

Healthy Food, Local Food*

John Ikerd†

Local foods have replaced organic foods as the most dynamic sector of the retail food market. Sales of local foods grew from \$4 billion in 2002 to \$5 billion in 2007 and are projected to reach \$11 billion by 2011.ⁱ Organic food sales are still far larger, more than \$20 billion, but the rate of growth in organic food sales seems to be slowing while local food sales are accelerating. For many people, *local* has become more important than *organic*. In fact, the word “locavore” was chosen by the New Oxford American Dictionary as their 2007 “word of the year.” The term was first associated with the “100-mile diet,” but is described more generally as someone who shows a strong preference for foods that are locally grown, seasonally available, and produced without unnecessary additives or preservatives.ⁱⁱ

The local foods movement represents the latest phase in the decades-old evolution toward a new sustainable food system. The new food system provides new opportunities for American farmers, particularly for those with small and mid-sized farms that have found it difficult to compete in today's global markets for agricultural commodities. However, if farmers are to benefit from this new market opportunity, they must understand what's driving the local food movement. Why are locavores dissatisfied with the foods in the supermarkets and franchise restaurants? Why are they willing to pay premium prices and sacrifice convenience for foods that are grown locally?

If you ask a locavore why they prefer local foods they will probably mention freshness and flavor. The local food movement is about far more than a search for fresh and flavorful foods. The Chefs Collaborative, a network of more than 1,000 American chefs, promotes the “joys of local, seasonal, and artisanal cooking,” proclaiming that “cultural and biological diversity are essential for the health of the earth and its inhabitants. Preserving and revitalizing sustainable food, fishing, and agricultural traditions strengthen that diversity.”ⁱⁱⁱ These same cultural and ethical values are reflected in the Slow Food movement, a worldwide organization with about 85,000 members in over 100 countries. Their website states, “We believe that the food we eat should taste good; that it should be produced in a clean way that does not harm the environment, animal welfare or our health; that food producers should receive fair compensation for their work, and that all people should have access to good clean food.”^{iv} *Good, clean, and fair* are becoming the watchwords of the local foods movement.

The local food movement has its roots in the natural food movement of the 1960s, which began when the “back to the earth” people dropped out of the American mainstream. Rachel Carson's 1962 book, *Silent Spring*, awakened public awareness to the environmental risks of agricultural pesticides. The “back to earth” people responded by producing their own *organic* food, buying food at farmers markets, and establishing the first cooperatively owned and

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† John Ikerd is Professor Emeritus, University of Missouri, Columbia, MO – USA; Author of, *Sustainable Capitalism*, <http://www.kpbooks.com>, *A Return to Common Sense*, <http://www.rtedwards.com/books/171/>, *Small Farms are Real Farms*, Acres USA, <http://www.acresusa.com/other/contact.htm>, and *Crisis and Opportunity: Sustainability in American Agriculture*, University of Nebraska Press <http://nebraskapress.unl.edu>;

operated natural food stores. They knew how their food was produced because they knew where it was produced and they often knew personally the person who grew it.

To these early natural food advocates, *organic* was as much a way of life as a way to grow good, healthy food. The natural food movement spread far beyond the “hippie” communities during the 1970s and 1980s, as more people became aware of the health and environmental risks associated with industrial agriculture and began to lose faith in an increasingly corporately controlled U.S. food system.

The growing market for natural foods laid the foundation for a booming market in organic foods during the 1990s. By the early ‘90s, growing public concerns about nutritional health and food safety had fueled dramatic growth in the market for natural foods. Relationships between consumers and farmers became less direct and personal as natural foods retailers took a larger share of the natural foods market from farmers markets and roadside stands. Fewer consumers then knew the farmers who grew their food so they needed some other means of knowing that their food was grown naturally.

Certification of *organic* foods by a third party was a means of assuring consumers that legitimate standards for *natural* food production had been followed. Organic farmers across the U.S. formed organizations to define organic standards and to inspect organic farms to verify compliance. Organic certification allowed producers to gain access to even more distant markets, as farmers and consumers began to rely on certification rather than personal relationships. During the decade of the ‘90s, organic foods grew an average rate of 20% per year, doubling every three to four years.

The late ‘80s and early ‘90s brought dramatic changes in organic foods retailing. By the late ‘80s, several natural foods retailers had expanded into small chain store operations, operating from three to 20 stores. In 1991, Whole Foods, then a six-store operation, began buying out other natural food stores, beginning a consolidation process that ultimately would reshape the natural foods market.^v In 1993, Wild Oats followed the lead of Whole Foods and began acquiring other natural foods cooperatives and small retail chains.^{vi} Wild Oats eventually was bought out by Whole Foods, and by 2009, Whole Foods operated 270 stores in North America and the United Kingdom.

Throughout the ‘90s, the farmers producing for the rapidly growing organic food market were smaller, independent operations, at least for the most part. A 1998 survey of the Organic Farming Research Foundation indicated that nearly 90 percent of U.S. organic farms were single-family operations or family partnerships.^{vii} More than 60 percent were full-time farming operations, even though the average size of an organic farm was only about 140 acres – just over one-third as large as the average U.S. farm at the time. So organic farming was dominated by small, family farms, at least in terms of farm numbers. However, this was about to change.

Prospects for large profits from the rapidly growing organic food market eventually attracted the attention of the large mainstream food corporations. No other segment of the food market was growing as fast as organics and Whole Foods had become the fastest growing food chain in the U.S. The mainstream supermarkets, such as Kroger and Safeway, added lines of organic

foods and began promoting organic foods in their ads. As the share of organic foods marketed by mainstream supermarkets grew, the market share left for the smaller independent natural foods stores and co-ops obviously fell. The share of the organic market held by *independent* natural foods and health foods stores fell from 62% in 1998 to 31% in 2003.

In 2005, Wal-Mart announced plans to move into organic foods in a big way, reportedly committed to retailing organic foods for a price premium of only 10% over their “always low” conventional food prices. In 2007, mainstream corporate supermarkets had 47% of the organic foods market and natural foods stores and specialty retail chains accounted for 46%, leaving direct sales at farmers markets and cooperative food-buying clubs with just 7% percent of the organic market.^{viii}

The large corporate food retailers, and the large food processors who supplied them, found it difficult to deal with large numbers of small farms, particularly with the diversity of organic standards and certification programs that existed among different groups of farmers in different regions of the country. They encouraged organic farmers to adopt uniform *national* standards for organic certification so they could assemble the large quantities of organic products necessary to supply their stores. Organic farmers were led to believe that uniform national standards would give them greater access to these mainstream food markets. On the surface, standardization of organics seemed to be a good idea and most organic farmers supported it.

In 2002, the USDA launched its National Organic Program (NOP) for certification of organic foods. However, uniform national standards actually facilitated the ongoing industrialization of organic food production and distribution – the specialization, standardization, and consolidation of control needed to accommodate the mainstream food system. With greater standardization, organic producers could continue to specialize and consolidate into even larger scale operations.

Organic production was no longer defined by the farmer's commitment to natural systems of production that maintained the organic matter and natural regenerative capacity of the soil, but by a set of written rules regarding allowable and non-allowable inputs and production practices. Large producers typically could meet these *minimum* requirements at lower costs than could the philosophically committed organic farmers. Larger producers also could produce the large quantities of organic products demanded by the mainstream corporate supermarkets and could ship truckloads or shipping containers of organic produce across nations or around the world. The industrialization of organics left smaller independent organic farmers and smaller natural foods stores struggling for their economic survival.

However, many discriminating “natural foods” consumers were already moving beyond organic to *local*. They didn't trust either the corporate food system or the government to maintain the ecological and social integrity of organic foods. Many people in the new food movement wanted something more than certified organic; they wanted to buy their foods locally from people they knew and trusted. A number of surveys over the past few years have indicated that roughly three-fourths of American consumers have a strong preference for local foods.^{ix} *Local* is becoming the *new organic*. Many organic farmers who market directly to their customers through farmers markets, roadside markets, or CSAs chose not to become certified as organic, but instead to rely on personal relationships with their customers to validate the integrity of their

products. Affirming their judgment, the number of farmers markets in the U.S. more than doubled during the decade that organic foods were moving into mainstream supermarkets. For many people, relationships are more important than convenience. They want to buy food “with a face.” They wanted to “know their food” by “knowing their farmer.”

Today, the food movement is at a new frontier. The natural foods movement was born out of concerns for food safety, but growing concerns about health and nutrition promises to be the new driver of the organic/local foods movement. A growing number of scientific studies are verifying that significant declines in the basic nutritive value of foods have occurred during the period of agricultural industrialization.^x The American epidemics of obesity, diabetes, and heart disease are all obviously related to diet. It's easy to blame these maladies on the sedentary, but high-stress, American lifestyle, which might well be a significant factor. But an equally if not more important factor could be that many of today's foods are simply lacking in nutrients.

Americans are the most obese people in the world. According to the Center for Disease Control and Prevention, adult obesity has increased by 60% within the past twenty years. Trends for childhood obesity are even worse, having *doubled* for children and *tripled* for adolescents during the same time. One-third of American adults are now considered severely overweight or obese. Obesity is closely linked with other health problems, particularly diabetes and heart disease, and ranks second only to tobacco smoking as a cause of adult death. Americans are the most overfed yet undernourished people in the world. The epidemic of obesity is obviously related to the American diet.

For more than fifty-years, American farmers have been under increased pressure to specialize, mechanize, and get bigger – to produce more food cheaper. Farm policy has always been promoted to taxpayers as being necessary for national food security. The USDA defines food security as “access by all people at all times to enough food for an active, healthy life.” Food security, however, includes food *quality* as well as *quantity* and affordability. If food isn't nutritious, and healthful, as well as available and affordable, it will not ensure adequate diets for all. Unfortunately, the emphasis of food security programs administered through the USDA – including its farm programs – has been on food quantity rather than food quality. The agency admits its concept of food security is not adequate to ensure healthy diets, but places most of the burden for food quality on consumers.

During the 1930s, USDA farm programs were justified as means of keeping farmland in the trusted care of family farmers who had very personal reasons for maintaining the nutritional value of foods they grew, as well as the fertility and productivity of their land. At the time, farmers produced much of their own food and most non-farm consumers were their neighbors. Over time, as agriculture has become more efficient, the personal connections between farmers and consumers were lost. Today, many consumers never think about the fact that their food even comes from farms.

USDA farm programs have continued to support the industrialization of agriculture as a means of making more food accessible and affordable to more people. Meanwhile, the evidence continues to grow that as food has become more abundant in terms of calories it has become more deficient in terms of nutrients. For example, problems of obesity and diabetes are more

common among people with lower incomes who logically tend to seek foods providing the cheapest source of energy – meaning the most calories for the fewest dollars. Because of time constraints, many such people also rely heavily on highly processed and ready-to-eat foods, including “fast foods.” On such diets, people can easily end up eating far more calories than they need without getting enough nutrition to meet the minimum requirements of a healthy diet.

When livestock are offered a wide variety of foodstuffs containing a variety of vitamins, minerals, and other nutrients, most will naturally select a healthy balanced diet. When offered a premixed feed containing fixed quantities of the same nutrients, they tend to consume more of some nutrients than they need, apparently trying to meet their minimum requirements of others. If we humans have this same basic tendency, whenever our food choices are limited we will tend to consume more of some nutrients than we need because we are not getting enough of others. In other words, a lack of nutrient balance in our diets would leave us hungry, even though we are consuming far more calories than is consistent with good health. Many Americans may be obese, sedentary, and stressed out because they are starving for nutritional substance in their foods.

One prominent academic study compared nutrient levels in 43 garden crops in 1999 with levels documented in benchmark nutrient studies conducted by USDA in 1950. The scientists found declines in median concentrations of six important nutrients: protein –6%, calcium –16%, phosphorus –9%, iron –15%, riboflavin –38%, and vitamin C –2%.^{xi} Another study published in the *Journal of Applied Nutrition* in 1993 showed nutritional deficiencies for conventional foods relative to organic foods.^{xii} Organically grown apples, potatoes, pears, wheat, and sweet corn, purchased over a two-year period, averaged 63% higher in calcium, 73% higher in iron, 118% higher in magnesium, 91% higher in phosphorus, 125% higher in potassium, and 60% higher in zinc than conventional foods purchased at the same times.

Other studies have shown that yield-enhancing technologies – fertilizers, pesticides, plant density, and irrigation – reduce the nutrient content of field crops by amounts generally consistent with the results for the 50-year nutrient declines and differences between conventional and organic crops.^{xiii} These results should come as no surprise to anyone who understands that industrial agriculture drives profits primarily from *quantity* factors: acres farmed, head produced, yields per acre, rates of gain, and the cost efficiency of large-scale production. *Quality* factors affecting prices typically are incidental to profits and are often associated with cosmetic appearance rather than nutrition.

Advocates of industrial agriculture are quick to point out that other studies have found no difference in nutrient value between organic and conventionally grown foods. However, foods can be certified as organic after only three years of following organic farming practices, including elimination of chemical pesticides and fertilizers. It can take many years to restore the nutrient balance and natural fertility of soils needed to grow healthy, organic crops. Currently, most certified organic farms are still in the early years of transition to true organic. Regardless, this line of inquiry would appear to be potentially fertile ground for continuing research into questions of food quality and nutrition. But we don't need a mountain of evidence to conclude that food quality has been compromised in the pursuit of greater efficiency.

The food processing and distribution industry also must share the blame. The corporations that market our foods are concerned about profits – not diet or health. In fact, the managers of the multinational corporations that currently control the American food system have a legal fiduciary responsibility to maximize returns to their stockholders. They have no social or ethical commitment to protecting public health and instead do only those things required by law. Current laws are clearly inadequate to protect the public from diet related illnesses, as is evident in current trends in the diets and health of Americans.

Food industry marketers know that humans have a natural taste preference, probably a genetic predisposition, for foods that are high in fat and sugar. Preferences essential for the survival and health of our primitive ancestors may threaten our health today. Regardless, it's easier to market foods that are higher in calories, particularly when those foods are cheaper to produce. The primary sources of those cheap calories are plants and animals from farms using modern yield-enhancing technologies and thus lacking in nutrient density and encouraging over-consumption while enhancing food industry profits.

Americans increasingly are rebelling against the industrialization of their food systems by seeking out local sources of foods. They are looking for healthier foods by buying more local foods. There are many other environmental and social factors driving the local foods movement and the emphasis placed on health here is not meant to diminish the importance of these other factors. People are looking for local farmers they can trust to produce *good, clean* food, and are willing to pay them a *fair* price for their efforts – good, clean, fair food.

Some people question whether local food systems can ever replace the industrial food system of today. However, fifty years ago most food in America was locally grown. Construction on the interstate highway system had just begun and supermarkets and franchise restaurants were just beginning to catch on. In an ever-changing world, it seems logical to assume that changes in the food system over the next fifty years will be at least as great as in the past fifty years. With growing challenges of ecological, social, and economic sustainability, including food security, it is obvious that future changes must be in a fundamentally different direction.

The natural/organic/local/sustainable food movement is at least as advanced today as the industrial food movement was fifty years ago. Local foods are moving beyond farmers markets and CSAs and into mainstream food markets – locally owned restaurants and supermarkets. Rising energy costs and environmental concerns will eliminate current economic advantages of industrial foods as we move into the future. On the other hand, the future could bring new innovations that make local foods even more available and affordable.

Obviously, there is no assurance that foods are healthier just because they are grown locally. Foods grown by industrial farming methods are no healthier just because they are grown by local farmers. However, we have an opportunity to know how our foods are grown when we buy food from local farmers. We can buy from those who we trust to produce good, clean, fair food and avoid those we do not trust. There is no logical reason to expect anything other than the continued growth in local foods in the future. The industrial food system has left us with no logical, sustainable alternative. The only way to get food we can trust is to buy our food from farmers we trust. The only dependable source of healthy food is local food.

Sources:

- ⁱ *Packaged Facts*, “Local and Fresh Foods in the U.S.,” May 1, 2007. <http://www.packagedfacts.com/Local-Fresh-Foods-1421831/>
- ⁱⁱ UOP Blog, Oxford University Press, USA, “Oxford Word of the Year: Locavore,” <http://blog.oup.com/2007/11/locavore/>
- ⁱⁱⁱ Chefs Collaborative website: <http://www.chefscollaborative.org/>
- ^{iv} Slow Foods International website, http://www.slowfood.com/about_us/eng/philosophy.lasso
- ^v Whole Foods Market, “Our History,” <http://www.wholefoodsmarket.com/company/history.html>
- ^{vi} Wild Oats, “History,” <http://www.wildoats.com/app/cda/cda.php?pt=History>
- ^{vii} Organic Farming Research Foundation, 1999, *Third Biennial National Organic Farmer's Survey*, Santa Cruz, CA USA.
- ^{viii} Carmelo Ruiz-Marrero, 2004, *Clouds on the Organic Horizon*, CorpWatch.
- ^{ix} Diane Conners, “Hunger Grows for Locally Grown Food: *Restaurants, grocery stores discovering a tasty advantage*, published by Great Lakes Bulletin News Service, 3/30/2005.
- ^x For a list of peer review scientific studies documenting the health benefits of natural foods, see *The Organic Center*, <http://www.organic-center.org/>
- ^{xi} Donald Davis, Melvin Epp, and Hugh Riordan, 2004, “Changes in USDA Food Composition Data for 43 Garden Crops, 1950 to 1999” *Journal of American College of Nutrition*, 23:669-682.
- ^{xii} Bob Smith, 1993, Organic Foods vs Supermarket Foods: Element Levels, *Journal of Applied Nutrition*, 45:35-39.
- ^{xiii} WM Jarrell and RB Beverly, 1981, “The Dilution Effect in Plant Nutrient Studies,” *Advances in Agronomy*, 34:197–224.