The Marketing and Distribution of Fast Food

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INTRODUCTION

Today childhood obesity is widely recognized as a global health crisis; obesity rates in children have risen dramatically in developed countries since the 1960s and in developing countries since the 1980s. Recent conferences, NGO initiatives, and academic publications testify to increasing awareness of the problem. There is an emerging consensus that the study of childhood obesity should go beyond the medical interventionist model and incorporate multiple levels of analysis. Investigators from diverse social and scientific backgrounds now argue that “obesity should be framed as a complex system in which behavior is affected by multiple individual-level and socioenvironmental factors (1, p. 1),” rather than solely by individual choice.

Glass and McAtee (2) were among the first to call for an integration of the natural, behavioral, and social sciences to study childhood obesity. They argue that individual behavior choices are embedded within a social context that places “constraints,” “inducements,” and “pressures” upon their environment and their ability to act independently. They propose a “stream of causation” model of nested levels of analysis that highlight different social factors that induce and constrain health-related behaviors for all individuals. Glass and McAtee’s original thesis was bolstered by a series of articles in the July 2009 edition of Preventing Chronic Diseases (see, 1) that incorporates a systems-based analysis.

This chapter seeks to advance the multilevel approach to studying childhood obesity by focusing on the “macro” level of corporations in the global economy. We use a global value chains (GVC) framework to explain how the structure of food and agricultural value chains, with an emphasis on

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the fast-food segment, affects individual consumption choices. Food value chains shape consumption habits in various ways: they have a direct impact on the availability of foods; they foster the international dissemination of consumption patterns through the interplay between global and local food chains; they highlight the key role of transnational corporations (TNCs) in using marketing to define the consumer’s perceptions of food; and they show where leverage can be exercised throughout the chain to push for change. (For a more detailed analysis of GVC methodology and its linkage to consumption see (3).)

The GVC model is based on a series of steps that can be applied to any global industry to understand how it is organized and evolves (4). First, we identify the lead firms in the industry, and how their strategies and roles are changing. Second, we show the linkages between economic activities that constitute the input–output structure of the chain, from raw materials to the production, distribution, and sale of the final product, which helps us understand how value is distributed across the chain and who captures value at each stage. Third, we reveal the governance structure that dictates how the chain operates and who controls the diffusion of technology, standards, and business practices within the chain. Lastly, we analyze the institutions (i.e., governments, unions, non-governmental organizations, and multilateral agencies) that establish the rules, incentives, and norms that guide the behavior of firms in the chain.

The global value chain for food operates at both the global and the local levels. In Fig. 1, we highlight the interaction of global and local food value chains between developed and developing countries. There are different types of lead firms at the global level, including the fast-food franchises that are household brand names in the United States (e.g., McDonald’s, KFC, Wendy’s, and Pizza Hut), the TNC food and beverage manufacturers (e.g., Kraft, PepsiCo, Coca Cola, Nestlé), and large supermarkets and food retailers (e.g., Kroger, Costco, and Wal-Mart). These corporations develop elaborate global sourcing and production networks to procure agricultural and food inputs from around the world that go into their final products.

**Interaction of Global and Local Food Value Chains**

**Global value chain – Developed country**

- **Agri-Business** (Cargill, ADM)
- **Food Manufacturers** (Kraft, Nestlé)
- **Fast-food Franchisees** (McDonald’s, KFC)
- **Retailers** (supermarkets, discount foods, Wal-Mart)

**Local value chain – Developing Country**

- **Local Farmers**
- **Local Food Producers**
- **TNC Franchisees** (fast-food chains)
- **Local Franchisees** (fast-food & traditional)
- **Retailers** (supermarkets, convenience stores, street vendors)
- **Food Consumption**

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Fig. 1. Global and local food value chains.
The retail end of the chain includes fast-food chains and retailers that sell directly to consumers. Within the food and agricultural GVC, we focus on the organization of the fast-food segment because of the concerns often raised about the industry's impact on childhood obesity. Researchers have correlated the rise of fast food over the past couple of decades to the growth in high-caloric, energy-dense consumption and eating away from home, which has paralleled the rise in obesity rates. Survey results from the United States Department of Agriculture (USDA) chronicle how the proportion of total calories consumed in the United States that comes from fast-food has quadrupled from 3 to 12% from 1977 to 1995 (5). In another USDA survey, away-from-home consumption for children aged 2–19 averaged around 26% between 1994 and 1996, accounting for 32% of total daily energy, with researchers suggesting that children eat bigger proportions with higher caloric intake of fat and saturated fat away from home (6).

In the remainder of the chapter, we highlight four areas of the fast-food industry that exhibit the influence and power of large branded fast-food firms in shaping food production, distribution, and consumption. First, we document the rise of the industry in the United States and explain the linkages between the firms along the chain. Second, we address the international expansion of leading fast-food companies and the imitation effects that followed their global rise. Third, we chronicle how the marketing strategies of fast-food firms helped to expedite the growth of the industry and its direct relationship to children. Lastly, we discuss recent initiatives by the fast-food industry to provide healthier food options due to the public outcry that fast food is unhealthy. We focus on two companies (McDonald's and KFC) to show how fast food has revolutionized consumption, and also how societies, institutions, and consumers can have an impact on some of the world's largest companies.

THE RISE OF FAST FOOD IN THE UNITED STATES

According to Austin et al., fast-food sales soared 900% from US $16 billion in 1975 to US $153 billion by the mid-2000s (7). In 2007, the value of US fast-food sales grew by 5% to reach $179 million with restaurants totaling 248,400 units (8). Since 2002, the chained fast-food subsector, which includes top brands such as McDonald's, Yum! Brands (KFC, Taco Bell, Pizza Hut), and Burger King, represented over 60% of fast-food units and total sales (see Figs. 2 and 3). McDonald's is the clear leader in chained fast food in its percentage of global brand owner shares, followed by Yum! Brands (see Fig. 4).

![Fast-Food Total Value U.S. Percentage Chained Fast-Food Subsector 2002-2007](image)

**Fig. 2.** Fast food by subsector, foodservice value 2002–2007, US$ million. Source: Euromonitor International 2008.
Fig. 3. Fast food by subsector, unit restaurants 2002–2007.

Fig. 4. Global brand owner shares of chained fast food in the United States.

The top fast-food chains influence and shape the manufacturing segments that support their huge demand for staple products like processed French fries, chicken, and hamburger patties. Lead firms in the fast-food sector have dominant shares of the market, which gives them the power to set the performance standards for other firms along the chain. While purchasing power is key (9), the strength of lead firms also comes from their direct and/or indirect control of production, market concentration, brand recognition, and technological innovation (10). Multidimensional control of market forces is integral to lead firm status.

The origin of fast-food chains began with the franchising of McDonald’s in the 1960s, and since then the strength of fast-food brands has grown at a meteoric rate. The largest fast-food chains (such as McDonald’s and Yum! Brands) brought the mass production concept to foodservice, and in the process, changed how food is produced, distributed, and marketed. The activities of each segment of the chain are determined by the specifications of the lead firms, the branded fast-food restaurants, and their suppliers. The fast-food brands determine the production of food through their requirements for
how food products should be cultivated, manufactured, packaged, distributed, and displayed. They work directly with food processors, who in turn work with farmers (see Fig. 1).

The stringent standards placed on farmers and food suppliers spearheaded the rise of industrialized agriculture and food processing. The industrial uses of corn are a good example of food technology conforming to buyer demands. Refining corn into corn meal, corn starch, or corn sweetener by companies like ConAgra has bolstered corn sales, with 530 million bushels every year going into high fructose corn syrup alone. Furthermore, 60% of corn production goes into feed for beef, cattle and chicken, which caters to the needs of the food service industry, particularly fast food (11).

KFC is an example of a fast-food brand impacting the entire chicken supply chain configuration. Because KFC is one of the largest buyers of chicken in the world, it specifies what type of chickens it expects farmers to raise, and manufacturers to process, under exacting quality and safety standards. Because these standards require a high level of technological sophistication and efficiency, only the largest food processors (known in industry jargon as “integrators”), such as Tyson’s and Pilgrim’s Pride, can compete as a global supplier for KFC. Due to the scientific management required by modern chicken breeding, hatching, growing, and processing, the largest integrators handle most segments of the chain in-house and require the agricultural industry (like corn growers and processors) to meet their quantity and quality standards for chicken feed.

The demands of fast-food brands on their suppliers facilitated the further concentration of giant firms throughout the chain (a process known as “co-evolution”). French fries are a good example. The French fries served by fast-food chains (e.g., McDonald’s, Burger King, and Wendy’s) are supplied by a few very large manufacturers of French fries (e.g., McCain Foods and J.R. Simplot), which purchase russet potatoes from big growers/shippers (e.g., United Fresh Potato Growers of Idaho) that receive seeds, herbicides, and pesticides from a specialized corps of crop science firms (e.g., Bayer Crop Science and Monsanto). McDonald’s is the largest purchaser of potatoes in the United States, with McCain Foods being its biggest supplier followed by J.R. Simplot. These two potato processors have globally expanded to meet McDonald’s exacting standards as they enter new markets.

Another by-product of concentration is that the food varieties that manufacturers are producing and the fast-food that restaurants are selling spur imitation by competitors. Therefore, the rise of fast-food created a platform for the proliferation of processed food varieties that typically are higher in saturated fats and sodium, and lower in fiber, iron and other nutrients (6). Highly processed inputs are attractive to fast-food chains because they have longer shelf life, can travel further distances without degradation, can be produced in large scale, and yield higher profit margins. Processed chicken (i.e., patties, breaded strips, and nuggets) is emblematic of the shift from whole foods toward processed varieties channeled through fast-food venues. Chicken fast food represents 55% of all chicken consumed outside of the home (12).

INTERNATIONAL EXPANSION OF FAST FOOD

Fast-food chains have fueled their rapid growth through global expansion. This pace has increased exponentially in developing economies since the 1990s, where the gradual removal of market barriers and trade restrictions made the process of internationalization smoother for leading companies. Yum! Brands is a conglomerate that includes KFC, Pizza Hut, Taco Bell, Long John Silver, and A&W. In 2008 the company boasted 36,000 units in more than 110 countries and territories. KFC is the company’s strongest brand with 5,253 units in the United States and 10,327 internationally, including 2,497 in Mainland China alone (13). However, McDonald’s is by far the global fast-food brand leader. In 2008 the company’s total system units were 31,967, with 56% of those units being internationally based (14) (see Fig. 5). Like KFC, China leads the international market for McDonald’s with 1,021 units in 2008, doubling since 2003.
System Unit Restaurants by Region

1994-2008

- U.S.
- Europe
- Asia/Pacific*
- Latin America
- Other Regions
- Total - Outside U.S.
- Total - Worldwide

Fig. 5. McDonald's global operations. 

Other countries like Mexico, Brazil, India, Vietnam, and the Philippines have quickly adopted the fast-food revolution. McDonald's operates 379 units in Mexico and 562 in Brazil. India, a country with a rich spice tradition and many varieties of local cuisine, is experiencing a "fascination" with fast food (15). Since 2006, KFC has opened more than 45 restaurants with projections to surpass 120 by 2010. Pizza Hut operates 120 stores in 34 cities and McDonald's 132 stores, with further expansion planned in the coming years (16). Entrepreneurs in Vietnam, now a member of the World Trade Organization, are trying to push forward franchise agreements with Carl's Jr. and Round Table Pizza (17), while by the year 2000, the Philippines had 2,000 national and global brand chained fast-food restaurants (18).

When fast-food firms enter emerging markets, they have the strength, technological prowess, and modern Western image to impact local food production in various ways. Matejowsky claims that the "efficiency and regimentation" of fast-food production styles reinforce the idea that fast food is often superior to local food because it is "scientifically designed" (18).

Interaction effects between global and local fast-food value chains are seen in the global agro-businesses that buy products from local farms around the world or else they set up their own farms where they lease out plots to local growers to cultivate the crops the agro-businesses want. These local farms may supply internationally based fast-food units, local food manufacturers, or transnational corporations that have set up operations in developing countries in order to serve the domestic market. In developing economies, TNCs are certainly not the only actors that are practicing industrialized farming, making processed foods, and setting-up fast-food restaurants. Domestic companies do this as well. However, the global and local food chains are connected because the standards, practices, and technological achievements that local farmers, manufacturers, and fast-food companies are using were generally adopted from Western firms. Thus, there is an interaction effect. Schlosser argues that McDonald's and other fast-food chains impart to developing countries new systems of agriculture and food production, which reorient local food systems from staple domestic crops to externally induced needs (19).

For example, when J.R. Simplot entered China in 1993 and created the first commercial French fry for the Chinese market, agricultural producers began cultivating potatoes to meet this new demand.
for processed food (20). Similarly in India, after importing processed French fries for several years, by 2010 each McDonald’s French fry is expected to come from Indian soil but processed by McCain Foods. McCain worked with Indian growers for 9 years to change their potato crop to the Shepody variety to meet McDonald’s exacting standards (21). This is a switch from the typical Indian potato varieties that are low in solids and high in water. Both companies see emerging economies as cornerstones for the frozen food market.

The dissemination of global fast-food production and consumption through local imitators is evident in the rapid growth of local fast-food brands in developing countries, as well. Jollibee, southeast Asia’s version of McDonald’s, is considered one of the region’s most profitable corporations with over 1,655 franchises, branches, and subsidiaries across Asia-Pacific (18).

China symbolizes the penetration of fast foods in developing countries and the interaction between global and local dynamics. KFC is one of the most successful fast-food chains in China. As of 2008, there were over 2,497 restaurants in Mainland China. Five hundred or more restaurants are planned for 2009. The emergence of KFC and other leading fast-food chains in China is shaping local food systems in lasting ways. Agricultural imports have increased because foreign firms are demanding particular commodities as key ingredients for their fast-food staples. The food-processing industry in China has grown at high double digits over the past 5 years. Large foreign food manufacturers have continued to set up facilities and expand their Chinese operations to cater to the demand from both global and local firms in China. For example, Tyson’s, a top supplier to KFC, had two acquisitions in 2008. As with poultry farmers in the United States, Tyson pushes standards onto Chinese poultry farmers (e.g., types of feed and antibiotics used) and in the process impacts local agricultural suppliers (e.g., farmers switching to soy bean cultivation which is used as feed for poultry).

THE POWER OF MARKETING

What has spurred the meteoric rise of fast-food chains and allowed them to solidify their market power while not being food producers themselves is the role of marketing and brands. For the past 50 years, the fast-food revolution was buoyed by the top brands’ ability to mold marketing messages in multiple media that impacted how consumers perceived fast-food. Corporations like McDonald’s and KFC expanded their brand image with extensive marketing and advertising.

Image creation for food products and brands, domestically and internationally, is one of the most powerful tools that affect food choices. In 2001 the global advertising budget for food products was around $40 billion, with confectionary, sweetened breakfast cereals, and fast-food restaurants representing the most frequently advertised food options (22). Lang and Millstone argue that selective advertising of foods high in fat, sugar, and salt undermines the ability of individuals to make healthy food choices.

Rather than being passive consumers subject to adult wishes, children are often the target in the messaging and creation of fast-food brand identities. They are also more vulnerable to the marketing messages being transmitted. Story and French document how fast-food companies influence purchasing behavior through television advertisements and school marketing programs. Food advertisers are second only to automakers in television advertising expenditures, with campaigns targeted toward children estimated to cost $1 billion (23). Ninety-five percent of US fast-food restaurants’ budgets are allocated to television placements with children typically viewing one food commercial every 5 min. According to TNS Media Intelligence, in 2007 overall TV spending by McDonald’s, Kellogg, General Mills, and Campbell Soup rose to $1.7 billion; 12% ($204 million) of this was spent for advertisements on children’s television channels like Nickelodeon and the Cartoon Network (24). Furthermore, children are inundated with food marketing at schools through product placements, soft drink pouring rights, and sole vendor contracts.
Fast-food marketing campaigns oriented toward children remain strong, particularly within the realm of movies. McDonald’s 2008 total marketing budget was $1.7 billion and in 2009 they launched a major promotional campaign linked to the blockbuster movie Avatar (25). Since 1997, McDonald’s has had a global alliance with the Walt Disney Co. whereby they shared exclusive marketing rights for films like Toy Story and A Bug’s Life. As children enjoyed their Chicken McNugget Happy Meals, they also were able to play with toys of Buzz Lightyear. McDonald’s moved their partnership to DreamWorks studios in 2007 to take advantage of the immense popularity of the Shrek movie franchise (26). Thus, children associate fun and exciting entertainment with particular brands and food choices.

Strong marketing and promotional initiatives in the United States by the largest fast-food companies parallel the marketing campaigns that follow a fast-food company’s entry into foreign markets. These companies have continued to target children in their global operations. The marketing strategy “think global, act local” has become the rallying cry of global marketing campaigns (27) with children and youth representing a key part of this “glocalisation.” Both McDonald’s and KFC have marketing campaigns, particularly in East Asia, that appeal to children and teenagers through the use of Internet texting, in-store prizes inspired by the summer Olympics, and the marketing of “cool.” Li highlights how KFC marketing strategies in China have a dual strategy that keeps KFC “hip” for young consumers who want a Western brand experience and culturally sensitive for adults who appreciate the Chinese-style menu items like the Old Beijing Chicken Roll (28).

FAST-FOOD COMPANIES ON THE DEFENSIVE

During the past decade, consumer and public health advocates and government bodies have begun to highlight the health dangers of excessive consumption of fast foods and the irresponsibility of fast-food marketing campaigns oriented toward children. This public outcry has spurred an attempt by fast-food firms to “rebrand” themselves by offering healthier food options. These shifts could lead to significant changes along the value chain if fast-food buyers begin to demand healthier products (including additives and other inputs) from their suppliers, but many are skeptical that these “healthy choice” changes are in fact superficial.

The launching of health-conscious initiatives by fast-food firms followed a series of well-publicized reports and lawsuits criticizing the marketing practices of the top firms and the lack of nutritional value in their food options. In 2008 the Center for Science in the Public Interest and the California Center for Public Health Advocacy released a study that concluded that most of the kids’ options at venues such as McDonald’s, KFC, and Wendy’s are too high in calories (29). In addition, in 2004 the World Health Organization launched its Global Strategy on Diet, Physical Activity, and Health that called on governments and private industry to curb the marketing of unhealthy dietary practices. However, most actions by the industry regarding standards for marketing practices are merely voluntary. The Children’s Advertising Review Unit (CARU) of the National Council of Better Business Bureaus sets guidelines for policies and standards for food advertisers in the United States, but it has no enforcement authority.

The most visible government actions to change fast-food industry practices have involved the regulation of trans-fats, a common component of fast-food products, and required nutritional labeling. This has mainly been handled on a state-by-state basis. California, New York City, and Texas have already enacted or put forward legislation banning trans-fats in chained restaurants. In addition, the Labeling Education and Nutrition (LEAN) Act, a recent 2008 federal legislation that would create one standard for disclosing information in chain restaurants nationwide, is garnering some industry support, but many companies still oppose detailed labeling such as listing grams of saturated and trans-fats and
sodium levels as menu items (30). With greater public awareness about fast-food health issues and the push for government regulation, the industry has sought to deflect this new market pressure. As of 2008, according to Euromonitor International, almost all the leading fast-food chains have either eliminated or are attempting to eliminate trans-fat (31).

Both McDonald’s and KFC have begun new marketing campaigns to highlight their moves toward more nutritious meals. Fast-food brands still struggle, however, between new healthier claims and the core brand messaging of their classic meals, while trying to avoid formal regulation. Yum! Brands, KFC’s parent company, leads the industry in putting forward calorie count menu boards, and KFC touts their trans-fat-free chicken items. KFC has also created new healthier items, such as boneless and grilled chicken options, salads, and wraps. These initiatives have accelerated since 2003 when the company began to push the idea that chicken is part of a healthy diet, particularly in comparison to the offerings of their fast-food competitors. Marketing analysts have praised the effectiveness of this strategy, since consumers now think that fast-food chicken is better than fast-food beef (32).

McDonald’s, more than any fast-food company, was subject to harsh criticism for the low nutritional value of its food. Public exposes with lawsuits, the 2004 documentary “Supersize Me,” and bestseller books and documentaries that excoriate the economic and social abuses of our industrialized fast-food culture and the agricultural systems that support it (e.g., Food Inc., Fast Food Nation, Omnivore’s Dilemma, and In Defense of Food) have all spotlighted the fast-food industry and its top representative, McDonald’s. Originally McDonald’s went on the defensive, but in the last few years the company has attempted to rebrand itself as a restaurant that offers food options for a balanced diet. They started educational campaigns in 2004 where Ronald McDonald touted four key messages that range from making balanced food choices to embracing an active lifestyle (33). Diverse salad menu options, new forms of wraps, and fruit options for kids’ Happy Meals are also part of the rebranding effort. Similar to KFC, McDonald’s has used its Web site as a medium to push its initiatives, such as providing nutritional facts of meals and recommending to customers “simple steps to trim fat,” “save on sodium,” or “cut calories.”

The initiatives from KFC and McDonald’s demonstrate how lead firms can be pressured to modify some of their business practices. Nevertheless, many questions remain regarding the significance of these changes. Are these initiatives merely part of what Simon labels “nutriwashing” (34) or attempts to cover up what Brownell calls the epidemic of a “toxic food environment” (35). Euromonitor International points out that most of the growth and profits of fast-food firms are still generated by sales of fatty food options. Moreover, McDonald’s executives are quick to highlight personal responsibility and choice as the reasons why individuals make bad dietary decisions and to assert that “advertising is not the issue” in influencing food choices (36). These statements seem to contradict the value McDonald’s puts on marketing and advertising, as witnessed by its nearly $2 billion marketing budget, revitalized campaigns for the classic McDonald’s Big Mac, its dollar menu, and its global brand positioning. Critics argue McDonald’s products are not as healthy as claimed and that calorie counts are an inadequate basis to determine the nutritional quality of food (37).

The US fast-food industry’s attempts to counter criticism need to be placed in a global perspective. The chains’ practice of opening up restaurants abroad, particularly in developing countries, brings fast-food menu items to new markets but changes local food production systems through global-local interaction effects. At the beginning of the twenty-first century a new McDonald’s was opening somewhere in the world every 8 h (19). The size, influence, and modern image of fast-food business practices change how local foods are produced, marketed, and distributed, with long-term effects for food and agriculture systems beyond the fast-food industry in these countries. The lax regulatory environment in many developing countries and the value placed on economic development, often to the detriment of social and environmental protection, underscore the multiple dimensions of fast food’s meteoric rise.
CONCLUSION

The severity of the global childhood obesity pandemic calls for new theoretical frameworks and research agendas that take into account the broad factors that affect consumption patterns and behavioral choices related to public health crises. The GVC paradigm gives us a foundation to examine how some of the main corporate strategies and international processes relating to the production, distribution, and the marketing of fast-food companies are linked to consumption patterns around the world and to childhood obesity as a health problem.

The rise of the fast-food industry has influenced the social conditions of life in developed and developing countries in ways that can contribute to childhood obesity. Many fast-food companies have already been compelled to change certain practices within the fast-food global value chain, but research is still needed to assess whether the health-related initiatives of top firms are merely superficial. The structural environment that these companies shape, nationally and globally, continues to constrain, induce, and pressure how individuals, and especially children, make food choices that can adversely affect their health.

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Editor’s Question and Authors’ Response

- Global corporations wield enormous power over the worldwide production, distribution, and consumption of food. You have argued that corporate decisions and practice promote the dissemination and consumption of fast food and thereby contribute to the epidemic of childhood and adult obesity. A growing movement now focuses on support of local producers of fresh fruits, vegetables, and meats. Do you think that this “locavore” movement can compete effectively with global corporations for a share in the global food market?

- The “go local” approach to food consumption has gained a lot of momentum with the publication of books like Eric Schlosser’s Fast Food Nation (2001) and Michael Pollan’s The Omnivore’s Dilemma (2006), and Robert Kenner’s newly released film, “Food, Inc.” (2009). These materials highlight the vast power of contemporary food and agricultural multinational companies and the growing health, safety, and environmental concerns that our mechanized, highly concentrated, and increasingly global agricultural and food production systems have generated. While the “locavore” movement is a welcome counter-trend to the commodification of our food choices, it is by itself inadequate to address the larger issues at hand.

- For all the criticisms that can be made of our industrialized food system, it has one big advantage: it has staved off (at least for the time being) the earlier and dire Malthusian fears of an inadequate food supply. The scientific advancements that have led to improved seed varieties for staple crops like rice, corn, and wheat and the manufacturing and logistical advances in producing and distributing food to reach both urban and rural population centers around the world mean that a small fraction of our workforce (less than 1% of the US population of 285 million are farmers) (39) is producing vast quantities of relatively inexpensive food accessible to everyone.

- A major value of the “locavore” movement is that it is making clearer the hidden costs of our industrialized food system. Not only are the low nutritional value and dietary abuses of “cheap calories” in our fast-food culture being critically evaluated but the environmental dangers of this
system are also being exposed. Buying local reduces the "food miles" (and thus the carbon footprint) of our food choices, and it also promotes economic diversity and a healthier local ecosystem, which are important steps toward sustainable consumption.

- However, local food systems will not replace globalized food and agriculture for various reasons. There is a scaling up problem, which is also related to costs. To feed the ever larger urban populations of the world, there is no substitute for the concentrated and highly coordinated production and distribution system put in place by global agribusiness companies. Perhaps even more surprising than the "backlash" to these giant firms represented by the locavore movement is the pervasive imitation of modern fast-food concepts in the developing world. Equally distressing is the fact that some of the icons in the healthy food counterculture movement are themselves conglomerates. Whole Foods, Ben & Jerry's, Danone and Starbucks are now transnational firms, not so dissimilar from the fast-food and standardized brands they railed against.

- The locavore movement is a positive trend, but it is more of social movement than an economic counterweight to our global food and agriculture system. The healthy food culture will need to be buttressed by supportive government legislation, which makes healthy diets and preventive health care more affordable and accessible to our entire population, rather than an attractive option for small subsets of our population.

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