The composition and structure of fish and seafood products is quite different from that of meat and poultry. Furthermore, fish products are much more perishable than meat is. Consequently, this subject requires special study, so that when you apply the basic cooking techniques to seafood products, you will be able to adjust them to fit these unique products.

After studying Chapter 14, you should be able to:

1. Explain how the cooking qualities of fish are affected by the lack of connective tissue.
2. Determine doneness in cooked fish.
3. Demonstrate the appropriate cooking methods for fat and lean fish.
4. List the seven basic market forms of fish.
5. Dress and fillet round fish and flat fish.
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. Identify 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 lobster, and peel and devein shrimp.

A. Terms

Fill in each blank with the term that is defined or described.

1. The family of sea animals that includes soft animals that live inside a pair of hinged shells.

2. The family of sea animals that have segmented shells and jointed legs.
3. The smallest size of Eastern hard-shell clams.
4. The largest size of Eastern hard-shell clams.
5. In bivalves (animals with a pair of hinged shells), the muscle that closes the shells.
6. The pale green liver of a lobster.
7. The largest of the crabs.
8. The roe or eggs of a lobster.
9. The inactive, dying lobster.
10. The words that the abbreviation IQF stands for.
11. Market term for raw shrimp in the shell.
12. A blue crab that was harvested just after it molted or shed its shell.
13. The words that the abbreviation PDC, as applied to shrimp, stands for.
14. Coated with a thin layer of ice when frozen, in order to prevent drying.
15. A fresh-water shellfish that looks like a small lobster.
16. A small relative of the rock lobster, sometimes sold as rock shrimp.
17. The Italian name for squid, often used on menus.
18. The name for the family of mollusks that includes squid, cuttlefish, and octopus.
19. The general name for a processed seafood product that is made by grinding lean, white fish and shaping it to resemble crab legs and other shellfish.
20. Designating fish that live in salt water but that swim into fresh water to lay eggs.
21. Designating fish that live in fresh water but that swim into salt water to lay eggs.
B. Fin Fish: Market Forms

In the blanks, write the name of the market form that corresponds to the description and illustration.

1. _______________ Viscera removed

2. _______________ Boneless side of fish

3. _______________ Completely intact, as caught

4. _______________ Cross-section slices

5. _______________ Viscera, scales, head, tail, and fins removed

6. _______________ Both sides of fish joined, bones removed
C. **Fat Fish and Lean Fish**

In the blank before the name of each fish, write the word "lean" if the fish is low in fat; write the word "fat" if it is high in fat.

1. ___________ Haddock
2. ___________ Salmon
3. ___________ Ocean perch
4. ___________ Red snapper
5. ___________ Tuna
6. ___________ Swordfish
7. ___________ Pompano
8. ___________ Pike
9. ___________ Shad
10. ___________ Black sea bass
11. ___________ Chilean sea bass
12. ___________ Whiting
13. ___________ Whitefish
14. ___________ Flounder
15. ___________ Sole
16. ___________ Cod
17. ___________ Escolar
18. ___________ Trout
19. ___________ Halibut
20. ___________ Bluefish
21. ___________ Mackerel
22. ___________ Tilefish
23. ___________ Monkfish
24. ___________ Eel
25. ___________ Skate
26. ___________ John Dory
27. ___________ Mahi-mahi
28. ___________ Red mullet
29. ___________ Tilapia
D. Review: Freshness and Storage

1. List five signs of freshness in whole fin fish.
   (a) 
   (b) 
   (c) 
   (d) 
   (e) 

2. What is the most important sign of freshness in fish fillets?

3. What is the most important sign of freshness in lobsters?

4. What is the most important sign of freshness in clams, oysters, and mussels?

5. What is the best way to store whole fin fish?

6. At what temperature should frozen fish be stored?

7. What is the best way to thaw frozen fish?

8. What is the best way to store fresh clams and oysters in the shell?
9. What are two ways of storing live lobsters?
   (a) ________________________________
   (b) ________________________________

10. What is the best way to store thawed raw shrimp in the shell?

   ________________________________

E. True/False

T F 1. Haddock is an example of flatfish.
T F 2. In general, fat fish are better suited for broiling than lean fish are.
T F 3. In fish cookery, moist-heat methods are used primarily to tenderize tough fish.
T F 4. Some canned fish products are inspected for wholesomeness by the federal government.
T F 5. Shrimp that are designated “21/25” weigh about 1¾ oz each.
T F 6. A fish that is very fresh has clear, white gills.
T F 7. The largest varieties of scallops are called sea scallops.
T F 8. Frozen fish fillets must be completely thawed before they can be breaded.
T F 9. Scallops are available only in the fall, winter, and spring.
T F 10. If baked clams are tough, it is because they weren’t cooked long enough.