

Commodity Spotlight



Scott Bauer, Agricultural Research Service, USDA

Organic Food Industry Taps Growing American Market

American consumer interest in organically grown foods has opened new market opportunities for U.S. producers, leading to a transformation in the organic foods industry. Once a niche product sold in a limited number of retail outlets, organic food is currently sold in a wide variety of venues, including farmers markets, natural foods supermarkets, conventional supermarkets, and club stores. Since the early 1990s, certified organic acreage in the U.S. has increased as producers strive to meet growing demand for organic agricultural and food products. The dramatic growth of the industry spurred Federal policy to facilitate organic marketing.

Supermarkets Expand Organic Offerings

The U.S. organic food industry crossed a threshold in 2000: For the first time, more organic food was purchased in conventional supermarkets than in any other type of venue. Packaged Facts, a market research firm, indicates that of the \$7.8 billion spent on organic food in 2000, consumers purchased 49 percent in conventional supermarkets, exceeding the 48 percent sold in natural foods stores. This contrasts sharply with the early 1990s, when an estimated 7 percent of all organic

products was sold in conventional supermarkets and 68 percent in natural foods stores. Organic products are now sold in 73 percent of all conventional supermarkets, along with nearly 20,000 natural foods stores.

Certified organic acreage is increasing to meet growing consumer demand, doubling between 1992 and 1997 to 1.3 million acres. Preliminary estimates for 2001 indicate a similarly high rate of growth between 1997 and 2001. New organic products are also rapidly entering the market—over 800 in the first half of 2000. Desserts made up the majority of new products in 2000, while most new products introduced in 1999 were beverages.

New USDA standards for organic food, slated to be fully implemented by October 21, 2002, are expected to facilitate further growth in the organic foods industry. The national organic standards address the methods, practices, and substances used in producing and handling crops, livestock, and processed agricultural products that are sold, labeled, or represented as organic. The standards define organic production as a system that is managed “to respond to site-specific conditions by integrating cultural, biological, and

mechanical practices that foster cycling of resources, promote ecological balance, and conserve biodiversity.”

Organic food is sold to consumers through three main venues in the U.S.—natural foods stores (including natural foods supermarkets, health food shops and coops), conventional grocery stores, and direct-to-consumer markets. Industry sources indicate that a small amount of organic products is also exported to foreign markets, but this is difficult to track because the trade monitoring system does not yet include codes for organic products.

Various industry sources have reported retail sales of organic food for over a decade. A trade publication, the *Natural Foods Merchandiser* (NFM), estimated total organic sales through all marketing outlets rose steadily from about \$1 billion in 1990 to \$3.3 billion in 1996. Packaged Facts reported organic food sales totaling \$6.5 billion in 1999 and \$7.8 billion in 2000. According to these sources, industry sales have grown by 20 percent or more annually since 1990.

Fresh produce is the top-selling organic category by sales value, followed by nondairy beverages (including juice and soymilk), breads and grains, packaged foods (such as frozen and dried foods, baby food, soups, and desserts), and dairy products. Organic dairy was the most rapidly growing market segment during the 1990s.

Consumer Interest Varies

At least three industry groups—Walnut Acres, Food Marketing Institute, Hartman Group—as well as *The Packer*, a produce business publication, have conducted nationwide surveys of American consumers about their preferences and buying habits for organic food. These surveys posed different questions to consumers, and several focused exclusively on the fresh produce segment of the organic market. Consequently, caution must be used in comparing results and generalizing.

The Hartman Group’s 2000 survey found that approximately one-third of the U.S. population was currently buying organically grown food products, with “light

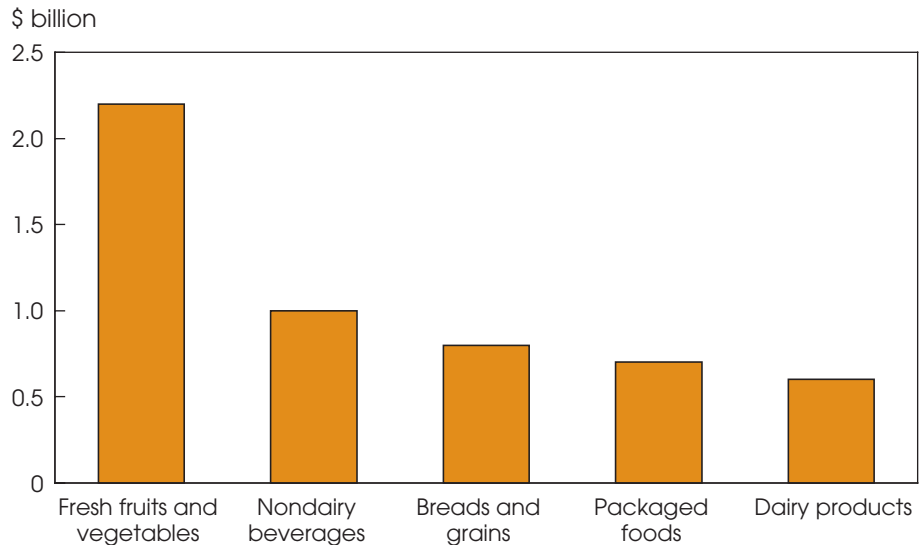
organic buyers” (those who buy some organic food) accounting for 29 percent of the U.S. population and “heavy buyers” (those who buy many organic food products) accounting for 3 percent. The Walnut Acres Survey in 2001 found that 63 percent of respondents purchased organic food at least sometimes, and 57 percent of the purchasers had been doing so for at least 3 years. The Food Marketing Institute’s survey in 2001 found that 66 percent of surveyed shoppers bought organically grown foods.

According to the Food Marketing Institute survey, 37 percent of those who bought organically grown food did so to maintain their health. Consumers surveyed by the Hartman Group reported multiple reasons for purchasing organic food: health and nutrition (66 percent), taste (38 percent), environmental concerns (26 percent), and availability (16 percent). *The Packer’s* Fresh Trends survey in 2001 revealed that for 12 percent of the surveyed shoppers, the “organic” label was a primary factor in their purchasing decision. Sixty-three percent of the respondents of the Walnut Acres survey believed that organic food and beverages were more healthful than their conventional counterparts.

The Packer’s Fresh Trends survey found that of the shoppers who had purchased organic produce in the previous 6 months, more purchased vegetables than fruit. According to the Hartman Group survey, the top 10 organic products were strawberries, lettuce, carrots, “other fresh fruit,” broccoli, apples, “other fresh vegetables,” grapes, bananas, and potatoes. The Hartman survey also found that fruits and vegetables were gateway or entrance categories into organic foods. In the Walnut Acres Survey, 64 percent of surveyed consumers who did not purchase organic food every time they shop cited price as the main reason.

Universities are also starting to examine consumer behavior toward organic food and agriculture. Academic studies so far are limited in scope and geographic coverage. Some preliminary findings are that consumers consider the following factors when purchasing fresh produce: appearance (the fewer defects the better), price, size and packaging, whether the item is on sale, and whether the item is organic.

Fresh Fruits and Vegetables Are the Top-Selling Organic Foods



Source: *Nutrition Business Journal*, 2000.
Economic Research Service, USDA

Also, some studies have found the most likely purchasers of organic produce to be younger households in which females do the shopping, smaller sized and higher income households, households knowledgeable about organic agriculture, and those with children under 18.

The Organic Marketing Chain

As food moves from farm to consumer, it passes through many hands. Some foods are fresh when delivered (apples and eggs), while others are processed before delivery (pasta and bread). Each commodity, depending in large part on whether it is fresh or processed, follows an individualized path from farm to market. Regardless of whether they are fresh or processed, higher quality products and products with unique attributes (such as organic foods) generally have a higher selling price. As a result, farmers have a strong incentive to produce and sell commodities with quality and other price-enhancing attributes intact.

Since most foods pass through a number of intermediaries as they move from the farm to the consumer, maintaining premium product integrity along the marketing chain is a challenge. Each agent along the chain must begin by moving the product to the next agent quickly. Farmers need to

sell their perishable commodities immediately after harvesting, while distributors, brokers, and wholesalers need to move fresh products to retailers as quickly as possible.

National organic production standards are tailored for different categories of crops and livestock, and the organic integrity of certified products must be maintained throughout the production and marketing chain.

Fresh Produce—Highest in Organic Food Sales. Fresh fruits and vegetables were the first organic products marketed half a century ago, and are still the top organic food category. Sales of organically grown fresh produce grew by over 50 percent between 1999 and 2000, according to industry sources.

In accord with the new national standards, organic fruit and vegetable producers must rely on ecologically based practices, such as biological pest management and composting, and produce crops on land that has had no prohibited substances applied to it for at least 3 years prior to harvest. Soil fertility and crop nutrients are managed through tillage and cultivation practices, crop rotations, and cover crops, supplemented with manure and

Commodity Spotlight

How Were the Consumer Surveys Conducted?

Survey	Year published	Methodology
Walnut Acres Survey	2001	Telephone interviews with nationally representative sample of 1,000 adults. Sample collected March 1-March 5, 2001.
Food Marketing Institute Survey	2001	Telephone interviews with nationally representative sample of 1,200 adults.
Hartman Group, the Organic Consumer Profile	2000	Mail questionnaire sent to 40,000 households nationwide, of which 26,434 responded. Sample conformed to a cross-section of the population based on the 2000 Census.
<i>The Packer's</i> Fresh Trends Surveys	2001	Two separate surveys: 1) A telephone survey of 1,000 nationally representative households. Average phone conversation was 10 minutes. 2) In-store interviews with 5,000 consumers in June 2001 and August 2001.

crop waste material and permitted synthetic substances. Crop pests, weeds, and diseases are controlled through cultural, biological, and mechanical management methods. Organic fruits and vegetables must be stored and shipped separately from conventionally grown produce. Organic produce is shipped or packed in containers free from synthetic fungicides, preservatives, or fumigants.

The first stage in the organic fresh fruit and vegetable marketing chain—production and preparation of produce for shipment—involves growers, packers, and shippers working together in a number of possible combinations. In some cases, one firm grows, packs, and ships the produce, while in other cases one firm grows and another packs and ships. Organic produce can either be sold to retailers by a broker or delivered to a terminal market, where it is sold by wholesalers to retailers. In practice, most organic produce is sold through a specialty broker rather than in a terminal market. In some instances, when a specific variety, quality, or quantity is desired, larger retailers may buy fresh fruits and vegetables directly from the produce shipper.

Organic produce is also sold directly to consumers through farmers' markets, "community supported agriculture" subscriptions, and roadside stands. A larger proportion of organic sales than of conventional sales is made through direct markets, which have been gaining popularity over the last decade. According to USDA's Agricultural Marketing Service, the number of farmers' markets in the U.S. jumped from 1,755 in 1994 to 2,863 in 2000. The number of farmers and consumers using these markets approximately tripled during this period, to 66,700 farmers serving 2.7 million consumers.

Organic Processed Food—Abundant and Varied. Organic processed foods include frozen vegetables and entrees, pasta, canned vegetables, baby food, sauces in jars, and shelf-stable entrees. New product offerings continue to appear in every supermarket aisle.

In accord with the new standards, a certified organic processed product, such as pasta or frozen pizza, is first prepared using at least 95 percent organic ingredients. For products that contain 70-95 percent organic ingredients, processors may

label the product "made with organic ingredients." Organic and conventionally grown ingredients must be kept separate, and the organic ingredients must be stored in containers that do not compromise the organic nature of the food. Neither organic nor conventional ingredients in organic products can be treated with ionizing radiation or synthetic solvents, or arise from excluded processes (such as genetic engineering).

There are several basic marketing channels for processed organic foods, once farmers produce the organic raw commodities. In one channel, farmers send the commodities to the manufacturer, who converts them into a processed product. A distributor then moves processed products from manufacturers to retailers. In another channel, a shipper procures the raw commodities from farmers, ensures that the commodities meet the manufacturer's organic standards, and delivers them to manufacturers. After creating the processed good, the manufacturer moves the products to retailers.

Organic farmers also produce a large array of value-added products—foods processed on their farm or in farm-owned plants or farm-based cooperatives—and sell many of these products directly to consumers. According to a survey of organic producers by the Organic Farming Research Foundation, 31 percent produced value-added products in 1997. These products included salsa, syrup, cider, pickles, preserves, vinegar, dried and canned fruits and vegetables, butter, yogurt, cheese, milled flours, sausages and other processed meats, baked goods, and wine.

Organic Dairy Products—the Fastest Growing Segment. Organic dairy was the most rapidly growing organic market segment during the 1990s, with sales up over 500 percent between 1994 and 1999. Sales of most organic dairy products—including milk, cheese, butter, yogurt, and ice cream—have been rising in both conventional and natural foods supermarkets.

Organic dairy products, as defined by the USDA, are made from the milk of animals raised under organic management. The cows are raised in a herd separate from conventional dairy cows, receive

preventive medical care such as vaccines and dietary supplements of vitamins and minerals, but are not given growth hormones or antibiotics. Based on stage of production, the climate, and the environment, all organically raised dairy cows must have suitable access to pasture, the outdoors, shade, shelter, exercise areas, fresh air, and direct sunlight.

Organic dairy products must make use of milk from animals raised organically for at least 1 year prior to milking, or from cows converted from conventional to organic production. To convert cows to organic production, the cows must be fed a diet consisting of at least 80 percent organic feed for 9 months, and then 100-percent organic feed for 3 additional months, or must be grazed on land that is managed under a certified organic plan.

The process used to bottle milk and to make and pack cheese, ice cream, yogurt, and other dairy products must also be certified. The processor is required to keep organic and nonorganic products separate, and to prevent organic products from having any contact with prohibited substances.

Regionally distributed organic dairy products are bottled and processed in a small local dairy, and may contain milk from one or more farms. In contrast, organic dairy products that are distributed nationally are marketed in two different ways. In the first, milk from several farms is processed and then distributed nationwide through a marketing cooperative. In the second option, many farms produce milk under contract for a dairy, which pasteurizes and bottles milk, or processes it into cheese or ice cream. In both cases, the organic dairy products are distributed under a brand name.

Future Prospects

Many industry analysts expect demand for organically grown foods to continue growing at a rapid pace, as more U.S. growers move into organic production and more processors and distributors expand or add organic selections in their product lines. In addition to organic foods that have already been growing at a fast pace—including dairy products, juices, soy milk, frozen pizza, and dinner entrees—expanded organic beef and other

USDA Organic Marketing System Support

Agricultural Marketing Service (AMS) is home to the National Organic Program (NOP), which developed, implemented, and currently administers national production, handling, and labeling standards for organic agricultural products. The NOP also accredits the certifying agents (foreign and domestic) who inspect organic production and handling operations to ensure that they meet USDA standards.

To facilitate the export of U.S. organic agricultural products, the NOP is working to establish formal recognition agreements with foreign governments (www.ams.usda.gov/nop). The AMS *Fruit and Vegetable Market News* has provided price data for some organically grown fruits and vegetables at the Boston wholesale market for a number of years, and has occasionally provided data on a few other markets (www.ams.usda.gov/fv/mktnews.html). AMS is also involved in several areas of organic marketing research, working either independently or in cooperation with major universities.

Economic Research Service (ERS) conducts economic research and develops and distributes a broad range of economic and other social science information and analysis on organic agriculture. ERS' briefing room on organic agriculture describes characteristics of the U.S. organic farm sector, including estimates of certified organic farmland acreage and livestock, by commodity and by state. The briefing room also features data depicting industry growth and sales and highlights ERS publications on organic agriculture and current organic-related activities of ERS researchers (www.ers.usda.gov/briefing/Organic/).

Foreign Agricultural Service (FAS) assists the organic industry with U.S. export programs and services. FAS, in conjunction with AMS, has developed protocols for working with foreign nations to keep organic trade moving as more countries develop organic standards, including labeling, certification, and market access. FAS has helped fund the promotion of U.S. organic products in Canada, Europe, and Japan. FAS publishes *Organic Perspectives*, a newsletter containing reports from around the world as well as items on the U.S. national organic program and the domestic organic industry (www.fas.usda.gov/agx/organics/organics.html).

meat selections, new processed products, and new types of health-promoting foods are likely to appear on the market. Some new organic products are aimed at mainstream markets—Heinz, for example, has just launched an organic catsup—while others may target Spanish-speaking and other groups. Products like kefir, a health-promoting cultured-milk beverage, are gaining popularity among health-conscious consumers.

Demand for organically grown food in local markets is also likely to rise as the renaissance in farmers' markets continues and more local communities—in both high- and low-income areas—pay greater attention to increasing consumer access to fresh, healthy food. **AO**

Carolyn Dimitri (202) 694-5252
cdimitri@ers.usda.gov
 Catherine Greene (202) 694-5541
cgreene@ers.usda.gov

For more information see:

ERS Organic Agriculture briefing room
www.usda.gov/briefing/organic

Recent Growth Patterns in the U.S. Organic Foods Market
www.ers.usda.gov/publications/aib777/

National Organic Program
USDA's Agricultural Marketing Service
www.ams.usda.gov/nop/