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Operations Manual for Seafood Retailers

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OPERATIONS MANUAL FOR SEAFOOD RETAILERS

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March, 1974

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OPERATIONS MANUAL FOR SEAFOOD RETAILERS

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CHAPTER I SELLING THE SEAFOOD CONCEPT

Introduction

The basic purpose of this manual is to help you more profitably satisfy the **consumer**. Notice the emphasis is on consumer. Your rewards should come naturally if the consumer is pleased with the total bundle of product and services you provide.

To satisfy the customer more profitably, this manual stresses that you sell not “fish” but seafood. Moreover, this manual emphasizes that you inventory, promote, sell and merchandise the “seafood concept”. Just what do we mean, “sell the seafood concept”? Initially, it may be easier to explain what this phrase does not mean. Calling the market a “fish market” is **not** selling the seafood concept. You merchandise much more than fish. You offer a wide assortment of fresh and frozen finfish and shellfish (freshwater and saltwater) from all parts of the world: cod from the North Atlantic; red snapper from the Gulf; mountain trout from the Rockies; squid from the Far East; salmon from the Northwest and catfish from the heart of America. When you name your shop “Joe’s Fish Market” or put a FISH sign above the seafood section in the supermarket, you have hurt both yourself and your customer.

The customer suffers because you fail to provide the greater allure of a seafood product assortment rather than a fish product assortment. You suffer financially because he/she isn’t satisfied. By promoting fish rather than seafood you naturally limit the set of images which come into the customer’s mind. Think about it. Don’t you visualize a more inviting market interior (display case, interior design, posters, etc.) if someone names his market Fulton’s Pier, Galveston Wharf, Pier 21, or Neptune’s Galley, rather than Joe’s Fish Market?

Throughout this manual there is **no** reference to a fish market. The manual refers to a **seafood** market. Hopefully you, too, will visualize your business as a seafood operation. Fish is only one part of the seafood market. The product, seafood, is another part of the seafood concept, just as the market’s name is a part of this concept.

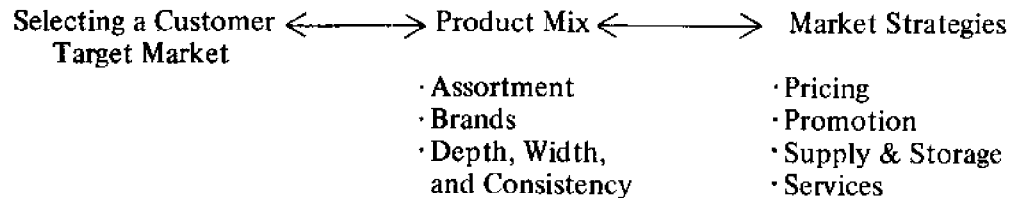
The **seafood concept**, then, is the total set of visual cues (symbols, colors, signs, interior design posters, recipes, price markers, display case, work area, personnel, advertisements, market name, and other items) that make up what the consumer sees, hears, and smells that, tells the customer: “Here is where I buy my seafood.” The seafood concept is a total set of merchandising skills that tells the customer this seafood product is fresh, sanitary, top quality, fun to prepare, and a joy to eat. By selling the complete seafood concept, and not just fish, your customer is not disappointed. Nor should you be disappointed at the end of the month when you look at the bottom line of your profit-and-loss statement.

FUNDAMENTALS IN MARKETING THE SEAFOOD CONCEPT

How do you sell the seafood concept? This manual shows you. Before reading the details in the following chapters you will need to master a few fundamental principles—the “Trinity of Marketing Decisions”. These principles, when applied to marketing seafood, help you become a more successful businessman.

The Trinity of Marketing Decisions. The seafood retailer has three major decisions to consider: 1) to whom am I trying to market my product? 2) what should my product mix include to satisfy profitably this selected customer target market? 3) what various marketing tools and strategies do I have at my disposal to persuade my customer to start coming and to return repeatedly to my store for seafood requirements?

Chart I-1



The diagram in Chart I-1 illustrates these three fundamental decisions. Notice that the arrows point in both directions. This implies not only that the customer target market dictates the specific types of seafood you might carry but also that your product mix has an impact upon customers. The same holds true with the nature of marketing strategies you apply to ensure that your target market continues to do business with you.

Customer Target Market. When making decisions about the target market, a market owner hopes to identify his customers and their locale. Chapter II treats this problem.

Product Mix Strategies. Product mix decisions are critical. You must determine the product assortment that will attract target customers to your store. You will be concerned not only with the number of seafood species to carry (the width of the product line—flounder, shrimp, oysters, redfish, etc.), but also with the various forms of each seafood to offer your customers (the depth of the product line). For example, both frozen and fresh shrimp; in the case of fresh shrimp, you may carry whole, headless, peeled and deveined, boiled, breaded, three or four sizes, and one or two sub-species (white, pink, or brown). In the case of fresh Gulf trout, you may carry this species for sale in the round, filleted, steaked, breaded, or ready-for-pan-frying forms. Needless to say, since it is possible to carry a limited amount of the species assortments, it is important to choose carefully the width and depth of your product mix.

The width and depth of your product mix decision leads to a third decision: consistency of the product mix. How closely related is the total product assortment to seafood products in general? For example, the decision to sell fishing licenses dilutes the seafood market to a “bait-house” image. Likewise, selling knick-knacks and trinkets in your market is not in line with the seafood concept. However, offering complementary items such as breadings, sauces and spices, garnishes, seafood cooking utensils, recipe books, smoking grills, wines, and gourmet foods all seem to reinforce the seashore image you are trying to convey. Chapter V, Parts A & B, helps you determine your product mix.

Marketing Strategies. The marketing strategies you choose must be tailored to present the product effectively to your customer. These strategies include: an effective retail price that assures a fair return on your capital and personal investment; creative and motivating tools of **PROMOTION** (including properly selected and trained personnel) to attract customers to your store; reliable sources of **SUPPLY** to ensure adequate product assortments; and provision of numerous

CUSTOMER SERVICES that range from a strong image of sanitation, to free filleting, and store hours to match your target market's purchasing habits. Chapters III, IV, and VI are aids in resolving these decision problems.

MONITORING YOUR BUSINESS PLANS

Naturally you want to keep track of the success of your plans. Chapter VIII (Accounting) and Chapter IX (Financing) are designed, in part to help establish a set of basic tools for determining the achievement of your plans. Business records and financial tools which help analyze your performance are more than necessary evils. They help to analyze how well you have "played the game" once the Profit and Loss Statement and Balance Sheet has been completed for that month or planning period.

As you use this manual, keep the "Trinity of Marketing Decisions" in mind. You will find it a helpful reference point from which to begin developing your marketing effort. A well-defined and effectively implemented **marketing effort** (Product Mix, Pricing Strategies, Promotion Decisions, Supply Sources, and Customer Services) helps to attain your marketing goal. "Selling the Seafood Concept" is the marketing effort that accomplishes the goal stated in this chapter—satisfying the consumer profitably.

PROFIT POTENTIAL OF THE SEAFOOD CONCEPT

At the outset, let it be made clear that there are profits in seafood, fresh and frozen. Recent studies of meat departments in food stores grossing approximately \$25,000 weekly sales reveal that seafoods rank second only to variety meats in profitability.¹ Additionally, seafood is a high gross-margin item. In a similar study of food stores, seafood maintained an average margin of 27.5% on selling price; almost every store studied revealed that the gross margin on fish was higher than that on meat.²

Seafood products offer today's food retailers an opportunity to increase sales volume at a gross margin substantially above average for all grocery items in the firm's product assortment. Clearly, any food item that can offer this potential reward needs special consideration.

Seafood can also be a high turnover item that lends itself to efficient use of investment dollars. Generally, a supermarket manager can expect a once-a-week turnover of his meat inventory dollar investment. Turnover of fresh seafood in a display case, in a well-managed store, can be as short as one day. Through skillful use of proven merchandising practices, consumer demand can be increased. With inventory control, this increased demand will result in 1) maximum turnover of seafood products inventory, and 2) higher return on inventory investment, two commonly used measures of efficient financial management.

The profitability of frozen seafood products has been demonstrated in an eleven-year study of the frozen food departments at King's Super Markets in New Jersey. This study showed that, although frozen fish occupied only 7.2% of the display space, it contributed 10.4% to the frozen food department's gross profit.³

The fresh seafood counter in a supermarket can be a profit-making center when management recognizes its potential and adopts a store policy to reap these profits by planning, implementing and supervising aggressive merchandising strategies. The key to unlocking these potential profits pivots on management's attitude toward seafood.

Some merchandisers ignore seafood completely and declare that limited demand, special handling difficulties, and employee resistance raise barriers too costly to overcome. Some merchants carry fresh seafood but view it only as a necessary item and not as a particularly favorable meat item among store clientele because its physical properties are radically different from red meat and poultry products.

A few food merchants have viewed fresh seafood not as an impediment, but as an additional meat alternative for the consumer and as a money-making opportunity. These merchants have learned that a positive and innovative approach to food marketing has resulted in enhancing the store's total volume and profit performance.

These far-sighted merchandisers perceive fresh seafood as a product that dramatically improves the store's "potency of assortment". The fresh seafood counter may not be the high-profit contributor as are some other sections of the store, but because the management does offer fresh seafood, customers are attracted who might otherwise market with competitors. This increased store traffic adds dollar gross margin to a relatively high fixed-cost operation that would not be available without the seafood counter. Where store management enthusiasm for fresh seafood is strong, this profit contribution can be substantial.

The overall profitability of both fresh and frozen seafoods makes them well worth promoting. Thus, the marketing objective for improved profits with seafoods is to have high quality products attractively presented through modern merchandising methods that will produce high sales volume and profits.⁴ Additionally, the modern retailer must use these skills to improve inventory turnover and to gain the most efficient use of his dollar investment.

In general, profit in the individual seafood market or seafood section is determined by physical set-up, procedures and promotions.

Policies include financing, accounting and general operations.

Physical set-up is simply the merchandising of seafood, including product assortment and display techniques.

Procedures refer to buying of fish from quality sources and to the care of fish once it arrives at the retail store or supermarket.

Promotion includes in-store appeal, well-trained personnel, handout materials, and advertising.

When knowledge and utilization of the modern consumer's buying habits and attitudes are added to these major areas of profit determination, the retailer has at his disposal effective tools for a successful seafood department or store. The major portion of this manual is directed toward describing these tools and how they may be profitably employed. Of particular value is Chapter X—"Summary." Be sure you read it, for it attempts to provide a perspective on what is contained in the previous chapters and to aid you in answering three major business questions that are central to your goal of a profitable seafood market.

CHAPTER II CONSUMER ATTITUDES AND BUYING HABITS

It is a cardinal principle of modern business that a firm should know its customers. Consequently before undertaking retail selling, the seafood merchandiser should familiarize himself with the buying patterns that characterize today's consumer. New homemakers, the 29-year-olds and younger, constitute the most rapidly expanding buying group today. Yet, studies show that young households are not consuming their proportional share of seafood products. Consequently, a generation of future purchasers is growing up without developing the desirable preferences for seafood products exhibited by persons at older age levels. The lines of tradition in seafood consumption are being disrupted and retailers would do well, therefore, to heed this trend and direct their marketing efforts accordingly.¹ The younger homemakers constitute an excellent target market for attempting to achieve increases in seafood sales and profits. Their food preferences are not set, but developing, and can be influenced in favor of fresh and frozen seafood. What are some of the characteristics of today's modern consumer?

1. **She has more money to spend**—family incomes are up and consequently she wants her family to live better and eat better.
2. **She looks for abundance of food**—in this land of plenty, she appreciates well-stocked stores offering wide selections.
3. **She wants variety in foods**—with an increased food budget, she seeks new and different foods and interesting ways to serve them.
4. **She is diet conscious**—she wants high-energy foods for her children and fat-free foods for her husband and herself.
5. **She wants convenience foods**—“quick-n-easy dishes” that are nutritious and tasty.
6. **She buys food on impulse**—faced with abundance and pressed to select from countless varieties of food, she now shops mainly on sight rather than from shopping lists.
7. **She's a merchandising “pro”**—other food retailers have worked hard to “sell” her with highly professional sales promotion. She knows this and expects to be helped by high-quality merchandising in making her food selections.²

Thus, the opportunity to capture these consumers as customers is open to the modern retailer who uses effective merchandising to stimulate their buying impulses and to activate their spending power toward the purchase of seafood.

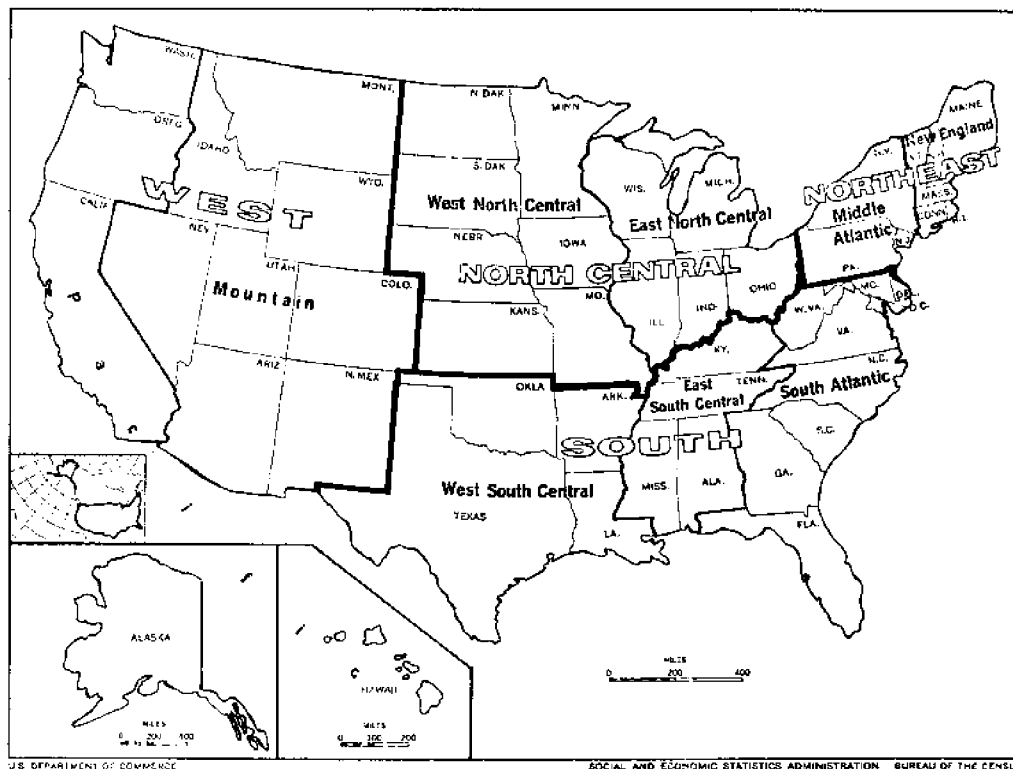
Along these same lines, several household characteristics have been found to cause marked differences in seafood purchases for home use. These characteristics may be classed as ethnic, that is, race and religion; regionalism; seasonality; the economic factors of income and occupation; and finally, distinctive features of the household itself such as age of the household head, and the number of persons composing the household.

ETHNIC FACTORS

Race, as shown in Table II-1, is an important factor in determining seafood consumption habits. Shrimp, by far the most important fresh and frozen fishery product, is consumed in large quantities by both black and white families. Products which are consumed more by black families include crabs, ocean perch, catfish and whiting. White families purchase more lobsters and halibut.

Religions provide a second measure of ethnic variation in fish consumption. Table II-1 demonstrates that Jewish households lead other major U.S. religions in the purchase of flounder; sole, salmon, and the miscellaneous category. They are also measurably higher purchasers of shrimp, crabs, scallops, halibut, and cod. Catholic households rank somewhat above Protestant households in purchases of shrimp, lobsters, clams, scallops, haddock, flounder, sole, and cod. Protestant families exhibit higher consumption levels of oysters, red snapper, catfish, and whiting. By combining information on seafood preferences from Tables II-1 and II-2 it can be inferred that black Protestant families are primarily responsible for higher consumption of catfish and whiting among Protestants.

MAP OF GEOGRAPHIC DIVISIONS OF U. S.



Nine U. S. Census Groupings

Figure II-1

Figure II-1 represents the nine U. S. Census geographic groupings of states. Regional purchase patterns show that some seafood fishery products have achieved the status of a "national" food while others are consumed on a strictly regional basis.³ For example, although shrimp consumption varies considerably by region, considerable quantities of shrimp are purchased in each region, so that shrimp can be labeled a national food. The East North Central and the West North

Central regions have the lowest consumption of shrimp, but they are also reported to sell shrimp at the highest price per pound. The Middle Atlantic, South Atlantic, West South Central, and Mountain regions are the highest shrimp consumers. Oysters have achieved about as even a distribution of consumption nationwide as any fishery product. Among finfish, cod and ocean perch are rather well-known nationwide, probably due in part to product-related items such as fish sticks and fish dinners.

Crabs are highly regional and decline rapidly in importance as distance increases from areas of landing. Thus, crabs are virtually unknown in the interior of the United States, while the Pacific coast states lead the nation in crab consumption. Lobsters, clams, and scallops are even more regionalized, and price seems to be an important factor in determining consumption. Halibut is rather widely dispersed, with the Mountain states exhibiting the highest preference followed by the Pacific states. Salmon is also a preferred seafood. The East South Central region shows a high consumption rate of catfish and whiting, apparently a function of race as well as availability.

SEASONAL FACTORS

Shellfish purchases do not show significant seasonal shifts. Typically, the consumption of oysters follows closely the pattern of the "R" months, when most of the catch is landed. This reflects the fact that oysters are consumed chiefly in fresh form. The myth surrounding the "R" months leads many people to believe that it is safe to eat oysters only during months that have an "R" in them. This is not true, and oysters may be enjoyed all year without any adverse effects. Consumption of clams also shows wide seasonal swings, which tend to complement the changes in oyster consumption. This suggests possible substitution between the two products. For example, consumption of both oysters and clams drops sharply from March to April. Then, clam consumption rises while oyster consumption continues to fall. From September onward, clam consumption drops as oyster consumption climbs sharply. Crab consumption varies from month to month but appears to have a summer peak in July and a winter peak in January-February. Monthly variations in both scallop and shrimp consumption are slight in comparison to the wide seasonal swings in oysters, clams, and crabs. The relatively smooth seasonal consumption of scallops and shrimp reflects the availability of year-round supplies of these products.⁴

There are no significant seasonal trends in the purchase of finfish.

ECONOMIC FACTORS

Income is not as strong a factor in explaining seafood purchases as it is sometimes thought to be. In general, purchases of all types of shellfish tend to increase with increase in income. Flounder, halibut, ocean perch, cod and salmon purchases seem to be positively related to income. Haddock is apparently neutral. Catfish and whiting are purchased mostly by lower income households,⁵ although farm-raised catfish is finding wide acceptance throughout the economic spectrum.

Differences in consumption by occupational classes reveal some interesting patterns. For example, Table II-3 shows that "clerical and sales" personnel purchase the greatest quantity of shellfish; and those in "professional and semi-professional" occupations purchase smaller quantities of both fish and shellfish than any other occupational class.

HOUSEHOLD CHARACTERISTICS

There are positive indications that higher consumption levels are associated with increased age of the household head. For example, about 50 percent of the households in the U.S. are headed by persons 45 years old or older, yet this group accounts for 72 percent of the oyster consumption. In contrast, the 28 percent of U.S. households headed by persons under 35 years of age consume only 20 percent of the oysters, 14 percent of the clams, and 13 percent of the scallops. Shrimp alone, among shellfish, tends to exhibit an even distribution with respect to age of the household head.⁶ Finfish that do not follow an age trend are catfish and whiting, possibly because of previously discussed effects of race and/or lower prices. (see Tables II-1, and II-3) Age may become a very important factor in fish consumption as the age structure of the nation changes through time. As indicated at the beginning of this chapter, the nation is currently experiencing a younger and more informed generation of consumers.

Household size is also an important factor in seafood purchases. Members of smaller households are the highest per capita users of seafood products; purchases decrease as size of household increases.⁷

In general, consumer buying habits with regard to seafood indicate that:

1. Race is a highly influential factor in the purchase of both quantity and kind of seafood. Overall, black families purchase more seafood per capita than white families.
2. Persons of Jewish religion are the largest per capita purchasers of seafood; followed by Catholics; and finally Protestants.
3. Geographically, shrimp, oysters, cod, and ocean perch are consumed nationwide, while most other seafoods are consumed on a more regional basis.
4. Purchasing of oysters, clams, and crabs is subject to seasonal shifts; scallops, shrimp and finfish exhibit no significant seasonal trends.
5. Purchases of shellfish and most finfish increase as income increases.
6. Increased seafood consumption levels are associated with higher ages of the household head.
7. Smaller households are the highest per capita users of seafood.

One special note of caution. These data are generalizations of the United States market. Naturally, each retail trade area is unique and will reflect seafood preferences corresponding to its particular population composition. A successful retailer will not fail to understand and analyze the consumers in his trading area. If he has done an adequate job of getting a "feel" for his market, he can anticipate how his customers will react; that is, he will be able to predict consumer behavior. Having gained confidence in this important task, he can apply his knowledge to plan marketing strategies directed toward achieving his goals.

Keep in mind that systematic analysis of a potential market can be realized in terms of such easily identifiable factors as income, population distribution, number of households within each population group, ages of household heads, sizes of households, race, religion, and occupation; also some subjective generalizations about customers' psychological attitudes toward seafood, toward a shopping district, and towards a place of business.

Remember, in learning about potential customers, you are interested in answering three basic questions: (1) Who are they?—this can easily be determined through various city, county, and census data; (2) Why do they behave toward food, meats, particularly seafoods, the way they do?—this is much more difficult to measure accurately; but the early sections of this chapter are designed to help analyze your potential market; and (3) Why do they prefer shopping at a given food store? Particularly a given seafood store or department?—this we have come to label **consumer patronage motives**. These facts are not too difficult to come by if you are inquisitive and willing to ask many of the consumers in your potential market why they like certain food stores more than others. Studies have indicated that just as people identify with certain groups of people, locations, or ways of life, they also identify with certain types of retail stores. Friendly, cheerful-appearing, well-dressed personnel and a colorful, well-stocked, and clean-appearing store will tend to develop positive consumer attitudes toward your department or store.

If you can determine these **who's** and **why's**, then this important market information can be used wisely to guide seafood merchandising activities.

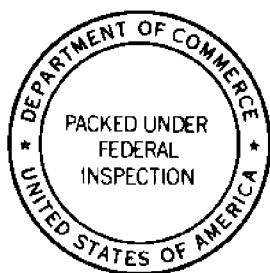
CHAPTER III HOW TO BUY AND CARE FOR FISH AND SHELLFISH

Most seafood arrives at the retail store after moving from harvester boat to processor, to wholesaler or agent, and then to retailer. It is essential that quality be maintained all along this distribution chain if the retailer is to receive a top quality seafood product for sale to the consumer. Quality is one of the key elements that results in increased sales, for it is remembered long after the price is forgotten. Therefore, there is one basic rule to follow: **ALWAYS BUY FROM A HIGH QUALITY SOURCE**. In addition, remember that the average consumer depends on his retailer for proper selection and quality assurance.

The United States Department of Commerce provides official inspection service for fishery products. Buyers and sellers who wish to establish the quality of their seafood may request this service. Only fresh and frozen products that are processed in government-registered plants and that meet high quality standards at the time of inspection may be identified with government inspection symbols. If the seafood products you handle are government inspected, you should feature this fact in your advertising.

The “continuous protection” shield indicates that United States Department of Commerce (USDC) inspectors were assigned to the process plant at all times during operation to check the quality of materials, plant conditions, and the processing and packaging of the product.

Grade “A” means top quality. The processor who voluntarily pays for USDC inspection uses this label to assure the buyer that he receives quality products. However, inspection by government agencies is only part of the answer to maintaining high quality. After the seafood has arrived in good condition, the best way to ensure continuous top quality is regular in-store quality control.



Quality at the retail level begins by knowing how the seafood was handled in transit, and whether properly packed and adequately refrigerated. Examine the product carefully before accepting delivery. If you doubt its freshness or quality, reject the order.

Order seafood in amounts and varieties that will give the consumer a broad selection and yet maintain a quality product. Normally, fresh fish should be ordered for not more than a four-day period. If the freshest quality is to be maintained, it should not be carried over into the next week. Keeping accurate records on the movement of all seafood products will eliminate over-stocking and carry-over. Frequent deliveries eliminate excessive in-store handling of fresh and frozen products. Daily delivery of fresh fish is the ideal arrangement. However, this may be difficult to achieve; hence, adequate storage facilities, including proper refrigeration, should be available.

Once delivered, fish that have been checked and accepted, should be placed immediately in low temperature storage to retain seafood moisture and freshness. Preserve fresh fish by covering with ice, preferably soft crushed or thin flakes.

The ideal storage temperature for fresh fish is 31°F. Frozen fish should be kept at zero or below. Freezer storage life can be extended several months if the temperature is minus 10-15°F.¹

When buying fish and shellfish for sale in retail stores, it is desirable to have some idea of the popularity of the wide varieties. The following list identifies some of the most popular fish and shellfish products sold fresh and frozen:

SALTWATER FINFISH

1. **Cod:** A highly popular fish which supplies much of our fish sticks and boneless portions. It is also processed in a variety of other ways: dried, salted, shredded, or flaked.
2. **Drum:** Frequently called “croaker” because it makes a characteristic croaking noise. Black drum, red drum or redfish, and whiting are members of the croaker family.
3. **Finnan Haddie:** Smoked haddock. Known and served internationally as whole split fish.
4. **Flounder:** A flat fish belonging to the flounder and sole families. There are several species ranging in size from 1-2 pounds to an average of about 12 pounds. Species most often marketed are: Pacific Halibut, Dover, Petrale, English and Rex Sole from the West Coast; Fluke, Yellowtail, Winter Flounder and Sanddab from the East Coast; and Southern or “Texas Flounder” from the Gulf of Mexico.
5. **Gulf Trout:** A species that tolerates warmer water than their freshwater counterparts; silvery in color; delicious broiled or fried.
6. **Haddock:** This popular fish is marketed across the country in various forms. The main product is frozen fillets.
7. **Halibut:** A large fish which can weigh up to 125 pounds. It is available in most retail stores. It freezes well and is usually sold as steaks. Large pieces of halibut, called “fleches”, are used in restaurants.
8. **Mackerel:** A specie which has an “individual” flavor that requires tasting for appreciation. The types of mackerel vary: “tinker” or “spike” are 1/2 to 1 pound. Spanish are 1-4 pounds. King grows up to 60 pounds.
9. **Ocean Perch:** Also called rosefish, redfish and red perch on the East coast. Most often marketed as frozen fillets.
10. **Pompano:** Silver-blue body near the top, shading into silver lower on the body; a very popular food; ranges from 3-8 pounds.
11. **Red Snapper:** A rose-red fish marked by a black blotch on each side when young; a favorite food in the southern United States; found in deep waters of the Gulf of Mexico; ranges from 4-40 pounds.

12. **Salmon:** Marketed in a variety of forms, each with characteristic flavor. King or chinook may be large, 20-100 pounds. Silver or coho, up to 20 pounds, is usually sold as steaks. Pink or sockeye is usually canned. The bright orange-red flesh color of salmon is a distinguishing characteristic.
13. **Sheepshead:** Greenish in color with a compressed body marked by several vertical dark bands; ranges from 1-5 pounds; is considered excellent for broiling.
14. **Smelt:** Freshwater and saltwater fish; sea smelt are larger. Smelt are abundant, inexpensive, and delicious; the choicest of pan fish.

FRESHWATER FISH

1. **Buffalo:** Also called winter carp: Another popular, freshwater fish. Resembles carp superficially. Can be baked, broiled, fried or smoked.
2. **Carp:** One of the more widely distributed freshwater fish. Has lean and firm flesh of good flavor. Available in a variety of forms. Often smoked.
3. **Channel Catfish:** Sometimes called Spotted Catfish. Range from 1-4 pounds; most popular market size is 3/4 to 1 pound. Channel Catfish are raised commercially on fish farms in south-central states.
4. **River Catfish:** Several species. Largest is blue or Mississippi cat, which may weigh up to 150 pounds; one of the largest freshwater fishes. Yellow catfish is next in size, weighing 50-75 pounds. A freshwater fish of the Great Lakes region.
5. **Whitefish:** Usually marketed fresh-drawn, weighing 2-10 pounds. While favored for all cooking methods, whitefish is a delicacy when smoked. Its roe is made into caviar.
6. **Yellow Perch:** Always a good sales item, sold whole or filleted. Perch are found in nearly all Midwest retail stores and served in most Midwest restaurants.

SHELLFISH: Two basic kinds; mollusks (such as oysters, scallops, and clams) and crustaceans (such as shrimp, lobsters, and crabs). The most delicate food flavors known can be found in shellfish.

1. **Canned Oysters:** Sold on basis of size, i.e. the number of meats per gallon with counts generally ranging from 160 to 500. Olympia oysters from the Pacific Northwest may run as high as 2400 to a gallon.
2. **Clams and Oysters:** Should be alive when purchased with shells tightly closed. "Gapers" (open shells) indicate mollusk is dead or dying; should be discarded.
3. **Cooked Crab and Lobster Tails:** Bright red in color. No objectionable odor; white meat.
4. **Crab and Lobster:** Available in the shell, fresh or frozen, and in crab and lobster meat products.

5. Crabs: Many varieties.
 Rock Crab from New England.
 Blue Crab from the East and Gulf Coasts. Annually shed old hard shells and are marketed as “soft” shelled crab.
 Stone Crab from Florida.
 King Crab from Alaska. The meat of king crab is taken mostly from the legs, which may also be sold cooked or frozen.
6. East Coast Shucked Oysters: Should be plump and when canned should have a creamy color with clear liquid. More than 10 percent liquid indicates inferior product that is improperly handled.
7. Quahaugs: Also called “little necks”; are round, hard-shelled clams that are very meaty. Large quahaugs are chopped and used in chowder. Small quahaugs are called “cherrystones” and are eaten raw on the halfshell.
8. Scallops: Scallop meat is the muscle that closes the shell. Live scallops are not available; they die soon after leaving water. Scallops are shucked aboard ship and packed in ice. The meat is boneless, sweet and tender. Sea scallops run 110-170 per gallon. Bay scallops (1/2”-3/4” in diameter) run 500-850 per gallon.
9. Shrimp: Broad variety of forms. Most popular of all seafoods in the United States. Counts range from less than 15 per pound to as many as 275 per pound for the tiny sweet Alaskan pink shrimp, sometimes called “cocktail shrimp.” Shrimp are classified by size. The descriptive term “jumbo” generally means 15 or less headless shrimp per pound. “Large” shrimp may range from 16 to 25, “medium” from 26 to 35, and 36 or more may be described as “small.”
10. Shucked Clams, Oysters, Scallops: Available without shells and known as “shucked”.
11. Spiny Lobster and Maine Lobster: The term “lobster” is used for many species. Maine lobster has large meat-filled claws. Live lobsters should have claws pegged, and tail should curl under and not hang down when picked up. Rock lobsters are marked as frozen tails. Frozen lobsters should be hard frozen, no odor.
12. West Coast Oysters: Show a dark mantle in the shucked form.

QUALITY OF FISH AND SHELLFISH

The successful seafood retailer must familiarize himself with signs of quality so that seafood not meeting high standards can be rejected. Quality of fresh fish and shellfish can be determined by observing their appearance, texture, and odor.

Fresh Whole Fish:

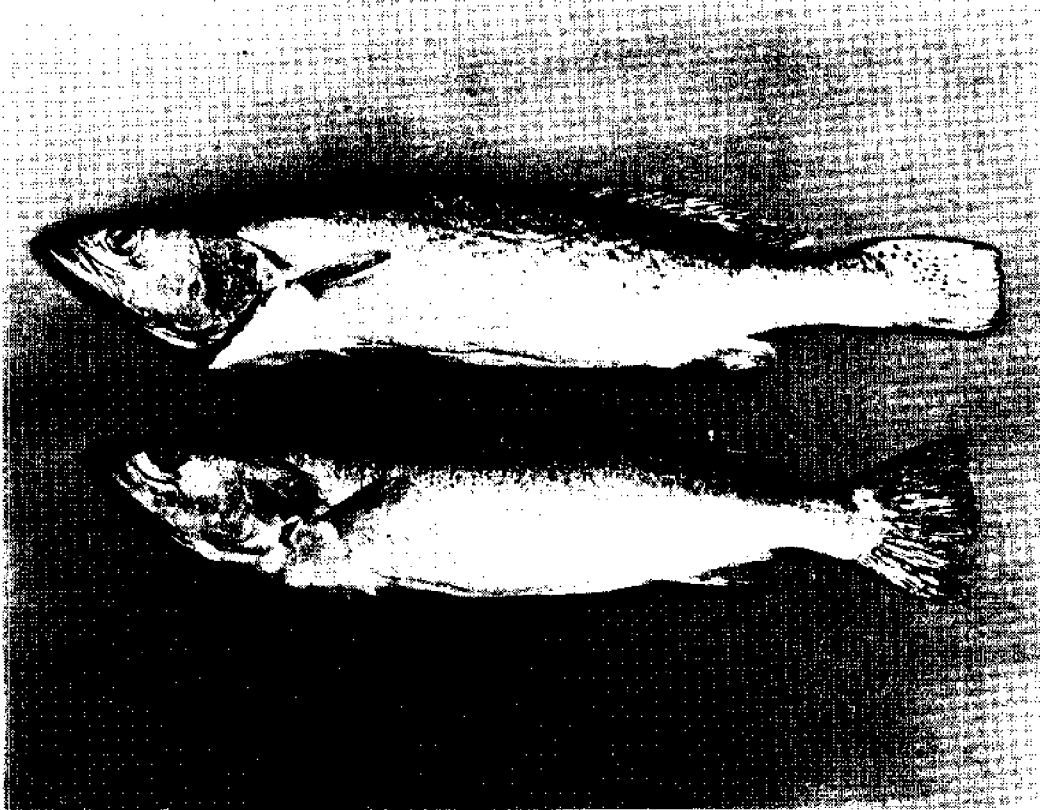
Eyes: Bright, clear, and full. As fish become stale, the eyes become cloudy and sunken.

Gills: Red and free from slime. The color of the gills fades with age to pink, to gray, and finally to brown or dark green.

Odor: Fresh and mild. With increasing age a strong offensive odor develops.

Skin: Shiny, with bright colors. As fish lose freshness, skin colors fade and become less pronounced.

Flesh: Firm, elastic, and not separating from the bones. As fish age, the flesh changes color and takes on a dried out appearance.



Whole fish of prime quality actually appear as if they were just taken from the water. Firm flesh, clear and bulging eyes, and bright red blood in the belly cavity are sure signs that the Gulf trout on bottom is of prime freshness.

Fillets and Steaks:

Flesh: Fresh-cut in appearance and firm in texture. There should be no traces of browning or drying out. If fresh or frozen fillets are packaged, the wrapping should be moistureproof and vaporproof. There should be little or no air space between fish and wrapping.

Odor: Fresh and mild.



Fresh fillets should always appear moist and freshly cut, as does the bottom fillet in the picture above. The fillet on top has been thawed out after one year in cold storage.

Live Shellfish:

Lobster and Crabs: Heavy for their size and show leg movement. The tail of a live lobster curls under the body and does not hang down when the lobster is picked up.

Oysters and Clams: Hard, well-cupped shells. A gaping shell which does not close tightly when tapped indicates that the shellfish is dead and no longer edible. Canadian Atlantic oysters come graded according to shape of shell. The grades are fancy, choice, standard, and commercial.

Frozen Fish Products:

Flesh: Solidly frozen. If cut surfaces are visible, they should have a glossy appearance. There should be no abnormally white or dark spots, papery edges, discoloration, or other signs of drying.

Covering: A moisture and vaporproof wrapping that fits tightly.

The retailer should also familiarize himself with the following signs of poor quality:

Voids: Hollow places in fish flesh are considered faults. Voids are unsightly and if filled with ice cause incorrect net weights.

Dehydration: White cottony signs of “dehydration” are caused by prolonged exposure of unwrapped flesh to mechanical refrigeration. A good test of frozen fillets quality is to thaw a package and inspect it for signs of deterioration and dehydration. For example, if part of the belly-cavity lining is still in the filleted flesh, this piece of lining will cause rapid deterioration.

Discoloration: Most often caused by bruising and accumulation of blood. Reddish-brown steaks are the result of discoloration. Careful handling and thorough rinsing of fish can prevent this.

Rancidity: The chemical breakdown or oxidation of the fat in fish, caused by prolonged storage or thawing. The higher the fat content of the fish, the more likely rancidity is to occur. This defect is indicated by appearance of an orange color.

Coating Defects: Occur in breaded seafood products. A customer may not be able to detect faults until she opens the package at home, so sample your incoming shipments for such faults.

Deterioration in Shrimp: When shrimp deteriorate, bacterial action causes the color to darken and the flesh to become soft and mushy.

Black Spot: The cause of black spot has not been identified but these spots become more numerous as shrimp age. USDC inspectors consider black spot a defect.



“Black spot” is beginning to appear on the shrimp tail at right. Although the shrimp is still edible, black spot is a sign of age and is considered a defect by Federal inspectors.

Once the quality of a seafood has been determined, efforts must be made to maintain only top quality. This can be achieved through proper care.

SEASONAL SUPPLY OF SPECIES

Seasonal availability of species in Gulf Coast states is not a serious problem. Nearly all species can be purchased year-round. Weather conditions that prevent fishing boats from "catching" fish cause the major problem in species availability. For example, from about February to April when winds are high, the supply of red snapper diminishes because snapper is caught farther out at sea. Production of trout and redfish, which can be caught in the protected inner bays, suffer less from these high winds. In general, availability of all species is reduced when the boats cannot go to sea due to bad weather. Although some state laws close public oyster reefs to commercial fishing from about the first of May to November, oysters are available year-round from other states so that the retailer's supply of oysters need not suffer. Oysters are particularly popular during the Thanksgiving and Christmas seasons for use in dressings and gravies.

A key to solving supply problems is to develop good relationships with suppliers. Ideally, the retailer wants to purchase only the quantity needed for one or two days, but rarely is this possible. However, if the retailer builds good relationships with his suppliers, they will most likely provide him with the fish he needs to meet expected and **unexpected** demands. The retailer, in turn, should aid the supplier by purchasing excess quantities of fish that the supplier will have from time to time.

By working together in this way, each link in the distribution chain contributes toward maximum efficiency of the total marketing channel. A sound business relationship among all members of the marketing channel, from fisherman to consumer, is a vital marketing activity that is too often ignored. Naturally, there seems little one can do to improve business relationships with firms several stages of distribution away from one's firm. But keep in mind that each of you must depend upon one another if the consumer is to be completely satisfied. **A satisfied customer means a successful retailer.**

There is a moral to this discussion of good channel relationships. A seller becomes "rich" by making his customers "rich." It all begins or ends with Mrs. Consumer. If you make her a success at the dinner table, she will make you a success in your market.

THE CARE OF FRESH FISH

Fresh fish spoil mainly because of bacterial activity. When a fish dies, bacteria on the skin, on the gills, and in the intestines continue to grow and feed upon the fish flesh. Along the Texas Gulf Coast it has become common practice for all commercial finfish to be gilled and gutted when they are landed. This practice helps reduce bacterial spoilage.

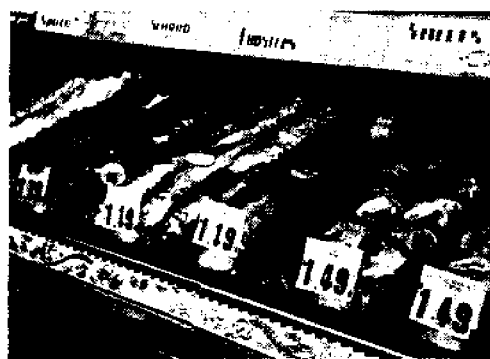
The speed with which bacteria grow on fish flesh depends upon temperature and cleansing action from melting ice. For example, if gutted redfish are taken out of the sea, immediately buried in crushed ice, and kept at 32°F, they will remain edible for 15-16 days. If the fish are stored at 42°F, they will keep for only five and one-half days. Therefore, the first essential in handling fresh seafood is to keep it always as close to 32°F as possible.² The bacterial count on fresh seafood can also be reduced by **washing** the catch with water and by keeping enough ice on top of the product. The melting ice will continually wash the

product where bacteria are likely to form. Storing fish head down in a vertical position in ice makes this washing phenomenon more efficient, thus prolonging storage life.

Of course, the retailer does not receive his merchandise straight from the sea. Because of the time-lapse between landing and delivery to the retail shop, it is best to hold fresh seafood stocks no longer than four days; which means fast turnover and frequent deliveries.

The following list offers suggestions for proper handling and care of fresh seafood:

1. Upon delivery, open containers of seafood and inspect for condition and quality. Reject any fish that show signs of spoilage.
2. Fish that will not be immediately processed and displayed should be washed with 100 ppm chlorine, packed into a clean box or tray with plenty of flaked or crushed ice, and quickly placed in a cooler. Positioning the whole fish vertically or with head lower than tail allows better drainage of melting ice and bacteria through the abdominal cavity.
3. Avoid rough handling, since bruises and flesh punctures hasten spoilage.
4. Keep fresh and cooked, unfrozen fish products under refrigeration at all times. Temperature should be checked several times a day, preferably in two places. Best refrigeration practice is to maintain temperature constant at 31°F. Do not allow uncooked products to come in contact with cooked products because this can cause spoilage and contamination that may be dangerous.
5. See that whole fish in the storage cooler are well iced. Mechanical refrigeration draws moisture from seafood. Ice prevents this dehydration and rinses the fish as it melts. Surround fillets and steaks with ice, but keep them from direct contact with the ice to prevent loss of soluble food elements. This separation can be accomplished by placing butcher wrap or similar material between layers of fillets.
6. Rinse each whole fish with ice water before putting it into the case and surrounding it with ice. Rinse fresh fillets and steaks before placing them on trays and embedding them in ice. Do not stick spike tags in fish. Spike holes allow easy access for bacteria.



Sticking spiked tags into raw flesh is not only poor merchandising, it's highly unsanitary and damaging to the product. Lemons or artificial fruit are much cleaner and have more eye appeal.

7. If you must prepackage fresh fish for self-service, do not package more than one day ahead of sales.

SMOKED, SALTED, AND MARINATED FISH

Keep unfrozen, smoked fish products under refrigeration, but avoid direct contact with ice. The smoking process which involves drying the fish and treating it with salt and smoke preserves fish against spoilage. However, since most consumers prefer their fish lightly smoked and dried, today's products do not remain edible for very long. Smoked fish, therefore, should not be kept in the shop for more than three or four days. It is better to order small quantities more frequently. If not properly protected, smoked fish may develop molds readily, especially during warm and humid weather. Therefore, stock should be examined every day. Because smoked fish warms quickly, a minimum quantity should be displayed and the rest should be placed in cold storage at 31°.

Prevent direct contact of **salted fish** products with ice. Hard, dried, salted products need not be refrigerated, but do need to be protected from high humidity.

Keep **marinated fish** products and all other prepared fish products that have not been frozen or heat-sterilized under refrigeration.

LIVE LOBSTERS AND CRABS

Keep live lobsters cool and moist by storing them in their shipping containers or in tanks of aerated saltwater. **They will not live in fresh water.** By checking lobsters once a day and by using the weakest specimen first, some can be kept on hand for a week or longer.

OYSTERS-IN-THE-SHELL

Store oysters-in-the-shell in a cool, damp atmosphere at about 35°F. Do not allow them to come in contact with fresh water because this will kill them. Properly refrigerated, they will stay alive for a week or more. Freshly shucked oysters will keep for 7-10 days. Frozen oysters that are received in good condition can be kept successfully for as long as four months with proper storage.

STOCK ROTATION

Adhere to a strict rotating system on all seafood products to guarantee first-in, first-out sales. Fresh fish and shellfish retain good quality for only a limited period of time with even the best care. Although the sale of poor quality products may add to current profits, it will discourage repeat sales.

OVERNIGHT CARE

At night, see that fresh fish are removed from the display case, iced down, and stored in the cooler.

Before closing shop for the weekend, discard any fish of border-line quality. Wash left-over fish of good quality in 100 ppm chlorine, re-ice, and store in the cooler. Carefully inspect the fish again before beginning business the next week. Note that effective ordering will ensure a minimum carryover into a subsequent week.³

CARE OF FROZEN SEAFOOD

Although it is true that freezing halts the aging process and retards rapid spoilage, chemical and physical changes which can cause a loss in product quality occur during frozen storage. It should be noted that frozen cold water fish, such as cod, or haddock, lose quality faster than frozen warmer-water fish such as red snapper. A gradual toughening and drying out of fish takes place, and the characteristic flavor that marks each species gradually disappears, leaving the fish somewhat flavorless. Rancidity, evidenced by a strong fish flavor, may occur in any species. All changes that result in the deterioration of frozen seafood products are accelerated by raising the temperature above 0°F for brief time periods. These temperature changes have a permanent **damaging** effect on quality.

The same care in inspecting fresh fish deliveries for quality also applies to frozen fish deliveries. Be sure to reject any thawed or partially thawed products.

Other suggestions for the proper care of frozen seafood include:

1. Transport frozen products directly from the delivery truck to frozen storage. Never allow frozen fish to stand at room temperature since thawing will begin. If thawing should occur, do not refreeze the thawed product, but sell as "defrosted fish." Refrozen seafood is still edible; however the taste and texture of the product is significantly inferior.
2. Frozen packages should be marked and put into the delivery case as soon as they are brought from storage. If they are allowed to stand at room temperature, moisture released from the product due to thawing is trapped inside the package. After the product is refrozen in the freezer case, this moisture forms ice crystals on the inside of the package. These crystals are a tip-off to harmful thawing/refreezing.⁴
3. Store all frozen fish at very low temperatures, preferably minus 10-15°F or lower. Check the temperature of both storage and display facilities several times a day.

STOCK ROTATION OF FROZEN PRODUCTS

Do not keep seafood products in a frozen food display cabinet longer than one month because today's cabinets generally cannot be relied upon to maintain product temperature at or near 0°F. Since minus 10-15°F is the required temperature for long-term quality maintenance storage, severe deterioration will result at 0° or above within a few months. Frozen products have code numbers. Attention to code numbers will aid the retailer in rotating his stock, and in identifying and removing old products.

PREVENTING DRYNESS

Protect frozen seafood in storage from drying with undamaged moisture-and-vapor-proof wrapping or by an unbroken ice glaze. "Glazing" is simply freezing a fish and then spraying it with water to form a protective icy glaze over the flesh. Reglazing may be necessary if storage is longer than thirty days. After processing, the approximate frozen storage life for fat fish is about three months; for lean fish, six months; and for shellfish, two to six months.

Proceed with speed and clear purpose in stocking frozen fish cases. Unnecessary delays in transferring merchandise from one storage location to another are the most frequent cause of temperature damage. When restocking

cabinets, place new merchandise under or behind old merchandise. Aim for weekly turnover of all packages.

DISPLAY OF FROZEN PACKAGES

Place packages close together in the display cabinet, but not so tightly that they are difficult to remove. A snug arrangement prevents air spaces, thereby reducing the chance of thawing. Dividers in cabinets are valuable in maintaining an orderly display. Do not allow frozen seafood display cabinets to become jumbled since the lack of neatness and order will be unappealing to customers and may result in lost sales.

Locate cabinets where they receive a minimum air flow because draughts dissipate the cold air upon which efficient functioning of the cabinet depends.



Always stack frozen packages below the load-limit line in display cabinets. Thawed or fresh products should never be placed in a display freezer.

Stack cartons of frozen seafood products away from walls and ceilings, and off the floors in frozen food storage rooms. This practice favors circulation of cold air, thus increasing cooling efficiency.

Defrost non self-defrosting freezer cabinets at regular intervals and have facilities serviced according to a regular schedule to maintain a constant temperature.⁵

CUSTOMER SERVICE: THAWING AND COOKING FOR BETTER QUALITY

Advise customers that frozen seafoods should be thawed under cold, running water in the original wrapper. Thawing slowly in the refrigerator is **not** recommended because this results in a dry piece of fish. Thawing at room temperature is **not** recommended because thinner parts thaw faster than thicker parts and quality is lost.

Frozen fish portions such as sticks, fillets and steaks can be cooked without thawing if additional cooking time is allowed. Advise customers to read cooking instructions on the package for best results.⁶

TEXAS WHOLESALE SEAFOOD DEALERS, 1974

Abilene	Ben E. Keith Co.	2149 Cottonwood	79601	
	Independent Groc.	P. O. Box 2938	79604	
	Kimbell, Inc.	1301 Treadway	79604	
Amarillo	Affiliated Food	6700 Washington	79106	
	Artic Frozen Foods	P. O. Box 510	79107	
	Mid Central Foods	300 N. Tyler	79105	
	Panhandle Fruit Co.	P. O. Box 1588	79103	
	San Jacinto Foods	314 S. Fannin	79106	
Anahuac	Swift & Co.	110 N. Taylor	79107	
	Marsh Seafood	P. O. Box 2054	77514	
	Oak Island Seafood	Rt. 2 Box 23A	77514	
Aransas Pass	Causeway Fish Mkt.	132 W. Goodnight	78336	
	Coastal Freezing	P. O. Drawer CC	78336	
	Holiday Fish, Inc.	729 S. Whitney	78336	
	South Bay Seafood	135 Bigelow	78336	
	"Y" Fish Market	719 N. Commercial	78336	
Austin	Connolly, Frank L.	1204 Choquette	78757	
	Frostex Food, Inc.	P. O. Box 6278	78762	
	Gugenheim Co.	600 E. St. Elmo	78704	
	Lenz Seafood	5705 Shoalercreek	78757	
	Quality Seafood	5621 Airport	78751	
	Terry's Seafood	2005 Teakwood	78758	
	White Swan Inc.	4044 Promontory Rd.	78744	
	Groce-Wearden Co.	1605 Cottonwood	77414	
Bay City	Osgood Seafood	Rt. 3 Box 445	77520	
Baytown	Bill's Produce	1048 Neches	77701	
Beaumont	Coastal Fish & Oyster	1925 Wash. Blvd.	77705	
	R & B Seafood	3125 College St.	77701	
	Stepman Wholesale	P. O. Box 3828	77704	
	Swift Food Service	805 Crockett	77701	
	Brenham Wholesale Groc.	602 W. First St.	77833	
	Booth Fisheries	3555 E. 14th St.	78520	
	Campechi Seafood	2100 Boca Chica	78520	
	Gavito Seafood	Box 1933	78520	
	Gulf-Tex Seafood	1255 Esperanza	78520	
	J. R. Hardee Shrimp	Star Rt. Box 130	78520	
Brenham	J. V. J. Sales Co.	P. O. Box 3128	78520	
	National Shrimp Proc.	P. O. Box 3410	78520	
	Pace Fish Co.	P. O. Box 3365	78520	
	Ruiz Seafood	1304 E. 13th St.	78520	
	Sea Garden Sales	P. O. Box 3160	78520	
	Shell Tex Fisheries	P. O. Box 1672	78520	
	Southmost Seafood	P. O. Box 1892	78520	
	Trade Winds	2954 Boca Chica	78520	
	Ducan-Husted, Inc.	P. O. Box 207	78611	
	Cisco	West Texas Produce	P. O. Box 1295	76101
	Corpus Christi	Andrews Fish Mkt.	2705 Laguna Shores	78418
		Earls, I. J.	1925 Glenfield	78416
		Groce-Wearden Co.	210 McBride Ln.	78408
		Harris Wholesale	6530 Hwy. No. 9	78408
Lone Star Food		Duss at Mestina	78408	
Laguna Fish Mkt.		3521 Shore Drive	78411	
Nelson Seafood		2441 Ayres	78411	
Olson-Kessler Meat		2341 Pearse St.	78408	
Sam Kane Wholesale		P. O. Box 9254	78411	
Swift & Company		330 Cantwell	78408	
Crystal Beach		Howard's Seafood	Hwy. 87	77650
Dalhart		H.E.B. Grocery	Box 271	79022

Dallas	Affiliated Food Store	9001 Ambassador Row	75221	
	American Produce & Veg.	1120 Central Expwy.	75201	
	Armstrong Hotel Supply	2625 Seelco	75235	
	Ben E. Keith Co.	902 S. Pearl	75201	
	Chester Moore & Son	P. O. Box 34258	75234	
	El Chico Corp.	1925 Valley View	75234	
	Goodman Produce	1000 South Central	75201	
	Hairston Produce	608 S. Pearl Expwy.	75201	
	J & A Fish Co.	10229 San Lorenzo	75228	
	Lone Star Instit.	2666 Manana Dr.	75220	
	Rubenstein Food	1111 Hall St.	75204	
	Schepp's Meat	1135 S. Lamor St.	75215	
	Wicker, Inc.	3004 Gaston Ave.	75221	
	Donna El Paso	Groce-Wearden	2111 Hester St.	78537
Emmett Food		3200 Duranzo	79905	
H & R Wholesale		2000 Mills	79982	
Hasom Frostex Food		2215 Myrtle	79901	
Interstate Mercantile		1515 E. Paisono Mail	79990	
Kitchen Krew Foods		4024 Trowbridge	79925	
Tri-State Wholesale		1000 Hawkins	79990	
Valley Foods		216 S. Florence	79901	
White Swan		4721 Simonton	76101	
Weiss Seafood		219 North Main	78941	
Farmers Branch Flatonia Fort Worth		Austin Fish Mkt.	1300 Riverside	76111
		Ben E. Keith Co.	9th & Pecan	76101
		D & D Produce	3030 Mansfield Hwy.	76119
		Great SW Fish & Oyster	2840 Bryan	76109
	Kimbell Inc.	301 Industrial	76101	
	Kimbell Inc.	5500 Waco Hwy. 81	76101	
	Lewis, Gene C.	6616 Robindale	76119	
	Mar-G-Corp.	4012 White Settlement	76107	
	Swift Food	1101 N. E. 23rd	76101	
	Waples Platter	7301 Waples Rd.	76101	
	West Texas Produce	P. O. Box 1295	76102	
	Frankston Fredericksburg Freeport	Morgan, W. T.	Rt. 1 Box 118-A	75763
		National Inc.	202 East Creek St.	76824
		Allen & Hinkle	Box 971	77541
Coral Shrimp		P. O. Box 911	77541	
Green Bay Seafood		Box 358	77541	
Freeport Shrimp & Storage		909 N. Ave. F	77541	
Gulfshores Industries		P. O. Box 2532	77541	
King Shrimp Co.		P. O. Box 1052	77541	
Old River Shrimp		P. O. Box 864	77541	
S & H Shrimp Co.		P. O. Box 913	77541	
Singleton Shrimp		P. O. Box 997	77541	
Texas Seafood		P. O. Box 1162	77541	
Tidewater Shrimp		P. O. Box 1016	77541	
Western Seafood Co.		420 W. Brazos	77541	
Fulton Galveston	Gulf Coast Seafood	P. O. Box 86	78358	
	D & M Poultry & Seafood	4510 Broadway	77550	
	Gulf Fisheries	P. O. Box 162	77550	
	Hill's Fish & Oyster	P. O. Box 2097	77550	
	Joe Grasso & Son	Box 1018	77550	
	Micheletti's Bros.	1020 10th St.	77550	
	Sampson & Sons	Pier 20	77550	
	Southeast Packing	Pier 22	77550	
	The Liberty Fish & Oyster	7th & Wharf	77550	
	37th St. Fish Market	1709 37th St.	77550	
	Grapevine Gruver	Hall, Leonard	Box 747	76051
		Stanton, Tom J.	Box 398	79040
		Harlingen	Southern Shell Fish	708 N. Commerce
	Swift Food		726 N. Expressway	78550

Houston	Airline Fish Mkt.	2015 Westheimer	77006
	Barnacle Bill's Seafood	2507 S. Shepherd	77019
	Bill's Fish Mkt.	4700 Laura Koppe	77016
	Central Meat Co.	4725 Yellow Stone	77021
	Chu Lov Imports	3115 D'Amico	77019
	Diezi's Wholesale	3719 Navigation	77003
	Dutchman's Seafood	4626 Idaho	77021
	Emmett's Seafood	2704 Austin St.	77004
	General Commodities	2001 Providence	77020
	Glatzmaiers Seafood	416 Travis	77002
	Glazier Frosted Food	Box 2724	77001
	Hendrix Foods	2720 Smith	77006
	Martin Poultry & Egg	2002 White	77007
	Magnolia Seafood	1901 Preston	77002
	Mima Meat	12634 E. Freeway	77015
	Sanitary Fish Co.	4730 C Reed Rd.	77033
	Schepps Groc.	3200 Produce Row	77023
	Shrimp Wholesalers	5324 Telephone Rd.	77017
	Swift & Co.	621 Waverly	77007
	Sysco Food Services	2000 Lyons Ave.	77007
The Grocers Supply	3131 E. Holcombe	77021	
Warren, James R.	Box 388	78362	
Ingleside	Blansfield, E. J. Mrs.	101 Harris	77565
	Cary, Robert W.	318 Oak	77505
Kilgore	Petty's Fish Mkt.	Box 491	75662
Laredo	Southern Fish Co.	2202 Pinder & Gonzales	78040
	Steamboat Seafood	110 Highland Terr.	77573
League City	Steamboat Seafood	110 Highland Terr.	77573
League City	Ben E. Keith Co.	6th & Methvin	75601
Longview	Gregg Poultry & Egg	817 Eastman	75601
	Longview Fish & Oyster	807 N. High St.	75601
Lubbock	Mings, E. B.	1422 Auburn	75601
	Ben E. Keith Co.	121 23rd St.	79404
	Cal-Maine Foods	P. O. Box 2246	79408
	Deardoff Enterprises	Box 819	79408
	Kimbell, Inc.	101 Ave. G	79404
	Potato Specialty	604 30th St.	79404
	Waplen Platter W. Tex.	P. O. Box 1530	79404
	White Swan	915 E. 50	79412
	Wicker Inc.	2427 Ave. H	79404
	Marshall	Caddel, D. G.	Rt. 2 Box 438
Floyd, Jack H.		Rt. 4 Box 788X	75670
Ratcliff Fish & Oyster		Box 237	75670
Matagorda	Jim Yeamans Seafood	P. O. Box 7	77457
	Matagorda Seafoods	P. O. Box 151	77457
McAllen	Sweeney & Co.	3000 Highway	78501
McKinney	North Texas Food & Sup.	209 S. Wilcox St.	75069
Meade, Kansas	Artesian Valley Foods	214 E. Carthage	67864
Midland	Bryant, W. T.	300 N. Big Spring	79701
	Don's Poultry & Egg	Rt. 3 Box 452	79701
	Swift Food	3002 W. Front	79701
	Webb-Davis Fruit	Drawer D, Air Term.	79701
	Lilly Sales	401 Treeman	75773
Minola	B & C Catfish	4107 Forest	75961
Nacogdoches	Adams, W. T.	Rt. 3 Box 1212	79760
Odessa	Dumas Seafood	No. 9 Eighth St.	77465
	E. Collins Seafood	Box 755	77465
	Lowell Fish Co.	Box 981	77465
	Palacios Seafood	P. O. Box 836	77465
	Texas Fish Co.	Turning Basin No. 1	77465

Point Blank	Odom Fish Mkt.	P. O. Box 195	77364
Port Arthur	Cal-Tex Poultry & Seafood	346 East 6th	77640
	Coastal Fish & Oyster	527 Dallas Ave.	77640
	Quality Freezers	101 Houston	77640
Port Bolivar	Gold Crab	Box 86	77650
	Milt's Seafood	7th & Quarles	77650
	Top Quality Seafood	Box 28	77650
Port Isabel	B & A, Inc.	Box 245	78578
	Barszcy, Frank	P. O. Box 731	78578
	M & M Seafood Mkt.	P. O. Box 878	78578
	Twin City Fisherman	P. O. Box 518	78578
Port Lavaca	A & T Seafood	P. O. Box 421	77979
	Broadway Fish Mkt.	643 Broadway	77979
	Clegg Shrimp Co.	612 Harbor	77979
	Direlam Seafood	Box 564	77979
	Evelyn's Fish Mkt.	P. O. Box 769	77979
	Fritz Bait & Fish Mkt.	Rt. 2 Box 162	77979
	H. Morgan Dannel Seafood	P. O. Drawer 629	77979
	Lavaca Shrimp Co.	P. O. Box 255	77979
	Priddy's Oyster House	619 Broadway	77979
	Tritz, Louis E.	Rt. 2 Box 162	77979
Port O'Conner	Clark's Seafood	7th Intercoastal Can.	77982
Quinlan	Bud's Fish & Produce	Rt. 1 Box 37E	75474
Rivera	Naylor Fish Mkt.	Rt. 1	78379
Rockport	Jackson Seafood	P. O. Box 1088	78382
	Lee's Seafood	Box 1076	78382
	Mrs. Turner's Crab Co.	Rt. 1 Box 547	78382
	Rockport Fishery	Box 1437	78382
Sabine	Channel Shrimp	P. O. Box 406	77655
Sabine Pass	Rebel Seafood	P. O. Box 153	77655
San Angelo	D & D Enterprises	2736 Southwestern	76901
	Friend, Oth L.	120 West 20th	76901
	Kimbell, Inc.	2000 Loop 206	76901
San Antonio	Brandt Poultry	1504 Roosevelt	78210
	Eastside Seafood	2537 E. Commerce	78203
	General Commodities	1504 Roosevelt	78210
	Holmes Distributing	1403 E. Houston	78202
	Kimbell, Inc.	1503 Cherry St.	78210
	Labatt Company	300 N. San Marcos	78296
	National Inc.	421 Medina	78285
	Polunsky's Inc.	1224 N. Flores	78212
	Porter Poultry & Egg	5475 Hwy. 90 W. Expwy.	78227
	Sweeney & Co.	P. O. Box 721	78293
	Swift Fresh Meats	P. O. Box 2568	78299
San Benito	Poivell, Claude	335 Winchell	78586
San Leon	Blevin Shrimp & Oyster	Star Drive	77539
Seabrook	International Fisheries	P. O. Box 363	77586
	Seabrook Shrimp & Oyster	105 11th St.	77586
Seadrift	Amason Seafood	P. O. Box 861	77983
	Cunningham Seafood	P. O. Box 356	77983
	Froggies Shrimp	Box 441	77983
Seagoville	Dees, J. H.	Rt. 1	75159
Shreveport LA	Dupont Fish Mkt.	161 N. Market	71107
Sulphur Springs	Grocery Supply	Box 638	75482
Temple	Gaines Sales	803 E. French	76501
	McLane Company	3015 Center	76501
Texarkana, AR	Vanderslice Foods	4400 Penson	75501
Texas City	Mailand Seafood	4926 Texas	77590
Tyler	Kimbell Inc.	309 Palace	75701
	Tyler Fruit & Veg.	422 E. Oakwood	75701
Victoria	Groce-Wearden Co.	204 N. Bronson	77901

Waco	Swift Food	306 Otis	76710
	Waco Frozen Food	400 S. 20th St.	76706
Whitharral	Eslinger, David	Box 66	79380
Wichita Falls	Ben E. Keith Co.	3201 Lawrence	76309
	Massey Fish & Oyster	1916 Tenth	76301
	Register, George	2519 Inglewood	76301
Winnie	Burnet, Michael	Box 485	77665
Woodville	J & R Fish Co.	Box 1148 Dagwood Sta.	79579

CHAPTER IV SANITATION¹

BASIC BACTERIA KNOWLEDGE FOR RETAIL FOOD INDUSTRY PERSONNEL

Introduction

The food industry is fundamentally based on the control of bacteria. All the basic processes used in preparing food today originated for this purpose back in antiquity but, however, at that time without the knowledge of "why". All of these basic processes in one way or another control microbial growth and hence preserve the food item:

Salt
Spices
Smoking
Drying
Curing
Freeze-chilling

During production and marketing today, we also control the shape, size, color, etc., but always under conditions and in such a manner which also control bacteriological growth. Therefore, all individuals in this industry must become familiar with the terminology and the fundamental aspects of bacteriology. Not as bacteriologists, but as professional food handlers.

We must know the significance of bacteria from two standpoints: economic and public health.

CHARACTERISTICS OF MICROORGANISMS

Microorganisms are everywhere - in and on everything. The term "microorganisms" includes bacteria, yeast, molds, virus, protozoa, etc. However, we shall consider bacteria, yeast, and molds collectively in our discussion.

Remember, though, we are concerned primarily with bacteria.

1. Size of Bacteria

One of the most important characteristics of bacteria is the size, which is measured in microns, which is 1/25,000th of one inch. We can illustrate this size by saying that a trillion bacteria would occupy one cubic inch and 400 million bacteria would occupy the space the size of one grain of sugar.

2. What Temperatures Do Bacteria Like?

Important to you, also, is the temperature of growth for bacteria. There are generally three groups or classifications of organisms in regard to their desired temperature. There are those that love high temperatures and grow best when the temperature is a torrid 130°F. or 140°F. Some organisms in this group have been known to grow in temperatures as high as 185°F.

And there is the middle group that includes all those that invade the human body. These grow best between 86°F. and 100°F., but they may also grow somewhat slower at 60°F. up to 110°F.

Important to us in the food industry, also, are those cold-loving bacteria that will grow at and below 32°F.

3. Types of Environment Favorable to Bacteria

Most bacteria, of course, require air to grow, but curiously and, very importantly, there are some bacteria that will grow only where there is no air. This is an important fact to you because one of the most deadly microorganisms in the food industry is one that grows under these conditions. Airless conditions occur inside a mass of meat or vegetable material, in the bottom of a pot of warm stew and in other areas which are excluded from contact with air.

Also of significance to you as professional food handlers is that some bacteria, when their living conditions become intolerable—that is, too hot or too cold, or not enough air or too much air, or not enough food—can form themselves into a “cocoon-like” spore and “hibernate” until conditions are right again when they again begin to live. In this spore state, they may be extremely resistant to being destroyed. There is one organism that causes a deadly food poisoning that may withstand six hours of boiling water.

Now, let us put together some of these characteristics we have been discussing. Let us look at a real trouble-maker—an organism that is heat-loving, grows in absence of air and forms a highly resistant cocoon or spore. This characterizes one of the organisms with which we have to deal.

4. What Bacteria Eat

Something more that you should know about bacteria is what they eat. Generally, they do not need what you would call a balanced diet. Their requirements are simple—just meat, cooked or raw; they will live on just vegetable or fruit material.

Some can live and grow in dirt. More important, some can and do live and grow on such things as rust on a pipe, in the salt deposits on aerator screens in faucets, in the recesses of drains and grease traps, in sawdust, in salt, in vinegar, etc. They can and do grow in grease-soaked wood, in droplets of condensed water on a cooler ceiling, on a speck of meat on a wall, in vegetable debris in the bottom of a display case, on a dirty cloth, etc.

5. How Bacteria Multiply—Reproduction

Let us take 15 minutes per generation, as an example, to see what this means. Let us start at 9:00 a.m. with one bacterium:

At 9:15 we would have two; at 9:30 we would have four; at 9:45 we would have eight; at 10:00 there would be 16 bacteria; at 11:00, or two hours later, there would be 256 bacteria; at 12:00 there would be 4,096, and at 1:00 in the afternoon there would be 65,000 bacteria!

Remember how small these bacteria are? You may easily place 1,000 bacteria on, let us say, a piece of ham from your thumb. So, instead of starting with one at 9:00 we start with 1,000 and, therefore, in four hours, or 1:00 p.m., we would have instead of 65,000 - 65,000,000 bacteria.

In a 24-hour period there are 96 fifteen-minute generation times. Therefore, in 24 hours one becomes an unwriteably large number. If we take only a 12-hour period, or overnight, one organism can become a hundred trillion.

We are not being theoretical about this. This tremendous growth is exactly what is happening in and on the products in your stores today if they have been contaminated and then mishandled by being left at the wrong temperature. All of these millions upon millions of bacteria are living and excreting on the food you are hoping to sell.

If you place bacteria in a new environment—from your thumb, for example, to the surface of food—they must become used to the new environment before they can start to grow rapidly. This is called the lag phase of bacterial growth. Many factors cause this lag phase to vary in time from 1-1/2 hours to 18 hours, or many days in some cases. **In the food industry we use four hours as the average lag phase of bacterial with which we are concerned.** This 4-hour lag phase before growth occurs is very important to you. We will use this fact later in the control of bacteria in your stores.

6. How Bacteria Travel

One more important thing about bacteria, and that is they have no legs. They may wiggle a little bit but they cannot get around from place to place like we can. They must hitchhike—via a cough, sneeze, rat, mouse, roach, fly, fingers, clothing, splash droplets, or by direct contact—from place to place and from food to food.

TYPES OF BACTERIA

There are literally thousands of various types of bacteria, but those which are important to use can be placed into two general categories—the **food poisoners and the food spoilage bacteria.**

1. Food Poisoning Bacteria

Let us consider first the food poisoning bacteria—those organisms of public health significance. We are primarily concerned with only four. Let's name them and learn a little bit more about them:

- a. **Salmonella**—These are a large group of similar organisms, all of which infect the intestinal tract of man and warm-blooded animals such as cattle, sheep, swine, dogs, cats, birds, horses, mice, rats, etc. They are first cousins to typhoid fever. They may enter man's intestinal tract via food and there grow and produce severe illness which may result in the death of children, the elderly, or the weak individual. Since this organism must grow in the intestines to produce illness, it is possible that one single salmonella on a ready-to-eat food item may cause this illness.

The salmonella also may live in the intestinal tract of man and animals for long periods of time without causing noticeable symptoms. Therefore, the prime source from which salmonella enters into the food we eat is contaminated with feces—direct or indirect.

Salmonella are easily killed by disinfectant solutions, such as chlorine. They are also easily killed at temperatures of 161 F. for 16 seconds, or at 145 F. for 30 minutes. The main sources of contamination of cooked product in your store would be:

- 1) Unwashed hands of personnel.
- 2) Raw pork, beef, lamb, veal, etc., which probably was unavoidably contaminated with fecal material during slaughter and dressing.
- 3) All raw poultry are a prime source.
- 4) Carried into plant on unclean footwear.
- 5) Rodents and insects.
- 6) Bird excreta.
- 7) Uncleaned barrels from rendering plants.

It should be clearly understood that we always may expect salmonella contamination on raw meats of all types. Not always and not to a great degree, but some. Federal public health officials recognize this fact of life.

- b. **Staphylococci**—This is a group of organisms which most often cause infections of wounds, boils, pimples, sore throats. It quite commonly is found normally present on the skin of man. It is also the cause of untold misery from the “food-poisoning” outbreaks you read about in newspapers which result in the prostration of many persons shortly after a banquet, picnic, family gathering, etc. You certainly have had at least once the unpleasant “two-bucket” symptoms after eating some particular food.

This organism when it grows on food, particularly cooked products, produces a poison like a snake. We may then even heat or cook the food to kill the staphylococci, but the toxin remains unchanged and causes food poisoning symptoms shortly after eating.

The staph may grow to enormous numbers on meat without producing noticeable changes in color, odor, or taste of the product. The staphylococci cannot compete with the usual spoilage organisms found on fresh meat. The growth of spoilage organisms prolong the lag phase of the staphylococci. Therefore, food poisoning usually occurs when already cooked ready-to-eat (spoilage bacteria killed) recontaminated with the staphylococci organism and then held between 45° F. and 140° F.

Again, this organism is easily killed by disinfectants and heat. **The main sources of contamination in your store would be:**

- 1) Unwashed hands of personnel.
- 2) Infected cuts and scratches, boils, pimples and nasal or oral discharges of personnel.
- 3) Raw poultry seem to be always well loaded with staphylococci.

c. **Clostridium Botulinum**—This bacteria has a long name and may not be recognized. However, you certainly are familiar with the deadly disease of botulism that it produces. We again here have an organism like the staphylococci which produces a poison or toxin during its growth. There are, however, some vital differences from staphylococci which are:

- 1) Unlike the staph, the botulinum organism is extremely difficult to kill. It forms a spore. Remember, we discussed how resistant these spores are to killing. You cannot kill the spore of this organism with the strongest antiseptic that you can use in a food plant, or even with boiling.
- 2) The toxin it produces may be easily destroyed by boiling for a minute or two. This is contrary to staph toxin which is most difficult to destroy by heat.
- 3) The toxin does not produce a gastrointestinal upset like the staphylococcus, but instead attacks the nerves and most of the time causes death.

The botulinum organism will be found in most soils (dirt).

Therefore, prevention of dirt contamination of your product helps. Fish are a prime source of this organism, therefore, fish should not be handled in conjunction with other meats.

Soil from farm produce would be another source and should not be tracked throughout your store, especially in the delicatessen area.

One of the worst things about the botulinum organism is that it will grow only in the absence of air. From this you may expect to find this organism growing and producing toxin in the bottom of unclean tubs, inside a mistreated mass of meat, in hidden meat crevices, in the bottom of warm pots of stew, etc.

d. **Clostridium Perfringens**—This bacterium has been recognized only recently as being of prime importance as a food poisoner. This organism also may produce heat resistant spores. It grows at temperatures between 44° F. up to 124° F. and may double in numbers as often as every 18 to 30 minutes. It produces a toxin which causes a severe gastric upset similar to the staphylococcus.

This bacterium is of great importance in the delicatessen area of stores. Heat resistant spores will not be killed in cooking and, subsequently, may grow to enormous numbers when the food temperature is dropped to below 126° F. Further, and more important, if contamination of the chilled, cooked food occurs during holding time and the food is again heated, this heating activates the spores into rapid growth.

This organism is widespread in nature and impossible to keep out of your store. The main sources for contamination of your delicatessen items would be:

- 1) Soil or dirt from the produce department.
- 2) Fresh meat, poultry and fish.
- 3) Spices.
- 4) Unwashed employees' hands.
- 5) Soiled employees' clothing.

2. Food Spoilage Bacteria

Of the many types of bacteria that contribute to food spoilage, the group known as pseudomonads are the basic concern of the market operator.

- a. **Pseudomonads**—This family of bacteria is a primary cause of food spoilage and discoloration. They are present in the air and in the soil; despite the wide practice of chloridization, the pseudomonads are commonly present in municipal water supplies.

Many strains of pseudomonads survive and actively grow at low temperatures. Introduced by careless handling into a retail package of meat, poultry, fish or produce, the pseudomonads can induce spoilage at a rapid rate. The control over the cost associated with food spoilage and discoloration largely lie with a market's ability to control the frequency with which foods are contaminated with pseudomonads while being packaged for retail display cases.

Because of the prevalence of these bacteria and their hardiness, their control depends upon tight measures of sanitation.

- b. Large numbers of yeast and molds and bacteria from other families also contribute to food spoilage. Like the pseudomonads, these organisms grow well at reduced temperatures.

Cold-loving spoilage bacteria - those that cause slime and off odors will grow on damp cooler surfaces, in grease-soaked wood and in uncleaned equipment. These organisms then contaminate all meat entering the cooler and shorten its keeping time by many hours and days.

For example, a beef quarter entering a cooler with only 1,000 bacteria per square inch on the surface may easily have its surface count increased to 100,000 per square inch by contamination from the millions and billions of spoilage bacteria living on uncleaned cooler surfaces.

Fish are a primary source of both putrefying and slime forming spoilage organisms that grow at cooler temperatures.

The economic loss from meat spoilage varies greatly from store to store. However, whether it is great or small, it can be prevented by ordinary sanitation procedures aimed at eliminating the sources of the responsible bacteria in coolers.

CONTROL OF BACTERIA – 3 IMPORTANT RULES

A short review like we have had above on the characteristics of bacteria and their sources brings up the obvious question - how in the world may we control such creatures? Really, the answer is rather simple. If three general rules are put into effect and all of their ramifications by you as a food handler, your product will enjoy less spoilage, a longer shelf life, will give you more economic return with little chance of causing human illness. These rules are based on what you have learned above.

1. Three Important Rules for Bacteria Control

- a. Prevent entry of excessive numbers of bacteria into the store.
 - 1) Clean materials and supplies from reliable supplies are required.
 - 2) Delivery vehicles must be clean and sanitized and refrigerated.
 - 3) Clean employees entering the store.
 - 4) Control of personnel traffic into the sensitive cooked food delicatessen area.
- b. Prevent growth within the store of those bacteria that inevitably will enter.
 - 1) That is, make the store environment hostile to bacteria. Good food handling conditions make bad bacterial growth conditions.
 - 2) Hold product below 45° F., or above 140° F. Remember that these are minimum temperature recommendations.
 - 3) Handle products fast that must be handled in the range of temperatures between 45° F. up to 140° F. Fast, means product must not be in this temperature range for more than four hours. Remember the lag phase in growth of bacteria on which this statement is based.

If it takes one hour to chill warm or hot product to below 45° F., you must take this into account in the 4-hour interval.
- c. Prevent contamination of product from sources of bacteria within the store. This rule covers a whole host of does and don'ts. For example:
 - 1) Clean up food particles and grease wherever they are before bacteria can grow.
 - 2) Sanitize with disinfectant to kill bacteria that may be growing. The equipment held at room temperature will allow bacteria to grow, so we must wash and sanitize it every four hours.

- 3) Personnel should wear clean clothes.
- 4) Personnel should wash hands, especially after handling contaminated surfaces or handling raw meats, and before handling ready-to-eat cooked meats.
- 5) Prevent rodents and insects from entering the store.
- 6) Do not allow cross-contamination, direct or indirect, from raw products to cooked products.
- 7) Control incidental contamination from the water supply by cleaning and disinfecting "aerator" screens on a regular basis.

2. Typical Control Violations

Above all, remember that food poisoning and food spoilage bacteria are transmitted by both direct and indirect contact. A few examples that violate the reasons and rules above are:

- a. Fresh meat contacting soiled or slimy cooler surfaces.
- b. Fresh produce in coolers seeded with millions of spores from mold growing on ceiling and walls.
- c. Cooked ready-to-eat product being cut with saws or knives that have not been cleaned and sanitized after use on raw meat or poultry.
- d. Cooked delicatessen items handled on table surfaces or cutting boards that were not cleaned and sanitized after use with raw meat.
- e. Cooked delicatessen items contaminated with dirt from product supplies being carried through delicatessen area.
- f. Personnel handling raw meat, raw fish, or produce and then handling cooked ready-to-eat products without washing and sanitizing hands and changing aprons.
- g. Storage of ready-to-eat product in contact with or exposed to raw materials.

SUMMARY

The above rules which are founded on the basic bacteriological concepts we have learned must be expanded into specific guidelines and detailed procedures. However, you can see that we no longer are concerned only with visible or surface cleanliness. The emphasis today is with procedures and their relation to sources and routes of contamination. We must be concerned with operations involving personnel, equipment, cleanability, handling practices and time-temperature relationships. We must critically observe many details we have never thought of before.

**PERSONNEL
HYGIENE AND PERSONAL HABITS**

WASHING AND SANITIZING OF HANDS

1. When and How

- a. All personnel handling ready-to-eat products or contacting equipment handling ready-to-eat products must wash their hands with soap, preferably antiseptic or germicidal, from a dispenser (preferably foot or remotely operated) and then dip them in a 50 ppm chlorine or any other suitable sanitizing solution when:
 - 1) Starting to work in the morning.
 - 2) After break time.
 - 3) After Lunch.
 - 4) After leaving and then returning to work station.
 - 5) After touching the floor or dirty area.
 - 6) After handling uncooked product, etc.
- b. It is preferable not to dry the hands after using a chlorine dip.
- c. Disposable plastic gloves may be used in lieu of hand washing and sanitizing in the department. Gloves must be discarded for new ones at the same intervals as indicated above for hand washing.
- d. All other personnel handling any perishable product must follow the hand washing and sanitizing instructions above.

2. Drying

- a. Paper towels should be used instead of cloth to prevent contamination.
- b. Hands should never be wiped or dried on aprons.

CLOTHING

1. Clothing - General

- a. Personnel handling any food products, raw or cooked, must wear clean white outer clothing. This means daily laundering.

This includes maintenance personnel working in the food departments on equipment contacting any final product, cooked or raw.

Also, outer or street clothing such as jackets, sweaters, galoshes, etc. are not to be worn as outer garments in any edible department.

- b. All other personnel in store must wear **obviously** clean clothing.

2. Gloves - Guards

- a. Gloves and other guards required for handling products, cooked or raw, must be laundered or washed on a daily basis or however more often the job requires changing of gloves.

- b. Only **white** gloves may be used (unless disposable are used).
- c. Leather products, such as wrist guards and aprons must be replaced with plastic or other material that can be washed with hot detergent and sanitized daily.
- d. Where aprons are referred to later, either washable rubber or plastic or disposable aprons are recommended.

3. **Head Coverings**

All personnel present in departments where product is exposed and/or handled must wear head coverings to prevent hair falling into product.

4. **Laundering Instructions**

- a. One or two quarts of hypochlorite bleach, containing 1% of available chlorine, must be added per 100 lbs. of fabric during the bleach operation.
- b. At least one rinse must employ a temperature of at least 170° F. for a minimum of three minutes.

USE OF TOBACCO

Personnel must not use tobacco in any form while in food processing, food storage or equipment and utensil washing areas. (Dry grocery warehouse areas are not included in this requirement.)

DISEASE

No person affected by disease in a communicable form, or while a carrier of such disease, or while affected with boils, sores, severe acne, infected wounds, sore throats, colds, diarrhea or other abnormal sources of bacterial contamination should be permitted to work in an area where food, cooked or raw, is exposed.

PERSONAL HABITS

1. **Spitting**

Spitting on the floor is prohibited. The mouth must not be used to temporarily hold tags, pins, cards, etc.

2. **Coughing, sneezing, Etc.**

Insanitary practices, such as placing the fingers in the mouth or nose, uncovered sneezing or coughing, scratching the head, etc. must be controlled.

3. **Eating**

Employees must not be allowed to eat, drink or taste any products while working unless hands are immediately thereafter washed and sanitized.

- a. Lunches must be eaten only in a designated area away from food-handling areas.

- b. Employees must not store or hold their lunches or drinks in the coolers, refrigerators or ice chests with product that is to be sold. A specific cooler shelf or area, used for nothing else, may be designated by the management for this purpose.

SUMMARY

The area of personal cleanliness is a most difficult field in which to obtain effective action. Bad habits of long standing must be eliminated and rigid rules of personal hygiene and practice must be instituted. It is the responsibility of store management to set standards at a high level.

The above personnel requirements must be required of all "outside" visitors, such as management people, salesmen, service men, fire inspectors, health inspectors, demonstrators, etc. that enter foodhandling areas.

In these cases it may be advisable for management to provide extra white frocks and disposable head covering for these people.

TECHNIQUES, EQUIPMENT AND AGENTS FOR CLEANING AND SANITIZING

SELECTING APPROPRIATE TECHNIQUES AND PRODUCTS

To "sanitize" means the adequate bactericidal treatment of cleaned surfaces by a process that is effective in destroying bacteria. The key phrase in this definition is "cleaned surfaces" since bactericidal agents as used here are ineffective in the presence of grease, soil or product debris.

An effective sanitation program must include the proper use of cleaning and sanitizing agents, together with adequate cleaning and sanitizing procedures. To be truly effective, the sanitation program should provide procedures for cleaning which quickly remove greasy soils and solid waste materials from the food preparation process and also provide adequate controls of bacterial contamination. Unfortunately, many people involved in these programs still confuse ordinary soaps and cleansers with the processes of disinfection and sanitation. These products clean most of the greasy soils with relative ease, but they do not have any significant bacterial activity.

The use of an alkaline detergent should be followed with a sanitizer for the purpose of eliminating or at least reducing the levels of remaining bacterial contamination.

"Sanitizers" are the agents most commonly used in combination with alkaline detergents. It should be noted again, however, that sanitizers are not cleansers. They have no detergent power. As previously mentioned, "sanitizers" show very little effectiveness against bacteria when applied in the presence of grease, soap residues and in combination with many ordinary detergents.

There are also today alternative ways of cleaning and sanitizing that will save up to 50% of the time needed to clean and sanitize under the standard method.

This is accomplished with the use of germicidal detergents which combine the cleaning and sanitizing operation. Combining these operations means that the destroying of bacteria is taking place while the cleaning is being accomplished.

Therefore, the steps involved that will be discussed in further detail are as follows for each method:

Standard Procedure

1. Rough clean—broom, brush, etc.
2. Alkaline detergent cleaning
3. Rinse
4. Sanitize
5. Rinse (if needed)
6. Air Dry

One-Step Cleaning-Sanitizing Procedure

1. Rough clean
2. Germicidal detergent cleaning and sanitizing
3. Rinse (if needed)
4. Air dry

IMPORTANT – SPECIAL NOTE

It should be noted here that there is some disagreement between supporters of the two methods listed above. Confronted with a choice, there might be some confusion as to which method to use.

The supporters of the **Standard or Traditional Procedures** say that the cleaning and sanitizing steps must be separated for maximum effect in the reduction of bacterial levels, hence there is no acceptable short cut to good sanitation.

The supporters of the **One-Step Cleaning-Sanitizing Method** claim that the new modern germicidal detergents combine the operations with equal effectiveness in destroying bacteria and also save up to 50% in labor.

Whichever one prefers, either will do the job effectively for the supermarket, if combined with correct procedures for cleaning and sanitizing. Documented savings are available using either program. **Both are approved.**

It is always wise to consult a USDA list of accepted materials before deciding on a product.

A breakdown of the above two cleaning and sanitizing procedures is described in detail in the following sections.

STANDARD PROCEDURES

1. Rough Cleaning

This is the preliminary step to all cleaning-sanitizing procedures. The elimination of the bulk of food materials aids in subsequent cleaning and prevents floor-drain clogging.

- a. Without use of water, use hands, brushes, brooms, squeegees or scrapers as applicable to collect and dispose of all large debris.
- b. Where blood is a problem, such as on beef-cooler floors, hose down with cold water to finish rough cleaning.
- c. For equipment and all other floors, flush with warm (125-130°F.) water to complete rough cleaning, if drains are available.

2. Alkaline Detergent Cleaning

Prepare and apply detergent with hot (155-160°F.) water. This step may be accomplished by:

- a. Using mechanical pressure equipment.
- b. By hand, in a sink, tank or tub in which case scrubbing by brush is required.
- c. By bucket and brush.
- d. By bucket and mop.

3. Acid Detergent Cleaning

In case of very hard water for metal surfaces acid detergent or acid cleaning:

- a. Follow alkaline detergent cleaning instructions.
- b. Flood equipment with warm acid cleaner and allow to stand 5 to 15 minutes.
- c. Using a stiff fiber or nylon brush, scrub away the softened deposit. If there is a heavy deposit, more than one application may be required.

4. Rinse

- a. Rinse with hot (155-160° F.) water. Check thoroughly that all grease and particulate matter have been removed. If not, wash again.
- b. Remove excess water by clean squeegee, disposable paper towelling or power vacuum and allow to air dry.
- c. Portable equipment must be placed on cleaned racks, pegs, hooks or drain boards to dry.

5. Sanitize

- a. After cleaning and rinsing, apply 200 ppm sanitizing solution:

On some equipment it may be necessary to remove excess water before applying sanitizer.

Apply by spray, flooding cleaned area with buckets of sanitizer or by immersion of equipment in solution.

- b. Allow sanitizer to remain a minimum of 5 minutes and a maximum of 15 minutes on metal.

6. **Rinse**

Rinse (not necessary on floors and walls) after applying sanitizing solution.

7. **Air Dry**

ONE-STEP CLEANING-SANITIZING PROCEDURES

1. **Rough Clean**

Follow steps under Standard Procedures.

2. **Cleaning and Sanitizing**

Prepare and apply germicidal detergent with hot (155-160° F.) water:

- a. Using mechanical pressure equipment.
- b. By hand, in a sink, tank or tub in which case scrubbing by brush is required.
- c. By bucket and brush.
- d. By bucket and mop.

3. **Rinse**

- a. Rinse with hot (155-160° F.) water. Check thoroughly that all grease and particulate matter have been removed. If not, wash again.
- b. Remove excess water by cleaned squeegee, disposable paper toweling or power vacuum and allow to air dry.
- c. Portable equipment must be placed on cleaned racks, pegs, hooks or drain boards to dry.

4. **Air Dry**

SPECIAL INSTRUCTIONS FOR SPECIFIC AREAS, EQUIPMENT AND PRODUCTS

1. **Cooked and Ready-to-Eat Products—Equipment and Areas**

- a. If area temperature is above 45° F. the sanitation schedule must be as follows:
 - 1) Prior to start in morning, wet all surfaces and equipment with 200 ppm sanitizing solution for 5 minutes, rinse and remove excess water.
 - 2) Every 4 hours that equipment is used, clean and sanitize.
 - 3) At end of working day, follow the standard procedures for cleaning and disinfecting.
- b. If area temperature is 45° F. or below, follow the standard procedures for cleaning and disinfecting at end of each working day.

Prior to start in morning, flood surfaces and equipment with 200 ppm sanitizer for 5 minutes, rinse and remove excess water.

- c. Equipment, such as slicer and saw, must be disassembled as far as possible when cleaning and sanitizing.
- d. Cutting boards of plexiglass, or other synthetic materials in good condition may be cleaned and sanitized as above, but wooden cutting boards in good condition must undergo the following procedure.

Daily, at the end of day after cleaning as above, immerse the boards in 500 ppm chlorine or other suitable sanitizing agent for 30 minutes. Stand on edge to dry overnight without rinsing. In morning, put board through the regular 200 ppm sanitizing and rinse procedure.

- e. Knives with twine-wrapped handles are uncleanable and are not to be used for cooking equipment.
- f. Plastic or rubber matting and plastic ornaments for the display counters must be cleaned daily following the standard instructions for cleaning and disinfecting.
- g. Cleaning and sanitizing of all cooked product equipment should be done in a separate area from raw product washing area.

2. Raw Products—Equipment and Areas

- a. If area temperature is 50° F. or below, the sanitation schedule must be:

Daily, at end of shift, follow instructions for cleaning and disinfecting.

- b. If area temperature is above 50° F., the sanitation must be:
 - 1) Follow at noon or mid-shift, the standard instructions for cleaning and disinfecting.
 - 2) Follow at end of shift the standard instructions for cleaning and disinfecting.
- c. All equipment must be disassembled completely for cleaning and disinfecting.
- d. Fish-handling equipment should be cleaned in an area separate from other cleaning procedures. In addition to cleaning and disinfecting, all surfaces should be final rinsed with 200 ppm sanitizer before start of operations in the morning.

3. Coolers—Floors and Walls

- a. Rough-clean floors without water daily, with these exceptions:

In fish coolers and in areas where poultry is held after rough-cleaning, flush floors daily with warm (125-130° F.) water followed by applying 200 ppm sanitizing solution.

Following cleaning, the floor, walls and ceilings must be wet down with sanitizing solution which is left on.

- b. Treatment of mold.
 - 1) Scrub with detergents.
 - 2) Rinse.
 - 3) Spray with 500 ppm chlorine solution.

4. Processing Areas

- a. Floors, with drains, are to be cleaned daily, following standard instructions for cleaning and sanitizing.
- b. Walls are to be cleaned weekly or when soiled, following the standard instructions for cleaning and sanitizing.
- c. Special alternative instructions for floors and walls.

Realizing that there are stores within companies that are not equipped with floor drains or the latest in wall and floor materials that make for easy cleaning and sanitizing, this section is devoted to alternate ways of getting the job done with satisfactory results.

- 1) **Wood floors** should be treated after finishing or refinishing with a waterproof non-porous sealer.
 - a) Clean and sanitize with hot water, using mop or similar floor-scrubbing appliance, a bucket on wheels with preferably two compartments.
 - b) Soak up excess water on floor and air dry.
- 2) **Concrete or Cement (without drains)**
 - a) Clean and sanitize with hot water, using a mop or floor scrubbing machine if available.
 - b) Rinse with warm water.
 - c) Air dry after removing excess water; use water vacuum if available.
- 3) **Linoleum or Asphalt Tile Floors (without drains)**

Follow instructions above for concrete and cement floors. Special caution should be taken here not to use so much water as to loosen floor tile.

- 4) **Floors With Drains**

Clean and sanitize according to general instructions and ideally, using a mechanical high-pressure spray machine; if steam and condensation are not a problem, floor drying may be aided by using very hot water as a final rinse.

5) **Dry-Storage Areas**

Dry rough-clean daily. Weekly, follow instructions for cleaning and sanitizing. At least every two weeks, move all skids and racks so the entire floor may be cleaned.

6) **Miscellaneous Cleaning Instructions**

- a. **Barrels** or containers for waste, scrap or rendering materials must be cleaned after each emptying and at least weekly by following the standard instructions for cleaning and sanitizing.
- b. **Small equipment**, such as knives, mesh gloves, small pans, strainers, etc., may be sprayed with or immersed in 180° F. water after cleaning and sanitizing procedures.
- c. **Can openers** must be cleaned and sanitized daily. A small stiff-bristled brush is required for cleaning crevices.
- d. **Ice manufacturing machines** must be cleaned-sanitized.
 - 1) Turn off water and power; empty and drain.
 - 2) Clean thoroughly inside, using cleaning and sanitizing instructions, including circulating the cleaning solution through the machine.
 - 3) After sanitizing, rinse thoroughly.
- e. **Conveyor Belts.** Perishable product processing area.

After cleaning and sanitizing, if belts are to be unused for 4 hours or more, supply facilities so that the belt is held up so drying of under surface may occur.
- f. **Roller conveyors** are extremely difficult to clean, but there are three ways this may be accomplished.
 - 1) Divide them into small enough sections so they may be taken to a sink for washing.
 - 2) Use power washing equipment in place.
 - 3) Take long sections to a cleaning area sufficiently large to handle them.

- g. Heavy plastic or smooth rubber aprons (if disposables are not used) may be cleaned according to the standard instructions for cleaning and sanitizing by repeated dipping into and out of fairly large containers of germicidal detergent, followed by a rinse in water.

Air returns and grills

- h. **Air returns and grills** in display counters and on refrigeration units must be cleaned weekly with a vacuum hose.
- i. **Hand-sanitizing solutions** may be placed in small stainless steel pans near hand washing sinks. There are sinks available with small containers attached alongside the wash basin. Also, dispenser with antibacterial soap is strongly recommended.
- j. **Rest rooms, lunch rooms**

These rooms, and equipment within them, must be cleaned daily according to the instructions for cleaning and sanitizing.
- k. **Vehicles** should be rough-cleaned daily and cleaned and sanitized on a weekly basis.
 - 1) Vehicles that are used for perishables must be cleaned and sanitized daily.
 - 2) All racks, flats, pallets and skids must receive the same cleaning procedure and frequency as does the floor in the area they are used.

WATER TEMPERATURES FOR CLEANING AND SANITIZING

The following temperatures should apply as used in the preceding text:

Cold Water	cold tap water only
Warm Water	125-130 degrees F.
Hot Water	155-160 degrees F.
Very Hot Water	170-180 degrees F.
Boiling	212 degrees F.

Temperatures of the water as used is highly important and cleaning personnel must be trained to use thermometers to control water temperatures as used.

The problems involved are these: water above 130° F. is too hot for hand immersion, water below 140° F. will not cut fat and grease film effectively, water much above 160° F. will “cook” protein material to surfaces and also precipitate water hardness onto equipment, water in the 170° F. and above range produces too much steam and condensate in refrigerated areas and even 200° F. water is an ineffective sanitizing agent for large pieces of equipment.

COMPOUNDS FOR CLEANING AND SANITIZING

There are many basic types of chemicals available for use in cleaning, disinfecting and sanitizing. Under any given circumstance, as the type of surface or soil, one type may be the more effective and more economical to use.

There are hundreds of manufacturers producing thousands of bulk-quantity compounds for use in commercial establishments. For concerns using large quantities, it will be economical to either purchase the specific job-oriented compounds in drum quantities or take advantage of the disposable self-dispensing 1/2 gallon and gallon containers in which specialty manufacturers often package their products.

In order to make sure that the correct compound is used, it is suggested that a commercial firm be contacted for specific recommendations rather than using items from the grocery shelves that may not do the job and turn out to be much more expensive to use.

Any product under consideration should be checked against the USDA list of approved general and germicidal detergents or sanitizers before being adopted for use.

1. General Purpose Detergents

a. Alkaline

The most widely used are the alkaline types containing 15% wetting agent, 30% glassy phosphates (hexameta and/or polyphosphates), 30% anhydrous sodium metasilicate and 25% soda ash. Such compounds are available as powders; they find wide application as cleaners in areas handling cooked or processed food and for processing glassware, silver and general food handling equipment which must be treated with a sanitizing rinse following cleaning so as to conform with local public health regulations.

b. Acid

Acid detergents also find use in specialty applications where hard waters, cooked foods and protein materials tend to form deposits on metal equipment. Acid cleaner should be used with caution as they may be corrosive to equipment. The household type acid cleaner should be avoided as they often contain materials that cannot legally be approved for use in food establishments.

Procedures using acid detergents are usually applied on a weekly basis as follows:

- 1) Remove gross soil by hand.
- 2) Apply the standard procedure for cleaning and sanitizing.
- 3) Rinse
- 4) Flood equipment with warm acid cleaner and allow to stand 5-15 minutes.
- 5) Scrub away softened deposits with a stiff fiber or nylon brush.
- 6) Rinse.

NOTE: Heavy deposits may require more than one application of acid cleaner.

2. Germicidal Detergents - One Step Cleaner/Sanitizers

There are several types of these products readily available on the commercial market. Those which include two or more synthetic phenols as degerming agents are the most likely to be equally effective for cleaning and degerming. These products are generally liquids and are often packed in inexpensive self-dispensing disposable containers. They are good cleaners and are available with either soap or synthetic detergents as the cleaning agent. They are easily formulated to contain water softening compounds which insure that the germicidal detergent will give good performance independently of the quality of a local water supply.

3. Sanitizing Agents

There are a great many sanitizing agents available. Only a few are acceptable in food handling establishments.

It must be emphasized that many of the household sanitizers sold in the grocery stores should not be used in commercial food preparation due to their toxicity or strong odor or ineffectiveness or high cost. **There are available from the USDA lists of acceptable and non-acceptable sanitizers.** Usually the most inexpensive and effective of agents will be one of two types.

- a. **Chlorine Sanitizers** - solutions of the common household bleaches such as "Clorox" or "Linco". Any of these sodium hypochlorite bleaches that contain approximately 5.25% available chlorine may be used as follows:

NOTE: Most sanitizer solutions are calculated in "parts-per-million". One measure of a chemical to one million measures of water equals 1 ppm. A 1% solution of chemical equals 10,000 ppm. **NEVER USE MORE THAN THE RECOMMENDED AMOUNT.**

1) Hand Sanitizing

- a) A 50 ppm chlorine - for hand sanitizing. Wash hands with soap, rinse, dip and rinse hands in 50 ppm chlorine. Hands need not be dried or rinsed in water afterwards.
- b) **One half teaspoon "bleach" per gallon of tapwater or one measure of 200 ppm chlorine to three equal measures of tapwater will give approximately 50 ppm chlorine.**

2) Equipment and Working Surfaces

- a) 200 ppm chlorine - for all equipment or product-contact surfaces.
- b) **Two teaspoons of "bleach" to one gallon of water gives approximately 200 ppm chlorine.**

3) Treatment of Mold

- a) 500 ppm chlorine - for treatment of mold on cooler surfaces or other special uses only.
- b) Five teaspoons of bleach to one gallon of water gives approximately 500 ppm chlorine.
- c) Bulk quantities of sodium hypochlorite stock solutions containing 4 to 16% chlorine are available.

The three concentrations recommended above may be made from these bulk quantities according to label directions. Since chlorine in strong stock solution is readily lost, not more than a 30 day supply should be on hand and then kept only in a cooler. The 50,200 and 500 ppm solutions above should not be kept more than 4 hours and must be discarded whenever the solution becomes soiled with food materials. Food such as grease, meat and vegetable materials rapidly inactivate chlorine. Therefore, surfaces must be clean before using this sanitizing agent. Chlorine solutions should not be left on metal surfaces longer than 15 minutes otherwise corrosion will commence.

- b. **Quaternary Ammonium Compounds** - These compounds are less versatile than the chlorine types as their antibacterial properties are often diminished by contact with the mineral salts of hard waters; further, they are neutralized by contact with the more commonly used cleaners and germicidal detergents.

There are a great many commercial products on the market which are solutions of a number of different compounds of this type. Alkyl dimethyl benzyl ammonium chloride and dimethyl ethyl benzyl ammonium chloride are examples of "quaternary ammonium compounds". They are quite often mixed with other chemicals with long names such as tetrasodium pyrophosphate or ethylene diamine tetra-acetate. In all cases the container should state that the use-dilutions recommended will result in so many ppm of quaternary ammonium compound.

1) Walls and Ceilings

The quaternary ammonium compounds have a long-lasting effect and are recommended here for use on walls and ceilings of coolers for mold control although the compounds may be used the same as chlorine and at the same ppm level as chlorine noted above.

2) Hand Sanitizing

For 50 ppm hand sanitizing solution and the 200 ppm equipment sanitizing solution, these compounds must be made up according to the manufacturer's label directions since they come in many concentrations. No more than 50 ppm for hands and 200 ppm for equipment or product-contact surfaces may be used.

3) Walls and Ceilings

For walls and ceilings of coolers, these compounds may be used in concentration of 500 to 800 ppm.

It is very important when using these compounds above 50 ppm that the food-contact surfaces be thoroughly rinsed before use since quaternary ammonium will impart a bitter flavor to foods.

NOTE: Ordinary household ammonia is not a sanitizing agent.

CLEANING EQUIPMENT AND AIDS

1. **Brushes** should be designed for the use intended. Soft-fibered or uncleanable brushes (such as whisk brooms) should not be used. Brushes of white nylon or abrasive fibers are typical of the types that can be used effectively.
2. **Scouring Pads** of the "Chore-Boy" or "Scouring Cloth" type may be used where absolutely necessary on bright stainless steel only. Nylon web scouring pads are preferable. Steel wool and wire brushes must not be used for cleaning.
3. **Cloths and towels should not be permitted** as an aid in cleaning equipment or wiping. Cloth towels or rags are too often held and reused to the extent that bacterial contamination occurs. High wet strength disposable paper towels should always be used.
4. **Squeegees are an invaluable aid** for removing water from large equipment surfaces. Squeegees, brushes and other aids for cleaning equipment, boards, tables, etc. must never be allowed to contact floors.
5. **Hoses for use in food preparation areas** should be white and always hung between uses on a wall rack.
6. **Mechanical pressure cleaning equipment** is available in many sizes and complexity. High pressure for washing may be developed by use of: built-in electric pump, separate compressed air source (80-100 lbs.) separate steam source (90-100 lbs.) or built-in steam source. Nozzles will produce anything from a small single jet to a wide sweeping pattern. The type of detergent used should follow manufacturer's recommendations.

The temperature of the water coming from the unit should follow recommendations in this document. Minimum requirement for a high-pressure washer should be a nozzle pressure of at least 250 lbs. per sq. inch and at least 1-1/2 to 2-1/2 gallons per minute.

7. **For application of sanitizing solutions** to walls, ceilings and equipment a hand sprayer is recommended.
8. **Stiff-floor-scrub brushes** and floor brooms for wet sweeping are excellent aids.
9. **Most floors** will at least initially require the use of a floor scraper.
10. **Consult trade journals** for supplier sources.

The preceding chapter on sanitation was provided through the courtesy of SUPER MARKET INSTITUTE, INC., 200 E. Ontario St., Chicago, Illinois 60611.

CHAPTER V

MERCHANDISING

Earlier chapters of this manual focused on the customer target market of a retail seafood business and on the purchase and care of various seafood products. This chapter emphasizes the importance of properly presenting the product to the consumer. The central topic discussed here concerns product assortment considerations, pricing considerations, product display, in-store location of seafood cases and visual cues for the consumer. Hopefully, these suggestions will contribute toward satisfying your customers' needs and improving your firm's sales and profits.

Product Assortment

The old saying "what you see is what you get" fits well the topic of product assortment. The first principle of merchandising a product assortment IS TO KEEP THE SEAFOOD CASE FULL—even if your supply assortment is meager. The customer likes to see a full case.

The second principle is to MAKE YOUR PRODUCT ASSORTMENT POTENT. That is, offer a wide variety of seafood products. This principle, known as "potency of assortment", offers the following benefits to the customer and to you: (1) Customers receive the impression that you are dedicated to offering them a host of seafood varieties; (2) A wide product assortment appeals to a wider market segment, thus presenting a greater opportunity to increase volume; (3) Wider variety increases frequency of purchase and amount of purchase by individual consumers. In short, if the principle of "potency of assortment" is properly applied, greater sales volume can be expected and thus greater profits.



Maintaining a full display case and offering a wide variety are key principles to successful seafood merchandising.

Naturally, decisions concerning your product offering will depend not only on availability of supply, but also on the particular tastes of your clientele. Cater to the tastes of your customers. If a large portion of your customers prefer a particular seafood, stock it. Do not base your buying habits on what your competition stocks since his customers may be different from yours.

The following is a suggested list of basic merchandise that a seafood establishment in a Gulf Coast state might stock in the fresh seafood case. Visualize the “potency” of this product assortment!

A Model Stock of Assorted Seafood Products

A. Shellfish

1. Clams, fresh
2. Crabs
 - a. Blue crab
 - (1) Lump crabmeat (lump grade)
 - (2) White crabmeat (special grade)
 - (3) Claw crabmeat
 - b. Alaskan King Crab Meat
3. Oysters
 - a. 12 oz. jars, fresh
 - b. 1/2 pint, pint, and quart paper cartons
4. Scallops, fresh or defrosted
5. Shrimp
 - a. Jumbo/with shell, fresh or defrosted (size 15-25)
 - b. Medium/with shell, fresh or defrosted (size 25-35)
 - c. Cooked (cocktail)
 - d. Marinated

B. Finfish

1. Fresh-water catfish
 - a. Fillets
 - b. Drawn or dressed (skinless)
2. Black Drum
 - a. Fillets
 - b. Steaks
 - c. Drawn or dressed
3. Texas flounder, dressed
4. Pompano, fresh dressed

5. **Redfish**
 - a. Fillets
 - b. Steaks
 - c. Drawn or dressed
6. **Red Snapper**
 - a. Fillets
 - b. Steaks
 - c. Throats
 - d. Drawn or dressed
7. **Salmon steaks, fresh or defrosted**
8. **Sole fillets, fresh or defrosted**
9. **Gulf Trout**
 - a. Fillets
 - b. Drawn or dressed
10. **Whiting, fresh dressed**
- C. **Frozen seafood**
 1. **Dungeness Crab**
 2. **King Crab meat**
 3. **Stuffed crabs**
 4. **Fish 'n Chips**
 5. **Fish sticks**
 6. **Fillets of flounder, ocean perch, catfish, sole and cod**
 7. **Stuffed flounder**
 8. **French fries**
 9. **Fried fish fillets**
 10. **Halibut steaks**
 11. **Hush puppies**
 12. **Lobster tails**
 13. **Octopus**
 14. **Breaded oysters**
 15. **Salmon**
 16. **Scallops**

17. Breaded shrimp
 18. Cooked shrimp, salad pieces
 19. PDQ shrimp (peeled, deveined and individually quick frozen)
 20. Squid
 21. Smelts
- D. Canned Seafoods (partial list)
1. Mackerel
 2. Salmon
 - a. Pink
 - b. Red Cobo
 - c. Silver
 3. Sardines
 - a. Green chile pack
 - b. Mustard pack
 - c. Olive oil pack
 - d. Tomato pack
 4. Shrimp (cooked)
 5. Tuna
 - a. albacore
 - b. dark
 - c. water pack
 - d. white
 6. Specialty or Gourmet Items
 - a. Kippered Herring
 - b. Shad roe
 - c. Smoked clams
 - d. Finnan Haddie
 - e. Smoked oysters
 - f. Smoked salmon (lox)
 - g. Smoked snapper
 - h. Sprats
 - i. Stuffed squid

The retailer may wish to prepare some of the items for the frozen fish case himself, if so, special care should be given to packaging, weighing, and marking the contents. However, most items are available from frozen food wholesale sources in prepackaged form.

Along with the basic product assortment of fresh and frozen seafood, the retailer should stock complementary items such as tartar sauce, lemons, breadings, cocktail sauces, seasonings and shrimp peelers. Although of secondary importance in product assortment decisions, these items can add substantially to sales volume over a period of time, generally at a good gross margin mark-up.

DRESSING FISH

Rather than buying fish already filleted, many people prefer to have fish dressed at the time of purchase. This process is expensive since cost economies in filleting normally accompany batch-processing. Nevertheless, many consumers want this service, and the retailer should provide it at **no additional charge**. In fact, consumers should be encouraged to have their whole fish processed in order to avoid the unpleasant problems associated with fish cutting and waste disposal at home.

Following are basic procedures for processing whole fish:

Scaling fish: Remove scales with a sharp knife or mechanical scaler and run clean tap water over the fish to remove the loosened slime. The head and tail may or may not be removed.

Removing fins: A cut is made along each side of the dorsal fin (the large fin on the back of the fish). The fin is then pulled out with pliers, removing the fin bones. Unless the fish is to be filleted, the dorsal fin should not be cut off because this leaves small pieces of fin bones in the flesh.

Belly Cavity: Be sure all organs are removed since they later cause spoilage. This cleaning operation should be done under running tap water.¹

Filleting Fish: Experience and practice will dictate the best method for different individuals since there is more than one way filleting can be accomplished. The following description is an example :

With an extremely sharp filleting knife, cut immediately behind the head, down to the backbone. Turning the knife flat, cut along the backbone, from head to tail. Then cut the flesh away from the backbone and upper ribs. Now, cut the fillet away from the lower ribs, from head to tail. The operation for the other side of the fish is practically the same, except that the second cut along the backbone is made in reverse, from tail to head.

If the customer wants the fillet skinned, lay the fish on the cutting board skin side down. Hold the tail with your fingers and cut through to the skin about 1/2 inch from the end of the fillet. Flatten the knife and cut the flesh away from the skin, pushing the knife forward, while holding the free end of the skin firmly.²

MARKET FORMS

Fillets are only one form in which seafoods are marketed. Other major forms include the following:

- A. **Whole or Round** fish is sold just as it comes from the water. It must be dressed before cooking.
- B. **Drawn** fish have had entrails removed. Since entrails cause rapid spoilage, drawn fish have longer storage life.
- C. **Headed and gutted** fish have head, tail, fins, and viscera removed before sale.

D. **Dressed** or “pan-ready” fish are completely cleaned and ready to prepare when purchased.

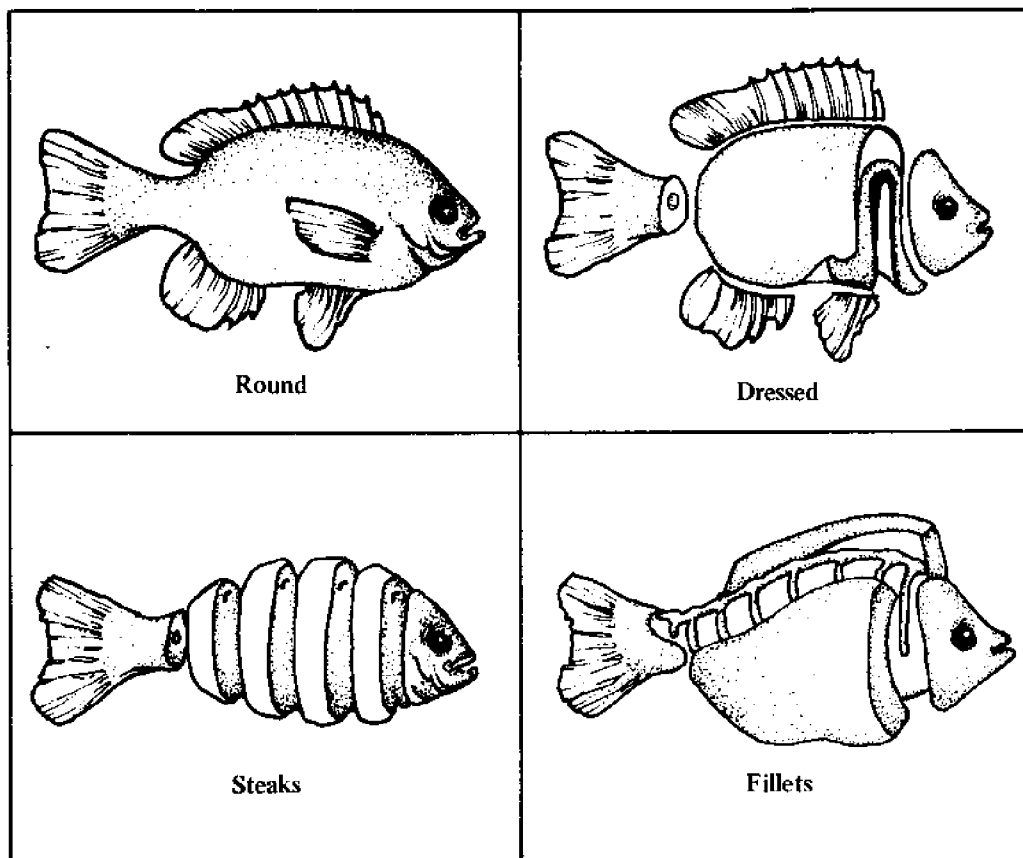
E. **Steaks** are larger slices of dressed fish and yield an edible portion of about 86 to 92%. They are ready for cooking. Salmon, halibut, swordfish, and other large fish are commonly processed and sold as steaks.

F. **Fillets** are sides of the fish cut away from the backbone. Ready for cooking, and 100% edible without any waste, fillets are usually the housewife’s best buy; despite their seemingly higher cost.

G. **Chunks** are cross sections of large dressed fish, having a cross section of backbone as the only bone. They are similar to a beef or pork roast and are ready for cooking.

H. **Fish Sticks** are pieces of fish flesh cut into uniform width and length, usually 3” x 1” , and coated with a breading.

I. **Fish Portions** are larger than fish sticks but uniform in size and weight. One portion is usually enough for a single serving.



PRICING CONSIDERATIONS

Although the procedure for dressing fish remains basically the same for most species, differences in costs involved in the operation can be very important when pricing your product lines. The following example may help to illustrate this point. Assume that, for a given retailer, the following statements are true:

Species Information	Specie A	Specie B
Cost per pound	\$.17	\$.17
Delivery cost per pound	.03	.03
LANDED COST PER POUND	\$.20	\$.20
Dress-out (percentage salable meat)	66 2/3%	40%
Filleting time (No. of fish/hour)	32	8
Labor costs per hour	\$2	\$2

Suppose further that a shipment of 1,000 pounds of each species arrives and that the average weight of the fish is 4 pounds. How should the fillet price per pound be determined? As you know, cost often serves as an indicator of the lowest price to charge, allowing the seller to break even. The question is which costs to include and how to determine them? For example:

Dressing Out	Specie A	Specie B
Dress-out factor	66 2/3%	40%
Amount purchased (lbs. of fish)	1,000	1,000
Amount available for sale (lbs.)	667	400
Original purchase price (1,000 lbs. at \$.20)	\$ 200	\$ 200
Price per pound available for sale	\$.30	\$.50
	(\$200/667)	(\$200/400)

Filleting Cost	Specie A	Specie B
Fish Filleted per hour	32	8
Number of fish (1,000 lbs./4 lbs. per fish)	250	250
Hours of labor required (250/number of fish per hour)	8	31.5
Labor cost at \$2.00 per hour	\$16.00	\$63.00
Labor cost per pound of salable product (Labor cost per hr./pounds available for sale)	.02	.16

	Specie A	Specie B
Cost Per Pound of Salable Meat	\$.30	\$.50
Filleting Cost Per Pound of Salable Meat		
Meat	.02	.16
Total Cost Per Pound of Salable Meat	.32	.66
Profit To Attain 40% Margin	.22	.44
Selling Price Per Pound	\$.54	\$1.10

Notice that all the costs are necessarily based on some **marketable weight**, not on the original pounds purchased. Remember that you can only get return on the pounds you sell, and not on the ones you have thrown away. While this example is exaggerated, it illustrates that cost differences of whole fish that are similarly priced can become very great after processing. For profitable filleting, a merchant should be aware of the various yields that he can expect from different fish.

When pricing seafood, a retailer can be too conscious about his customer's reaction to the cost of the product. Marketing studies reveal that consumers have relatively limited information on prices. Typically, the consumer designates a store as "relatively low priced" when the items she most frequently purchases are competitive with other stores. In reality the store may be priced higher on its product assortment except for these popular items. However, because of this "price image" in the customer's mind, she continues to shop at the store.

It follows that a "selective" pricing strategy rather than a "blanket" pricing strategy is more intelligent and appropriate. Hence, it would be wise for a retailer to price competitively on more popular seafood items and enjoy higher margins on items which sell more slowly. The key to selective pricing is to equate tonnage movement with gross margin for each product. Low pricing on fast movers may lead to such low gross margin that profits are negligible; a relatively high price on slow-moving items will give you high unit markup but volume of the item contributes little toward total gross profits. By sitting down with pencil and paper and estimating various dollar sales at different prices for the products in your inventory, you can estimate the gross margin you will need to cover cost of doing business and to provide a necessary profit level. What prices actually generate the necessary profit level for a firm are determined ultimately in the market place.

What is the optimum average markup at retail selling price in your seafood business? A conservative estimate is to attempt to maintain a 40 percent markup on selling price. That is, for every dollar you receive from the sale of seafood items, you should retain, an average of forty cents over and above the landed cost of the product; "landed cost" equals the amount the retailer pays for the product plus transportation costs. If sales volume is relatively high, you may lower average prices or employ weekend price promotions to pass lower prices to the customer.

Pricing as a competitive ploy can be dangerous. No one wants to get into a price war. If you wish to use price as a traffic-generating tool, use low-price tactics on special occasions or scatter low prices among various seafoods at different times during the year.

Keep in mind that a sound pricing policy is just as important as sound purchasing and product assortment policies. The retailer is wise to formulate a price policy; through experience and experimentations, he can refine this policy until it becomes a proven strategic tool.

MERCHANDISE DISPLAY

Research has shown that many food purchases are made on impulse. Therefore, an attractive display can often “clinch” a sale. Breadth of assortment, product quality, and eye appeal greatly affect sale of seafood products. Maintain the highest cleanliness standards. Make sure all cases and cabinets are clean before setting up your merchandise display. Ice is the foundation of any good fresh seafood display, so naturally it is important to keep plenty of it on hand at all times. The type of ice to use should also be considered. Aggressive merchandisers are relying more and more on small-cubed ice rather than on flakes. This is because cube ice has “sparkle” which greatly enhances the fresh appearance of seafoods, and makes the entire display more appealing and colorful. The ice bed should be not less than six inches thick and banked from front to back. Fresh crabmeat, oysters, or clams can be displayed in cartons embedded in ice to at least 3/4 of the height of the carton.

Following are other fundamentals of good seafood display:

Display the widest variety of seafoods. Offer shoppers the same broad selection available in other foods, since a wider choice increases opportunity for sales with any one customer. This is the “potency of assortment” principle (see page 49). Make your product mix “potent” by providing a wide range of seafood products from which to choose, including fresh, frozen, and canned items.

Display for greater “see-ability”. Bank seafoods in cases on slanted beds of ice for maximum visibility. Dark colored seafood alternated with light seafood make each type stand out for greater eye appeal.

Garnish seafoods. Decorate your displays with paprika, lemon slices, or parsley to add needed color and eye-catching appeal. If state laws do not allow this, use attractive plastic greens.

Use bright price markers. Identify packaged fish and shellfish by marking each package clearly with price, weight, and market form of the fish. Plastic tags with interchangeable prices are convenient to update and easy to keep clean. Do not stick spike tags in fish since spike holes damage fish flesh and allow bacteria to enter. Instead place the spike tag in a colorful piece of fruit and place it in front of the fish. Separate items in the display case with plastic greenery strips for additional eye appeal.

Keep your cases filled. Continually replenish depleted items and ice beds so that your displays are filled to capacity. Remember that the image of abundance is very important to good merchandising.

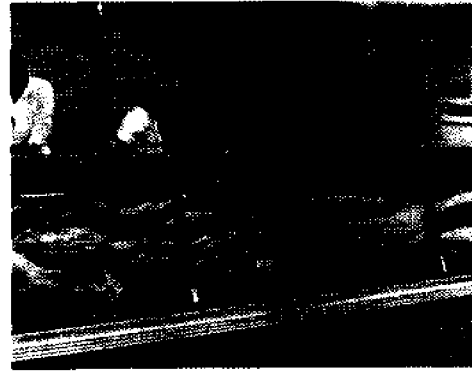
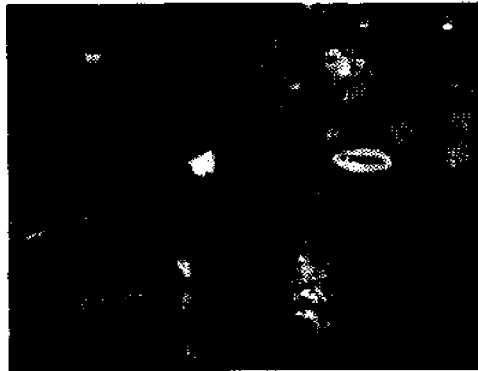
Feature compatible foods. Complementary products such as cocktail, tartar, and red hot sauces, french fries, rice, wines, and related items add greatly to images of fish and shellfish dishes.

Keep seafood trays neat and clean. Trays used to display fish or shellfish should be free of water and seafood juices. This can be easily accomplished by placing product on trays which have been turned upside down. Use contrasting flesh colors in displaying seafood in trays.

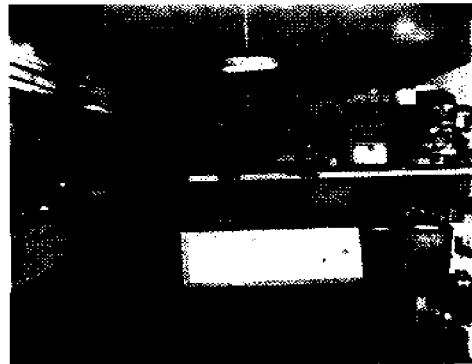
Tailor packages to seafoods. If you offer prepackaged fish or shellfish as a convenience, be sure packaging is suited to the specific seafood handled. All packages should be leakproof, odorproof, secure, and clearly labeled.

THE FUNCTION OF GOOD DISPLAY

Too few retailers realize the importance of good display to customer impulse buying. A full display case, neatly stocked with a wide variety of seafoods, has a dramatic visual impact which generate sales that would otherwise be lost. Given a choice, which of the 2 displays below would you purchase from?



Techniques of good display are clearly evident in the picture on the above left. Products are well lighted, colorfully garnished, and arranged in "ribbons" or rows from front to back. Price markers are sanitary, easy to read, and they are not protruding from the product. The finfish are fresh and moist and have been "top dressed" with clear ice cubes to add sparkle. Note, however, that the processed salmon steaks are not in direct contact with the ice. Such meticulous attention to detail is in direct contrast to the "dump display" on the right.



Interior decor and visual cues are as important as the seafood display and should be considered an extension of that display. By making liberal use of hardwoods and brass, the market interior on the left seems to capture the romantic appeal of the sea. The perceived images that result tend to optimize consumer satisfaction and product demand. The market interior on the right does little to increase seafoods aesthetic appeal to the consumer.

Frozen display case. Displays in the frozen seafood case should also be appealing. Do not build a frozen fish display above the frost line, as any products above the line will be outside a safe temperature range. Be sure the frozen food display is checked at least twice a day in order to replenish dwindling stocks and to straighten and reorganize misplaced frozen foods. When restocking, place new stock on the bottom and old stock on top. Never allow older stock to spoil in your display case. Remove any torn or discolored packages since a few unappealing packages can ruin the visual effect of the entire display. When stocking the frozen seafood case, place packages close together to prevent air spaces and to reduce the chance of thawing.³

IN-STORE LOCATION OF SEAFOOD CASE IN SUPERMARKETS

The position of the seafood case in a supermarket may depend to a large extent on whether management views its seafood customers largely as impulse buyers or as nonimpulse buyers. The management of a Dallas supermarket for example, views its customers as **impulse buyers of fresh seafood**. Consequently, the fish display case is the first station in the "traffic flow" design of the seafood and meat department. On the other hand, a supermarket in Houston views its seafood customers as nonimpulse buyers; as a result, its seafood case is last in line in the seafood-meat department. Initially, the same Dallas supermarket that placed its seafood case at the head of customer traffic flow grossed nearly \$8,000 in sales from the seafood counter during the first week of operation.

There are many decisions which the retailer must make concerning his merchandising methods. He must decide upon the "best" arrangement of the seafood counter or counters to accommodate customer traffic flow. He must be familiar with the various forms in which seafoods may be displayed. Even more important, the retailer must maintain a wide product assortment tailored to his particular customers, and then display this assortment in a clean, attractive manner.

Another good merchandising practice is to group related products in a central location. A smart seafood merchant (particularly a supermarket merchandiser) should locate all seafood products—fresh, frozen, and canned—at one focal point within the store. Such grouping increases the impact of the seafood section on the consumer.

Additionally, the consumer will develop the attitude that seafood is a main meal item if the counter is positioned closer to the red-meat counter than to the cold-cut or delicatessen display. This is not meant to suggest, however, that seafood operations be an appendage of the red-meat section. Indeed, for good merchandising management and sanitation practices, experience has shown that red-meat and seafood operations perform best when kept separate, both physically and managerially.

CHAPTER VI

PROMOTING SEAFOOD SALES

Despite its potency, sales promotion is often viewed by the small retailer with considerable skepticism, or at best as a strategy to boost sales when times are bad. This is indeed an unfortunate attitude, since a well-planned promotion program can contribute handsomely to store profits by increasing sales volume. Promotion is also a service to the customer, since it helps one to make buying decisions by providing useful information about products. In the long run, promotion tends to lower prices by helping to expand markets.

What is Promotion?

When taken in a broad sense, promotion means any activity designed and implemented for the purpose of increasing sales. Using this definition, it can easily be understood that promotion is something the retailer should view with favor. Promotional activities do not always require large outlays of dollars—although such outlays should be viewed not as costs but as tax-free investments.

Running an in-store “special” is, therefore, a form of promotion if the objective of the special is to increase sales. Likewise, newspaper advertising is a form of promotion if the main objective is to increase sales.

All seafood retail firms, regardless of size, should have a promotion program, including a sales goal, and a plan to obtain that goal. A retailer can expect some business without any promotional effort, but his financial interests may not be furthered if he continues to operate without purposeful (planned) activity to increase sales. For the most part, the size of a promotion program depends on how ambitiously a firm sets its sales goal. If a market which averages \$1,500 a week in sales with little or no promotional effort wishes to increase sales to \$1,600, a minimum-cost promotional program will probably do the job. On the other hand, if the goal is to double sales volume to \$3,000 per week, a substantial and aggressive promotional program is needed. The point to be made is that every retailer, large or small, should use promotional tools which are tailored to accomplish predetermined sales objectives.

The Tools of Promotion

According to our previous definition, any activity designed and implemented to increase sales can be considered promotional. Therefore, it can readily be seen that good in-shop business practices are included in the arena of promotion, since such practices contribute to the overall level of business. A clean, odorless shop; consistent high-quality products; rigorous sanitation policies; and adherence to business hours are part of and prerequisite to an effective promotional program. There are, however, some specific tools available to promote a firm’s product assortment.

1. **Promotion through personal selling**—The man behind the counter is a key figure in a good sales promotion program. His attitude is all-important and can “make or break” a sale. Therefore, begin your promotion program by encouraging counter personnel to become good salesmen as well as good butchers. Customers should always be greeted in a warm, friendly manner to let them know that their

business is appreciated. Service to the customer is of utmost importance in building good will and in securing repeat sales. Customer service should not be compromised by practices such as charging extra for dressing whole fish. Remember that the customer views the man behind the counter as being a seafood authority; what the counter salesman does or says has great bearing on purchasing decisions. If a woman looks over a seafood display hesitantly, ask her, "Have you seen our fresh flounder today"? This has much more salesmanship than "May I help you", and gives the customer more information than "What kind of fish would you like"? When a customer is uncertain, such a general question may turn her away.¹



The man behind the counter is the key figure to a good sales promotion program, since his attitude can often make or break a sale. He should be a good salesman—not just an order-taker.

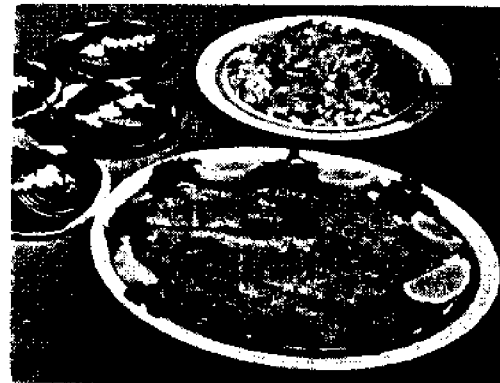
After the customer decides on a seafood item, find out how many people are to be served and suggest to her the quantity needed, perhaps mentioning another item to complement her first choice. If whole fish are chosen from the counter display, offer to dress or fillet the fish free of charge. If encouraged to accept your offer, the customer may avoid an unpleasant experience at home that might turn her away from fresh seafoods completely.

At this point, you may be asked for serving suggestions or recipes. Be prepared to deliver them both verbally and in printed recipe form. Remember that if you make her a success at the dinner table, she will make you a success in your business.


The most desirable promotion is favorable “word-of-mouth” advertising—satisfied customers telling their friends and neighbors about your friendly market. The most important way, indeed the only way to accomplish this is with competent and friendly personnel who can meet the public pleasantly, maintain an attractively displayed product assortment, and service their trade.

2. **Promotion through collateral materials.**—Sales can be influenced positively by liberal use of tasteful literature and display materials. Literature and displays do cost money, but it is important that this “cost” be measured in terms of results rather than production charges. Many fine promotional materials, free of charge, can be obtained through various government agencies and fisheries trade associations. Following is a listing of in-store collateral materials which the seafood retailer might wish to consider:

1. **Recipes.** No retail seafood market should be without recipe materials. Generally, American consumers do not know how to prepare seafoods, and any help you can provide will make them better seafood users. In addition, a “recipe of the week” or featured recipe contributes to impulse sales. Recipe materials are available in many forms—brochures, cards, booklets, sheets, etc.—and many of these can be obtained free of charge. At the end of this chapter is a list of government and industry trade groups that supply recipes, as well as other display materials.

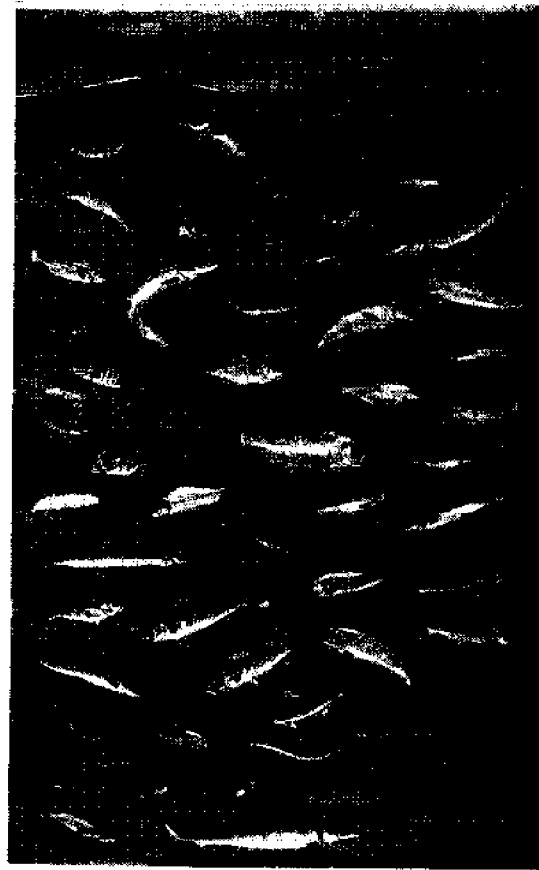
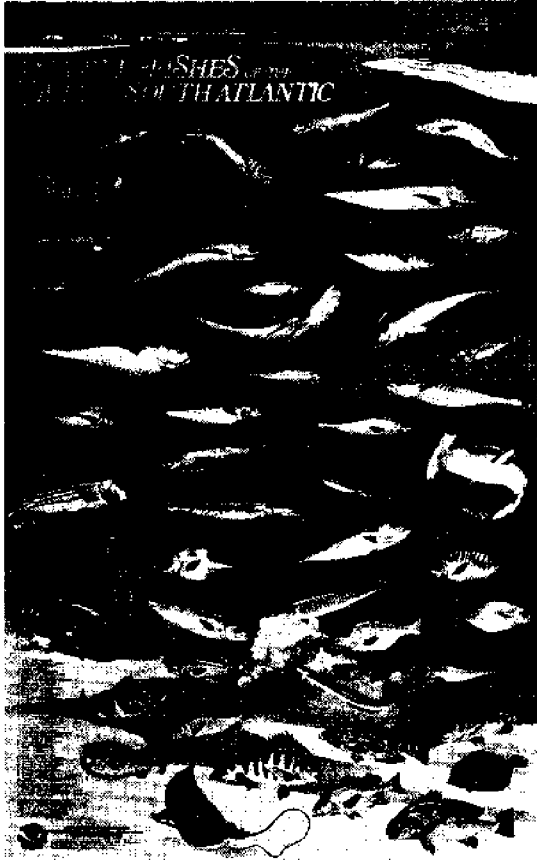


M E N U
 — Hearty fried fish — Always delicious —
GOLDEN FRIED TURBOT
 Cottage Fried Potatoes
 Tomato and Onion Slices
 Vons Rye Bread
 Vons Strawberry — Rhubarb Pie or Vons Square Cake
 Wine Suggestion: Vonte Brothers Blanc De Blanc
 Preparation Time: About 30 minutes

VONS  VONS

Providing good seafood recipes to customers will help make them better seafood users. The point-of-purchase recipe display at left is available from the Texas Parks and Wildlife Department free of charge to qualified retailers.

2. **Charts and Posters.** These items add color and interest to your market and often provide helpful information to consumers. A colorful wall chart available from the Texas Parks and Wildlife Department showing market forms of finfish is an example of a very useful chart; as are a series of species identification charts available from the National Marine Fisheries Service.



3. **Window and store displays.** An ad in the front display window is an effective way to attract the attention of potential customers. You may then wish to use posters, signs, or secondary displays that invite the shopper into your market. In-store displays are highly effective and widely used in supermarkets. The purpose is to draw attention to a particular item or product in plentiful supply. During a recent merchandising study conducted in Bryan, Texas, sales of fresh oysters were tripled simply by creating a makeshift display from which shoppers could readily pick up "jarred" oysters.
4. **Freezer strips and shelf talkers.** These materials are generally used to offer serving suggestions and to focus attention on a particular item. They may also provide information to shoppers on handling and preparing techniques. For example, one such display might read "Thaw Frozen Seafood Under Cold Running Water". Freezer strips vary in dimensions, but generally are 4 x 24 inches. They customarily have a self-adhesive backing and are displayed horizontally on freezer and display cases. Shelf talkers are small square or rectangular signs that are attached to shelves and draw attention to products thereon. Talkers are most commonly used along supermarket aisles, but are equally appropriate for display on shelves in independent seafood shops.

5. **Business Cards.** This promotional tool is often overlooked. Nevertheless, business cards can help sales when they are distributed to customers. Customers refer to them when placing phone orders and when recommending the shop to friends.
6. **In-Counter items.** In terms of eye appeal, seafoods and ice alone leave much to be desired. It is important, therefore, that additional color and warm lighting be introduced to your product display. The more eye-appealing your display, the more sales it will generate.

A. Price Markers—Essential to effective product merchandising, these signs should be easy to read, constructed of plastic, and designed so that prices can be changed readily. Such markers are available from butcher supply shops. It is important to keep markers clean and displayed in front of the product. Do not mount “spear type” markers in the flesh of the product. The puncture holes resulting from this practice promote bacterial growths and cause foul odors. Price markers can be mounted in real or artificial citrus in front of the product. Not only is this technique superior from a sanitation viewpoint, but the colorful fruit also makes your display more appealing.

B. Product Labels—Proper identification of each item in your product assortment lets the customer know exactly what is being purchased. At the same time labels increase consumer knowledge and confidence about fresh seafoods. The most common method of identification is to place the name of the specie directly on to the price marker. Differentiate fresh products from those thawed for display in the fresh seafood case by placing small paper signs which read “Fresh” directly on top of those species that have not been frozen. Such a practice builds consumer confidence and loyalty and emphasizes the desirability of fresh seafoods over frozen. Counter personnel should encourage shoppers to prepare fresh seafoods as soon as possible—rather than first freezing them—for maximum eating enjoyment.

C. Display “Greens”—Your counter display should be garnished to provide color and eye-catching liveliness. Lemon slices and parsley are excellent complements for your product display, but other items work equally well. Plastic greenery strips can be used to divide various products as well as to add color and liveliness to your display.

D. Case borders—Case borders are adhesive strips approximately 6 to 8 inches wide that affix to the top and/or bottom of the glass display window. Borders run the length of the counter. Their primary function, like greens, is to add color and liveliness to your product display. However, they can also identify products. Lettering the product name on the case border, then displaying that particular product directly behind or below is very effective for identifying components of a product mix. Case borders placed along the bottom edge of the display window can also indicate depth and level of the ice bed inside the case.

E. Warm Lighting—It is best to illuminate your seafood display with warm lighting as opposed to “cold” white fluorescent lighting. Warm lighting makes white fish flesh appear more appetizing. If using fluorescent fixtures, you should specify “soft white natural” when purchasing tubes.

7. **Custom wrap and packaging.** Promoting your shop's name in the "outside" world can make mental impressions that will contribute to your business in the long run. An easy, inexpensive way to circulate your firm's name is to use custom wrap and packaging. Little additional cost is involved between buying printed wrapping paper rather than unprinted paper. When your company name or trade mark is printed on shopping bags, the customer "carries" your company name or trade mark with her for others to see. Your company image is also reinforced when packages are unwrapped just prior to preparation.



Custom-printed wrap can carry your firm's image directly into a customer's kitchen.

8. **Sack stuffers.** Stuffers are placed in the shopping sack at check-out time. Recipe brochures are excellent sack stuffers but other information can also be distributed in this way. A soon-to-open shop, a new line of merchandise, or new business hours can be effectively announced with sack stuffers.
9. **Mailers and Leaflets.** Direct mail advertising is an excellent way to reach potential customers. Distribution can be accomplished by U.S. postal service, by private postal service (not available in all communities) or by individuals hired to deliver your communications from door to door. With direct mail you can be highly selective in distribution. Although placing your message at a prospect's front door is more expensive than handing materials to customers over the counter, remember that only a small percentage of potential customers visit your shop regularly. Direct mail is similar to sack stuffers because it often announces a new business, a new merchandise line, or price specials. However, direct mail attempts to enlist new customers, whereas stuffers attempt to maintain the regulars.

10. **Coupons and Premiums.** Price coupons can also effectively increase sales. Because they are “spent” like money (psychologically this is much more potent than a “reduced price special” that is available to anyone), price coupons are used principally to attract new customers. Therefore, price coupons should be distributed outside your premises to prospective customers. This is often accomplished by direct mail or through newspaper ads from which coupons are clipped. Perhaps the most effective price coupon does not specify any particular product, but does allow a face-value reduction on a minimum purchase—for example, a coupon worth 50 cents on any purchase of 2 or more dollars. More often, price coupons encourage current and prospective customers to buy a specific product, in which case it basically becomes a sampling device. Price coupons can also aid the retailer in systematically obtaining names and address of customers, both new and old, who are responsive to coupon ads. This can be accomplished by requiring customers to write their name and address on the coupon at the time it is presented for redemption. The retailer then has an excellent list to which additional advertising may be directed. In addition to price coupons, “premium coupons” are another strategy. Premium coupons date back as far as 1851 when Raleighs cigarettes were first packed with a coupon “good for premiums” as an inducement for purchasers to continue using Raleighs until they were “hooked”. Unlike the price coupon, the premium coupon is available on the premises at time of sale. After accumulating a predetermined number of coupons, the customer can then redeem them for certain premiums or perhaps a fixed amount of credit.
11. **Uniforms.** Properly uniformed personnel can help a retailer convey a consistent, quality image. For this reason, attempt to provide some type of uniform dress for employees. By paying for employees’ uniforms, the retailer will find it easier to control the overall cleanliness and appearance of his crew. A “uniform” may not include an entire set of clothes. Disposable utility “jackets” and personalized service caps can provide an impressive appearance at minimum cost. One firm discovered that by hand-lettering employees names on their caps, customers are inclined to be friendlier and to communicate more openly with service personnel on a first-name basis. This type of relationship builds good will, and “repeat” business.



All personnel should be provided with uniforms or other custom utility garments to help convey a clean, consistent, and quality image.

12. **Samples.** One sure way to move a product is to give it away. This may not be as obvious as it sounds, since giving by one party requires "taking" by another. Unfortunately, many people who profess dislike for seafood, may actually love it. However, these people have never experienced good seafood that was properly prepared.

A sampling promotion can and should provide them with a pleasant experience. The sampling promotion may be high-keyed or low-keyed, involving neither additional help nor the hiring of a professional home economist. Remember that you are trying to introduce customers to a new product or recipe which eventually will be reflected on cash register receipts. In a recent merchandising study conducted at a Texas supermarket, fresh seafood sales reached a record high for a single day when the sampling technique was employed. In fact, the market sold out of fresh fish, despite having an unusually large reserve inventory in anticipation of increased sales.

Promotion through special events

Promotional success can also be enhanced by "tying-in" to a special event or season. For example, an effort to promote "Oyster Stuffing" for turkey is more effective at Thanksgiving or Christmas than in May or June. Below is a list of tie-in opportunities for each season, followed by a more comprehensive list of months:

1. **Spring (Lent)** An effective tie-in is a good supply of Lenten specials with hot vegetable items, french-fried potatoes or chips, salad fixings, lemons, tartar sauce and a variety of sherbets for dessert. Check on tying-in with promotional opportunities of other food product advertisers (the National Fisheries Institute, National Marine Fisheries Service, or various state agencies that promote seafood).
2. **Summer** Now is the time for crisp seafood salads that can be served as the main course. Include eggs, tomatoes, celery, green peppers, mayonnaise, lemons, chips and crackers, assorted rolls, chilled fruit, juices and iced lemonade. Watermelon or cantaloupe are dessert-pleasers. Many families move outside for summer meals, so tie-in your seafood display with related cook-out supplies (paper plates, cups, napkins, charcoal), as well as with traditional ingredients for crisp green salads, corn for roasting and marshmallows and fresh fruits for dessert.
3. **Fall** Now is the time for seafood appetizers and oyster stuffing. Tie-in with national "October is Fish and Shellfish Month" promotions; promote all species.
4. **Winter** Hearty fish dinners are just the thing after cold winter sports. Include all the trimmings for fish soups and chowders, oyster dressing for holiday turkeys and seafood canapes for appetizer trays at gala festive parties. Feature shellfish of all kinds.

Not only can effective promotions vary during the four seasons, but in-store displays can also differ each month. Following is a month-to-month suggestion of possible in-store displays and a chart of popular seafoods that may be featured each month.

JANUARY

“Have a Down East Feast”

January is an excellent month to feature fish and clams as a money-saving food, because of Christmas bills experienced by most families. Emphasize the abundance of inexpensive seafoods that can help balance those budgets after Christmas. Post signs that emphasize fish in both fresh and frozen forms, perhaps including a couple of serving suggestions.

“The fabulous Fish-Wich”

Display the many kinds of fish that can be used for lunches, in sandwiches, or as a quick “heat-up” when the kids come home for lunch. Stock frozen soups by the seafood display case, as well as tartar and remoulade sauces. January is also a good time to feature fish and shellfish as change-of-pace tastes from poultry.

FEBRUARY

“A Fine Kettle of Fish—Bouillabaisse”

Bouillabaisse, the French fish soup, usually takes about six different kinds of seafood. Mimeograph copies of a simple recipe for this tasty dish and hang them over your frozen seafood case. Group all the seafood ingredients for the recipe together.

“Ah, So Delicious! Oriental Fish Fillets”

Promote frozen (or fresh) fillets and bottled teriyaki sauce. Use a sign to suggest canned oriental vegetables and fortune cookies as go-togethers. Since February can be a dreary, chilly month, suggestions for bright and cheerful dinners will be welcomed. Check magazines for color pictures of seafood dishes; open a magazine to a specific seafood recipe and hang it above your fresh or frozen seafood case. If possible, place a small rack with salable copies of the same magazine nearby.

MARCH

“Elegant Dinners with Fish”

Watch for pictures in newspapers and magazines of special and unusual fish dishes. Feature main dish, frozen fish packages with signs suggesting menu tie-ins.

“Fish ‘n Chips”

March is an in-between month, not yet spring but not winter. Give it some zip with the fish ‘n chip theme, which you can merchandise with paper British flags and mod decorations. Display a picture of an English scene from a magazine to use on the freezer case. Promote Fish ‘n Chips packaged dinners in your freezer, as well as breaded clam strips, fish sticks and portions, and frozen French fries. Demonstrate the deliciousness of Fish ‘n Chips—use a small oven to warm crisp frozen potato products and breaded fish. Fish sandwiches for lunch is still a good secondary theme.

APRIL

“Maine Dishes”

Plan family meals with main dishes of seafood—emphasize the New England historical appeal of fish and seafoods with promotional materials or pictures. Advertise some products on special as “Sea Captain’s Specials” or “First Rate for the First Mate”.

“Party Perfect”

Offer luncheon suggestions and party uses for canned, fresh and frozen seafoods. For graduation parties, school ribbons may be pinned on a dummy package or a graduate’s hat.

“Lenten Luscious!”

For the Lenten period feature seafoods from around the world! Emphasize your stock of fresh and fresh-frozen fish. Advertise the tremendous variety of seafoods that are available.

Point out the freshness and spring-like quality of seafoods. Watch for color pictures of ladies’ luncheon type menus featuring fresh seafood.

MAY

“Salads of the Seven Seas”

Emphasize the abundance of fresh shellfish to suggest salads and salad plates. Post tie-in signs around the produce section; perhaps even place one by the salad dressings.

“Fresh as the Season”

Any point-of-sale materials that emphasizes the fresh-caught flavor of seafood is advantageous. Signs like “Fresh frozen for the best flavor” or “Freshest taste—just heat and serve” draw attention to frozen seafood dinners.

“Seafood Fun-Fare”

Now is the beginning of the salad season, when women serve their families and club groups a variety of combinations. Shrimp, salmon, lobster, and crab are just a few of the seafoods that women traditionally think of for seafood salads. For your part, suggest quick and easy seafood dishes and salads. Have recipe pads or a sample mimeographed sheet made up for items like Lobster Newburg, Creamed Whitefish, etc. Continue this practice all summer and suggest seafoods your customers may not usually buy.

JUNE

“Weightless Wonders”

Emphasize simple, low-calorie meals with other dietetic products. Display signs to suggest complete, low-calorie dinners with products from your store. Read magazines for simple recipes, hopefully with color pictures to post by your seafood cases.

Have a two-week special on all forms of one kind of fish. Salmon, for instance, with an umbrella theme "Salmon is Supreme". Feature frozen salmon steaks, canned salmon, and any fresh salmon available. Use signs that suggest salmon salad; that tell how to broil salmon steaks; that indicate what weight equals one portion; and that list cooking methods! Feature salmon recipes in your weekly ads—of course, you'll advertise your special too.

"Seafood Fanfare - Everybody applauds quick-cooking seafood dinners"

Emphasize the TV-type dinners in your case. Signs can show their cooking time and advertise that they are a delicious change of taste from meat. Beef and chicken, probably eaten in quantity all winter, may be less attractive at this time. Suggest that seafood can slip into the family menu many different ways—and at less expense than many meat cuts.

JULY

"Cool Cooking with Seafood"

Continue to feature low-calorie aspects of seafood, so important to women who are slipping into bathing suits. Also continue advertising the convenience of fish salads and seafoods that can be cooked on top of the stove. Mount pictures of cold seafood plates—hang them by the seafood counter and in the produce case for tie-ins with lettuce and other fresh vegetables.

AUGUST

"Super Shellfish Suppers"

Promote the use of chilled lobster, crab, shrimp, etc. for cold plate suppers or in sandwiches for kid's lunches. Most important, however, is the "quick 'n easy" dinner angle, during a month when homemakers prefer not to cook.

"Have a Fish Fly-In"

August is a month when customers need to be lifted out of their eating doldrums. Persuade them that seafood can be an exciting, easy way to break from usual eating habits. Build a promotion around fresh fish, perhaps trout, that you will have flown in daily or regularly. Advertise the speciality in your local papers, including recipes in your ads. Have recipes available at sales counters if possible; obtain color photographs that depict different ways to prepare fish. Convenience and ease of preparation are important points to stress. This type of promotion, properly handled, can be very successful.

SEPTEMBER

"Captain's Choice"

Suggest hearty man-style dinners, and tie-in convenience foods with quick dish products. Frozen, breaded seafood products, frozen potatoes, and other vegetables can be promoted together as "quick family dinners that are delicious".

"Short-Cut Specials"

Offer lunch suggestions for school children. Hot sandwiches made of different kinds of fish portions, teamed with frozen French fried potatoes are good suggestions. Introduce your customers to heartier seafood dinners and the wide variety of fish and shellfish available. Much of the summer heat has subsided and homemakers are enjoying cooking again.

OCTOBER

“Harvest from the Deep”

Using themes of abundance, call attention to the tremendous variety of seafoods available in your store. Each week you can feature a certain method of preserving fish. (i.e., fresh, frozen, canned, smoked or salted). Watch for local newspaper or national magazine articles on seafood and post them by your counters. October is a month when appetites call for homemade stews, chili, and soups. Take advantage of this thought trend by featuring easy-to-serve breaded fish portions of different species.

NOVEMBER

“Hearty Holidays”

Feature the same products that you will emphasize at Christmas—oysters for dressings, stew or frying, shrimp and crab for cocktails and hors d’oeuvres. If ethnic groups in your area are fond of fish, suggest seafood as an alternative to poultry.

“Snowflake Specials”

Highlight several kinds of frozen fish, breaded and unbreaded. Decorate your cases with paper snowflakes or other winter scenes. If possible, put a rack of tartar sauce, as well as various seafood seasonings near the case.

“Atlantic Harvest”

Feature fish and shellfish from New England. Dramatize the origin of fresh and frozen species with pictures of salty fishermen and old fishing boats. Continue suggesting hearty seafood meals adding the thought that frozen seafood dinners save time and trouble during the holiday rush. Of course, fancy fish and shellfish fit nicely into Thanksgiving menus.

DECEMBER

“Christman Companions”

Suggest oysters for stews, dressings, and frying for holiday breakfasts. Suggest shrimp and shellfish cocktails for holiday dinner accompaniment. Promote!

“Hurry-Up Holiday Dinners”

Emphasize frozen seafood dinners and frozen portions. Heat-and-serve fish dishes (such as fish sticks) can be suggested for nutritious meals that any family member can cook.²

The following “Monthly Seafoods to Feature” chart offers general suggestions. Depending on location within the United States, certain species may or may not be available during the whole year. Thus, availability of supply, along with customer demand, will determine to a large extent the seafood item to offer each month.

MONTHLY SEAFOODS TO FEATURE

FISH	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Salmon	X					X	X	X	X	X	X	
Oysters	X	X								X	X	X
Mackeral	X	X						X				X
Cod	X							X	X	X	X	
Halibut	X		X			X	X	X	X			
Haddock	X		X				X	X				
Smelt	X	X					X	X			X	
Scallops	X			X	X		X			X	X	X
Clams	X		X				X	X	X	X		X
Crabs	X	X				X	X	X		X		X
Flounder		X	X		X	X		X	X			X
Shrimp		X	X	X	X		X		X	X	X	X
Frog Legs		X			X			X				X
Red Snapper			X							X	X	X
Catfish			X		X							X
Ocean Perch			X									
Herring			X									
Snails			X								X	X
Lobster				X	X	X			X	X	X	X
Pike				X	X							
Tuna				X		X	X					
Trout						X		X			X	
Grouper						X		X		X		
Lake Herring				X		X			X			
Lake Trout									X	X	X	
Pompano												X
Turtle										X	X	X
Mussels								X		X	X	X
Whiting			X					X		X	X	
Mullet								X			X	

PROMOTION THROUGH MEDIA ADVERTISING

Display advertising in local newspapers, together with "spot" commercials on T.V. and radio, provide profit-making opportunities to reach the greatest number of potential customers at proportionately low cost. Many homemakers use newspaper ads as shopping lists; to many readers an advertised "sale special" is news.

To ensure the best newspaper promotion, ads should be run in selected editions, as determined mutually by you and the newspaper's display advertising manager.

Frequency of radio and T.V. advertising will probably be determined by cost factors since this type of advertising is usually more expensive than newspaper space.

Special seafood seasons such as Lent, or special promotions such as "Summer Festival of Seafoods", demand more ads each week to match heightened consumer interest in seafoods and to tie-in with promotions by government and seafood industry groups.

Effective seafood advertising, whether in a newspaper, on radio or on T.V., should always include one or more of the following concepts:

1. **Sell your "image" as a seafood expert.** Use words and pictures that promote images of succulent seafoods harvested by hearty seafarers. Never forget that seafoods are surrounded by the excitement, adventure and romance of the sea. This uniqueness of the sea is a good selling point to feature in ads.
2. **Sell "value" in terms of quality, flavor, wholesomeness and variety.** Since most of your customers are budget-conscious, remind them that a pound of fish fillets or scalloped meat is a full pound of edible food--no bones, fat, or waste.
3. **Use colorful words and phrases to describe seafoods.** These words should create mental images of fresh, savory seafood that excites the taste buds. Appealing descriptions might include:

"Tasty, tender, 'n plump!"
"Sea-licious--with true sea-flavor locked in!"
"Succulent, fresh-caught flavor!"
"Foods from foamy seas with fathoms of flavor!"
"Heat 'em, eat 'em--savory seafoods in seconds!"

4. **Sell seafood's nutritional value.** Fish is low in cholesterol and calories and high in protein and other valuable nutrients. These healthful benefits are especially appealing to weight watchers. A National Heart Institute meeting produced a consensus that fish should be included in the diet four times a week.
5. **Tie-in with other food promotions.** Nationally promoted, seasonal seafood campaigns offer timely vehicles on which ads can "ride". Ads in August, for example, should feature scallops to tie-in with "Scallop Festival Days".
6. **Always have easy-to-read and easy-to-understand advertisements.** Advertising copy should be simple, to the point, and believable. The following poem by Orville Reed illustrates this point:

Copy that lilts like the song of a bird,
Or flows like a brook in the spring,
Syntax that sings—a joy to be heard—
I've found may not sell a darn thing.

But stuff that informs is simple and plain,
That says what it says and then stops,
Is often the reason that sales show the gain
That pays for the fine-written flops.

Writing ad copy is a highly developed skill, and for the most part should be left to the professionals.

SOURCES OF PROMOTIONAL MATERIALS

There are many organizations that periodically offer different types of seafood promotional materials to help boost sales. Utilize promotional materials and recipes supplied by such associations, but do not use so many displays that customers become confused. Develop friendly relations with sources of materials because these organizations can provide attractive literature, most of which is free. Listed below are some groups from which promotional materials may be secured:

National Fisheries Institute
333 North Michigan Avenue
Chicago, Illinois 60601

Texas Parks and Wildlife Department
Seafood Marketing Services Section
John H. Reagan State Office Building
Austin, Texas 78701

U. S. Department of Commerce
National Marine Fisheries Service
Room 526
100 East Ohio
Chicago, Illinois 60611

SEAFOOD TRADE ASSOCIATIONS

American Shrimp Cannery Association
P.O. Box 50775
New Orleans, Louisiana 70150

California Seafood Institute
2677 Larkin Street
San Francisco, California 94109

Department of Chesapeake Bay Affairs
69 Prince George Street
Annapolis, Maryland

Virginia Seafood Council
P.O. Box 687
Newport News, Virginia

International Shrimp Council
Ring Building
Washington, D. C. 20036

Marine Department of Sea and Shore
Fisheries
State Capital Building
Augusta, Maine 04332

Massachusetts Seafood Council
Administration Bldg., - Fish Pier
Boston, Massachusetts 02210

Canned Salmon Institute
618 Second Avenue
Seattle, Washington 98104

Florida Board of Conservation
107 West Gaines Street
Tallahassee, Florida

Boston Fisheries Association, Inc.
Administration Bldg., - Fish Pier
Boston, Massachusetts 02210

Halibut Association of North America
c/o Booth Fisheries Corporation
Pier 24
Seattle, Washington 97134

King Crab Quality Control and
Marketing Board
c/o King Crab, Inc.
Box 1457
Kodiak, Alaska 99615

Maine Sardine Council
15 Grove Street
Augusta, Maine 04330

National Cannery Association
1133 Twentieth Street, N.W.
Washington, D. C. 20036

Seafood Educational Association
c/o Washington Fish and Oyster
Association of California
2 Rankin Street
P.O. Box 2894, Rincon Annex
San Francisco, California 94119

Texas Shrimp Association
910 East Levee Street
Brownsville, Texas 78520

U.S. Trout Farmers Association
67 West 9000 South
Sandy, Utah 84070

Oyster Institute of North America
22 Maine Street
Sayville, L.I., New York 11782

California Fisheries Association
1201 East Olympic Boulevard
Los Angeles, California 90021

Southeastern Fisheries Association
330 South Adams Street
Tallahassee, Florida 32301

Tuna Research Foundation, Inc.
Ferry Building
Terminal Island, California 90731

CHAPTER VII

REGULATIONS AFFECTING THE SEAFOOD INDUSTRY

In starting a retail business, the businessman is faced with numerous federal, state and local laws, along with various fees and licenses. Therefore, the seafood retailer should familiarize himself with the regulations that apply to him.

Some general and specific federal laws concerning seafoods are found in regulations issued under sections of the Federal Food, Drug, and Cosmetic Act. The laws that cover "current good manufacturing practice (sanitation) in the manufacture, processing, packing, or holding of fish and seafood products." are referred to by this act. Part 128 of Title 21 of these federal regulations relates to sanitation of food in general and contains the following:

Section

128.1	Definitions
128.2	Current good manufacturing practice (sanitation)
128.3	Plant and ground
128.4	Equipment and utensils
128.5	Sanitary facilities and controls
128.6	Sanitary operations
128.7	Processes and control
128.8	Personnel
128.9	Exclusions

Included in the definitions section are those used in Section 201 of the Federal Food, Drug and Cosmetic Act and the definitions of "adequate, plant and sanitize".

Adequate refers to that which accomplishes the intended purpose, in keeping with good public health practice.

Plant means the building, buildings or parts thereof used in manufacturing, processing, packaging, labeling or holding human food.

Sanitize pertains to adequate treatment of surfaces by a process that destroys bacteria and substantially reduces other microorganisms.

Such treatment shall not adversely affect the product and shall be safe for the consumer.

Sections 128.3 through 128.8 refer to facilities, methods, practices, and controls that assure food for human consumption is safe and has been prepared, packed and held under sanitary conditions.¹

More specifically, Part 128a of Title 21 is entitled "Fish and Seafood Products". Subpart A pertains to smoked and smoke-flavored fish; subpart E concerns frozen raw breaded shrimp. Both subparts are divided into the same seven sections listed above for general food regulations.

In addition to federal regulations, Texas has regulations applicable to seafood retailers. Article 934A defines a "Retail Fish Dealer" as any person engaged in the business of buying fresh or frozen edible aquatic products for the purpose of selling to the consumer. Before any person in Texas can engage in the retail fish business, he must procure the proper license from the Texas Parks and Wildlife Department in Austin or from one of its authorized agents or field offices. The four major licenses for retail seafood dealers include:

1. **Retail Fish Dealers' License**—six dollars (\$6) for each place of business in each city or town of less than 7,500 population.
2. **Retail Fish Dealers' License** fifteen dollars (\$15) for each place of business in each city or town of not less than 7,500 and not more than 40,000 population.
3. **Retail Fish Dealers' License**—twenty dollars (\$20) for each place of business in each city or town of more than 40,000 population.
4. **Retail Oyster Dealers' License** (permit the sale of oysters only)—five dollars (\$5) for each place of business in each city or town of more than 7,500 population. Selling any fresh or frozen edible aquatic products other than oysters by a retail fish dealer possessing this license constitutes a violation of the Act.²

At all times licenses shall be displayed by the dealer in his place of business so that they may be seen by the public. In Texas all license fees are annual. Licenses become effective on September 1 of each year and are valid until August 31 of the following year. All aquatic products handled or in possession of the retail fish dealer shall be subject to inspection by any employee of the Texas Parks and Wildlife Department.

In addition to stipulating which license a retail fish dealer must possess this Act makes it unlawful for a retailer to have in his possession or at his place of business, to buy or to sell any of the following fish species that do not conform to the specified lengths.³

Salt Water Species	Maximum Length	Minimum Length
Red Fish or Channel Bass	35 inches	14 inches
Flounder and Speckled Sea Trout	None	12 inches
Sheepshead and Pompano	None	9 inches
Mackerel	None	14 inches
Gafftopsail	None	11 inches

Proved possession of undersized or oversized fish at the place of business shall constitute *prima facie* evidence of possession for the purpose of sale. However, it shall be lawful for the licensee to process and to sell any lawful fish of acceptable length by cutting, filleting, wrapping, freezing or otherwise preparing the fish for market.

A person violating any provision of the act shall be guilty of a misdemeanor and upon conviction shall be punished by a fine of not less than ten dollars (\$10) and not more than two hundred dollars (\$200). This license shall be automatically cancelled and another license cannot be obtained for one year from the date of conviction.

Before the retailer opens his doors for business, he must be sure he has (1) met minimum federal sanitation and safety standards that concern the handling of human food, (2) secured the proper state license or licenses and (3) complied with regulations relating to lengths of certain fish species.

The federal and state regulations presented here do not include all laws that confront the retail fish dealer. He must check with local county and city authorities since there are probably local ordinances with which he must comply before he can open a retail seafood business.

Copies of federal laws that concern wholesaling and retailing of fresh seafoods can be found in the Code of Federal Regulations at public libraries. Copies may also be obtained by writing to the Food and Drug Administration (Washington, D.C.) or to the Department of Commerce, National Marine Fisheries Service, Washington D.C.

Copies of state regulations can be located by contacting the appropriate state agency or agencies.

Once the retailer has secured the necessary licenses and complied with all federal and state laws, he is ready to set up an accounting system that will allow him to determine the profitability of his operation relative to investment.

CHAPTER VIII

RECORD KEEPING—THE BASIS FOR OPERATIONAL CONTROL

A good businessman is always aware of how well his business is functioning. He normally has a dollar or profit goal in mind, and knows how closely he is meeting objectives. He realizes that, to evaluate the performance of his business, adequate and up-to-date records must be maintained. From these records he prepares financial statements and selected performance ratios to compare current business activities with past results and to judge budgeted performance goals.

The purpose of this chapter is to provide an introductory exposure to the benefits of establishing and maintaining efficient records. No attempt is made to investigate the details of accounting and financial procedures. These matters should be directed to qualified personnel (certified public accountants or financial consultants), who can be located by consulting the Yellow Pages of the telephone directory, by inquiring at the local Chamber of Commerce, by contacting your banker or lawyer, or by getting in touch with the local Small Business Administration field office (Niels Esperson Building, 808 Travis Street, Houston, Texas).

Two financial statements are essential to all business firms. The Profit and Loss (P and L) Statement indicates how much money was collected and how much was paid during a time period. A Balance Sheet indicates the items in which money is invested (your money and your creditors' money) and the source of this money.

In addition to these two basic financial statements, a businessman should utilize performance ratios that help him compare his business to other firms in this product-industry category. Current Ratio, Inventory Turnover Ratio, Profit Ratio, Investment Ratio and Return-on-Investment Ratio are basic performance tools that can significantly aid the seafood retailer in evaluating his business performance.

THE PROFIT AND LOSS STATEMENT

A firm's profit for a given time period is determined by subtracting from net sales (total sales less returns and allowances) the cost of merchandise sold (cost of goods sold). The resulting figure is called gross profit (profit before deducting all operating costs). When operating costs are subtracted from gross profit, the remainder is net profit before income taxes. Once business income taxes have been computed and subtracted from net profits, the balance reflects profits after taxes for the firm. A simplified profit and loss statement might read as follows:

Gross sales	
Less: Sales returns and allowances	\$50,000 (1,000)
Net sales	49,000
Less: Cost of goods sold	(27,000)
Gross profit:	22,000
Less: Operating expenses	(5,000)
Net profit before taxes	17,000
Income taxes	(2,000)
Net Profit	\$15,000

COST OF GOODS SOLD

The simplest way to compute "cost of goods sold" is to record every item sold (using sales tickets) and then to "cost out" each ticket by determining from the purchase records the cost of each item. In firms where several hundred transactions take place, this process may be simple in concept but tedious to perform. Since the cost of some goods fluctuates frequently, it is often impossible to determine the exact cost of the item sold; there may be several of the same item in stock that were purchased previously at a lower or higher price.

Given these difficulties, the "cost of goods sold" section of the profit and loss statement is designed to accommodate mass selling practices. A typical section would appear as follows:

Beginning inventory at cost (at onset of time period; e. g., January 1)	\$ 300
Add: Purchases at cost during beginning and ending time period; (e.g., January 1 - January 31)	2,700
Cost of goods available for sale	3,000
Less ending inventory	(500)
Cost of goods sold	\$2,500

An additional problem is determining the inventory cost when purchases are frequent and when prices fluctuate during the accounting time frame (e.g., Jan 1. - Jan. 31). The retailer should incorporate into his business an accounting system which reflects a policy where fish are sold on a "first-in-first-out" basis to insure product quality and freshness. The following paragraphs illustrate how the "cost of goods sold" section reflects this policy in a firm's accounting system.

The "cost of goods sold" section for a specified period consists of cost for the first seafood purchased, thus leaving the cost for the last seafood purchased still in inventory. To illustrate the "FIFO" (first-in-first-out) method of accounting, assume the data shown below.¹

	No. of Pounds	Avg. Cost per pound	Total Cost
Beginning Inventory	100	\$.80	\$ 80
First Purchase (Jan. 1)	50	.90	45
Second Purchase (Jan. 2)	50	1.00	50
Third Purchase (Jan. 18)	50	1.20	60
Fourth Purchase (Jan. 24)	50	1.30	65
Goods Available for Sale	300		\$300
Pounds Sold	-180		
Pounds in Ending Inventory	120		

"Goods available for sale" consists of beginning inventory plus additional purchases made during the period. Sales are from the oldest stock, and final inventory consists of the most recently acquired stock, as follows:

Five pounds from Jan. 25 at \$1.30	\$65
Five pounds from Jan. 15 at \$1.20	60
Two pounds from Jan. 8 at \$1.00	20
Ending Inventory (based on FIFO)	\$145

Cost of Goods Sold is then determined by:

Cost of goods available for sale	\$300
Less: Ending Inventory	(145)
Cost of goods sold (based on FIFO)	\$155

A simple accounting system may consist of accounts for purchases, inventory, and receipts. A spoilage account could also be established in which the purchases account is credited for the amount of spoilage and the spoilage account is debited for the same amount. In this way the manager will know how much seafood is lost due to spoilage.

Amount of purchases is determined from invoices received. Receipts from sales of seafood can be determined from daily cash register totals. A simple income statement might look like this:

Revenue or sales	4,500
Less: Cost of goods sold:	
Beginning inventory (at cost)	350
Plus: Purchases	2,600
Equals: Goods available for sale	2,950
Less: Ending inventory	320
Equals: Cost of goods sold	(2,630)
Equals: Gross profit	1,870
Less: Operating Expenses	(930)
Equals: Profit	\$ 940

To determine net profit, operating expenses such as employee wages, insurance, heating and lighting, advertising, etc. should be deducted. These expenses vary according to size of business operation and size of town or city in which the store is located.

BALANCE SHEET

The balance sheet indicates where the businessman invests his money and to whom he is liable for use of this money. Money invested in particular business items that maintain the firm are assets. Cash, Accounts Receivables, Inventory are typical examples of **Current Assets**; these items are relatively "liquid" and can be converted into cash in 30-60 days. **Building, equipment and land are Fixed Assets** that can be converted into cash but may take considerable time to be negotiated for sale. For example, assets generate revenue for the firm to buy inventory, pay employees, buy and operate delivery equipment. Assets are accumulated from the retailer's own savings and from previous business profits over and above the operating costs, business taxes and the proprietor's living salary. These expenses are termed capital or equity. Assets may also accumulate by borrowing. Accounts Payable to suppliers is one type of borrowing; on a short-term basis. These suppliers "lend" money for 10-30-60 days, and the retailer may "use" this money for his business during the time length allowed by the purchase invoice before he is obligated to repay. Notes Payable reflects long-term borrowing. Both categories, Accounts and Notes Payable, are liabilities incurred by the firm to lenders. Equity or Capital invested is also a type of liability since the firm "owes" the retailer the amount he has contributed. Thus the worth of the business is assets minus liabilities and personal capital invested (by retailer, partners or stockholders). Subtracting liabilities from assets yields **Net Worth**, and the excess of net worth over capital is **Earned Surplus**. A typical balance sheet might look like the following:

Balance Sheet
Jan. 31

ASSETS

Current Assets:	
Cash	\$ 50
Accounts receivable	50
Inventory	100
Fixed Assets:	
Equipment	200
Less: Depreciation	(100)
	100
TOTAL	\$300

LIABILITIES

Current liabilities:	
Accounts payable	\$ 50
Notes payable to bank	50
Owner's Equity	200
TOTAL	\$300

PERFORMANCE RATIOS

Good accounting records are the foundation on which sound financial management is based, and the two most important accounting statements are the balance sheet and the income or "profit and loss" statement. However, these two records only begin to explain the financial condition of a business. A number of indicators reveal relationships between some figures on the balance sheet and the profit and loss statement. The first objective of financial management, "liquidity" may be defined simply as the ability to pay bills. "Current ratio" is one of the best known indicators of liquidity. This ratio is computed from the balance sheet by dividing current assets by current liabilities:

$$\frac{\text{Current Assets}}{\text{Current Liabilities}} = \frac{\$200}{\$100} = 2$$

Is this an acceptable current ratio? This question cannot be answered with a definite yes or no. A popular rule of thumb for the current ratio is 2 to 1, but whether a specific ratio is satisfactory depends upon the nature of the business and the characteristics of its current assets and liabilities. If a retailer decides his current ratio is too low, he may be able to raise it by paying some debts or by increasing current assets.²

Since profit in a retail seafood business is greatly affected by inventory turnover, computation of the turnover rate is also an important liquidity ratio. Inventory turnover, which indicates the velocity with which merchandise moves through the business, is determined by either of two formulas:

$$\frac{\text{Cost of Goods Sold}}{\text{Average Inventory At Cost}} = \text{Inventory Turnover}$$

$$\frac{\text{Sales}}{\text{Average Inventory At Retail}} = \text{Inventory Turnover}$$

To determine average inventory for the period, add beginning and ending inventories and divide this figure by two. A high turnover suggests that business is operating with a relatively small investment in inventory or that inventories are not on display too long. Inventory turnover records for individual items or groups of items show which items sell well. Reorder fast-moving items quickly and dispose of slow-moving items before they become unsalable.

The second major objective of financial management is answering the question, "Does your business earn as much profit as it should, considering the amount of money invested"? The rate of return on investment (ROI), probably the most useful profitability measure for the small business owner, is based on two other ratios—"profit ratio" and "investment turnover". Profit ratio measures the difference between the amount your business earns and the amount it spends for business operations. Thus, changes in the ratio depend on operating costs and pricing policies. For example, net profit on sales (**profit ratio**) is computed as follows:

$$\frac{\text{Net Profit}}{\text{Net Sales}} = \frac{\$ 20,000}{300,000} = 6.7\% \text{ net profit}$$

This means that for every dollar of sales, this business makes a profit of 6.7 cents. This ratio is most useful when comparing your figures with those of comparable businesses.

Investment turnover, the ratio of annual net sales to total investment, measures the volume of sales you receive for each dollar invested in assets. Investment turnover is computed as follows:

$$\frac{\text{Net Sales}}{\text{Total Assets}} = \frac{\$300,000}{\$230,000} = 1.3 \text{ times}$$

Now, return on investment can be determined by multiplying the profit ratio by the investment turnover:

$$\frac{\text{Net Profit}}{\text{Net Sales}} \times \frac{\text{Net Sales}}{\text{Total Assets}} = \frac{\text{Net Profit}}{\text{Total Assets}} = \text{Return on Investment}$$

Usage varies in regard to which items from financial statements are used for "profit" and "investment". For example, "profit" may refer to net operating profit, net profit before taxes, or net profit after taxes. "Investments" can mean total assets or simply equity. Decide which values you will use in computing return on investment, then be consistent.³

Size, organization type, kind of business and other factors largely govern the records needed and the complexity of the records system. Every business needs **seven** basic kinds of records. In order to help you remember these, below is an anagram which spells R E C O R D S which lists the seven basic records.

Records of cash receipt with provisions that segregate receipts from sources other than income (e.g., bank loans).

Expenditure records that designate the nature of the expenditure (e.g., materials and labor expense) and the payment method (check or cash).

Control of payroll expenditures that shows names, social security numbers, time of payment, gross pay, payroll deductions, and taxes.

On Account or accounts receivable records that show customers' accounts and your experience with them.

Resources and accounts payable that show your experience with suppliers (e.g., cash discounts and dates).

Documentation file for the orderly accumulation of documentary evidence (invoices, stubs, etc.) that supports other records.

Summarization in order to condense transactions already basically recorded, and to provide a permanent, intelligible history of the business. A general ledger contains the beginning values of assets, liabilities and capital. It also summarizes the results of operations for any given period (week, month, quarter, year), and it provides a "running" record of assets, liabilities, and capital at any given moment. A summary also establishes accountability to employees or to departments for funds or other assets entrusted to their care.⁴

The need for accurate record-keeping cannot be stressed too much. Any accounting system, simple or complex, is useless without a sound basis for accumulating information used to prepare various statements and ratios. The retailer should seek the services of a professional accountant to help him establish an adequate accounting system. Additionally, he should call upon a financial analyst to help him interpret his operation's performance as reflected in the Profit and Loss Statement on the Balance Sheet, and by Selected Performance Ratios. These professionals detect "soft spots" in business activities and suggest how to improve the firm's profitability.

CHAPTER IX

FINANCING—MAKING MONEY WORK FOR YOU

The ability to obtain needed money is as necessary to the operation of a business as a good location, the right equipment, reliable sources of supply, and well-trained personnel. Before a bank will lend money, the finance officer must be satisfied by answers to the following questions:

1. What sort of person are you? The character of the borrower comes first, followed by his ability to manage the business.
2. What will you do with the money? This answer determines the type of loan, short or long-term. Money used for the purchase of seasonal inventory will require quicker repayment than money to buy fixed assets.
3. When and how do you plan to repay? The banker's judgment of your business ability and the type of loan will be deciding factors in answering this question.
4. Is the "cushion" in the loan large enough? In other words, does the amount requested allow for unexpected developments? The banker resolves this question on the basis of projected financial statements that you present to him.
5. What is the general outlook for the business community and for your particular type of business?

After deciding to borrow money, the businessman and his banker must decide what financing is needed—short-term loan, long-term loan or equity capital.

SHORT-TERM LOANS

Short-term loans usually finance a need that does not exceed one year, such as building a seasonal inventory during a five or six month period. Short-term loans, and some long-term loans, may be "secured" or "unsecured". The former loan involves a pledge of your assets as protection; the latter relies solely upon your credit reputation.

LONG-TERM LOANS

Long-term loans involve money borrowed over an extended period of time in order to finance fixed assets such as equipment and fixtures. These types of loans are paid back in periodic installments from earnings.

EQUITY CAPITAL

Equity is the owner's investment plus profits that accumulate in the business. Money invested as equity in the business is not repaid; instead, the owner has invested his own money or has acquired capital by selling a part interest in the business to someone else.

A businessman wishing to open a new seafood establishment would probably be required to contribute about 50 percent of the total investment himself in the form of equity and to borrow the remaining 50 percent as a long-term loan to purchase initial land, buildings, equipment, etc. If the need arises, he may later obtain short-term loans to finance seasonal inventories.

MONTHLY PROJECTED STATEMENTS

Before a banker transacts a major loan, the “would-be” businessman must provide a detailed monthly projection of his expected financial requirements for a period of time, not more than two years in length. The projection is developed by combining budgeted expenses with a sales forecast, from which a cash-flow forecast is developed. The cash-flow forecast estimates cash receipts and disbursements during the budget period and represents a plan to meet working capital requirements.¹ This forecast information is based on previous business experience plus anticipated performance during the coming year. An estimated Profit and Loss Statement can also be prepared from this information.² The banker uses these projected statements, along with balance sheets and subjective judgments of the borrower’s ability and credibility, to decide whether or not to grant the loan. If the loan cannot be justified by the borrower’s financial statements, a pledge of security may be required. Pledges of security can be of several types:

1. **Endorsers, co-makers or guarantors.** The borrower has other people sign the note for him. These endorsers, co-makers and guarantors are contingently liable for the note.
2. **Real estate.** The borrower signs over real estate that he owns as collateral for long-term loans.
3. **Savings accounts.** The borrower may assign to the bank a savings account to which the bank keeps the passbook.
4. **Life insurance policies.** Banks will also accept life insurance as collateral for a loan. They will lend as much as the cash value of a life insurance policy.
5. **Stocks and bonds.** If the borrower offers stocks and bonds as collateral, they must be marketable. Banks usually lend no more than 75 percent of the market value for high grade stock. For federal or municipal bonds, banks may be willing to lend 90 percent or more of the market value.³

BREAK-EVEN ANALYSIS

Bankers often want to know what sales level is required before the borrower expects to earn a profit. The break-even technique is a good tool for analyzing the effect on profits of different costs, operating volumes, pricing methods and other management policies. The “break-even point” is reached when sales revenues just equal costs, with no profit or loss.

Two major classifications of costs are fixed-categories and variable costs. Fixed costs do not change with fluctuations in the level of business activity (e.g., property insurance or property taxes). Variable costs, on the other hand, vary directly with the volume of business activity and include expenses such as cost of goods sold. Once all costs are categorized as fixed or variable, the break-even point in pounds of fish can be found by using this formula:

$$\text{Break-even volume (in pounds of fish)} = \frac{\text{Total fixed costs}}{\text{Selling price} - \text{Variable cost (per pound)}}$$

This formula can be used to find the break-even point by assuming one fish product. Total fixed costs for a fish retailer excludes only what he pays for the fish (cost of goods sold). Included in total fixed costs, on a monthly basis, are items such as rent, salaries and wages (including owner's salary), insurance, heat, light and electricity. Costs of goods sold, (what the retailer pays for the fish wholesale) are variable costs. For example, suppose the XYZ Company figures the costs for one variety of fish (redfish) as follows:

$$\text{Total fixed costs} = \$100.00$$

$$\text{Variable cost (Cost of goods sold)} = \$.50 \text{ per pound}$$

$$\text{Selling price} = \$1.00 \text{ per pound}$$

This computation means that \$.50 per-pound-sold applies toward fixed costs. Since fixed costs are \$100, the retailer must sell 200 pounds of redfish before any profit is realized. Once fixed costs are recovered, the \$.50 per pound sold will be profit. By applying the correct formula, the derived break-even point in pounds is:

$$\text{Break-even volume (pounds of fish)} = \frac{\$100}{\$1.00 - \$.50} = \frac{\$100}{\$.50} = 200 \text{ pounds}$$

To determine a dollar break-even point, multiply the break-even volume in pounds by the selling price per pound. The retailer must sell 200 pounds of fish at \$1.00 per pound for total sales of \$200 in order to cover costs.

Of course, a seafood retailer sells more than one seafood variety. By applying a "weighted average" to the above formula a more realistic break-even point is obtained. The weights (percentages) are based on previous sales records and purchases. Assume that the retailer calculates from previous records that 60 percent of his sales are from redfish and 40 percent from trout. The selling price and cost of the two species are as follows:

	<u>Selling Price Per Pound</u>	<u>Cost Per Pound</u>
Redfish	\$1.00	\$.50
Trout	\$.75	\$.45

By applying weighted averages to the original formula, the break-even point becomes:

$$\begin{aligned} \text{Break-even volume (pounds of fish)} &= \frac{\$100}{.60 (1.00 - \$.50) + .40 (.75 - \$.45)} = \frac{\$100}{.30 + .12} \\ &= \frac{\$100}{.42} = 238 \text{ pounds} \end{aligned}$$

The weights must now be applied to the total number of pounds to determine how many pounds of each species must be sold:

$$238 \quad \times \quad .60 \quad = \quad 142.80$$

$$238 \quad \times \quad .40 \quad = \quad 95.20$$

Thus, by applying weighted averages, the retailer can determine break-even points for each seafood variety he carries. Note that changes in fixed costs, selling price, or variable costs result in a changing break-even point. For example, reduced variable costs will lower the break-even point because more profit per unit is obtained from each sale. Similarly, if the retailer must pay more for his seafood products (variable costs rise), his break-even volume point will be higher. In this case, either he will raise his price or, he will sell more seafood at the original price in order to cover fixed costs.

THE SMALL BUSINESS ADMINISTRATION

Even with projected financial statements and break-even analysis, the banker may consider the loan too risky to authorize without additional guarantees. He may then suggest, if he feels the venture has merit, that the Small Business Administration consider the loan. By law, SBA cannot consider a loan application unless there is evidence that the loan cannot be obtained elsewhere on reasonable terms.

To be eligible for an SBA loan, a firm must qualify as a small business, i.e., the operation must (1) be independently owned and operated; (2) not be dominant in its business field; and (3) meet certain size standards in terms of employment or annual receipts. The loan applicant must also meet the following general credit requirements (notice that several of these criteria are required for conventional bank loans):

1. The applicant must be of good character.
2. Evidence must indicate that he is able to operate his business successfully.
3. The applicant must have enough capital when combined with the SBA loan, that he can operate on a sound financial basis.
4. The past record and future prospects of the business must indicate ability to repay the loan from the business income.⁴

If the bank is willing to supply part of the needed funds, SBA may advance the remaining money or may guarantee part of the loan made by bank participation loans. SBA can provide or guarantee as much as 90 percent of the bank loan.

If the bank cannot participate with SBA to extend credit, the borrower may apply for a "direct" loan financed wholly by SBA. Under law, however, SBA can authorize neither a direct-loan agreement if a participation loan is available, nor a participation agreement if the loan is available on a guarantee basis. If you need financial counseling or further information concerning SBA loans, call or write

one of the field offices (Small Business Administration, Niels Esperson Bldg., 808 Travis St., Houston, Texas).

Obviously the retailer will require outside financing unless he can supply all necessary capital by himself or by selling part of his business. Regardless of whether the loan is short-term or long-term, from a bank or from SBA, the retailer is required to submit balance sheets, as well as profit and loss statements. In addition, a break-even analysis of tonnage and dollar volume is valuable to the retailer and his financial agent in evaluating the loan requirement.

CHAPTER X

SUMMARY

This manual has provided a variety of marketing aids that range from purchasing seafood to obtaining financial aid. Now an organized perspective is in order.

Successful businesses operate systematically. In most cases the firm wants to answer three major questions:

1. "What do I want to accomplish during the planning period?" (week, month, quarter or year).
2. "What marketing strategies (product assortment, pricing decisions, promotional techniques, supply and storage factors, customer service requirements) will I use to obtain these goals?"
3. "What information (business records and financial analysis tools) shall I employ to know if I am "on target"—to know what activities should be maintained or changed to reach my goals?"

When answered, these three questions form the fundamentals of good business management; objectives, plans, and controls.

Objective—"What do I want to accomplish?"

This manual cannot tell you what your objectives should be. Objectives vary for each firm and each individual. For market planning purposes, a retailer must state his objectives or goals in such a way that he can measure them. That is, he may list a profit objective, "I plan to earn \$500.00 additional profit this quarter"; or a sales goal "I plan to increase my dollar volume by 15 percent this month"; or a product sales goal "I plan to double (100% increase) my sales of shucked raw oysters?"

Notice three characteristics of these statements:

1. The goal is **stated in precise terms**, which when compared with results, will indicate whether or not the goal was achieved.
2. The goal will be attained within a **definite time period**. The planning period (week, month, quarter).
3. The goal is to be achieved by **use of a plan**.

Marketing Plans—"What marketing strategies will I use?"

Recall the "Trinity of Marketing Decisions" that was introduced in the first chapter. How the retailer resolves the "Trinity Decisions" becomes his plan to achieve goals. **The personal plans for pricing, promotion, etc. must support one another in order for objectives to be realized.** For example, it does not pay to develop an extensive advertising plan and not have adequate product on hand. A stock-out condition will not increase customer patronage nor loyalty. It is also inconsistent to maintain an attractive display case and allow untidy or unsanitary facilities—or vice versa.

Controls—“Am I on target?”

Of course you, the retailer, want to know how you are doing. To gauge your progress, you need an “information system” or “feedback” that lets you learn if plans are resulting in the predetermined objectives. Recall that the financing and record-keeping chapters of this manual introduced the profit and loss statement, in addition to analytical tools such as return on investment and inventory ratios. These tools, plus daily records of sales and expenses, can compare present performance with past business activities and with budget figures estimated when your market plans were set up. Controls dictate whether the retailer should continue his present course with the current marketing plan or whether he should make changes in the plan.

The Basic Market-Planning Framework

1. Establish a set of **reasonable goals** to achieve within a specific time period.
2. Develop a set of marketing strategies to achieve these goals—have a written plan based on the Trinity of Marketing Decisions:
 - a. Select a target market.
 - b. Develop a product mix tailored to meet the needs of this market.
 - c. Combine promotion, retail pricing, source of supply, and customer service strategies to support your product assortment presentation.
3. Establish a record-keeping system that will provide useful marketing information on your business progress.

Listed below are some primary objectives that a seafood retailer should attempt to achieve. Although these objectives cannot be measured and compared against your business performance, you should plan on paper what you wish to accomplish. To help you get a “feel” of the kind of goals you may set for yourself, consider the following:

Primary Management Objectives for a Fresh Seafood Market

1. To increase customer satisfaction
 - a. By making fresh seafood available
 - b. By adding interest to the total store offering
2. To increase store revenue and profit
 - a. By increasing patronage and customer loyalty
 - b. By averaging higher check-out sales
3. To enhance the store’s image
 - a. By making it “the place” to purchase fresh seafood
 - b. By creating a one-stop seafood center
 - c. By being “fresh conscious”

Basic Management Guidelines for Accomplishing Seafood Market Objectives

1. Push the “seafood” concept—not just “fish”.
 - a. Use strong visual cues and symbols.
 - 1) Name the seafood market.
 - 2) Convey a market personality through architectural design.
 - b. Strengthen the impact of your concept by centralizing all seafood products in your display area.
2. Insure that your personnel have the proper attitudes and philosophies.
 - a. Establish strong, positive support of top management.
 - b. Structure carefully the training of seafood market employees.
 - c. Separate the responsibilities and authority between red meat and seafood operations (for supermarkets).
3. Make your seafood department a customer contact point.
 - a. Keep your merchandise area manned at all times.
 - b. Inform your customers of new menu items and recipes.
 - c. Be courteous and friendly to your customers.
4. Offer a wide selection in product assortment to increase sales potency and impulse buying.
 - a. Stock fresh, frozen and canned seafood items. Display these items in the seafood market area to emphasize that all seafood is part of the total concept (for supermarkets).
 - b. Stock a wide assortment of products that complement consumers seafood purchasing decisions.
5. Make product quality a selling point.
 - a. Establish quality standards for receipt and processing products.
 - b. Maintain an inventory control system to ensure fresh products.
 - c. Stress cleanliness and sanitation at all times.
6. Actively promote fresh seafoods.
 - a. Establish and follow a promotion program consisting of regularly recurring activities:
 - 1) Weekly leaflets or advertisements
 - 2) Weekend or seasonal specials

- 3) Adequate supply of “freebees” (recipes, etc.)
 - 4) Paper overwrap with market’s name
- b. Develop “special” promotion events:
- 1) Hire a person to prepare seafood menus and distribute samples.
 - 2) Give away, as samples or sell at very low retail price, new products that you may want to test for potential market success.

Implementing these management guidelines has been discussed in this manual. If these fundamentals are studied and applied, your firm is far along on the road to a successful retail seafood operation. You will see profits increase, because customers are better satisfied; and satisfied customers are the best marketing tool you have. Start now to develop marketing objectives, implement marketing plans and monitor your performance. Put the pencil, the paper, and yourself to work!

FOOTNOTES

Chapter I

1. "How to Sell Seafoods and Net More Profits"; Developed by the Massachusetts Division of Marine Fisheries in cooperation with the U.S. Bureau of Commercial Fisheries under P.L. 88-309; p. 3.
2. "There's Gold in Them There Gills"; U.S. Department of Interior, Bureau of Commercial Fisheries; p. 2.
3. Ibid.; p. 3.
4. "How to Sell Seafoods and Net More Profits"; p. 3.

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2. "How to Sell Seafoods and Net More Profits"; Developed by the Massachusetts Division of Marine Fisheries in cooperation with the U.S. Bureau of Commercial Fisheries under P.L. 88-309; p. 5.
3. Nash, Darrel A.; "Preliminary Analyses of a Survey of Fish Buying Patterns by Households"; Bureau of Commercial Fisheries, Division of Economic Research; p. 9.
4. Miller, Morton M. and Darrel A. Nash; p. 31.
5. Nash, Darrel A.; p. 15.
6. Miller, Morton M. and Darrel A. Nash; p. 40.
7. Nash, Darrel A.; p. 17.

Chapter III

1. "There's Gold in Them There Gills"; U.S. Department of Interior, Bureau of Commercial Fisheries; p. 7.
2. Burgess, G.H.O.; *Fish Handling and Processing*; New York: 1967; p. 259.
3. "The Care of Fish in Retail Stores"; Department of Fisheries, Ottawa Canada; 1967; pp. 8-11.
4. "There's Gold in Them There Gills"; p. 26.
5. "The Care of Fish in Retail Stores"; pp. 14-16.
6. "There's Gold in Them There Gills"; p. 28.

Chapter IV

1. **SMI Sanitation System Guidelines and Standards**; Super Market Institute, Inc., Chicago; pp. 1-28.

Chapter V

1. "There's Gold in Them There Gills"; U.S. Department of Interior, Bureau of Commercial Fisheries; p. 33.
2. **Ibid.**; p. 34.
3. **Ibid.**; p. 27.

Chapter VI

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2. "The Profitable Role of Fish in Your Store"; Part II; pp. 1-12.

Chapter VII

1. Code of Federal Regulations; Part 128 Title 21; January, 1971; Issued under Federal Food, Drug and Cosmetic Act.
2. Texas Penal Code; Article 934a; p. 645.
3. **Ibid.**; p. 647.

Chapter VIII

1. Meigs, Walter B., Charles Johnson, and A. N. Mosich; **Financial Accounting**; New York, 1970; pp. 328, 330, and 331.
2. Zwick, Jack; "A Handbook of Small Business Finance"; Small Business Administration; 1965; p. 19.
3. **Ibid.**; p. 28.
4. **Records and Credit in Profitable Management**; Administrative Management Course Program; Small Business Administration, Washington, D.C.; 1964; p. 24.

Chapter IX

1. Small Business Administration Management Aids, "The ABC's of Borrowing," No. 170; August, 1971; p. 1.
2. **Ibid.**; p. 3.

3. **Ibid.**; p. 4.
4. Zwick, Jack; "A Handbook of Small Business Finance," Small Business Administration, Small Business Management Series No. 15; p. 66.

Chapter X

No footnotes.

