Food Safety in Modern Japan

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Abstract: This paper will investigate the latter issue through an analysis of food safety in modern Japan. The importance of food safety to many Japanese consumers is reflected in the growth of organic food production, the success of the Japanese consumer cooperative movement over the past 20 years, and the "greening" of the marketing strategies of many food firms. We will begin with a review of historical concerns about food supply and the relationship between diet and health. We then demonstrate the extent to which food safety concerns have become widespread amongst Japanese consumers and how food safety concerns are a logical outgrowth of historical concerns about food security and health. These findings are then reviewed within the context of theories of contemporary Japanese social change. Our argument is that consumer concern over food safety reflects the cultural value placed on eating and health, is unlikely to dissipate in the foreseeable future, and that the emergence into the mainstream of food safety concerns presents challenges to Japanese social movements promoting alternative food systems.

1. Introduction

Food is undoubtedly an important and sensitive topic in contemporary Japan. Even the casual visitor cannot help but notice the seriousness with which people in Japanese society purchase and prepare the ingredients for their cooking, whether it be Japanese or non-Japanese cuisine. The properties that various foods contain for maintaining physical health are a constant theme in Japanese TV programs. At bookstores and railway station kiosks, one can find a wide variety of magazines filled with articles and photos of food from many cultures. Food and cuisine appear in multifarious contexts in the media, be they to do with travel or famous personalities, or health, beauty and family life. The variety and depth of the social meanings of food as expressed in the Japanese media suggest the firm commitment to enjoyment of food felt by Japanese people – and they also suggest that food is an appropriate vehicle for understanding Japanese culture and society.

Food is also an intense political issue in Japan, as witnessed by the variety and complexity of government agriculture and food related policies.

The Japanese people are acutely aware that their dinner tables are covered with foods imported from all over the world. Just as middle-aged and older Europeans and Americans retain strong memories of the oil embargos of the 70's, their contemporaries in Japan remember the U.S. soybean embargo of 1973. The government and media often make mention of the fact that the national food self-sufficiency rate is only 40 percent when computed on a caloric scale. Thus, agricultural and food security "crises" have always been important in Japan, with external political pressure on Japan to import rice a potent symbol of Japan's reliance on imported foods throughout the GATT Uruguay Round, as well as the more recent round of WTO talks in Seattle.

Not surprisingly, food is also a topic of longstanding interest on the part of academics who study contemporary social life in Japan. One line of research, coming largely out of the anthropological tradition, focuses on food, particularly cuisine, as a vehicle for understanding the nature of Japanese culture and the ways in which cultural change is occurring. Ashkenazi (1991), for example, has examined Japanese cuisine's long history, while simultaneously investigating how this cuisine has evolved in response to external cultural influences. For Ashkenazi, the end result continues to be a very "Japanese" pattern of food consumption, one that is constantly reinventing itself.

The business and marketing literature on food in Japan is also extensive. The primary objective of this research is to understand food consumption in Japan in order to market to Japanese consumers. While the business and marketing literature focuses more on food industry structure and consumer demand than on the symbolic meaning of food in everyday life, the findings and implications parallel those of the anthropological literature. For example, Nielson and Lu (1994) analyze the high quality and sophistication of food packaging in Japan, and recommend that exporters pay more attention accordingly. Riethmuller (1994) focuses on the upheaval in the Japanese food distribution system, including the decline of traditional wholesalers and "mom and pop" stores. Yet he also takes care to point out that while the system is rapidly changing, it retains a Japanese character, and that exporters need to keep abreast of those changes and their influence on consumer buying patterns.

Our goal is to examine changes in Japanese mainstream food lifestyle as a vehicle for understanding how Japan's culture and political economy are evolving. We do this through an analysis of the food safety movement in Japan. While food riots, consumer cooperatives, and other aspects of the consumer food movement have a long history in Japan, food safety has become a focal point of the broader consumer movement only within the past quarter century. An analysis of the rise of the food safety movement

and how it fits within the broader context of Japan's food history is extremely useful for detailing how Japanese food culture is changing and how Japanese people are responding to various aspects of modernization. While we do not wish to overstate the significance of the food safety movement in Japan as a contemporary political movement, a majority of Japanese consumers do report that they are concerned about food safety and import issues (Jussaume and Judson 1992; Jussaume and Higgins 1998). Given that Japanese consumer sensitivity about food safety appears to be related in part to culturally shared concerns about food imports and modern agricultural practices, we believe that an analysis of the food safety movement can yield useful insights into contemporary Japanese political economy and society.

To tell this story, we begin with a review of the role of food in recent Japanese history, and then detail the rise of the food safety movement. This includes a description of the growth of the organic food market, and culminates with an analysis of the current response of Japanese consumers towards foods produced from Genetically Modified Organisms (GMO). We also discuss the political, economic and social dimensions of the food safety movement. We end with an evaluation of where the food safety movement in Japan is headed, and what this tells us about food as a focal point for social movements in Japan.

2. THEORETICAL CONTEXT

In many ways, Japanese society can be said to be facing a crisis in its agricultural and food system. This crisis is linked to the ongoing political restructuring of the global food system, under the context of negotiated trade regimes like GATT, that is designed to expand global food trade under the regulation of transnational corporations. In the Japanese context, this has been expressed in a critique of protectionist state policies in agriculture and food distribution (Alston, Carter and Jarvis 1990; Anderson and Tyers 1987). The argument is made that globalization and trade liberalization are inevitable, and that Japanese agriculture can survive only through a process of deregulation and technological intensification (Honma 1994; Kano 1982). Recently, the Japanese national government has accepted the basic premises of these arguments, and has begun to pass a series of new laws and policies designed to "de-regulate" food production and distribution in Japan. This includes the government's decision to liberalize rice imports, the passage of the New Food Law (Francks 1998), and the enactment by Parliament of the Basic Law for Food, Agriculture and Rural Areas on 12 July 1999.

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As state regulation of the food and agricultural sector has weakened, foreign food and agribusiness firms have become increasingly active in Japan, contributing to the importation of various practices and tastes – and perhaps to a deepening of the Japanese agricultural crisis. The theoretical argument has been made that a heavy reliance on the private sector to regulate the agricultural and food sector is unhealthy for poor economies and human diets because the main focus of firms is on profits rather than nutritional, food safety, employment, environmental, and land use issues (Friedmann 1995). Such a perspective is popular among many farmers and consumers in Japan, where there has been a constant stream of criticism of liberalization and de-regulation in the agriculture and food sector. Arguments are made that increased trade puts the sovereignty of the nation at risk (Tashiro 1998), and that rather than to stress productivity, economic efficiency and profit, the goal of a healthy agri-food system should be to promote personal, community and environmental well-being (Ôshima 1999). In other words, the future shape of agricultural production and food consumption is a contested area, with part of the debate centering on how economically rational or "Japanese" the future system should be.

Nonetheless, for all these changes in the political economy of food, observers have consistently found that despite increasing exposure to external cultural influences often mediated by multinational enterprizes, Japanese food culture is not becoming "Westernized." Rather, many analysts note that Japanese culture has been absorbing external cultural influences for centuries and that while Japanese culture changes as a result of the process, it influences the way in which these influences are adapted, and thus reproduces itself. A classic example of this type of analysis is Ohnuky-Tierny's (1997) study of how McDonald's Japan has influenced, and been influenced by, Japanese culture. She argues that while the growth of McDonald's has contributed to the development of new manners and fashions, including changes in table manners, Japanese people continue to view McDonald's offerings as *snacks* rather than *meals.* In other words, she argues that while McDonald's has influenced how young Japanese approach their meals, Japanese culture has influenced the degree to which McDonald's menu offerings are viewed as food.

Such findings suggest to us that the question of whether Japanese food culture is "Westernizing" is not particularly relevant. Rather, it is more appropriate to look into the ways Japanese culture and the Japanese political economy are being influenced by "external" organizations, values and ideas, and what this means for the future structure of Japanese culture and society. More specifically, in our case, we wish to understand the extent to which the concern over food safety by some elements of the Japanese population is reflective of an evolving Japanese way of understanding food,

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and perhaps is a response to the pressures of economic rationalization. In our discussion, we ask: a) Is the Japanese food safety movement simply a "borrowing" of concerns being expressed elsewhere in the world, or does it have significant domestic cultural content?; b) Can this movement be expected to continue and perhaps grow in contemporary Japan?; and c) Should this movement be seen as part of a trend that will ensure that the Japanese food and agricultural system will retain some of its cultural distinctiveness? We begin developing our answers to these questions by reviewing the recent history of food and food problems in Japan.

3. Evolution of the Japanese diet and the food safety movement

It should not be surprising to discover that a significantly larger percentage of the Japanese population is concerned about food safety issues than appears to be the case in the United States (Jussaume and Judson 1992; Jussaume and Higgins 1998). An explanation of how and why these concerns have arisen begins with the Japanese historical traditions that are related to food and diet, including the quality and availability of food. A Japanese dietary pattern that was centered on grains (especially rice), vegetables, soybeans and fish, and emphasized the medicinal aspects of food, evolved over the centuries (Yamaji 1987). Of course, this was the *ideal* typical diet. There were regional variations, and many peasants ate far less of these foodstuffs on a daily basis than is popularly recognized. Famines and other disruptions to the food supply were a constant threat. According to one historian, there were 15 major famines during the Tokugawa era (Hane 1982: 52–53); and the creation of warehouses of grain to use in time of famine was a central element of official Tokugawa policy (Bix 1986).

A dietary pattern that was centered on grains, vegetables, soybeans and fish developed over the course of centuries in Japan. The reasons for this are varied, but include geographical, climatic and cultural factors (Sahara 1999). For our argument, the way in which this pattern evolved is less important than the fact that it was established and reinforced by ecological conditions, and became the foundation for widespread conceptions on what was good to eat, both in terms of taste and maintenance of personal health.

The desire to secure an adequate supply of the staples of a healthy traditional diet did not end with the creation of the modern Japanese state in the latter half of the 19th Century. Food security continued to be a focal point of Japanese government policy as well as a cause of popular uprisings. The most famous of these were the rice riots of 1918, which inspired the government to pass the Rice Law of 1921 (Hirashima 1981). This law

served as one of the foundations of government food and agrarian policies for most of the 20th century (Matsumoto 1959). Concern over rice supplies was also one of the driving forces behind colonial expansion, as the colonies were viewed as a source of rice for the Japanese homeland. Thus, concerns about food security have been central to the modern history of Japan and its people.

When faced with food shortages, Japanese consumers have not limited themselves to participation in riots or expressions of dissatisfaction with government food policies. They have also become actively engaged in finding their own solutions. In modern times, Japanese consumers began to organize and participate in cooperatives, such as the *Tôkyô Kyôritsu Shôsha*, established in 1879, the first of many consumer cooperatives organized in Japan (Kawano 1986). These early cooperatives were influenced by the Rochdale consumer cooperative established in Manchester, England in 1844. They were frequently organized by industrial workers and government employees. Their primary intent was to provide food to members at low prices. Due to economic difficulties and a hostile political environment, early cooperatives rarely survived more than a few years, but efforts to organize cooperatives continued. The oldest Japanese cooperative still in existence, the *Nada Seikyô* was founded in Kôbe in 1921, and merged with the *Kôbe Seikyô* in 1960 to become what is now called *Co-op Kôbe*, the largest consumer cooperative in contemporary Japan.

The late 1940s and early 1950s were a particularly difficult time in Japan with regard to food as a result of hardships brought on by World War II and its aftermath. The daily per capita supply of calories fell to below 2,000 during the war and remained low until 1956 (Ogura 1980). The stimulation of rice production and distribution by subsidizing the consumer rice price became a central feature of government policy at this time. In light of current debates over the desirability of importing rice into Japan, it is interesting to note that during the 1950s, the United States was a major source of rice for Japan under PL480[1] (USDA 1974), in order to make up for lack of supply. The determination of consumer and producer prices for rice became one of the most crucial political events of each year, so much so that one analyst was compelled to write that "the price of rice may be thought of as representing politics itself in Japan" (Hemmi 1982: 235).

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[1] Public Law 480, passed soon after the end of World War II, provided for subsidized grain sales from the United States to foreign countries. The goals of the law have always been: a) to support domestic grain prices by reducing excess domestic supplies; b) develop foreign markets for U.S. grain; and c) to promote U.S. foreign policy.

In other words, access to a sufficient quantity of food was as, if not more important for Japanese consumers after World War II than it had been in previous years. Once again, many Japanese consumers did not simply rely on their government to enact food policies, but organized themselves into cooperatives and other organizations. These efforts are reflected in the founding of the Japan Cooperative Alliance (*Nihon Kyôdo Kumiai Dômei*), the forerunner of the Japanese Consumers' Co-Operative Union (*Nihon Seikatsu Kyôdo Kumiai Rengôkai*), in 1945. The *Shufu Rengôkai* (1948) and the *Zenkoku Chiiki Fujin Dantai Renrakukai* (1952) also were organized during this time period. These two latter organizations were part of a burgeoning womens' movement that took advantage of the fact that it was acceptable for women to be concerned and politically active about consumer matters. Thus, for example, the *Shufu Rengôkai* organized for choice in retail outlets and products, low prices, and consumer education.

With the rapid expansion of the economy in the 1960s, major changes took place in Japan both in terms of food quantity and diversity, and a subtle shift took place away from concerns about getting enough food to how the food was produced. The so-called "Westernization" of the Japanese diet began at this time. Among other changes were a decrease in rice, soybean and fish consumption, and a concomitant rise in red meat, dairy and wheat consumption (Ishibashi 1997; Tokoyama and Egaitsu 1994). Not only were Japanese consumers, in the context of increasing prosperity, experiencing greater access to a wider array of foods at lower prices, but as in other parts of the world, they began to become involved in social movements concerned with environmental problems, world peace, and the strengthening of the womens' rights movement. Groups like the Japan Consumers' Association (*Nihon Shohisha Kyôkai*), the New Japan Womens' Association (*Shin Nihon Fujin no Kai*), active in the womens' rights movement, the Japan Housewives' Association (*Shufu Rengôkai*), and the *Seikatsu Club Seikyô*, a kind of new wave consumer cooperative, were formed. Interestingly, while none of these organizations was founded as a response to a perceived food crisis, many later came to be involved in food and agricultural issues.

By the late 1960s and early 1970s, the vast majority of Japanese consumers no longer had to worry about the issue of food availability. Consumption of red meats, dairy products, fruits and processed foods continued to increase, while consumption of traditional items like rice and soybeans declined (Akiya 1998; Tamura and Inoue 1999), a trend which continued throughout the 1980s and 1990s (Ishibashi 1997). Concurrent with these changes in food consumption behavior was a shift in the Japanese consumers' movement from concerns about food supplies towards food safety.

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One of the factors contributing to this shift in concern was widely publicized food poisoning cases. A famous example was the Morinaga milk incident. In 1955, arsenic contamination of milk additives led to 12,000 cases of poisoning and 138 deaths. This incident was particularly tragic because many of the victims were babies and infants. The political fallout from this incident propelled the government to revise the Food Safety Law in 1957. It also encouraged some alternative movements to call for the production of "safe" and "no chemical" foods. Another well-known food poisoning scare was the Kanemi rice oil case of 1968. In this incident, rice oil was found to be contaminated with PCBs (Polychlorinated Biphenyls) and resulted in 1,900 officially recognized cases of poisoning. This case also had a tremendous impact on public perceptions of the food industry.

A second factor that contributed to the shift towards food safety concerns in Japan was increasing citizen awareness over environmental degradation and its effects on food production (Nakajima 1998). This was given momentum by a growing number of pollution incidents that directly impacted human health by virtue of their effects on food safety. Perhaps the most famous of these cases was the Minamata poisoning affair of 1953 in Kumamoto prefecture. A parallel incident occurred in Niigata Prefecture in 1964. In both cases, contaminants were passed on to local residents through their consumption of locally harvested seafoods. Lower-income residents were particularly vulnerable, as they were heavy consumers of local seafoods that they themselves harvested. Not only were consumers becoming increasingly aware of the risks associated with food contamination: other events were leading consumers to consider how dependence on imports might affect future food security and safety. One important symbolic event was the infamous soybean embargo of 1973, when the U.S. government temporarily suspended exports of that commodity in order to protect domestic supplies. Two years later, the Japanese Ministry of Agriculture, Forestry and Fisheries issued a ban on the use of OPP (Orthophenyl Phenol) on grapefruit, most of which were being imported from the United States. As a result of events like these, from the 1970s onwards, Japanese consumers became sensitized to the relationship between food safety and trade issues. Concern about the safety of imported food has increased since that time, and culminated in debates over the use by food-exporting countries of post-harvest chemicals, which are illegal to use within Japan, as well as rice import liberalization. These historical events, as well as an interest in preserving opportunities to consume traditional foods, have provided the basis for the shift in consumer concern from food supplies to food safety and security, and the rise of the food safety movement in contemporary Japan.

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4. The Japanese food safety movement

Food safety concerns among Japanese consumers germinated in the 1960s and 1970s, but evolved out of traditional sensitivities about access to food and the important role diet plays in maintaining health. In the early years, the Japanese consumer movement reacted by organizing protests against the food industry and state organs, such as the Ministry of Health, whose policies were seen as favoring industry rather than protecting human health. However, the protest movements began to weaken in the 1980s, and a new type of movement, dubbed the "self-help movement" by Taniguchi (1993), began to emerge. Consumers were becoming tired of endless fights against companies and government over the expansion of an industrial style food system, and began to organize to create an alternative system. In other words, as often happens with social movements, there was a transformation from "opposition" to "creating alternatives."

The result was the creation, or in some cases the evolution, of a growing number of grass-root level consumer organizations that took on food safety or food security as a cause. For example, according to the Tôkyô Metropolitan Government, approximately 970 different consumer groups are active in the Tôkyô Metropolitan area. Although these groups are quite diverse, one of their key common themes is the environment. According to the Tôkyô Consumer's Forum web site, one issue at the core of the environmental movement is "food safety," and "in particular, much attention is being focused on the question of foods that involve genetic recombination and Endocrine Disruptors. Consumer groups are involved with just about everything that concerns everyday living."[2] Thus, the Japan Consumers' Association,[3] which sponsors various products sold in the domestic market, is a strong promoter of organic agriculture and the movement to create a "new" agriculture and food system based on food safety. Similarly, the Consumers' Union of Japan (*Nihon Shôhisha Renmei*),[4] which has a broad mandate, is a leader of the anti-GMO movement in Japan.

While many consumer groups devote part of their attention to food safety and security issues,[5] a number of smaller organizations concentrate

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[2] http://www2.convention.co.jp/consumer/list_SA05.html

[3] http://www1.sphere.ne.jp/jca-home/

[4] http://www.jca.apc.org/nishoren/

[5] In the Japanese context, food security generally refers to food supply and availability. Supporters of agricultural support policies often argue that it is necessary to maximize domestic agricultural production in order to maintain food security. Food safety, on the other hand, is generally a reference to whether or not food is safe to eat. This includes a requirement that food is not biologically or chemically contaminated.

on food safety as their core objective. As more and more processed foods find their way onto store shelves, many Japanese consumers are considering what impact new, processed foods will have on the Japanese diet, and by extension, the health and well-being of those who eat such foods. One such movement, the *Nihon no Dentôshôku wo Kangaeru Kai* was established in 1988 as a result of a discovery that elderly residents of a particular town near Ôsaka who ate a traditional diet were particularly healthy and energetic (Miyamoto 1994). The organization, which began with 22 members, now has more than 600 members, and publishes a bi-monthly bulletin. The group's primary goal has been to support the reevaluation and rediscovery of a Japanese traditional diet. One way in which the group does this is to sponsor a train that travels to a particular region of Japan every year to promote a Japanese diet. This train campaign is designed to serve as a countermeasure against the "American Train Campaign" sponsored by U.S. interests, which is aimed at promoting food exports to Japan. The first Japanese food train was in September 1992, and the eleventh train is scheduled to make its run somewhere in Japan in November 2000.

As these consumer concerns and organizations evolved, so did the marketing strategy of Japanese consumer cooperatives. Indeed, the rise of food safety and quality concerns became the springboard for the greatest expansion ever in their history. Although many Japanese consumer cooperatives were well established by the 1960s, a focus on prices was not proving to be an effective strategy, particularly in the face of the expansion of large supermarket and department store chains. After much discussion, in 1973 the National Association of Consumer Cooperatives (now known as the Japan Consumer Cooperatives Union) decided that providing safe food products, and not only the traditional priority of low cost, would be its primary marketing strategy (Katsube 1977; Nomura 1986). As a result, the consumer cooperative movement throughout the country began a period of steady growth that would last almost two decades.

One reason for the success of consumer cooperatives over the past 25 years stems from the alliances they have developed with various farmers groups, such as the *Nôminren* (National Confederation of Farmers' Movements). Another is the cooperatives' promotion of a joint buying marketing strategy, whereby neighborhood groups of consumers submit their order to a co-op as a group. This is a particularly important strategy for *Seikatsu Clubs*. Cooperatives have also featured products grown under contract with producer cooperatives under a *teinôyaku* (reduced input) production system, and frequently develop their own brand name products as a means of publicizing that those products are guaranteed to have been locally grown under specified production systems. Although not as widespread as consumer cooperatives, a small organic farming movement

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relying heavily on direct sales to consumers experienced a similar period of growth at this same time.

In the 1990s, the growth of organic and other types of safe food sales, as well as the increasing success of consumer and women's groups in bringing food safety concerns to the center of public attention, began to catch the eye of the mainstream food industry. Management at more and more firms began to recognize that the market potential for safe foods was significant, and slowly began to adapt their own marketing strategies. One well-known example in Japan of how consumer concern over safe food has been "captured" by mainstream industry is that of the Moss Burger hamburger chain. This chain of fast food restaurants has an intriguing history. It is often said that the founder of the chain developed his marketing strategy by studying McDonald's Japan and then doing everything opposite in order to exploit a different market niche. Thus, for example, Moss Burger features thick french fries, teriyaki-flavored sandwiches, and has stores on side streets and alleys. In recent years, as part of this effort to distinguish itself, Moss Burger has taken to using organically grown vegetables, and informing its customers from which farm each store's daily supply of vegetables originated. Upon entering a store, customers can view a blackboard that informs them that the lettuce being used today comes from farmer *x* in *y* prefecture, the tomatoes from farmer *w* in *z* prefecture, and so on. How effective this strategy has been in terms of market share is debatable, but the fact that a mainstream restaurant chain would contemplate it is intriguing.

Another example of the trend of corporate entry into the organic market is the recent announcement of a joint venture between Dole, Itôchû and Kyôwa. The new company, called K. I., is organizing organic farmers in Japan. Farmers agree to sell organic produce to K.I., which in turn sells the product to large retail chains. This is the first time that a multinational agribusiness has directly entered into the fresh produce market in Japan. This case is also unique because this joint venture was established expressly to target the organic foods market, and thus to develop a reputation as a large-scale provider of safe, high-quality produce. Another significant element is that this joint venture is specifically designed to create a distribution system that bypasses the existing wholesale market system for fresh produce. Thus, this joint venture has the capacity to reorganize not only the safe food market, but the entire Japanese fresh produce marketing system.

The most current, and perhaps most illustrative, example of the mainstreaming of the food safety movement is shown in the way the Japanese food industry has responded to growing consumer concerns about Genetically Modified Organisms (GMO). Although the Japanese government

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has declared that foods made from GMO grains, including those imported from the U.S., are safe (Tabei 1999), many firms in the food processing industry are moving to assure their customers that they do not utilize GMO commodities. These include tofu makers, snack food makers like Nissin Foods, and major brewers like Kirin and Sapporo. The demand for GMO-free certified commodities, along with the national government's announcement that it will require labeling of foods made with GMO commodities, has led the Tôkyô Grain and Kansai Commodities Exchanges to announce that they would separately list the trading of GMO-free soybeans as of 1 April 2000. Some schools have also announced that they will not use GMO commodities in their lunch programs.

Clearly, consumer concerns about GMOs have been influenced by the consumer and environmental movements that succeeded in making the debate over GMOs a national issue in Japan. The *Seikatsu Club Seikyô,* with 250,000 members in 16 prefectures, first decided to ban GMO commodities from the foods they sell in January 1997. Similarly, the Green Coop, headquartered in Fukuoka with 295,000 members, began to use non-GMO canola in 1997, and to utilize the distribution system they created in 1991 for importing corn that has not been sprayed with post-harvest fungicides. A more intriguing social movement has been the creation of the "Soybean Field Trust Movement." This movement was begun in 1999 by the Japan Consumers Federation (*Nihon Shôhisha Renmei*). It began with 15 farmers' groups in 9 prefectures and about 1,000 consumers. Within a year, the movement grew to 54 farmers' groups in 23 prefectures with more than 6,000 consumers. The purpose of this movement is to produce and consume domestic soybeans in order to avoid the imported GM varieties. Consumers pay farmers 4000 yen for a 33-square meter soybean crop that yields about 5–6 kilograms of soybeans.

The anti-GMO movement also provides evidence of how Japanese grassroots organizations are developing international ties in order to advance their agenda. A number of Japanese non-governmental organizations have become aligned with non-Japanese counterparts, in part so that they can have a role in influencing the Codex Alimentarius Commission's efforts to set standards for global trade in GMOs.[6] The National Liaison Committee of Consumer Organizations, which is comprised of 45 member organizations, including the Consumers' Union of Japan (*Shinfujin*), the

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[6] The Codex Alimentarius Commission operates under the jurisdiction of the Food and Agriculture Organization of the United Nations and the World Health Organization. Its task is to establish international food safety guidelines. The World Trade Organization utilizes Codex standards to help adjudicate food safety trade disputes.

Japanese Consumers' Co-operative Union, the Japan Housewives' Association, and the Federation of Japanese Women's Organizations, were represented as members of Consumers International at a recent Codex task force on foods derived from biotechnology. The Japan Offspring Fund (JOF), on the other hand, was an observer at the same meeting as part of the International Association for Consumer Food Organization. JOF is particularly interesting because it presents another example of Japanese cultural borrowing while simultaneously maintaining Japanese cultural values. The JOF borrows from Western-style social movements by making claims based on scientific data, conducting campaigns against agribusiness through mass media, collaborating with international organizations, and sometimes seeking partnerships with government. On the other hand, it maintains the values of a "traditional" Japanese consumer movement by opposing food imports, calling for policies to protect Japanese agriculture, respecting a Japanese diet based on rice, and praising home cooking.

In the face of the success of the social movement against GMOs and growing consumer demand for non-GMO foods, the mainstream food industry has had no choice but to develop its own non-GMO policies. This can be interpreted as demonstrating the power of the food safety social movement. However, this growing acceptance by industry of certain demands of the food safety movement also presents a crisis for certain institutions in that movement. Consumer cooperatives are now competing directly with supermarkets over shares of the safe food market. Supermarkets began vigorously to sell "safe foods" in the late 1980s. The example of GMO-free foods is once again illustrative. While consumer cooperatives were pioneers in the development and selling of brand food products made from GMO-free soybeans, many manufacturers and distributors soon followed their lead and began to declare their intention to sell non-GMO products. Some cooperatives are finding it difficult to survive this competition with supermarkets, especially given that existing laws on cooperatives can sometimes restrict cooperatives' competitiveness. Unlike supermarket chains, for example, cooperatives are only allowed to organize on a prefectural, not a national, basis.

In some ways, the crisis for consumer cooperatives can be seen as illustrative of the challenges that Japanese food-related social movements face. For example, in the most recent polls, more than 80 per cent of Japanese respondents indicated a resistance to buying foods made with GMO commodities. Consumer groups are taking advantage of this rise in concern to get consumers to think more about cooperating with Japanese farmers and regional food processors to promote domestic agriculture and local economies. However, the more the market for safe foods is legitimized by standardizing the production and distribution of organic foods, the more

difficult it becomes for an alternative food system to maintain its distinctiveness. The response of the mainstream food industry thus has the potential to diminish the effectiveness of the food safety movement as a self-help movement, and to undermine its effectiveness in promoting alternative forms of development.

It is for these reasons that we believe the food and agriculture system in Japan is at an important historical turning point. In recent years, in an attempt to survive in an era of economic liberalization and rationalization, many Japanese farmers and small retailers have adopted a strategy of producing and distributing safe foods that promote human health. Many Japanese consumers, raised in a culture with an historical tradition that is focused on the availability of food and the relationship between diet and health, have reacted favorably to that strategy. Subsequently, safe food concerns have become legitimized in the Japanese culture and political economy to the extent that they are now being addressed by the very institutions, i.e. the state and large firms, that previously sought to promote the economic rationalization of agriculture and food distribution. The playing out of this contradiction over the next few years will help determine the future structure of Japanese culture and society.

5. Conclusion

We believe that our analysis demonstrates the cultural significance of the food safety movement in Japan. Of course, concern over food safety is not unique to Japan. Throughout the so-called developed world, food safety has become a major political and cultural issue, particularly for middle and higher income consumers who can afford to demand higher quality and to pay premium prices for safe food (Kinsey 1993). In the U.S., "Consumers were willing to pay substantially high price premiums for safer produce, in return for only small reductions in risk" (Eom 1994: 769). The success of organic and other safe food marketing efforts have demonstrated that consumers are not very accepting of risks that are born "involuntarily" (Senauer 1992), such as those deriving from further application of biotechnologies into the food production process.

However, although food safety concerns and movements have become influential in other cultures, we do not believe that the growth and expression of these concerns in Japan can be interpreted simply as an example of cultural borrowing or the globalization of these concerns. While external events and influences have had an affect on the evolution of the food safety movement in Japan, the fact that the Japanese government would develop standards for the labeling of GMO foods, even though that policy is

opposed by the United States government and many multinational agri-businesses, is an indication of the strong domestic political pressure for these standards in Japan. In addition, we believe that the evidence we have presented in this paper demonstrates that food safety concerns in Japan can be viewed as a continuation of a long, historical trend of deep, culturally based concerns about food and its vital role in maintaining human health.

We also believe that the mainstreaming of the food safety movement, and its link to strong consumer interest in food and diet, provides ample evidence that food safety concerns, including resistance to GMO foods by many Japanese consumers, will not disappear in the foreseeable future. While no one can accurately predict how much more this movement will grow, we do not believe that these concerns, or institutional responses to them, are fleeting.

A more difficult question to answer, however, is what will happen to Japan's food and agricultural system now that mainstream producers and retailers have begun to market to consumer desires to buy safe foods. Will the system for producing safe food become subject to pressures to rationalize economically? Will smaller-scale Japanese farmers and food makers, like tofu makers, lose their marketing edge? More importantly, what will happen to the food safety movement?

One possibility is that, as standards develop and markets for safe foods expand, major retailers will access organic foods and non-GMO products from overseas producers and a handful of large domestic farmers organized by firms like K. I. The other possibility is that some consumers, consumer coops, small-scale farmers, and local food makers will try to further develop their networks with each other to produce organic and non-GMO foods. The success of such an alternative, sustainable food system movement will depend in part on the future direction of government policies to promote domestic agriculture and alternative food systems. What will happen in Japan is unclear, but whatever the outcome, it will certainly reflect the historical, traditional, and steadfast trend of Japanese consumer concerns about safe food.

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