Q 22: Which Would Be the Most Suitable Package for Seafood?

A 22: The seafood industry has undergone some very startling changes and yet has in some respects remained the same.

SUPPLY AND DEMAND

For centuries, seafood has been a household staple, served up at least once each week. In some homes and in many restaurants as well it was and still is considered a poor meat substitute or a cherished delicacy, which some hated and others considered a gourmet treat. Millions of Catholics were forced to eat fish each Friday and some resented it. However, when this restriction was lifted, the consumption of seafood did not diminish. Quite the contrary, the per capita consumption in the US has gone from 11.8 lbs in 1970 to 14.4 lbs in 1985, a 22% increase in 15 years. Some claim that the retail value of seafood in 1989 was about $28.8 billion. In the last few decades while the demand for seafood has steadily increased, the supply seems to have decreased. If 14.4 lb/per capita is an accurate statistic—and there is no reason to question it—then the annual consumption for the USA should be 3.6 billion lb (14.4 × 250 million people). At an average retail price of $8/lb this would confirm the $28.8 billion of retail sales. However, the US “catch” for fish and shellfish for 1988 is quoted as 10.9 billion pounds. There seems thus little justification for ever increasing prices based on alleged shortages.

THE HEALTH ASPECT

Seafood is a ready source of protein and many other nutrients. Many fish oils are low in saturated fats and cholesterol. They are therefore a choice
of the health conscious consumer. However, seafood has also received a massive dose of negative publicity. Early in the century there persisted the axiomatic rule. "Don’t eat fish in months without ‘R’." This meant that fish were tabu from May to August of each year. There was a good reason for this odd rule. Transportation and refrigeration was not up to today’s standards. Thus seafood would spoil on the way to the retail establishment and could actually present a health hazard to the ultimate consumer. However, under present circumstances there is no reason to hold on to this outmoded belief.

Seafood has in recent times suffered from some very bad press. As the pollution problem worsened, we became aware of fish absorbing waterborne pollutants. Thus we had a mercury scare in the 1970s. Recently there was concern for bluefish contaminated with PCB or swordfish with mercury. Shellfish are even more susceptible to pollution since they are grown in beds just offshore. Unfortunately, there is little government control over seafood. Meats are subject to both FDA and USDA inspection. There are, however, no federal inspection authorities for fish. Local and/or state inspection of shellfish is not very effective. One precaution that every consumer can and should take, is the avoidance of raw fish. Well cooked seafood will have practically all microbial contamination destroyed. There are many examples of eaters of sushi and other raw fish or shellfish dishes suffering dire health consequences. Aside from the microbial problems, it has recently been demonstrated that worms and parasites can be transmitted as well.

A highly publicized case is that of "Kapchunca." This delicacy is a salt cured, air dried whitefish. This fish was sold uneviscerated (whole with its insides intact). The intestines harbored Clostridium botulinum and claimed at least one fatality, and several were taken very ill. A very fast reaction by FDA tracked down and recalled the product within just a few days and this held the damage to a minimum.

There are two types of diseases associated with seafood:

1. Scrombroid poisoning. This may cause serious discomfort but is not life threatening.
2. Ciguatera. This is primarily transmitted by reef dwelling fish in subtropical climates. Of commercial importance are barracuda and red snapper. The toxin is not destroyed by freezing, may attack the nervous and respiratory system, and could cause death.

FROZEN FISH

Food can be preserved for extended periods of time in a freezer. Any food market has rows of freezers containing a range of products. Seafoods have