

U.S. Seafood Market in 2020

Strong Demand Likely Boon to Aquaculture

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According to a February study by the Economic Research Service of the United States Department of Agriculture (USDA), shifting demographics and population growth will create strong demand for seafood in the United States over the next two decades. This increase will profoundly impact all elements of the U.S. and world seafood industry, affecting what seafood we eat, where we eat it, and the sources of new supply needed to meet this demand.

Although U.S. per-capita seafood consumption has been relatively flat over the past decade at approximately 6.8 kg edible weight, it is expected that seafood will become the fastest-growing sector of the U.S. protein market. Outpacing poultry and beef, seafood will require an additional 1.81 billion kg (whole weight) of product to meet the demand by the year 2020.

Individual seafood companies and organizations will need to understand the consequences of the changing supply and demand situation and plan accordingly. Major opportunities will be created for innovative, forward-thinking companies that prepare now to meet tomorrow's demand.

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This article was adapted from "Seafood Vision 2020," an analysis of future seafood demand in the U.S. market by H. M. Johnson & Associates. The analysis looks at population and demographic forecasts and current consumer research to assess future seafood supply and its implications for retail and food-service markets.

Changing U.S. Population

As "baby boomers" mature, their impact will be felt as 70 million Americans pass the age of 60 by the year 2020 (Figure 1). Consumer research has shown that older adults in the U.S. eat more seafood than other age groups. For example, according to NPD Group CREST research on away-from-home dining, adults in the 50-64 age group eat 35% more seafood than the national average, and adults over 65 eat 53% more seafood than the national average.

USDA is forecasting an increase in per-capita consumption of seafood of 6.58% by 2020, largely driven by the age factor (Figure 2). Older adults consume less beef (Economic Research Service predicts a 3% drop in per-capi-

ta beef consumption by 2020), and coupled with the many health messages related to seafood consumption, demand for seafood should grow significantly.

Another demographic trend likely to increase seafood demand is the growth in the Hispanic population. Studies have shown that Hispanics consume seafood at a higher rate than the U.S. population as a whole. According to a report by Opinion Dynamics Corp., Hispanics consume 24% more seafood than non-Hispanics. At 38 million people, the Hispanic population is now the largest ethnic group in the U.S. and will continue to grow at a faster rate than the population in general. Shrimp, lobster, and other shellfish are the seafood most preferred by Hispanics.

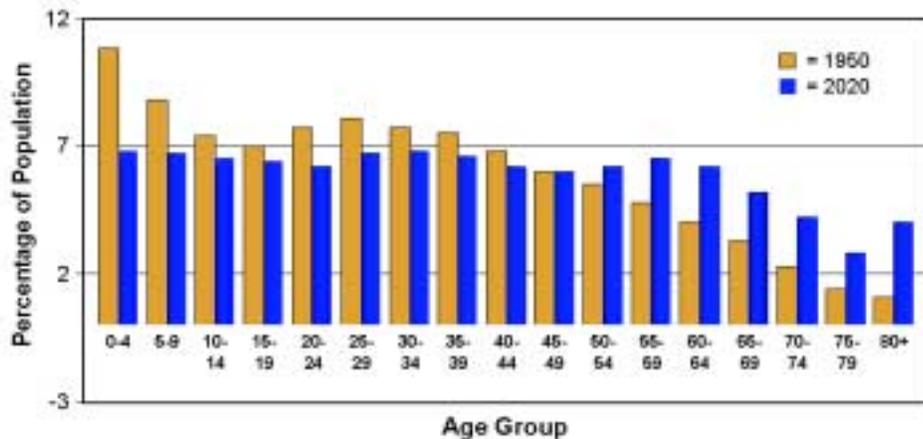
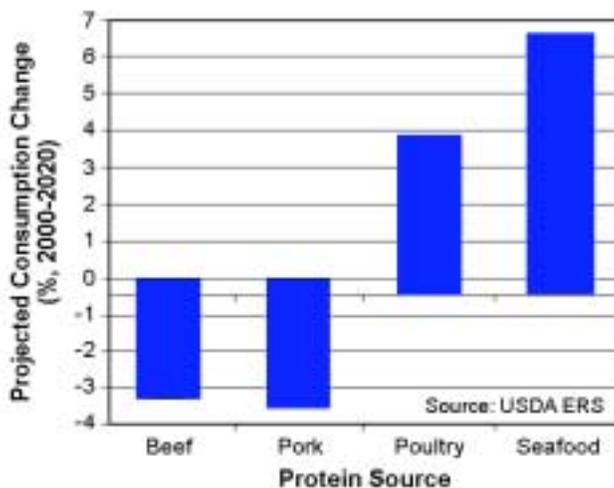


Figure 1. Comparative age distribution of U.S. population, 1950 and 2020 (projected).

Figure 2. Projected protein consumption shift in U.S. population, 2000-2020.



Changes in U.S. population and demographics will have significant effects on seafood products and forms, as well as where seafood is purchased and consumed.

The other element driving seafood demand is the overall growth in the U.S. population. According to the U.S. Bureau of the Census, the current population of approximately 285 million will increase by 18% to 336 million by 2020. When the demographic effect on per-capita consumption and population increase are combined, it is expected that by the year 2020, the increase in seafood demand will be 0.5 billion kg edible weight, or about 1.81 billion kg in round weight (Figure 3).

Future U.S. Seafood Demand

The changes in U.S. population and demographics will have significant effects on seafood products and product forms, as well as where seafood is purchased and consumed. It is likely that the species mix in U.S. seafood consumption will continue to change. However, one constant is likely to be the supremacy of shrimp as the most popular seafood with U.S. consumers.

By 2020, it is estimated the top four seafoods consumed – shrimp, salmon, tilapia, and catfish – will all be produced by aquaculture. In addition, a variety of cultured fish will be offered interchangeably to satisfy white fish demand. Among the species likely to fall into this category are basa and tra from Vietnam, and channa (*Channa micropeltes*) from Asia. No doubt other species will be added over time. The one

common element of this “whitefish du jour” will be that they will be skinless, boneless, white-fleshed, and relatively tasteless.

In addition to generic whitefish, seafood species in the future may be categorized as follows:

- Seafood perceived as good values (salmon, catfish)
- Cultured alternatives to endangered wild species (barramundi for Chilean sea bass)
- Wild species with unique flavor and/or texture (Copper River salmon, black cod).
- Indulgence foods (shrimp, lobster, and crab).

The aging U.S. population will present interesting product and marketing opportunities for the seafood industry. On the product side, age-related opportunities may include functional seafood with added health and nutritional properties introduced as vitamins or beneficial oils. Older adults may also want smaller portions and packages, but also be willing to pay more for upscale value-added products. Premium, value-added seafood will become an import market niche.

Food-service operators are becoming more responsive to the older population. This may include more health-oriented restaurants with smaller portions and/or fewer calories. Other markets likely to grow include travel and

leisure, as well as health care. One strong growth area appears to be assisted-living centers where older adults have their own apartments, but dine in a communal setting. Many of these assisted-living facilities are decidedly upscale and offer excellent meals to their residents.

The Economic Research Service study reported that seafood will experience the largest market growth in volume of the major proteins, with away-from-home seafood volume increasing 30% by 2020. Retail seafood is also likely to change over the next decades, as at-home seafood demand adapts to the shift in demographics and competitive nature of retailing.

As reported in various issues of *Progressive Grocer* magazine, seafood is currently grocers’ least-profitable perishables department in terms of contribution to sales (1.96%), contribution to profits (3.3%), and average gross margin (24.5%). Regulatory requirements such as country of origin labeling, color-added notification, and potentially HACCP will add to the cost burden of operating full-service seafood departments.

The recent spate of supermarket mergers, coupled with the strong pressure exerted by low-price giant Walmart, may well result in a shift toward more self-service seafood departments. These self-service seafood operations will be supplied with prepackaged, case-ready product. Driven by the poultry powerhouses Tyson and Perdue, the case-ready trend is already well established in beef and poultry. The recent acquisition of International Basic Protein by Tyson is expected to accelerate the trend. As meat departments transition to case-ready, it is likely seafood will not be far behind.

The move to self-service will not be universal, as regional retailers and niche marketers continue to offer high-quality service to their upscale customers. One opportunity offered by the

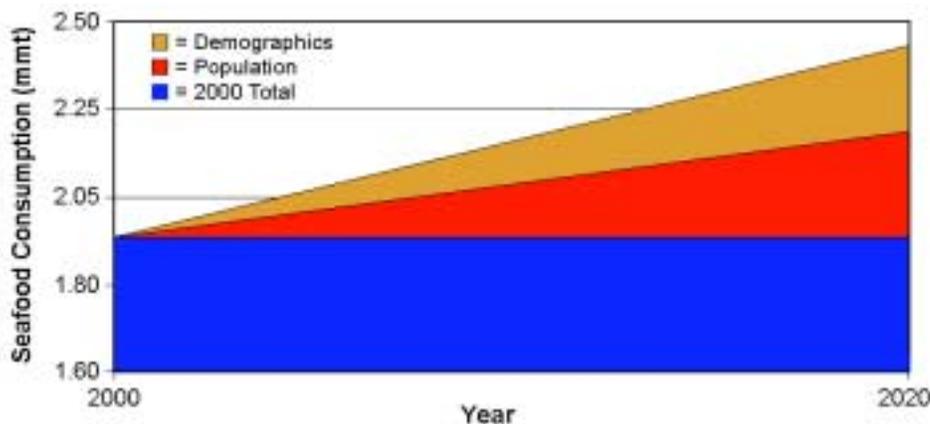


Figure 3. Projected increased demographics, population, and demand for seafood in U.S., 2000-2020.

case-ready trend will be the ability to “consumer brand” more seafood and add recipes and health information to packaging. Packaged seafood will also offer labeling opportunities for organic seafood similar to the packaged organic produce now being introduced in the U.S.

Organic seafood may well become a significant retail market niche by 2020 or sooner. Natural foods and organic food products have enjoyed double-digit growth in recent years, and this trend is likely to continue. Technology will also play a role in case-ready seafood, with modified-atmosphere packaging extending shelf life, and irradiation making products safer.

Supplying Future U.S. Seafood Demand

With the U.S. market requiring an additional 1.81 billion kg of seafood by the year 2020, it is clear that aquaculture will need to play an increasing role in supplying this demand. While estimates vary, it is likely that aquaculture currently supplies about 20% of the U.S. seafood demand on a volume basis. This figure is likely to rise to 30 or 40% by 2020.

According to the United Nations Food and Agricultural Organization (FAO), aquaculture currently accounts for 38% of the world’s edible seafood supply and is expected to exceed 50% by 2030. A 2002 study by the International Food Policy Research Institute (IFPRI) forecasted a 41% share of the edible seafood market for aquaculture by 2020.

While much of the anticipated increase in aquaculture production will occur among low-value species such as carp, a host of new cultured species – including Pacific halibut, black cod, cobia, barramundi, and Atlantic cod – will keep the demand pipeline filled in the U.S. According to IFPRI, the developing world will produce over 79% of all seafood by 2020 (Figure 4). It should be noted, however, that the institute includes China in this group.

While aquaculture production faces a number of growth obstacles in the U.S., marine aquaculture, including

open ocean systems, may offer some opportunity for expansion. Still, it is reasonable to assume that future U.S. seafood supply will be heavily dependent upon imports, particularly aquaculture products. Trade barriers pose the risk of not only artificially raising consumer prices, but also diverting needed supplies to other markets.

Global Perspective

Both FAO and IFPRI forecast a net increase in world per-capita seafood to 17.1 kg (round weight) from the current 15.8 kg. A sensitivity analysis of consumption conducted by IFPRI found that faster aquaculture growth would add an additional 1.9 kg/capita, while slower aquaculture growth reduced consumption by 1.4 kg.

The population of Japan is expected to decline over the next several decades, reducing overall demand in that country and likely shifting product to other markets. China will be the dominant player on the global seafood scene, both as a buyer and supplier.

IFPRI forecasts per-capita consumption of 35.9 kg in China by 2020, an increase of approximately 10 kg over current levels. Much of this consumption increase will be filled through domestic aquaculture production. A burgeoning middle class in China should also create demand for higher-value products not produced in China, including salmon, halibut, lobster, and crab.

According to IFPRI, the strong global demand for seafood will increase the real price (before inflation) of fish

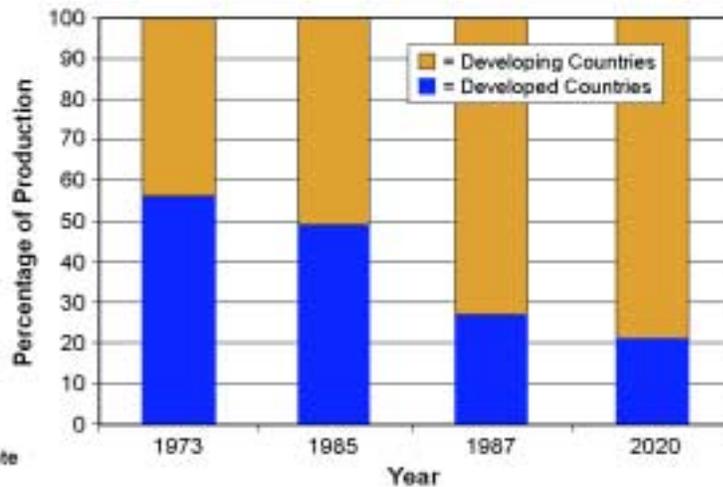
4-16 % by 2020, while meat prices are expected to fall 3%. High-value finfish are expected to increase by 15%, while crustacean prices are forecast to rise 16%. In addition, IFPRI predicts fish-meal and fish oil prices will rise 18%.

Strategies for 2020

The future seems bright for the U.S. seafood market. There will be strong demand for high-quality, healthy, tasty, convenient seafood products. Retail and food-service markets should experience above-average growth as per-capita consumption moves toward 7.26 kg. While there will always be a need to maintain a balance between supply and demand on a product by product basis, overall prices should trend upward over time.

To better position themselves to capitalize on growth opportunities within the U.S. seafood industry, companies will need to develop strategies for insuring supply, particularly as new aquaculture production becomes available. Seafood products will be needed to fill the demands of ethnic and age-related markets, and marketing programs will be required to differentiate individual companies and products and help them reach their target audiences. Companies at the forefront of case-ready seafood will be particularly well positioned to provide products and services to retailers.

Figure 4.
Global sources of seafood, 1973-2020 (projected).



Source:
International
Food Policy
Research Institute