

Organic food is a growth industry. Find out about some of the jobs that bring organics from the farm—and the factory—to your table.



Careers in organic food production

From TVs to TV dinners, technology plays a role in nearly all aspects of modern life. But when it comes to food production, many of us are turning away from technology toward organic methods of food production—methods that combine science with traditional farming practices. Growth in the organic industry's popularity should also sprout employment in its occupations.

New technology developed over the past several decades have allowed farmers to grow more food using fewer resources. Compared with 60 years ago, today's farm can supply more than three times more corn per acre, and the average dairy cow produces almost four times more milk. Even as technology improves farm yields, however, many consumers are looking for healthier, environmentally sustainable alternatives to typical food. The result has been a rapid growth in the growing, manufacturing, regulation, and marketing of organically produced foods.

This article discusses some of the workers who are involved in producing organic food, certifying it, and bringing it to consumers. The first section explains what organic means and how this expanding specialty may offer opportunities. The next three sections describe some occupations in the organic industry, looking at ways in which the work involved might differ from that in the conventional food industry. The final section provides sources of additional information.

Opportunities in organic

Organic fruits, vegetables, and animal products—which include meat, eggs, and dairy

items—are sold directly to consumers or to food manufacturers that make organic processed foods, such as bread and frozen meals. Foods that carry a U.S. Department of Agriculture (USDA) certified organic label come from producers that have undergone a certification process guaranteeing they have met specific criteria during production. For example, fruits and vegetables must be grown without the use of chemical pesticides or synthetic fertilizers, and animal products must come from livestock that have not been given growth hormones or antibiotics.

According to the USDA, certified organic acreage—which includes cropland, pastureland, and rangeland—quadrupled between 1992 and 2008, and the number of organic operations nearly tripled. But organic farms and the organic food industry are still much smaller than their conventional counterparts. Nevertheless, organic foods are now available in nearly all retail food stores, and most consumers say they buy organic food at least occasionally. Growth in the industry seems likely to continue, and continued growth in demand may lead to career opportunities.

The U.S. Bureau of Labor Statistics (BLS) estimates that there were 1.8 million workers in the crop and animal production industries in 2008. But the organic segment is a small portion of that total. BLS does not currently collect wage or employment data for occupations that deal exclusively with organic goods—nor does it project employment for organic-specific occupations. Given the increases in organic food sales, however, opportunities are likely to continue in the occupations related to organic foods.

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Growing organic: Farmers and other farm workers

Both conventional or organic food usually originates on a farm. The difference between conventional and organic farming is in the approach each uses to raise crops and animals. Where a conventional farm might use pesticides to fight insects that damage crops or livestock, for example, an organic farm might use predatory bugs that feed on such insects.

Farmers and ranchers, agricultural managers, and farmworkers and laborers are among the workers involved in producing organic food. The following pages describe the scope of their duties—both those specific to organic farming and those that are not.

Farmers, ranchers, and agricultural managers

Farmers, ranchers, and agricultural managers direct the activities of farms and ranches. On small farms, these workers generally oversee the entire operation; on larger farms, they may oversee a single activity, such as marketing. Farmers and ranchers own and operate their farms. Agricultural managers are hired to

work on behalf of a farmer, absentee landowner, or corporation.

On a crop farm, farmers, ranchers, and agricultural managers decide what and how much to grow and when to plant, harvest, and rotate fields. They supervise tilling and weeding to ensure a good crop. After harvesting is done, they make sure that crops are properly packaged and stored. For farmers raising animals, daily activities include feeding, monitoring the animals' health, maintaining the animals' living spaces, and, for dairy operations, milking more than once a day. Livestock farmers also oversee breeding activities.

A year-round, 7-day workweek and the uncertainties of weather are among the realities of farm life. But organic farmers have additional challenges. Because synthetic fertilizers cannot be used on organic crops, these farmers instead use manure, compost, and other organic fertilizers. In place of herbicides, attention to weeding or use of cover crops is important. Controlling pests without pesticides requires use of other methods, such as sowing "trap crops," plants intended to lure pests from the main crop. And on animal farms, organically raised livestock must have

Farmers and other farm workers harvest crops and make certain that the food is properly stored.





Monitoring animal health is an important task for livestock farmers.

access to the outdoors. This requires that farmers manage their animals' activities, such as rotating pastures for grazing cattle.

Running a farm also has a business component. These tasks include marketing, sales, and bookkeeping. Farmers, ranchers, and agricultural managers may perform all or some of the required tasks. Workers on larger farms often delegate the physical tasks to farmworkers and laborers, as described below. Operators on smaller farms usually perform most of the work themselves.

Because of the need for timely distribution of fresh food, marketing and sales are especially important in both organic and conventional farming. To get their food to consumers, farmers often make arrangements with buyers or wholesalers, who then sell the products. (To learn more about these workers, see "Getting food to consumers: Buyers and sellers," beginning on page 9.)

Other farmers, particularly organic ones, sell their products directly to consumers at farmers' markets, through community-supported agriculture programs, or, at crop farms, by allowing consumers to pick their own produce. Increasingly popular farmers'

markets allow producers to gather, often at a designated time and place, to sell their goods. In community-supported agriculture programs, farmers sell "shares" of their total goods for a set price before producing the food and then make regular food deliveries throughout the season. Some farmers arrange for self-pick, or pick-your-own, products, letting consumers come directly to the farm and pick their own produce to buy. This arrangement helps the farmer eliminate the costs of labor for harvesting and of transporting.

Skills and training. There are no specific educational requirements for becoming a farmer, rancher, or agricultural manager, although postsecondary education in agriculture—including, for organic farmers, instruction on organic farming practices and techniques—is recommended. And working on an existing farm through an internship or other arrangement is a good way to learn more about the occupation.

Aspiring farmers should enjoy working outdoors, be physically fit, and must understand the commitment required to run a farm. They also need managerial ability for organizing a farm's business operations, solid

communication skills for dealing with consumers and other buyers, and knowledge of accounting and bookkeeping for the substantial recordkeeping required due to organic farming regulations. Proficiency in using a computer, including basic spreadsheet and word processing programs, is increasingly important.

Farmworkers and laborers

Agricultural farmworkers and laborers perform much of the physical labor on a farm. This includes the work of raising crops and livestock but also involves maintenance of the farm itself, such as basic repair of fences, pens, or farm equipment. Some of the alternative approaches to organic farming may make the work more labor-intensive than conventional farmwork.

On organic crop farms, farmworkers and laborers plant seeds and prune, irrigate, harvest, and pack and load crops for shipment. They also apply fertilizers to crops, use organic methods for controlling pests and weeds, and may help with produce sales, such as at a local farmers' market.

On organic ranches and animal farms, farmworkers and laborers care for livestock by supplying the animals' food and water, maintaining their living areas, and ensuring that they spend time outside. Farmworkers and laborers may need to transport cattle to grazing areas or move portable coops to pastures, which may involve driving machinery and lifting equipment or animals.

Skills and training. As with farmers, ranchers, and agricultural managers, farmworkers and laborers have no specific educational requirements for entering the occupation; most farmworkers learn their skills on the job. But workers on organic farms often benefit from knowledge of, or experience in, organic farming techniques. And knowledge of the physical requirements of farming may be as important as the ability to perform them.

Much farm work is strenuous and takes place outdoors in all kinds of weather. Work schedules are variable and revolve around crop cycles and weather. Therefore, farmworkers and laborers must be physically fit and be able to work extended hours. Communication and basic math skills are also important for

Workers on organic farms often benefit from having knowledge or experience in organic farming techniques.





As part of the organic certification process, agricultural inspectors report whether a farm's operations match its organic production plan.

farmworkers and laborers who deal with customers and sell produce.

Working with producers: Inspectors and consultants

To use the “Certified Organic” seal, a farm or a food manufacturer must pass inspection by an accredited certifying agency. Such agencies may be part of a State government, a nonprofit group, or a for-profit company.

The USDA’s National Organic Program sets the standards for organic production of foods and also oversees accreditation of the certifying agencies. Agricultural inspectors and consultants are among the workers knowledgeable about the certification process.

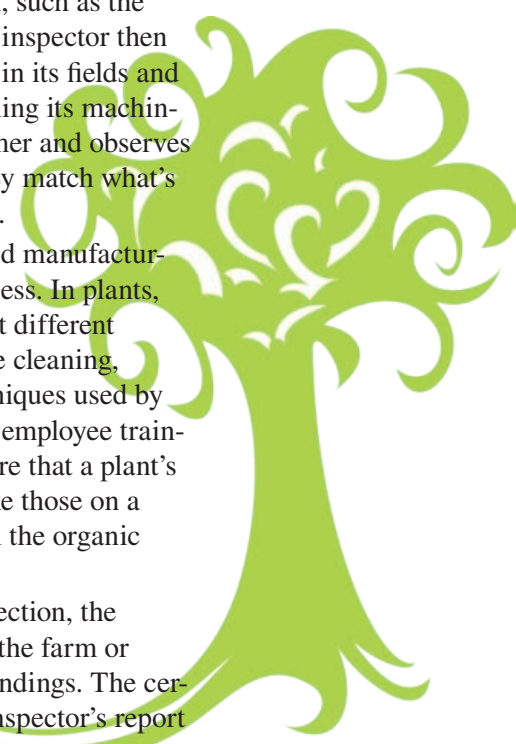
Agricultural inspectors

Agricultural inspectors do preliminary research and site inspections to investigate farms and food manufacturing companies. These inspectors usually work for Federal or State governments. Inspectors examine food processing operations to ensure compliance with health, safety, and quality laws. The work of inspectors for organic certification differs from that for conventional inspections.

Organic farms and companies are required to maintain organic production plans. These plans include detailed information about the farm, such as which crops are produced or which animals are raised, as well as information about the production process and the farm’s pest control or fertilization techniques. The inspector reviews this plan and other relevant information, such as the farm’s inspection history. The inspector then visits the farm, spending time in its fields and crop storage areas and examining its machinery. He or she talks to the farmer and observes farm operations to see that they match what’s in the organic production plan.

Inspectors also review food manufacturing plants using a similar process. In plants, however, the inspector looks at different things. He or she examines the cleaning, handling, and packaging techniques used by the facility, as well as reviews employee training programs. Inspectors ensure that a plant’s manufacturing procedures, like those on a farm, follow the description in the organic production plan.

After completing the inspection, the inspector prepares a report of the farm or plant to document his or her findings. The certifying agency considers the inspector’s report



in deciding whether the farm or manufacturer may obtain or retain organic certification.

Skills and training. There are no formal educational requirements for becoming an agricultural inspector. However, most employers require work experience in a related field, such as food processing, or some college coursework in biology, agricultural science, or a related subject.

Inspectors for organic certification are also usually required to have formal training in organic inspection. The largest training programs are offered by the Independent Organic Inspectors Association, which has separate trainings and accreditations for crop, livestock, and processing inspection. Employers often provide or sponsor ongoing training to keep up with the latest rules and regulations for organic production.

Potential inspectors should be comfortable working outdoors. In addition to their technical knowledge, they also need good oral communication skills for talking with producers and good written communication skills for drafting reports.

Consultants

Consultants provide technical advice and assistance to producers seeking to expand their organic operations or to transition from conventional to organic farming. The transition can be lengthy; it may require farmers or manufacturers to adopt new methods, and it can be costly. USDA regulations require a 3-year transition period for land used in organic production in most situations.

By law, inspectors may clarify rules but are not permitted to advise the facilities they examine. As a result, some certifying agencies and other establishments offer consulting services for aspiring organic producers. Consultants explain the organic certification process as fully as possible and provide suggestions, cost estimates, and more to help producers understand the complexity of an expansion or transition. Farmers and manufacturers may use the information from consultants to make a decision about whether to proceed.

In addition to working one-on-one with individual farmers, some consultants present group training. Nonprofit certifying agencies

Consultants explain the organic certification process to help farmers and food manufacturers decide whether to expand production or transition from conventional to organic farming.



Photo: U.S. Department of Agriculture



Purchasing agents and buyers of farm products help make organic foods more readily available to consumers.

and State governments often host educational events to disseminate information and answer producers' questions relating to organic production and certification. These organizations employ consultants full time who specialize in this type of work.

Skills and training. Consultants who advise or train organic farmers and manufacturers have diverse educational and professional backgrounds. Like consultants in other industries who have specialized knowledge, however, these consultants should have expertise in the organic industry—including a thorough understanding of the organic certification process as it relates to specific products.

Because consultants usually work without direct supervision, they should be self-motivated, disciplined, and have good time-management skills. They should also have analytical, problem-solving, and creative abilities, as their work often requires them to suggest solutions to obstacles encountered with the certification process. And they should have good interpersonal and communication skills for working with a wide range of people.

Getting food to consumers: Buyers and sellers

In response to the growing popularity of organic goods, retailers have increased their offerings of such products. Once sold primarily in natural and health food stores, organic goods have become mainstream: most organic food is now sold in conventional grocery stores. Purchasing agents and buyers of farm products and wholesale sales representatives are some of the workers who help make organic foods more readily available.

Purchasing agents and buyers of farm products

Purchasing agents and buyers of farm products work on behalf of grocery stores, restaurants, and other businesses. Their job is to obtain quantities of goods before they are resold to individual customers. Agents and buyers may also work on behalf of wholesalers, who serve as intermediaries in the path between producers and retailers.

To get the needed products and negotiate on prices and delivery dates for goods, agents and buyers may visit the producer or wholesaler directly. Agents and buyers keep abreast of changing consumer preferences to make sure what they buy can be profitably resold.

Purchasing agents and buyers of farm products who work with organic goods might be responsible for one category of goods, such as produce or cheese, or for many. Agents and buyers who work for a chain of grocery stores may oversee buying for one store or one region of stores.

To judge the quality of a product firsthand, agents and buyers often travel to visit farms, producers, or distributors. These workers also analyze sales data to determine what goods—and at what price—customers demand so they know what to buy and how much to pay.

Skills and training. Requirements for purchasing agents vary by the size and type of establishment. Most employers prefer to hire applicants who have a college degree and who are familiar with the merchandise they sell and with wholesaling and retailing practices. Educational background should include coursework in supply-chain management. Formal education is especially important for agents and buyers working in the organic food manufacturing industry. Continuing education is often necessary for advancement.

Professional certification is becoming increasingly important. There are many types of certification, based on specialty, but all require work-related experience and education followed by successful completion of written or oral exams. Buyers typically learn the particulars of their business through on-the-job training.

Good communication and negotiation skills are a plus, as they help when working with suppliers. Strong analytical skills are also necessary in determining which goods to buy. Prior knowledge of the particular qualities of organic foods or other goods is beneficial.

Purchasing agents and buyers must have basic computer skills and be proficient in various software. They also need an ability to

analyze technical and financial data and have good skills in communication and negotiation.

Wholesale sales representatives

Farmers and producers who do not sell their products directly to consumers, retailers, or restaurants instead sell them to wholesale businesses. Wholesale sales representatives are the workers responsible for selling these goods to other businesses.

Like any sales workers, wholesale sales representatives must find new customers to win new business. This effort sometimes requires making cold calls or traveling to businesses—and being well informed about the goods and products they sell.

Sales representatives might handle organic products exclusively or as part of a larger portfolio. For example, a sales agent might sell ingredients to an organic food manufacturer, such as organic flour to a baker. Or, a sales rep might sell finished products to retail outlets, such as packaged organic meat to grocery stores.

In each case, sales agents must know which establishments in their area are likely to buy organic products. And they must know market prices and industry trends to sell the organic goods.

Skills and training. Some wholesale sales representative positions require applicants to have a bachelor's degree, but most jobseekers are fully qualified with a high school diploma or its equivalent. For these positions, previous sales experience is a plus.

Companies often have formal training programs, which may last up to 2 years. In some of these programs, employees rotate among plants and offices to learn all phases of the employer's operation.

To create business, sales agents must be friendly and personable. The ability to communicate well is also important. General business skills, such as the ability to analyze sales data, are beneficial. A background in an aspect of organic food production or knowledge of organic regulations is helpful, too.

For more information

This article provided only snapshots of the occupations featured. For more general information about these occupations beyond their organic focus, see the *Occupational Outlook Handbook*. The *Handbook* provides detail about the work, employment, wages, outlook, training and more for farming, inspecting, buying, and other occupations related to food and food production—as well as for hundreds of other occupations. This resource is available in many career centers and public libraries and online at www.bls.gov/ooh.

To learn more about becoming an organic farmer, contact World Wide Opportunities on Organic Farms. This organization is an exchange network through which farms and volunteer workers connect. Volunteers learn more about organic farming by working on farms in exchange for living accommodations and food. For more information about

opportunities on farms in the United States, contact:

World Wide Opportunities on Organic Farms
430 Forest Ave.
Laguna Beach, CA 92651
(949) 715-9500
info@wwoofusa.org
www.wwoofusa.org

For general information about the organic industry, contact:

Organic Trade Association
60 Wells St.
Greenfield, MA 01301
www.ota.com

For more information about becoming an organic inspector, contact:

International Organic Inspectors Association
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Broadus, MT 59317
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