

Food and Agriculture: Consumer Trends and Opportunities

An Overview

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This publication presents a broad overview of trends in food consumption, nutrition, health, lifestyle, and marketing for food and agriculture. The publication is the first in a series that seeks to synthesize the multi-faceted aspects of food and agriculture. Each publication is organized around the categories in the USDA's Food Guide Pyramid. The series is designed to help bridge gaps in understanding about the economics of food consumption, health and lifestyle trends, and food production and to provide a resource for food marketing efforts. The following information should be helpful for farmers who want to better understand consumers and their consumption patterns. Consumers may gain a better understanding of the nutritional implications of their diet.

The Food System and You

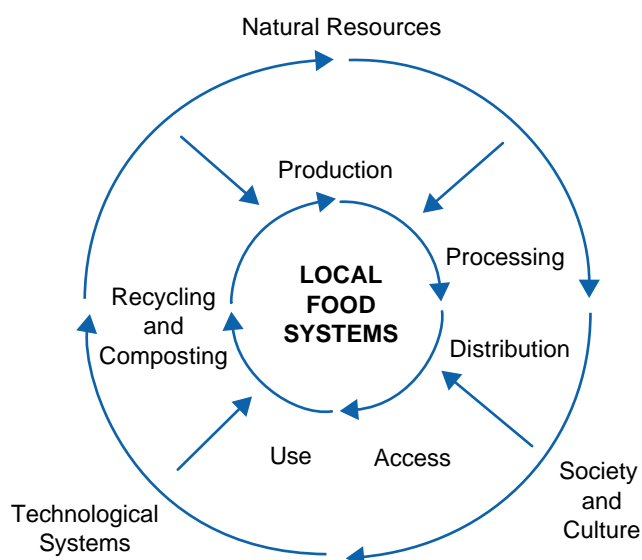
Agriculture is the underlying foundation of our food system. We use the term food system to describe the interdependent relationships among food production, distribution, and consumption. Understanding the relationship between natural resources, societal and cultural factors, and technology help us understand the food system. Figure 1 illustrates the complexity inherent in a local food system.

Growing concern about the loss of farms and farmers is prompting consumers and agricultural leaders to ask more questions about the future health and viability of our food system. Our food system—once simple, direct, and community-based—has become increasingly complex, indirect, and globally influenced. Many of us do not understand the process by which food reaches our dinner plates.

Our dynamic food system is more than just our home vegetable gardens, the corner grocery, restaurants, roads, waterways, or farm landscapes. It includes everything from seeds to supermarkets. Production agriculture, as well as vertically coordinated processors, wholesalers, brokers, merchandisers, retailers, and financial institutions, are part of our food system. The system is also influenced by public policies.

The food system is part of a larger, dynamic economy and society, and the way we grow and consume food reflects our values and activities. It also reflects trends in our society for farmers to employ more mechanized and highly technological practices and for food distributors to use information systems to maintain minimal food inventories to meet super-market shopper demand.

Figure 1. Local Food Systems (Bittman et al., 1996)



Increasingly, consumers have become more convenience-oriented and health conscious, and they expect food to be safe to eat.

We play two roles in our food system: as consumers and as actors, possibly as shopkeepers, farmers, or scientists. As consumers, we eat to fulfill our biological needs, but food also serves our social needs. Since World War II, our food choices have changed dramatically. Year-round seasonal foods, new enhanced food products, and exposure to international foods and cuisines are now commonly available in food markets. Strong family food traditions and regional food preferences influence our market choices as well. Increasingly, consumers have become more convenience-oriented and health conscious, and they expect food to be safe to eat.

Consumer Food Expenditure Trends

In the food system, the economic decisions made by producers and consumers jointly determine market outcomes. Germane to this process is the consumer's food budget. How do consumers allocate their incomes for food and non-food products? From 1970 to 1995, food expenditures as a percent of personal disposable income fell 2.8 percentage points to 11.0 percent in the United States (Table 1).

A trend prevalent in a developed country is the increasing propensity to consume food away from home. As a percentage of the consumer's total food budget, the share spent for food away from home has grown from roughly 26 to 39 percent during the last quarter century. More than one-third of these expenditures is devoted to fast-food consumption (Manchester and Clauson, 1996). This trend is largely due to higher disposable incomes and a growing demand for convenience and value-added food products.

Table 1. Food Expenditures as a Percent of Disposable Personal Income

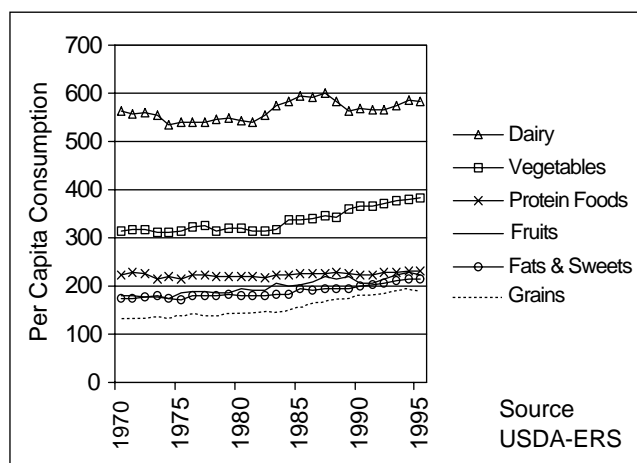
	1970	1995
At Home	10.2	6.7
Away from Home	3.6	4.3
Total	13.8	11.0

Source: Putnam and Allshouse, 1997

Per Capita Food Consumption Trends

Which food groups do consumers buy? Figure 2 shows the trends of domestic per capita consumption (in pounds) for each of the six Food Guide Pyramid categories from 1970 to 1995. These data are based on the disappearance of the food supply,¹ rather than on actual food consumption data. Generally, disappearance data overestimate food consumption, particularly that of fats and oils. However, by keeping track of food supply disappearance trends over time, researchers can observe relative changes in the types of foods consumed.

Figure 2. Per Capita Consumption (Pounds), Disappearance Data: 1970-1995



Although the disappearance of dairy and meat supplies has remained relatively flat, the consumption of vegetables, grains, fruits, and fats, oils, and sweets has edged upward. The most precipitous gains in per capita consumption were in vegetables and grains, which have increased to approximately 400 and 200 pounds per year, respectively. Although Americans are eating more carbohydrates and less fat, their consumption of these nutrients is still not consistent with recommendations prescribed in the Food Guide Pyramid for a healthy diet.

Food consumption trends may be influenced by a multitude of factors, including changes in relative prices, incomes, preferences, advertising, and health

¹ This term, as defined by the USDA-ERS, means beginning food stocks, production, and imports minus exports, shipments to the U.S. territories, and ending stocks. It is a reasonable proxy for consumption, given that data for consumption is not collected overall.

consciousness. By observing those factors that influence food consumption trends, producers may make better-informed agribusiness decisions. For example, agricultural producers have responded to consumer demand for leaner meats and low-fat dairy products.

Other Forces Driving Food Consumption

Consumer buying behavior, attitudes, and demographic trends influence our food system. Some prevailing trends include the increase in food consumed away from home, the use of processed foods, and the movement toward larger supermarkets. Yet, there are some opposing trends as well:

- The number of local farmers’ markets has increased both nationally and in Kentucky (Johnson et al., 1996).
- The demand for fresh fruits and vegetables is expanding in the United States.
- Greater sales of environmentally friendly products and locally grown products (Hartman, 1996) indicate the changing nature of retail stores. Hartman and others indicate the “fragmentation” of the food market into diverse segments. For example, Americans purchased more salsa last year than catsup, reflecting a growing international taste in foods.

Two situations are resulting in “micro-farms” and more part-time farmers: farmland is being chopped up and sold for housing developments, and commodities are bringing lower prices than they cost to produce.

Farmers are also looking for alternative approaches that enhance their farm income. Kentucky producers hope to increase markets for niche agricultural products beyond the traditional commodities of beef, corn, soybeans, and dairy. Many Kentucky farm groups and farmers, particularly part-time and women farmers, are experimenting with discrete markets in specialty items, organic produce, and range-fed animals. These market opportunities will be more consumer-driven and will require more market research and planning.

Kentucky Demographics and Opportunities

Demographic trends in Kentucky have implications for our food system and for those individuals trying alternative marketing mechanisms. The implications of these trends are summarized in Table 2. Many of the demographic trends offer opportunities for both farmers and consumers. Recognizing the trends and providing timely responses to unfolding markets will be important to farmers.

Table 2. Kentucky Demographic Trends and Food Marketing Opportunities

Demographic Factor	Trend / Implication
Age	Home delivery services and direct or farmers’ markets located within close proximity of elderly residential areas. Health foods designed and positioned for the growing elderly market segment.
Household Size	The greater proportion of one- and two-person households implies a demand for smaller serving sizes, perhaps in greater varieties.
Income	The rural aging and single-parent households with children comprise the limited-resource consumer segment. WIC/Food Stamp Voucher programs can be utilized by Kentucky direct market operators. Many Kentucky farmers’ markets use this payment system. Higher-income, well-educated individuals are a potential market segment for specialty produce and niche food products.
Socio-Cultural Factors	A strong sense of place and the nostalgic appeal of direct markets, particularly farmers’ markets, offer opportunities in growing urban areas, small towns, and tourism centers. Women still predominately make food purchase and preparation decisions in most households. With increasing numbers of women employed outside of the home, marketing strategies that address time constraints, convenience, availability, quality, and relative price are important.
Ethnic Diversity	Despite being a small proportion of the Kentucky population, African-American, Asian, and Hispanic ethnic groups provide niche food market opportunities.

- Kentucky is a predominately rural state; nearly half its population lives in rural areas. Its citizens have such a strong attachment to place and family that many Kentuckians have foregone job mobility for the social benefits and ties to family. The state is expected to maintain its strong rural character for some time to come.
- Seventy-eight percent of the population is native to Kentucky.
- The average rural household consists of two or more individuals related by birth, marriage, or adoption.
- The state's rural households are also more likely to be made up of married couples or married couples with children than its urban households (Smith-Mello and Schirmer, 1994).

Kentucky consumers have increasingly diverse food buying needs and concerns which create more innovative marketing possibilities.

How the Trends Influence the Food System

Certain demographic factors influence the food system in Kentucky:

- The population is aging more rapidly than the national trend, and the state has a large segment of children and the elderly living in poverty.
- The Kentucky population is generally homogenous. More diversity is evident in urban areas of the state with an African-American population and an immigration of Asian and Hispanic residents.
- Kentuckians marry and divorce more often than the national average. With the increase of divorce and the growing number of births to unmarried women, more children are living in single-parent households and are more likely to live in poverty.
- The number of women employed outside the home continues to grow, with gender roles gradually becoming more equal. The number of households has risen, but the number of persons per household has declined (Smith-Mello and Schirmer, 1994).
- Kentucky also has one of the highest rates of obesity and heart disease in the United States.

The development of niche agricultural markets in Kentucky is driving farmers to look at alternative marketing mechanisms. The development of freshwater shrimp and trout, wine production, and other specialty crops represent a few examples. Many farmers with specialty niches have organized ways to promote their products. For example, organic produce can have "certified organic" labeling if the product meets certification requirements. Labeling is also designated for products and fresh produce made and grown in Kentucky. Direct marketing, sometimes referred to as "shopping with a human face," is being touted as a way for farmers to keep a larger share of the profit for their products. However, it may limit growth potential in the business.

Consumers can purchase produce through a variety of direct market outlets. The most common forms include farmers' markets, roadside or on-farm markets, and agri-tourism events. Mail order, home delivery, Internet homepages, online auctions, and virtual grocers are relatively new market outlets.

Although Kentuckians have some unique characteristics, many of their shopping behaviors and attitudes likely mirror national trends. The Hartman Report (1996) helps define the market for agricultural products from the consumers' perspective. This national study queried 2,000 consumers and analyzed consumer attitudes toward farming and farm products. Although the study focused more on attitudes of consumers toward environmental issues about food production and safety, the study offers clues to consumer buying behavior in terms of purchasing power, purchasing criteria, and knowledge levels. Core purchase criteria of relative prices, income, and preferences drive consumption, differ across consumers and food products, and evolve through time as markets change.

Kentucky consumers have increasingly diverse food buying needs and concerns which create more innovative marketing possibilities. Some trends indicate consumers are eating more processed foods and food away from home, while other trends show increases in the purchase of fresh fruits and vegetables. Surveys show some consumers want more information about health and environmental issues regarding the food they buy. Food labeling continues to be one of the best ways to educate consumers, but the education process may be a lengthy and costly one for some small-scale producers. Meeting the needs of consumers who are time- and price-conscious will demand creative marketing approaches.

Festival Links Farmers, Chefs, and Consumers

Here's how three Kentucky women developed a unique and innovative idea for promoting locally grown produce to the benefit of farmers and consumers alike.

Sue Weant, a partner in a small bookkeeping service in Lexington, has always believed it is important to purchase food from local farmers. She went to farmers' markets and bought local produce because she believed it was healthier for her family and the environment. In the early 1990s, she joined a group of friends in a buying club, through which people in a community pay for vegetables at the beginning of the growing season. In return, they receive a variety of fresh vegetables in season.

Improving Economy

Weant was also a member of Mothers and Others for a Livable Planet. This organization promotes stronger connections between consumers and nearby farmers with the goal of improving family nutrition as well as the local economy.

Weant, her bookkeeping partner Martha Hixson, and their friend Sarah Fritschner, who is food editor for the *Louisville Courier-Journal*, all believed that the age-old relationship between producers and consumers had eroded with modern marketing systems. In the mid-1990s, the three women began organizing a harvest festival in Louisville. They committed themselves to developing a festival that would bring together producers and consumers and, eventually, local chefs.

The women worked with Ed Fackler, an apple orchardist in southern Indiana, to organize an apple festival that focused on the orchard's relationship with nearby nonfarm neighbors. Establishing a credible

farmer/nonfarmer partnership attracted several community service and education agencies, and these groups in turn provided publicity and logistical support.

The festival organizers decided after that first festival to invite local chefs to join the event, but bringing in chefs meant more money had to be raised. The Kentucky Leadership in Agriculture and Environmental

"If consumers demand more local produce, then more people will become interested in supporting Kentucky agriculture."

Sustainability (KLAES) Project provided some funding, enough seed money to attract other sponsors including Louisville's Jewish Hospital. Several media organizations provided advertising support.

Sampling the Fare

The September 1995 festival was held at the Belvedere, a Louisville park on the Ohio River. It featured 45 producers and chefs who offered tasty samples to the public for a small ticket price. Chefs were assigned the fresh produce of a particular local farmer and asked to create different dishes that festival-goers could sample. Also, the chefs were able to buy the produce directly from the farmer.

The 1995 festival drew more than 5,000 people, but the large crowd was not the only measure of success. Weant believed that "the main thing is not the number of people attending, but the message that consumers should learn to appreciate locally grown food."

Building Relationships

Weant's enthusiasm for the festival was reinforced while dining at Lexington's Dudley's Restaurant sometime after the event. "The feature for the evening was Kentucky freshwater shrimp, which had also been offered at the festival," she said. "A direct relationship had been established between farmer and consumer."

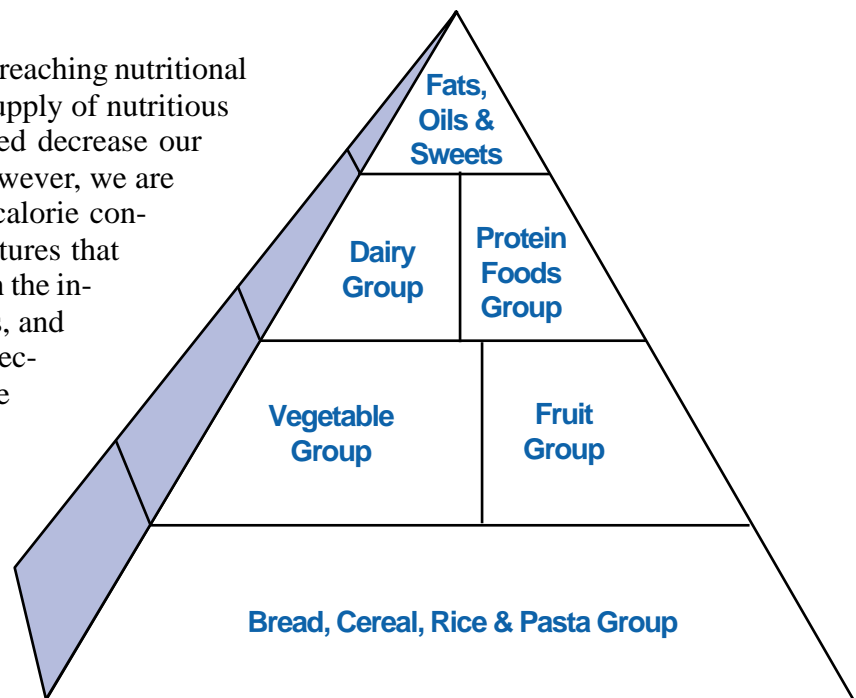
The festival has continued to thrive, and it led to the formation of a Lexington harvest festival as well. After hearing about the Louisville festival, cities such as Versailles have held smaller scale festivals in conjunction with their local farmers' markets.

Said Fritschner, "Those of us familiar with culinary literature know that chefs and consumers want locally grown, ultra-fresh, and sometimes organically grown produce. If consumers demand more local produce, then more people will become interested in supporting Kentucky agriculture."



The Food Guide Pyramid

Patterns of food consumption have far-reaching nutritional and health implications. The abundant supply of nutritious foods available to U.S. consumers helped decrease our concerns about nutrient deficiencies. However, we are now faced with concerns about excess calorie consumption and decreased energy expenditures that result in an overweight population. Given the incidence of heart disease, cancer, diabetes, and obesity domestically, the USDA issued recommendations to increase carbohydrate consumption and decrease fat intake as part of the Dietary Guidelines for Americans (USDA, 1995). In 1992, the USDA introduced the Food Guide Pyramid as an illustration of how Americans can choose foods for a healthy diet (USDA, 1996). The Pyramid, with its base of foods that are good sources of carbohydrates, illustrates the recommendation to eat more of these foods as the basis of a healthy diet. The size and positioning of the vegetable, fruit, dairy, and protein food groups on the Pyramid reflect the importance of these foods in a healthy diet. Informed choices in all food groups are necessary to limit calories from discretionary fats and sweeteners. This concept is illustrated by placing fats, oils, and sweets at the tip of the pyramid.



According to these self-reported food intake data from the USDA (1997), the current American diet does not meet the dietary recommendations for healthy eating. We are eating less nutrient-dense foods that are high in calories. While we need to eat more nutrient-dense foods from the grain, vegetable, fruit, dairy, and protein groups, we also need to consume fewer calories and get more physical activity. Over-consumption of foods from the tip of the pyramid provides empty calories without good nutrition. In order to achieve healthier eating patterns, Kentuckians will need to consume greater quantities of whole grains, fresh produce, lean meats, and low-fat dairy products.

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Recommended versus Actual Consumption

How does the average American diet measure up to the Food Guide Pyramid? Results from the latest USDA food consumption survey, shown in Table 3, provide the answer.

Table 3. Recommended and Actual Consumption by Food Guide Pyramid Group

Food Guide Pyramid Group	Recommended Food Guide Servings	Actual 1994-1996 Intake
Grains	6-11	6 2/3
Vegetables	3-5	3 1/3
Fruits	2-4	1 1/2
Dairy	2-3	1 1/2
Protein Foods	5-7 oz.	4 3/4 oz.

Source: USDA's 1995 and 1996 Continuing Survey of Food Intake by Individuals

Implications: Learning More About Your Local Food System

The food choices we make within our food and agricultural system impact our local, state, and national economy, the environment, and the well-being of communities, as well as our own personal health. Here are some practical things you can do:

As a Consumer

Learn more about your community food system and the origins of your food purchases. Select fresh, healthy foods for your family meals and when dining out. Support your local economy by purchasing food and food products from your local farmers' markets, roadside markets, food buying clubs, or other direct

market venues. Determine if your neighborhood restaurants and grocery stores use and sell local farm produce and products. Local food products may be identified by trademarks, such as the “Kentucky—Where Quality Grows,” “Pride of Kentucky,” and others. To appreciate the benefits and efforts of your local food system, consider planting a garden or volunteering in a community garden project. Read food labels for health and nutrition information.

As a Community Leader

Establish a farmers’ market in your community. Encourage your local farmers’ market to accept WIC/Food Stamp vouchers. Organize a community gardening program. Establish a community food pantry for limited resource families. Work with your local Cooperative Extension Service office or chamber of commerce to promote local agricultural activities.

As a Farmer

Learn about your customers’ needs and wants. Educate consumers about farming and the farm products you grow. Use state and national marketing programs to give visibility to your farm products. Leverage new and emerging technologies, such as virtual marketing, to gain competitive advantage in selling food products. Join community organizations that foster interest and support in farming.

Additional Extension publications are available in the *Food and Agriculture: Consumer Trends and Opportunities* series. Ask your county Extension office for these publications

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