the seafood. Add aromatics and seasonings as desired. Bring to a boil.
4. Place the seafood on the rack and set above the liquid. Cover the pan and steam until done.
5. Remove the seafood from the rack. Serve with desired sauce and/or accompaniments.

KEY POINTS TO REVIEW

- What are the steps in the basic procedure for poaching fish in court bouillon (submersion poaching)? Describe guidelines for success in poaching fish in court bouillon.
- What are the steps in the basic procedure for shallow-poaching fish in wine and fumet? Describe guidelines for success in shallow-poaching fish.
- What are some common variations in sauce production for shallow-poached fish?
- What tools and procedures are used for steaming fish? How is fish cooked en papillote?

Lobster à l'Americaine

PORTIONS: 2 PORTION SIZE: ½ LOBSTER

U.S.	METRIC	INGREDIENTS
1	1	Live lobster, about 1½ (700 g)
1 oz	30 g	Butter, softened

2 fl oz	60 mL	Oil
1 tbsp	15 mL	Finely chopped shallot
½ tsp	2 mL	Finely chopped garlic
2 fl oz	60 mL	Brandy
6 fl oz	200 mL	White wine
4 fl oz	125 mL	Fish stock
4 oz	125 g	Tomato concassé (p. 551) <i>or</i>
2 oz	60 g	Tomato purée
1 tbsp	15 mL	Chopped parsley
¼ tsp	1 mL	Dried tarragon
pinch	pinch	Cayenne

Per serving: Calories, 340; Protein, 7 g; Fat, 26 g (67% cal); Cholesterol, 50 mg; Carbohydrates, 5 g; Fiber, 1 g; Sodium, 230 mg.

VARIATIONS

Lobster Newburg

(*Note:* See p. 514 for Seafood Newburg using cooked shellfish.) Prepare through step 4. Omit remaining ingredients. Instead, add 1 tbsp (15 mL) brandy, 3 tbsp (45 mL) sherry or Marsala or Madeira wine, and 3 fl oz (100 mL) fish stock. Cover and simmer as in basic recipe. Remove lobster meat from shells and discard shells. Reduce cooking liquid by half and add 1 cup (250 mL) heavy cream or light cream sauce. Reduce the sauce slightly and finish by adding the mixture of butter, tomalley, and coral (step 10 of basic recipe). If desired, flavor with more sherry. Pour sauce over the lobster meat.

Shrimp à l'Americaine or Shrimp Newburg

Shrimp may be cooked using the main recipe or the variation. They should be shelled before combining with the finished sauce.

PROCEDURE

1. Cut up the lobster as shown in **Figure 14.14**.
2. Remove the tomalley (liver) and coral (if any). Mash them in a small bowl with the soft butter.
3. Heat the oil in a sauté pan and add the lobster pieces. Sauté over high heat until the shells turn red.
4. Drain off the oil by tilting the pan and holding the lobster in with the pan lid.
5. Add the shallot and garlic to the pan. Sauté for a few seconds.
6. Remove from the heat (to avoid burning yourself if the brandy flares up) and add the brandy. Return to the heat and add the wine, fish stock, tomato, parsley, tarragon, and cayenne.
7. Cover the pan and simmer until the lobster is cooked, about 10–15 minutes.
8. Remove the lobster from the cooking liquid and place it on a serving platter or in broad soup plates for service. The meat may be left in the shell or removed from the shell, as desired.
9. Reduce the cooking liquid over high heat to about 6 oz (175 mL).
10. Remove from the heat and stir in the mixture of butter, tomalley, and coral from step 2. Heat the sauce gently for a minute, but do not boil or it will curdle. Adjust the seasoning.
11. Strain the sauce and pour it over the lobster. Serve immediately.

Moules Marinière (Steamed Mussels)

PORTIONS: 10 PORTION SIZE: APPROX. 12 OZ (360 G)

U.S.	METRIC	INGREDIENTS
7 lb	3.2 kg	Mussels, in shells
3 oz	90 g	Shallots or onions, chopped fine
6	6	Parsley stems
¼ tsp	1 mL	Pepper
1 cup	250 mL	White wine
<hr/>		
¼ cup	60 mL	Chopped parsley
3 oz	90 g	Butter
to taste	to taste	Salt
to taste	to taste	Lemon juice

Per serving: Calories, 220; Protein, 20 g; Fat, 11 g (44% cal.); Cholesterol, 65 mg; Carbohydrates, 8 g; Fiber, 0 g; Sodium, 540 mg.

PROCEDURE

1. Scrub the mussels well with a stiff brush and remove the beards. Clean them well by soaking them according to the procedure given in Chapter 14.
2. Place the mussels in a stockpot or large saucepot. Add the shallots or onions, parsley stems, pepper, and wine.
3. Cover the pot and set it over moderately high heat. Cook until the mussels open, about 5 minutes.
4. Drain the mussels and strain the liquid through cheesecloth into a broad saucepan. Bring to a boil.
5. Add the parsley and butter. Swirl the liquid in the pan until the butter is melted. Season to taste with salt and a few drops of lemon juice.
6. For service, remove the top shells of the mussels (or leave them on, if desired). Place the mussels in broad soup plates and pour the sauce over them.

VARIATION

Steamed Mussels (without wine)

Substitute water for the wine and add 2 fl oz (60 mL) lemon juice. Increase the onion or shallot to 6 oz (175 g) and add 3 oz (90 g) sliced celery.

Mussels in Cream

Prepare the basic recipe. Reduce the cooking liquid by half and add 1 cup (250 mL) heavy cream or a liaison of 2 egg yolks and 1 cup (250 mL) heavy cream.



Moules Marinière

Mackerel en Papillote

PORTIONS: 1 PORTION SIZE: 4 OZ (125 G)

U. S.	METRIC	INGREDIENTS
1	1	Mackerel fillet, 4 oz (125 g) (see Note)
2 tsp	10 mL	Melted butter
to taste	to taste	Salt
to taste	to taste	White pepper
2 tsp	10 mL	Chopped parsley
pinch	pinch	Dried marjoram
1 tsp	5 mL	Very finely chopped shallots
2	2	Thin lemon slices

Per serving: Calories, 290; Protein, 20 g; Fat, 23 g (71% cal.); Cholesterol, 85 mg; Carbohydrates, 1 g; Fiber, 0 g; Sodium, 150 mg.

Note: Pompano or bluefish may be used.

VARIATION

Instead of the parsley, shallots, and lemon slices, top fillets with a thin layer of Duxelles (p. 577).

PROCEDURE

1. Cut out a piece of parchment in a heart shape, as shown in **Figure 15.4**. (Foil may be used instead of parchment.) The piece must be big enough to hold the fish and still have room for crimping the edges. Oil the parchment and place on the workbench oiled side down. (If using foil, place it oiled side up.)
2. Place the fillet on one side of the heart. Brush with melted butter and sprinkle with salt, pepper, parsley, marjoram, and chopped shallot. Lay the lemon slices on top.
3. Fold and crimp the parchment, as shown in the illustration, to enclose the fish tightly.
4. Place the folded package in a sauté pan or, if several orders are being done at once, on a sheet pan. Set on the range to start the cooking.
5. As soon as the paper begins to puff, place the pan in a hot oven (450°F/230°C). Bake until the parchment is puffed and browned, 5–8 minutes. (If the paper doesn't brown, you may run it under the broiler for a second.)
6. Serve immediately. The parchment should be cut open in front of the customer.

Figure 15.4 Preparing foods en papillote.



(a) Cut out a heart-shaped piece of parchment by folding a parchment sheet in half and cutting half a heart from the folded side. Oil or butter the parchment and place on the work surface, oiled side down.



(b) Place the fish fillet or other item plus any sauce, topping, or seasoning, on one side of the heart.



(c) Fold over the other half of the heart. Starting at the top of the fold, make a small crimp in the edges as shown.



(d) Continue crimping around the edge. Each crimp holds the previous one in place.



(e) When you reach the bottom of the heart, fold the point under to hold it in place. The papillote is now ready for cooking.

Steamed Sea Bass with Garlic and Ginger

PORTIONS: 10 PORTION SIZE: 5–6 OZ (150–180 G)

U.S.	METRIC	INGREDIENTS
10	10	Sea bass fillets, skin on, 5–6 oz (150–180 g) each
10	10	Scallions, trimmed, halved lengthwise
10 thin slices	10 thin slices	Fresh ginger root, peeled
4–5	4–5	Garlic cloves

PROCEDURE

1. With the point of a sharp knife, lightly score the skin of the sea bass, making 3 or 4 diagonal cuts across the fillets.
2. Arrange the scallion halves on the rack of a steamer.
3. Place the fillets, skin side up, on top of the scallions.
4. Cut the ginger slices into thin shreds.
5. Cut the garlic cloves into paper-thin slices.
6. Scatter the ginger and garlic on top of the fillets.
7. Pour water into the bottom of a steamer and bring to a boil.
8. Place the steamer rack holding the fish in the steamer, cover, and steam just until the fish is done, about 4–8 minutes, depending on the thickness of the fish.

5	5	Scallions, sliced thin
5 fl oz	150 mL	Soy sauce
5 fl oz	150 mL	Peanut oil

Per serving: Calories, 280; Protein, 29 g; Fat, 17 g (54% cal.); Cholesterol, 60 mg; Carbohydrates, 4 g; Fiber, 1 g; Sodium, 1130 mg.

VARIATION

Instead of finishing with soy sauce and hot oil, serve with Ponzu Sauce (p. 212) or Oriental Vinaigrette (p. 704).

9. Remove the fish and the scallions from the steamer. Discard the scallion halves.
10. Place the fillets on hot plates.
11. Sprinkle the tops of the fillets with the scallion slices.
12. Pour 1 tbsp (15 mL) soy sauce over each portion.
13. Heat the peanut oil until it is very hot, almost smoking.
14. Pour 1 tbsp (15 mL) oil over each portion.
15. Serve immediately.

Seafood Newburg

PORTIONS: 25 PORTION SIZE: 7 OZ (200 G)

U.S.	METRIC	INGREDIENTS
2½ lb	1.2 kg	Cooked sea scallops
2½ lb	1.2 kg	Cooked crabmeat
1½ lb	600 g	Cooked, peeled shrimp
4 oz	125 g	Butter
2½ tsp	12 mL	Paprika
8 fl oz	250 mL	Sherry
2½ qt	2.5 mL	Cream sauce, hot
to taste	to taste	Salt
to taste	to taste	White pepper

Per serving: Calories, 330; Protein, 26 g; Fat, 19 g (53% cal.); Cholesterol, 145 mg; Carbohydrates, 11 g; Fiber, 0 g; Sodium, 550 mg.

VARIATION

Different proportions of seafood may be used. Lobster meat may also be included.

Seafood Curry

Omit paprika and sherry. Substitute curry sauce (made with fish velouté) for the cream sauce. Garnish with toasted, sliced almonds, if desired.

PROCEDURE

1. If the sea scallops are large, cut them in halves or quarters.
2. Pick over the crabmeat to make sure it contains no pieces of shell. If the pieces of meat are large, cut them into ½-in. (1-cm) dice.
3. Cut the shrimp in half lengthwise.
4. Heat the butter in a large saucepan or sauté pan. Add the paprika and the seafood. Sauté over moderate heat until heated through and coated lightly with butter.
5. Add the sherry and simmer for a minute.
6. Add the cream sauce and bring to a simmer. Season to taste with salt and white pepper.
7. Serve with rice or in patty shells.

Fisherman's Stew

PORTIONS: 10 PORTION SIZE: SEE STEP 9

U.S.	METRIC	INGREDIENTS	PROCEDURE
2 lb	900 g	Fish steaks or fillets (see Note for suggested fish)	1. Cut the fish into 3-oz (90-g) serving pieces.
10	10	Clams, in shell	2. Scrub the clams and mussels well.
20	20	Mussels, in shell (or 10 more clams)	3. Cut the lobster tails in half lengthwise with a heavy chef's knife. Remove the intestinal vein.
5	5	Lobster tails, small (or 10 large shrimp)	
4 fl oz	125 mL	Olive oil	4. Heat the oil in a heavy saucepot or large straight-sided sauté pan.
8 oz	250 g	Onions, sliced	5. Add the onions, leeks, garlic, and fennel seed. Sweat them in the oil for a few minutes.
8 oz	250 g	Leeks, cut julienne	6. Add the pieces of fish and the lobster tails (or shrimp). Cover and cook over low heat for a few minutes to begin extracting juice from the fish.
2 tsp	10 mL	Chopped garlic	7. Remove the cover and add the clams and mussels.
¼ tsp	1 mL	Fennel seed	8. Add the tomato, fish stock, wine, bay leaves, parsley, thyme, salt, and pepper. Cover and bring to a boil. Reduce heat and simmer about 15 minutes, or until the clams and mussels are open.
12 oz	350 g	Tomato concassé or drained, chopped canned tomato	
2 qt	2 L	Fish stock	
4 fl oz	100 mL	White wine (optional but recommended)	
2	2	Bay leaves	
2 tbsp	30 mL	Chopped parsley	
¼ tsp	1 mL	Dried thyme	
2 tsp	10 mL	Salt	
¼ tsp	1 mL	Pepper	
20–30	20–30	French bread slices, dry or toasted	9. To serve, place 2 or 3 thin slices of French bread in the bottoms of soup plates. For each portion, place 1 piece of fish, 1 clam, 2 mussels, and ½ lobster tail in each plate. Ladle 8 fl oz (250 mL) broth over the fish.

Per serving: Calories, 470; Protein, 32 g; Fat, 26 g (51% cal.); Cholesterol, 90 mg; Carbohydrates, 25 g; Fiber, 2 g; Sodium, 910 mg.

Note: Any firm fish may be used, such as halibut, cod, haddock, sea bass or striped bass, red snapper, or mackerel. Avoid delicate fish like flounder or sole, which break up easily during cooking.

If desired, reduce or eliminate shellfish from the recipe and increase the quantity of fish.

Seafood Casserole au Gratin

PORTIONS: 25 PORTION SIZE 6 OZ (175 G)

U.S.	METRIC	INGREDIENTS
3¾ lb	1.7 kg	Cooked, flaked cod or other firm, white fish
2½ lb	1.1 kg	Cooked crabmeat, shrimp, scallops, or lobster meat, or a mixture of any of these
4 oz	125 g	Butter
2 qt	2 L	Mornay sauce, hot
4 oz	125 g	Parmesan cheese, grated

Per serving: Calories, 330; Protein, 33 g; Fat, 18 g (51% cal); Cholesterol, 120 mg; Carbohydrates, 6 g; Fiber, 0 g; Sodium, 520 mg.

PROCEDURE

1. Pick over the fish and shellfish to make sure it contains no bones or pieces of shell.
2. Heat the butter in a wide saucepan or straight-sided sauté pan. Add the fish and shellfish. Sauté lightly over moderate heat until the fish is heated through and coated with butter.
3. Add the Mornay sauce and bring just to a simmer. Taste and adjust seasonings.
4. Ladle 6-oz (175-g) portions into individual service casseroles. Sprinkle with parmesan cheese.
5. Heat under the broiler at low heat until the tops are lightly browned.

VARIATIONS

Other combinations of seafood may be used. If desired, use all fish or all shellfish.

Other sauces may be used instead of Mornay, including

Cream sauce

White wine sauce

Cheddar cheese sauce

Mushroom sauce (made from fish velouté)

Nantua sauce

Salmon or Tuna Casserole

Use drained, canned salmon or tuna, and use cream sauce, cheddar cheese sauce, or mushroom sauce (made with fish velouté) instead of Mornay sauce. Combine the parmesan cheese with an equal quantity of buttered bread crumbs before topping. If desired, prepare in a baking pan instead of individual casseroles.

Sea Bass Sous Vide with Asian Sweet-and-Sour Sauce

PORTIONS: 4 PORTION SIZE: 1 FISH FILLET, 6 OZ (180 G)

U.S.	METRIC	INGREDIENTS
1 oz	30 g	Fresh ginger root
as needed	as needed	Water
4	4	Sea bass fillets, skin on, 6 oz each
to taste	to taste	Salt
2 fl oz	60 mL	Oil
6 fl oz	180 mL	Asian Sweet-and-Sour Sauce (p. 212)
1 fl oz	30 mL	Basil Oil (p. 216), if possible made with Thai basil
as needed	as needed	Thai basil or cilantro leaves

Per serving: Calories, 480; Protein, 33 g; Fat, 28 g (53% cal.); Cholesterol, 75 mg; Carbohydrates, 22 g; Fiber, 2 g; Sodium, 125 mg.

PROCEDURE

1. Review the guidelines for safe sous vide cooking on pages 78–79.
2. Peel and grate the fresh ginger. Gather the grated ginger in a small square of cheesecloth and squeeze out the juice into a small ramekin. Discard the solids. Dilute the juice with approximately 3 times its volume of water.
3. Brush the skin side of the fillets lightly with the ginger juice.
4. Sprinkle both sides of the fillets lightly with salt.
5. Vacuum-pack each fillet in a plastic bag.
6. Cook at 140°F (60°C) for 12 minutes in a thermal bath (see p. 77).
7. Remove the fillets from their bags. Heat the oil in a sauté pan over high heat. Carefully place the fillets in the pan, skin side down, and cook just until the skin is lightly browned, about 1 minute.
8. For each portion, spoon a pool of 1½ fl oz (45 mL) sauce in the center of each plate. Spread the sauce a little with the back of a spoon. Place a fillet on the sauce, skin side up. Drizzle a little basil oil around the outside of the sauce.
9. Garnish the top of the fish with a few leaves of Thai basil or cilantro. If desired, deep-fry the herb garnish.

Seafood Served Raw

Raw oysters and clams have long been enjoyed in North American restaurants as well as in homes. Smoked salmon, too, has always been a popular raw seafood item, although many people don't think of it as raw fish because it has been processed.

More recently, with the popularity of Japanese sushi and sashimi, many more people enjoy eating items made with raw fish, and chefs are experimenting with new ways to serve raw seafood items. Because of the danger of contamination from polluted fishing waters, however, many health officials advise against serving raw seafood. Nevertheless, these items remain popular. If you choose to serve raw seafood, observe the following guidelines:

1. Use only the freshest fish.
2. Buy the fish from a reliable purveyor.
3. Use only saltwater seafood from clean waters. Do not use freshwater fish, which is more likely than saltwater fish to contain parasites. To destroy possible parasites in saltwater fish, freeze it, and then thaw it before use.
4. Observe the strictest sanitation procedures.
5. Keep the fish cold. Handle it as little as possible.

Four kinds of raw fish recipes are included in this section. *Fish tartare* is a mixture of chopped raw fish mixed with various condiments and seasonings. *Fish carpaccio* is a dish consisting of very thin slices of firm, meaty fish such as tuna, served with various garnishes and usually with a piquant sauce such as a vinaigrette. *Carpaccio* (karpachio) is the Italian word for a dish of thin slices of raw beef, served the same way. *Seviche*, or *ceviche*, (seh vee chay, or, in Spanish, seh bee chay) is a preparation, native to Latin America, of raw seafood marinated in an acid mixture. The acid coagulates the protein so the texture of the raw fish resembles that of cooked fish. It is common to say the acid “cooks” the fish. However, because the food is not subjected to heat, it is important to still think of the item as raw, for sanitation reasons. *Sushi* is seasoned Japanese short-grain rice garnished with one or more foods, usually, but not always, raw fish.

Sushi has become especially popular in Western countries, but there is much confusion about it. Sushi is often equated with raw fish, but in fact the term refers to cooked rice lightly flavored with seasoned vinegar. The rice is served with various garnishes, which include not only raw fish (the most popular garnish) but also cooked seafood and many kinds of vegetables and pickles.

KEY POINTS TO REVIEW

- What are five safety guidelines for serving raw fish items?
- What is seviche? How is it made?
- What is the basic meaning of the term *sushi*? How is sushi rice made?
- What is seafood tartare, and how is it made?
- What is tuna carpaccio, and how is it made?

Tuna Carpaccio

PORTIONS: 8 PORTION SIZE: 2½ OZ (75 G)

U.S.	METRIC	INGREDIENTS	PROCEDURE
1 lb 4 oz	600 g	Yellowfin tuna or other red-fleshed tuna	<ol style="list-style-type: none"> 1. On a slicing machine, or with a very sharp knife, cut the tuna into slices weighing 2½ oz (75 g) each. 2. Place each slice between two sheets of plastic film. Carefully pound each slice until it is paper thin, being careful to keep it of even thickness. 3. If the carpaccio is not to be served immediately, keep it between the layers of plastic film and refrigerate.
8–12 oz 8–12 fl oz	240–360 g 240–360 mL	Micro greens or baby arugula Mustard Vinaigrette (p. 703)	<ol style="list-style-type: none"> 4. Lay each portion of tuna flat in the center of a cold plate. 5. Toss the greens with just enough of the vinaigrette to coat them lightly. 6. Arrange the greens in a mound in the center of the sheet of tuna. 7. Drizzle the remaining vinaigrette over the tuna.
<p>Per serving: Calories, 270; Protein, 18 g; Fat, 22 g (72% cal.); Cholesterol, 35 mg; Carbohydrates, 1 g; Fiber, 1 g; Sodium, 280 mg.</p>			

Sushi Rice



YIELD: ABOUT 2½ LB (1.1 KG)

U.S.	METRIC	INGREDIENTS
3 cups	750 mL	Japanese short-grain rice (see Note)
3½ cups	875 mL	Water, cold

PROCEDURE

1. Wash the rice in several changes of cold water. Drain well.
2. Put the drained rice in a heavy saucepan and add the measured water. Cover tightly and let stand at least 30 minutes.
3. With the cover in place, set the pan over high heat and bring to a boil. When the water boils, reduce the heat to medium and let cook until all the water is absorbed. Do not remove the cover to check, but listen to the sounds. The bubbling will stop, and there will be a faint hissing sound.
4. Reduce the heat to very low and cook another 5 minutes. Then remove from heat and let stand at least 15 minutes before removing the cover. You now have the basic white rice that is eaten with Japanese meals.

3–4 fl oz 100–125 mL Sushi vinegar (see Note)

Per 1 ounce: Calories, 40; Protein, 1 g; Fat, 0g (0% cal.); Cholesterol, 0 mg; Carbohydrates, 9 g; Fiber, 0 g; Sodium, 105 mg.

Note: Do not confuse Japanese short-grain rice with glutinous rice, which is an entirely different product.

Sushi vinegar is commercially available, but it can also be made in the kitchen. Combine 1 pint (500 mL) Japanese rice vinegar, 8 oz (250 g) sugar, and 4 oz (125 g) salt. Heat and stir until the sugar and salt are dissolved, then cool.

5. In Japan, mixing in the vinegar is done in special wooden tub used only for this purpose (to avoid off flavors). The advantage of wood is that it absorbs excess moisture. If you use a nonabsorbent mixing bowl, transfer the rice to a clean bowl whenever the mixing bowl becomes coated with moisture. Using a wooden paddle or plastic spatula, break up the hot rice to get rid of all lumps. At the same time, fan the rice to cool it.
6. When the rice is slightly warm to the touch, begin adding the sushi vinegar. Add a little at a time while mixing gently. The rice is ready when it has a glossy appearance and a very mild taste of the vinegar. The vinegared rice is best if used within 2–3 hours, and it must not be refrigerated.

VARIATIONS

Nigirizushi (Finger Sushi)

1. Prepare *wasabi* (green horseradish) by mixing wasabi powder with a little water to form a thick paste. Let stand, covered, a few minutes to allow flavor to develop.
2. Prepare sushi toppings by cutting very fresh fish fillets (use saltwater fish or smoked salmon) into slices about 1½ × 2½ in. (4 × 6 cm). Tuna, the most popular fish for sushi, is tender and is usually cut about ¼ in. (6 mm) thick. Other fish are cut thinner.
3. Wet your hands with cold water to keep the rice from sticking to them, then pick up about 2 tbsp (30 mL) sushi rice. Shape it into firm oval about 1½ in. (4 cm) long (see **Figure 15.6**). Pick up a slice of fish in one hand. Dip a finger of the other hand in the wasabi and spread a very small amount on the underside of the fish slice. Drape the fish over the rice, with the wasabi underneath next to the rice, and press it gently but firmly in place. Serve with soy sauce for dipping.

Chirashizushi (Scatter Sushi)

Fill a serving bowl half full of sushi rice. Carefully and attractively arrange an assortment of raw fish, cooked shrimp, crabmeat, and neatly cut vegetables such as snow peas, cucumbers, carrots, mushrooms, and pickled ginger on top of the rice.

Tekka-maki (Tuna Roll)

Make kappa-maki, but instead of cucumber, use raw tuna cut into bâtonnet strips.

Kappa-maki (Cucumber Roll)

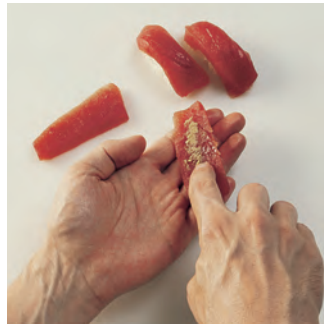
To make rolled sushi, you will need a special bamboo mat called a *sudare* (see **Figure 15.6**). You could also use a sheet of parchment, but the roll will be harder to make.

1. Peel a cucumber. Cut it in half and scrape out the seeds. Cut lengthwise into julienne.
2. Cut a sheet of *nori* (a type of seaweed for rolled sushi) in half crosswise. Toast it by passing it briefly above a burner flame, being careful not to burn it.
3. Put the bamboo mat on the table in front of you with the bamboo strips horizontal. Put the half-sheet of nori on the mat, smooth side down.
4. Cover the two-thirds of the nori closest to you with a layer of sushi rice about ¼ in. (6 mm) thick.
5. Spread a light streak of wasabi from right to left across the middle of the rice.
6. Lay strips of cucumber evenly on top of the strip of wasabi.
7. Lift the edge of the mat closest to you and roll up firmly. This is best done by lifting the mat with the thumbs while holding the cucumber in place with the fingers. Press the roll in the mat gently but firmly to make it tight.
8. Wipe the blade of a very sharp knife, then cut the roll in half crosswise. Do not saw the roll but cut it cleanly with a single stroke. Wiping the blade on a damp cloth after every cut, cut each half-roll into 3 or 4 pieces.

Figure 15.6 Making sushi.



(a) For nigirizushi, wet your hands with cold water to keep the rice from sticking to them. Form a bit of rice into a small oval in one hand.



(b) In the other hand, pick up a slice of fish and smear a dab of wasabi on the bottom of it.



(c) Top the rice with the fish, wasabi side against the rice, and press in place in the palm of one hand with two fingers of the other.



(d) Turn it over and press the same way. Then press the sides with the thumb and forefinger to finish shaping it.



(e) For rolled sushi, put a half-piece of nori on the sudare (bamboo mat). Wetting your hands with cold water to keep the rice from sticking to them, spread a layer of sushi rice over the bottom two-thirds of the nori.



(f) Lay strips of the filling across the middle of the rice.



(g) Holding the filling in place with the fingers, lift the corner of the mat with the thumbs and roll up.



(h) Press the mat firmly and evenly to make a tight roll.



(i) Using a dampened knife, cut the roll in half with a single forward stroke.



(j) Wipe the blade between cuts, and cut each half-roll into three or four pieces.

SUSHI: A JAPANESE CLASSIC

Fish and rice dominate the cuisine of the island nation of Japan, and these two staples are combined in sushi, a classic Japanese preparation that is especially popular in the West. Sushi originated many years ago as a way of preserving fish by salting it and packing it with vinegared rice. When the fish was eaten, the rice was discarded.

In Japan, it takes many years of apprenticeship to become a sushi master, or *itamae* (ee-tah-mah-eh). A master is skilled in preparing rice properly, making rice fingers of just the right size and compactness for nigirizushi, and especially in selecting, judging, and cutting the many varieties of fresh seafood used as toppings.

When one is eating nigirizushi, it is considered improper to dip the rice ball into soy sauce. The large amount of soy sauce absorbed by the rice masks the fresh flavor of the toppings and makes the rice ball break up. Instead, turn the sushi over and dip the seafood topping lightly in the sauce.

Incidentally, in Japanese, an initial S sound, as in the word *sushi*, may change to a Z sound when it is in the middle of a compound word, as in *nigirizushi*.

Tuna Tartare

YIELD: APPROX. 1 LB 12 OZ (850 G) PORTIONS 8 PORTION SIZE: 3½ OZ (105 G)

U.S.	METRIC	INGREDIENTS
1 lb 8 oz	720 g	Sashimi-quality tuna, well trimmed
1 oz	30 g	Shallots, minced
2 tbsp	30 mL	Parsley, chopped
2 tbsp	30 mL	Fresh tarragon, chopped
2 tbsp	30 mL	Lime juice
1 fl oz	30 mL	Dijon-style mustard
2 fl oz	60 mL	Olive oil
to taste	to taste	Salt
to taste	to taste	White pepper

Per serving: Calories, 200; Protein, 21 g; Fat, 12 g (54% cal.); Cholesterol, 35 mg; Carbohydrates, 2 g; Fiber, 0 g; Sodium, 130 mg.

VARIATIONS

Omit the shallots, parsley, tarragon, lime juice, and mustard. Add some chopped chives and a dash of hot pepper sauce.

Place a round biscuit cutter in the center of a plate. Fill it with the tartare and smooth the top. Remove the cutter (see **Figure 15.5**). Garnish and decorate as desired. For example, place a fresh herb leaf or dab of caviar on top, and place spoonfuls of caviar around the disk of tartare. With a squeeze bottle or spoon, place a ring of vinaigrette on the plate around the tartare.

Salmon Tartare

Substitute salmon for the tuna. Be sure all bones, skin, and sinews are removed from the salmon. In addition, cut away the dark, fatty tissue that runs down the centerline of the fillet on the skin side.

Tartare of Salmon and Sea Bass

In place of the tuna, use 12 oz (340 g) sea bass and 12 oz (340 g) salmon.

PROCEDURE

1. Mince the tuna with a knife. The most effective way to do this is to cut it into thin slices, cut the slices into thin strips, and cut the strips into very small dice. (The fish may also be chopped with a food processor, although the result is not as good as hand cutting. Pulse the machine, and be careful not to process the fish to a paste.) Do not pass the fish through a grinder, as this produces an undesirable texture.
2. Mix the chopped tuna with the remaining ingredients shortly before serving, seasoning to taste with salt and pepper. Do not mix too long in advance, as the acidity of the lime juice coagulates the protein as for seiche (p. 517).
3. Tuna tartare may be served very simply mounded on a small plate or in more elaborate ways (see variations).



Tuna Tartare

Figure 15.5 Shaping food with a ring mold.



(a) Position a ring mold on the plate. Fill with the food and level the top with a palette knife or spatula.



(b) Carefully lift off the mold.

Scallop Seviche

PORTIONS: 12 PORTION SIZE: 4 OZ (125 G)

U. S.	METRIC	INGREDIENTS	PROCEDURE
2 lb	1 kg	Sea scallops (see Note)	<ol style="list-style-type: none"> 1. Cut the scallops into quarters vertically, then slice crosswise $\frac{3}{4}$ in. (6 mm) thick. 2. In a nonreactive container, mix together the scallops, lime juice, and onion. 3. Refrigerate about 12 hours, or until the scallops have the texture of cooked scallops.
8 fl oz	250 mL	Lime juice	
4 oz	125 g	Red onion, chopped fine	
1	1	Jalapeño, seeded and chopped fine	<ol style="list-style-type: none"> 4. Drain the scallops and onions, discarding the lime juice. 5. Gently toss the scallops with the jalapeño, cilantro, avocado, and tomato. 6. Add salt to taste. 7. Mix in the olive oil 8. To serve, line small bowls or cups with lettuce leaves and spoon in the seviche.
6 tbsp	90 mL	Chopped cilantro	
2	2	Avocados, medium dice	
8 oz	250 g	Tomato, peeled and seeded, small dice	
to taste	to taste	Salt	
4 fl oz	125 mL	Olive oil	
as needed	as needed	Lettuce leaves	
<p>Per serving: Calories, 220; Protein, 14 g; Fat, 15 g (61% cal.); Cholesterol, 25 mg; Carbohydrates, 8 g; Fiber, 2 g; Sodium, 130 mg.</p> <p>Note: As an alternative to sea scallops, use bay scallops and leave them whole.</p>			



Scallop Seviche

TERMS FOR REVIEW

à la meunière	truite au bleu	étuver	fish carpaccio
shallow poaching	cuisson	en papillote	seviche
submersion method	à la nage	fish tartare	sushi
court bouillon			

QUESTIONS FOR DISCUSSION

1. What major precaution must be taken when baking or broiling lean fish?
2. Describe the procedure for cooking fish à la meunière.
3. Which side of a fish fillet is the presentation side?
4. What techniques can you use for lifting whole poached fish out of court bouillon without breaking it or damaging its appearance?
5. What temperatures are best for poaching fish?
6. What is one advantage of using the oven to poach fish fillets?
7. Describe two methods for making a finished sauce out of the cooking liquid (fumet and wine) used for poaching fish fillets.
8. Discuss the precautions a cook should take to ensure raw fish is safe to eat.