With annual sales in excess of $1 billion, the organic food industry has become an important component in our Nation's food system. In response to a request by the organic industry, Congress included a title in the recently passed 1990 Farm Bill which established procedures for developing a national program for organically grown foods. The title requires USDA, through a National Organic Standards Board, to set national minimum standards for the production, marketing, and labeling of organic foods.

However, the title does not make any scientific judgment that organically grown foods are more healthful, nutritious, or flavorful than conventionally produced food. Nor does it exempt organic foods from other food laws such as the Federal Food, Drug, and Cosmetic Act. The legislation requires an estimated Federal annual appropriation of about $31 million. In addition, the industry will pay approximately $19 million annually in user fees. There is a worry that such costs may be too great for a relatively small industry. Some food producers and marketers express concern about leading consumers to believe that conventionally produced food is unsafe.

Why Food Standards?

More than two-thirds of the U.S. food supply falls under one or more standards of identity. These standards define such foods as “fresh beef,” “frozen concentrated orange juice,” and “mayonnaise.” Standards provide useful market signals and protect consumers who have insufficient product information. Standards can act as guarantees of quality, safety, and nutrition in the food supply. One rationale behind standards is to combat economic adulteration—the debasing of foods by substituting inferior ingredients or adding low-value fillers. However, such food standards can be viewed as a form of regulation which limit consumer choices by retarding innovations and restricting producers from marketing variations. Standards can restrict competition and raise food prices by prohibiting lower cost ingredients. Thus, standards can both aid and prohibit efficient resource allocation.

Why Organic Standards?

Today, organically produced fruits and vegetables, meats, breads, milk, and wines, as well as many other food products, are available. Consumers purchase them for many different reasons, such as environmental, food safety, or sensory concerns. Because organic products differ from conventional products by production practices which are undeterminable at the point-of-purchase, consumers cannot identify organically produced food by simply looking at it. They could not verify whether organically grown potatoes are free of synthetic pesticides or whether organically grown lettuce is free of synthetic growth regulators. Consumers have a natural desire to reject food labeled as organically grown if they suspect it of being contaminated with synthetic pesticides or growth regulators.

The new Federal standards for organic foods set minimum standards for production, marketing and labeling.

The author is an agricultural economist with the U.S. Agricultural Policy Branch, Agriculture and Trade Analysis Division.
must rely on information provided by the sellers, such as labels. Since no national standards or definition of “organic” exist, consumers may not be completely assured that what they are buying meets their personal definition of organic. For example, processed foods currently labeled “organic” may contain from 40 to 100 percent organically produced ingredients (see box).

With sales of organic foods rising from $174 million in 1980 to $1.25 billion in 1989, interstate and international organic shipments have increased. As the industry grows, so does the distance between the farmers, wholesalers, processors, and retailers. Greater distances increase the cost of verifying that foods labeled “organic” are organically produced. With verification becoming costlier and more people demanding organically produced food, the price premium for organic food has increased and so has the potential for fraud. Organic food marketers and producers may deliberately mislabel non-organic products as organic. The Food and Drug Administration (FDA) investigates intentional mislabeling, but since no legal definition of “organic” existed, investigations were made on a case-by-case basis.

**Current Standards**

Though organic food marketing began in the 1940’s, little effort was made to ensure the credibility of this small but growing industry until the early 1970’s. In 1973, California Certified Organic Farmers (CCOF) organized to end confusion about the meaning of “organic” and to stop organic marketing fraud. CCOF defined uniform standards and set up a certification program to verify that farmers’ practices followed these standards. Oregon soon followed, enacting the Nation’s first legal definition of the term “organically grown.” Now, 22 States have organic laws or regulations, and over 30 government and private groups certify organic farmers and organically grown food products.

These State regulations and certification codes that approve, restrict, or prohibit production inputs are very similar. But the lack of total consistency between these standards forces farmers and processors to produce and label their products differently for interstate commerce. This issue is not unique to the United States. The European Community has a proposal before it to establish production and inspection standards of organic foods for its member countries. Also, the International Federation of Organic Agricultural Movements (IFOAM), in conjunction with other organizations, is working to harmonize international organic standards to promote more trade.

Consumers recognize some of the criteria used to define organic foods. In a 1989 California consumer study, 86 percent realized that organic foods are grown without pesticides, 66 percent knew that synthetic fertilizers are prohibited, and 52 percent were aware that no growth regulators are allowed. According to the study, shoppers used several methods, often in combination, to try to substantiate that the food was indeed organically grown. The two most common methods of verification used by over one-half of the shoppers were labels or display statements. Over 40 percent relied on sellers’ reputations. About 20 percent relied on private certification seals for verification. Only 8 percent said they did not verify that the produce was organic. Three-quarters of the surveyed consumers said that organic certification was very important to them.

**WHAT DOES “ORGANIC” MEAN?**

The Organic Produce Task Force agreed to the following definition of organic at the United Fresh Fruit and Vegetable Association’s July 1989 meeting. Task force members represented a cross-section of industry interests such as retailers, conventional growers and shippers, organic growers and shippers, representatives of State departments of agriculture, and related governmental agencies. This definition has been adopted by the National Association of State Departments of Agriculture and was used in developing the organic certification title of the 1990 Farm Act.

- Organic food production systems are based on farm management practices that replenish and maintain soil fertility by providing optimal conditions for soil biological activity.
- Organic food has been determined by an independent third-party certification program to be produced in accordance with a nationally approved list of materials and practices.
- Organic food is documented and verifiable by an accurate and comprehensive record of the production and handling system.
- Only nationally approved materials have been used on the land and crops for at least 3 years prior to harvest.
- Organic food meets all local, State, and Federal regulations governing the safety and quality of the food supply.

While most consumers in the California survey correctly identified organic to mean grown without pesticides, synthetic fertilizers, or growth regulators, they had some misconceptions about such foods. Nearly 46 percent identified “residue free” as a criterion for organic foods. However, being grown without chemicals does not guarantee freedom from chemical residues. Therefore, a need exists for a uniform definition and consumer education.

**National Standards**

Under the provisions in the 1990 Farm Bill, organic growers cannot use synthetic materials in production. However, some synthetic substances may be exempted, such as insect pheromones. Occurring in nature, a pheromone is a chemical secreted by certain insects to elicit responses from same insect species. Pheromones have been synthesized and are often used as biological control agents. Pheromones are very difficult to collect in nature and are less expensive when produced synthetically. They are very effective, ecologically benign forms of insect control.

The 1990 Farm Bill also contains a provision to judge nonsynthetic or natural materials. Natural materials harmful
to human health or the environment will be prohibited for use in organic production. Insecticides derived from plants, called botanical insecticides, are examples of toxic materials derived naturally. Currently, most organic certification programs restrict and regulate the use of botanical insecticides. A newly established National Organic Standards Board will propose allowable and prohibited substances. The Board will be composed of organic farmers, organic food processors, retailers, environmentalists, consumer advocates, scientists, and certifying agents. Their proposals will be reviewed and submitted for public comment, resulting in a national list of exemptions and prohibitions. This list will itemize the substances and their allowed usage. The Board will also make recommendations concerning residue testing and tolerance levels.

During Congressional debate on the Organic Certification Title, residue tolerance levels from 0 to 10 percent of EPA or FDA standards were discussed. Actual tolerance levels will be set by the National Organic Standards Board in conjunction with USDA. However, if a product labeled as organically grown contains any detectable residue of a prohibited substance, such as a synthetic pesticide, it is subject to investigation to determine whether the requirements under the title have been violated. Periodic residue testing will serve as a check on the honesty of the system.

The 1990 Farm Bill requires that prohibited substances cannot be used for 3 years before crops may be labeled as organic. In addition, all producers and handlers seeking certification must submit an organic plan to a certifying agent for approval. The organic plan sets out all procedures that they will follow in order for their products to be labeled as organically produced. These plans must contain provisions, such as how farmers will foster soil fertility and provide for crop rotations, and assurances that they will not use certain manuring practices. Farmers will be required to record their agricultural practices and to maintain the records for 5 years.

Only products raised under the provisions of this title and the national organic certification program can be labeled “organic.” The organic label indicates that the product meets USDA organic standards and can incorporate the USDA organic seal. Only the term “organic” is restricted. Other producers who do not use pesticides, but follow some practices that are not approved as organic, could label their products as “produced without pesticides.” States may add labels to indicate the origin of the product and the name of the certifying agents. Imported foods can be labeled “organic” if certified by foreign programs using equivalent standards.

The 1990 Farm Bill also includes standards for organic processed foods. An organic processed product must contain at least 95 percent organically produced ingredients by weight, excluding water and salt. For example, whole grain bread labeled “organically produced” means 95 percent of the flour, grains, and oils were organically grown. If the product has between 50 and 95 percent organically produced ingredients, it may claim the organically produced ingredients on the principal panel of the label. For example, if a chili product is made with organically produced beans that are over 50 percent of the chili’s weight, it may be declared “organically produced beans.”
on the principal panel but not “organic chili.” However, if the organic ingredients are less than 50 percent of the chili’s weight, they may be identified only on the ingredient list.

Processors may not add any synthetic ingredients or ingredients known to contain heavy metals or toxic residues, sulfites, nitrates, or nitrites. Also, they are prohibited from using packing materials containing fungicides, preservatives, or fumigants or other containers that may compromise the organic quality of the product. Water added must meet the standards of the Safe Drinking Water Act.

For animal products to be labeled “organic,” they must be fed organically produced feed. The feed must not contain plastic pellets for roughage or any urea. Manure refeeding is prohibited. No growth promoters, hormones, sub-therapeutic doses of antibiotics or other routine medication, except vaccinations, are allowed. These provisions must be followed with dairy cows for at least 12 months before the milk is labeled “organic.” Organic poultry products must follow these provisions for the entire lives of the birds.

In developing State organic food programs, States may include more restrictive standards and regulations. These State programs must be approved by the Secretary of Agriculture to ensure consistency with Federal program goals. State labels should not imply superior quality products. Nor can a State discriminate against another State’s organic products if these products are produced under the national standards.

The Future with Organic Food Standards

Consumers will determine if the organic industry continues to grow, therefore their faith in the quality of organic products is vitally important. The standards ensure that all products labeled “organic” have been produced according to the regulations. Before the legislation, not all organic producers participated in certification programs. Standards eliminate consumer confusion about what “organic” means. Standards provide information which can help consumers decide if they want to pay a price premium for these products. Consumers motivated by environmental concerns will be assured that environmentally unacceptable inputs have not been used. Consumers motivated by food safety concerns will know that residue tolerance levels are one-tenth or less than those for nonorganic foods. Consumers will also know the amount of processed food ingredients that are organically produced.

Producers are protected from “cheating” by other producers, wholesalers, or retailers because violations of the organic standards carry penalties of up to $10,000. National standards for organic products facilitate interstate and international commerce by making it easier to enter new markets. These standards also enable producers to truly differentiate their products from conventionally grown foods.

References

