

Dietary Change in China's Cities: Empirical Fact or Urban Legend?

Fengxia Dong
fdong@iastate.edu
515-294-0470

Frank H. Fuller
ffuller@iastate.edu
515-294-2364

Over the last two decades, urban Chinese consumers have dramatically increased their consumption of meat, other live-stock products, and fruits and have decreased consumption of grain-based foods. China's per capita grain consumption declined from 145 kilograms in 1981 to 78 kilograms in 2004 in urban areas, whereas the per capita consumption of meats, eggs, and aquatic products increased respectively from 20, 5, and 7 kilograms in 1981 to 29, 10, and 12 kilograms in 2004. As significant changes in food consumption patterns in urban China are noted, it is natural to ask: Are consumer responses to price changes and income growth entirely responsible for the transformation in food consumption in urban China, or have consumers in urban China changed their preferences for foods? Our recent CARD study examined the empirical evidence for structural change in urban diets in China. The study's findings may be good news for U.S. food industries seeking entry into the Chinese market.

Changes in China's Food Marketing System

Since 1978, a series of reforms of China's administrative system, agricultural policy, state-owned enterprises, investment regulations, fiscal and taxation policies, and financial system have fueled the growth of China's economy. Among these changes, at least three major developments have significantly affected the food marketing chain in China in ways that may have prompted con-



sumers to change their preferences for various food products.

First, privatization of food production, procurement, and marketing dramatically increased the quantity and availability of food in urban China, creating new consumption opportunities. A watershed shift in agricultural policy occurred in 1981, when China's government adopted a decentralized agricultural production system based on household units called the household responsibility system (HRS), which dramatically increased the amount of money a household could keep for themselves from expanded production. Following the adoption of the HRS, China's agricultural production boomed, and the availability of agricultural produce and food greatly increased.

Second, the elimination of food rationing in urban areas allowed food prices to adjust to market supply and demand conditions. Allowing prices to clear markets in 1985 reduced the role of state procurement and sales of agricultural products, especially for non-staple foods.

Within three years, rationing of the 15 non-staple foods in urban areas was totally eliminated. Rationing of grains and edible oils continued until 1993.

Third, the opening of China's food processing and retailing sector to foreign direct investment (FDI) has facilitated the rapid modernization of China's food processing and distribution systems and created an environment that fosters food product innovation. From 1990 to 1997, annual FDI flows into China grew tenfold. Substantial FDI has been targeted at the retail food sector, and the 1990s saw supermarkets rise to become a leading retail format for food products in urban areas. As foreign firms penetrated Chinese food markets, domestic firms responded by emulating and adapting foreign product designs, quality standards, and marketing strategies to better fit the tastes of Chinese consumers. The result has been an abundance of new food products offered in modern retail formats, which has facilitated significant changes in consumer shopping behaviors.

Study Findings

The results of tests applied to urban food consumption data for the period 1981 to 2004 provide a reasonably clear picture of changing food consumption in China's cities. First, the tests indicated that the early 1980s and mid- to late 1990s were periods of structural change in food consumption in urban China. The first of these periods corresponds to the elimination of rationing for non-staple foods and the introduction of the HRS. From 1980 to 1985, the output of fruits and freshwater aquaculture products in China increased by 71 and 130 percent, respectively. Statistical tests show that during this same period, preferences shifted in favor of fruits and aquaculture prod-

ucts, increasing per capita consumption of each product by roughly 2 kilograms. These results suggest that policy changes associated with the abolition of food rationing and development of free markets were the most important agents of structural change in Chinese diets in the 1980s and early 1990s.

Second, foods that have long played a major role in urban Chinese diets did not show strong evidence of preference change. In particular, changes in grain, pork, and vegetable consumption can be largely explained by normal price and income effects. In contrast, fruits, fish, beef, and poultry products, while not absent from traditional Chinese diets, play a less important role in daily food consumption and were frequently identified in the tests as showing evidence of structural change. The increasing consumption of these foods may be evidence that local and regional diets are broadening to include goods that are part of a more diverse national diet. An important observation supporting this notion is the fact that structural change associated with these products occurs in the latter half of the 1990s. This period coincides with the rapid development of private retail food chains and the creation of more regional and national food markets.

Third, the analysis indicates that the greatest changes in preferences occurred in consumers' responses to price changes. In particular, consumer demands became less responsive to price changes. As incomes have risen, food choices have increased and consumers' food preparation and shopping behaviors have

*U.S. food companies
that are able to
successfully target the
food product attributes
desired by urban
Chinese consumers will
tap into a huge and
growing market.*

begun to change. Consequently, product attributes other than prices, such as quality, convenience, and food safety, may be playing a greater role in consumption decisions.

Implications for U.S. Food Industries

From the perspective of U.S. food industries, China's food product markets have been limited by low consumer incomes and tastes for locally produced products. Our study suggests that these constraints are loosening, and prospects for U.S. food products are improving. The growing sophistication of Chinese consumers, greater openness to new products, and the declining responsiveness to prices may suggest that U.S. beef, pork, and poultry industries will see greater opportunities to expand sales of higher-valued products than in the previous decade. The continued improvements in

China's cold chain, especially with the growing distribution networks of large supermarket chains, increase the capacity for U.S. meat products to retain their quality until they reach consumers. Moreover, greater numbers of households are willing and able to pay for the quality, convenience, and safety of U.S. products. China still has a long way to go in its transition from a market for low-value cuts and variety meats to a market for high-value cuts, but the stage is set for change.

China has experienced tremendous foreign direct investment and rapid dietary changes facilitated by an evolution in its food marketing system. These adjustments point to the importance of discovering and targeting the product characteristics most valued by Chinese consumers. As in Japan and Korea, Chinese consumers are becoming increasingly sensitive to food safety and consistent quality. Nevertheless, the ability for products to adapt to the traditional Chinese cuisine is still important. U.S. food companies that are able to successfully target the food product attributes desired by urban Chinese consumers will tap into a huge and growing market. While this is certainly a tall order, the observed changes in Chinese consumer preferences indicate that the barriers to entry are declining.

Learn More

The study cited in this article is described in detail in "Changing Diets in China's Cities: Empirical Fact or Urban Legend?" CARD Working Paper 06-WP 437, available at www.card.iastate.edu/publications. ♦