Once Influenced by Foreign Foods, Japanese Food Now Influences the Diets of the World

Receiving International Attention

The Development and Expansion of the Japanese Diet

The Prototype of the Japanese Diet

According to The World Health Report 2003, published by the World Health Organization (WHO), worldwide average life expectancy in 2002 was 65.2 years, compared with just 46.5 years fifty years ago. Of all countries, Japan proudly maintains the longest life expectancy at 81.9 years (85.3 years for women; 78.4 years for men), and a 'healthy life expectancy' of 75 years. This long life expectancy of the Japanese people is one of the factors leading to international focus on the Japanese diet and the Japanese diet boom.

However, what the world considers a Japanese diet is not the traditional diet established during the Edo Period (1603–1868). While the word 'traditional' is generally used to describe customs or ways of doing things passed down from generation to generation through the ages, the English apply this term to any custom or habit that originated just fifty or more years ago. Thus, a traditional diet or dish is one that is homemade, originates in a region or with the parents or grandparents of the family, and is made from only natural foods without chemical seasonings, or instant or frozen ingredients.

In Japan today, the dishes considered to be 'traditional' are generally those from the end of the Taisho (1912–1926) and pre-World War II Showa (1926–1989) Periods. Influenced by the foods of China and the West, Japanese food by this time had become a fusion of Japanese,

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In ancient Japan, meat and the internal organs of various animals were widely eaten, with even the emperor participating in organized hunts. However, with the introduction of Buddhism in the mid-6th century came a deep reverence or all living creatures. The belief that all life was sacred spread rapidly. The Emperor Tenmu issued edicts prohibiting the killing and eating of any animal throughout Japan. Thus, the Buddhist notion that life was sacred and that meat was impure was proliferated, and the amount of meat in the Japanese diet gradually diminished.

Meat began to return to the Japanese diet with the propagation of Christianity, introduced by Francis Xavier and other Jesuit missionaries. Some of the regional lords, welcoming both Christianity and the culture that came with it, began ignoring the traditional bans against the eating of meat. The foods introduced by the missionaries, such as beef, pork, wine and bread, became very popular among these new Christian lords. Although meat was again prohibited during the Edo Era, wild game was not only eaten, but became a precious commodity in the mountain villages of Japan.

An end to this final ban against meat in the diet came when the Emperor Meiji himself began eating beef and instigated a revolution in the Japanese diet in 1872, the fifth year of the Meiji Era. Though opposition to the eating of meat also remained strong in all parts of the country, local and central governments removed the ban on meat and encouraged all citizens to include meat in their diets. These efforts resulted in the spread of a meat-eating culture throughout Japan and were a major step in the Westernization of the Japanese food culture.



Zenjiro Watanabe

Mr. Watanabe was born in Tokyo in 1932 and graduated from Waseda University in 1956. In 1961, he received his Ph.D in commerce from the same university and began working at the National Diet Library.

Mr. Watanabe worked there as manager of the department that researches the law as it applies to agriculture. He then worked as manager of the department that researches foreign affairs, and finally he devoted himself to research at the Library.

Mr. Watanabe retired in 1991 and is now head

Mr. Watanabe retired in 1991 and is now head of a history laboratory researching various aspects of cities, farms and villages.

Mr. Watanabe's major works include Toshi to Noson no Aida—*Toshikinko Nogyo Shiron*, 1983, Ronsosha; Kikigaki *Tokyo no Shokuji, edited 1987, Nobunkyo; *Kyodai Toshi Edo ga Washoku wo Tsukutta*, 1988, Nobunkyo; *Nou o Aru Machizukuri*, edited 1989, Gakuyoshobo; *Tokyo ni Nochi ga Atte Naze Warui*, collaboration 1991, Gakuyoshobo; *Kindai Nihon Toshikinko Nogyoshi*, 1991, Ronsosha.

Chinese and Western dishes. Therefore, what the world today considers 'Japanese food' has only existed since approximately fifty years after Japan began its modernization.

Even as Western foods began to influence the Japanese diet, the people remained inclined towards a diet in which rice was the main component. Rice provides much of the nutrients humans need, and it goes well with many European and Chinese dishes. Therefore, Chinese dishes and Western dishes modified to suit the Japanese palate were served as side dishes to the main course of rice. This practice, which continued through the 1950s, changed with the rapid economic growth Japan experienced beginning in the 1960s. All at once, Western foods, which had gradually found their way into the Japanese diet since the Meiji Period (1868–1912), seemed to take over the Japanese diet. This sudden increase in the amount of meat and oil led to a more nutritionally balanced diet. Whereas non-fibrous carbohydrates, provided by a diet consisting primarily of rice, had once been the main nutritional component, proteins and fats helped balance out the Japanese diet.

This is how the Japanese diet, today considered one of the healthiest by most of the world, came to be. This diet developed over the one hundred years between the beginning of Westernization in Japan and the 1970s.

Restoring the Diet After the War

In 1946, just after World War II ended, the average

Japanese person was eating just 1,400 calories per day. As this is barely enough to sustain an adult, the Japanese people were very hungry.

Japan was able to recover from the loss and confusion at the end the war and return to pre-war nutritional levels thanks to a bumper rice crop in 1955. The national economy recovered and in 1956 the Economic Planning Agency declared in its Economic White Paper that, "The 'Post-War Period' is over." By this time, the average daily caloric intake had jumped to 2,100 calories, exceeding pre-war intake, and the amount of animal protein in the diet had doubled to approximately 15 grams per day. However, the huge majority of calories and nutrition still came from rice, and the small amount of livestock farming did little to help Japan catch up to the 3,000 calories per day averaged by those in the West at this time.

In 1960, the Japanese diet was as different from the Western diet as can be imagined. At this time, the average daily intake of grains in the U.S. was 183 grams per person, 273 grams in France, 225 grams in Britain and 224 grams in West Germany, compared to 410 grams in Japan. However, the average daily intake of meat in the U.S. was 225 grams per person, 190 grams in France, 187 grams in Britain and 164 grams in West Germany, compared to the mere 18 grams eaten by the average Japanese person. Similarly, the U.S. averaged a daily dairy intake of 778 grams per person, 828 grams in France, 904 grams in Britain and 762 grams in West Germany while the Japanese averaged just 61 grams per person.

Further, the small amount of Westernization of the Japanese diet that had occurred to this point consisted primarily of the addition of processed foods that could be made from cheap ingredients such as powdered skim milk, pressed ham made from low-grade meat and sausages made from fish. Although Japan had recovered from near starvation and the diet had been Westernized to a small degree, there was little actual change in the contents, quantity or quality of the Japanese diet compared to that seen before the war. Rapid changes did not begin until the next period of economic growth.

Economic Growth and a Lifestyle Revolution

In the decades following World War II, Japan experienced tremendous and swift economic growth and overcame a number of international problems during the 1960s and 70s, including the oil crisis and a rising yen. By the end of the 1980s, the Japanese gross domestic product had exceeded that of the U.S., to be surpassed only by Switzerland, and Japan had become a world economic power with the most foreign assets.

With this economic growth came a rise in individual incomes and a luxurious lifestyle. According to NHK (Japan's public broadcaster) opinion polls, 56% of the population felt that the national living standard in 1956 was lower than that prior to World War II. Just four years later, in 1960, however, 58% of the population felt that the national living standard was higher than that prior to the war. The changes experienced by Japan over a few short decades were so great that the people

have given the period labels such as the Lifestyle Revolution, the Consumer Revolution and the Electronic Revolution. In the mid-1950s, domestic labor was reduced significantly with the introduction of the electric washing machine and electric rice cooker. While only 5% of the population owned traditional ice boxes in 1960, 50% of the population owned electric refrigerators by 1965, increasing to 99% by 1978. Homes were soon overflowing with the new electric appliances that appeared one after the other, including electric fans, mixers, toasters and electric ovens.





The first one-door refrigerator manufactured in Japan and the traditional wooden ice box (from the Showa no Kurashi Hakabutsukan)

Fuels also changed greatly. Although electricity and gas were introduced during the Meiji Period, firewood and coal were still the primary fuel sources when Japan entered World War II.

In her novel, *Chichi no Iru Shokutaku*, which takes place during this period of great change, Chieko Honma illustrates housewives' quick transition to the new fuels by describing the uses of each. Gas, coal, briquettes and firewood were all used for cooking. Wood chips or firewood were used to cook rice; coal was used to fry fish; briquettes were used to boil beans; gas was used when a strong and steady heat source was required, as for deep frying or steaming. Since the hibachi always contained hot coals deeply buried in white ashes, tea was made with water, at just the right temperature, in a kettle kept over the hibachi.

However, the use of propane gas rapidly became widespread in the 1960s. Users multiplied so fast that supply was taken over by municipal governments in 1963. This sudden shift from firewood and coal to propane gas, especially by agricultural villages, led to the gradual disappearance of the firewood and coal producing industries centered in mountainous regions. Further, the once common scenes of people grilling sardines and Pacific saury in their yards all but disappeared with rapid urbanization and the construction of apartment buildings and condominiums.

The year 1963 also saw the beginnings of a 'distribution revolution,' with the opening of the first supermarket. This new shopping concept that quickly spread throughout the nation, along with the gaining popularity of the family car, rapidly changed the way people shopped. Prior to the supermarket, housewives spent a good part of the day going from the vegetable stand to the fish monger to the butcher and

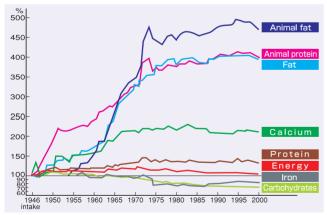
to various other specialty shops to purchase the goods they needed for meals at home. Supermarkets also meant great changes in the way products were distributed from manufacturers and suppliers. The changes to nearly every aspect of daily life witnessed during these few decades can surely be described as 'revolutionary.'

Westernization of the Diet

During this period, the Japanese diet also underwent great changes. The most obvious change was the Westernization of the diet. As with the global tendency for improved nutrition, especially with a greater intake of protein as a nation's average income increases, Japan experienced this phenomenon as its economy grew.

First, the caloric intake increased from the daily average of 2,200 calories per person prior to 1965 to 2,500 calories per person in that year. Despite further increases in income, caloric intake has remained at this level. Today, Japanese people enjoy incomes equal to or greater than those of their Western counterparts, yet the average caloric intake in Japan has never reached the 3,000 calories per day common in the West. 2,500 calories per day continues to be regarded as the optimum level at which a Japanese person's hunger can be satisfied and still remain healthy. Many individuals may even consider 2,500 calories more than enough. However, what is more remarkable than the increase in the quantity of food is the change in the quality of the Japanese diet began during the Meiji Period and suddenly exploded during the 1960s.

Figure 1 Nutrition Transition in Japan (since 1946)



Note: Increase in animal-fat intake is measured since 1952 and iron intake since 1955. From *The National Nutrition Survey in Japan, 2000*

One of the factors that promoted these qualitative improvements was the rise of movements promoting nutritional awareness. One of these movements, for example, promoted the importance of milk and animal proteins in a diet that also included more bread. Basically, a diet based on the Western example, but with smaller quantities, was encouraged. Intake trends for the three primary nutritional components, carbohydrates, proteins and fats, since the end of World War II are clearly expressed in Figure 1. One of the most notable

trends in this chart is the steady reduction in carbohydrate intake to nearly half of what it was in 1946, when rice was still the primary component of the Japanese diet.

Prior to World War II, rice distribution was regulated. In 1939, the average adult was allotted 330 grams of rice per day, compared with today's average intake of just 165 grams. Rice has been replaced by animal protein and fat. Between 1960 and 2000, meat consumption increased by four hundred percent, and by the mid-1980s, the ratio of meat to fish consumed in the average home had reversed. The Japanese could no longer be called a fish-eating people.

Fat intake also increased rapidly. Even by global standards, fat was an extremely rare component of the traditional Japanese diet. Fats were so rare prior to the Taisho Era (1912–1926) that many people suffered from diarrhea whenever they ate fatty or oily foods. Chinese food only became popular during the mid-Taisho Period because the amount of fat and oil in the dishes was significantly reduced to suit the Japanese palate.

Although post-war nutritional movements encouraged a greater fat intake, some revisions were necessary before dishes requiring large amounts of oil could be prepared at home. The desire to prepare dishes using lard and oil caused frying pans and woks, ventilation fans and chemical cleansers to become common household items. Stir-fry dishes did not become popular until after the mid-1960's, when ventilation fans began appearing. Though rarely eaten prior to the end of World War II, meat and animal fat quickly became standard ingredients in the Japanese diet following the war, and the Western dishes introduced during the Meiji Period have become a fully established part of the modern Japanese diet.

Minekichi Akabori, a cooking-school pioneer, noted in his cookbook, published in 1919 and containing recipes for Western dishes, that in the near future the dishes introduced from the West would no longer be considered 'Western' dishes. Just as Akabori predicted, the novel dishes introduced from other cultures, and timidly sampled by the people of the Meiji and Taisho Periods, are no longer considered 'foreign foods'. A prime example of this is curried rice, described in a Meiji Period newspaper article as a 'dish that combines Western and Japanese civilization,' which has become one of the most common dishes in Japan. In 1987, Japan Airlines began serving a meal of beef curry, pickled shallots, red pickles and salad with soy-sauce dressing on its international flights bound for Japan so that travelers returning home could sample the tastes of home just a little bit sooner.

Today, many dishes introduced from foreign cultures, such as sukiyaki—a stew-like dish of beef, vegetables and light broth introduced at the beginning of the Meiji Period, tempura—introduced via Nagasaki and the first Western dish to establish itself in Japan---, curried rice, pork cutlets, deepfried oysters, yakitori and ramen—originally a Chinese noodle soup, --- are standard items on Japanese menus. As Western foods in a variety of forms find their way into the Japanese diet, the Japanese diet itself is becoming more and more Western.

The Transition to Dining Out

Another major change in the Japanese diet following World War II was the change in eating habits characterized by an increase in dining out. This change was caused by the diversification in lifestyle that took place in the Post-War Period. Urbanization, the social advance of women, and changes in labor conditions led to a gradual decrease in the traditional scene of the family gathered around the table at mealtime. This new lifestyle demanded increased individualization and simplicity, and led to the development of the food service industry and instant foods.



The restaurant industry exploded at the beginning of the 1970s (Shukan Asahi Hyakka 120, Sekai no Tabemono/Nihon-hen)

From the mid-1960s through the 1970s, Japan witnessed a rapid increase in various kinds of restaurants. In 1965 noodle shops, where customers ate while standing up, made their appearance; 1967 saw the first sushi restaurant that served dishes from a revolving conveyor belt; Yoshinoya, a well-known chain restaurant serving gyudon (simmered seasoned beef over rice) made its appearance in 1968 with the catchphrase, 'cheap, fast, and good'; the family restaurant Drive-in Skylark, the sushi chain Kozo Sushi and American fast-food chains Kentucky Fried Chicken and Dunkin' Donuts emerged in 1970; McDonald's came to Japan in 1971; Shakey's Pizza arrived in 1974; the Japanese-style fast-food take-out restaurant Hokka Hokka Tei appeared in 1976; and in 1977, the 24-hour family restaurant Denny's made its way to Japan. The number of such restaurants increased from 230,000 with annual sales of 4.1 billion yen in 1960 to 430,000 with annual sales of 2.4 trillion yen in 1970 to 470,000 with annual sales of 13 trillion yen in 1992. As for the cost of dining out, a survey of all countries over the past ninety-five years by the British market research firm Euromonitor reveals that dining out in Japan is the most expensive in the world at twice the cost of dining out in the U.S. and between three and five times that in Europe.

The processed-food industry also showed remarkable expansion. The appearance of Nissin chicken ramen noodles in 1958 heralded the beginning of the age of instant foods. Following shortly thereafter, instant coffee arrived on the scene

in 1960; foods packaged in retort pouches appeared in 1965; instant curry was introduced in 1968; and instant noodles that included seasonings and could be eaten directly out of the cup they were sold in appeared in 1971. A variety of frozen and packaged instant foods appeared one after the other, gaining immediate popularity. Frozen-food production increased from 5,000 tons in 1960 to 1 million tons in 1990 to 1.5 million tons in 1999, while instant-food production increased from 3,000 tons to 80,000 tons to 1.25 million tons in the same years. Retort-packaged foods increased from 1,000 tons in 1985 to 150,000 tons in 1990 to 250,000 tons in 1999.

The introduction and rapid proliferation of such home appliances as the refrigerator-freezer and microwave oven since the 1960s have both supported and promoted the use of processed foods. Today, more than half of the money spent on food by the average family goes to dining out and processed foods. We expect that the Japanese consumer will continue to spend more and more money on processed foods and dining out as the trend toward the nuclear family or single-person household continues.

Establishment of the Japanese Diet

Japan was not the only country whose diet improved following World War II. Western nations began enjoying a richer diet before Japan did due to the rise in average incomes in those countries. Where a diet of 3,000 calories was the average in 1960, caloric intake had risen to 3,200 calories or more per day by 1980. As intake increased, carbohydrate-rich diets became fat-rich diets. As a result, nutritional balance began to collapse in many countries, causing serious health problems around the world.

Overeating is a significant problem in the U.S. The growing sense of impending crisis, as well as the rise in medical costs, from a rapid increase in diet-related heart disease, diabetes, stroke and high blood pressure have led to a fundamental examination of eating habits in that country. Concerns were first acknowledged in 1977 with the *Dietary Goals for the United States* (the McGovern Report), issued by the U.S. Senate Select Committee on Nutrition and Human Needs. Prior to the McGovern Report, government efforts to influence the national diet focused on encouraging the population to eat more of what

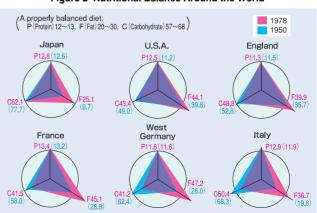


Figure 2 Nutritional Balance Around the World

Information provided by the Ministry of Agriculture, Forestry and Fisheries of Japan.

was good for them. This report heralded a new era in health promotion: negative nutrition. Americans were encouraged to avoid foods that were deemed bad, especially fat, sugar and salt. Similar health concerns began to surface in Japan, which was showing tendencies in its diet paralleling those of the West. The National Nutrition Survey in Japan, 1975, published by the Ministry of Health and Welfare, noted that although the great economic growth experienced since 1955 had improved the national diet incredibly, the increase in obesity, anemia, high blood pressure and heart disease clearly illustrated the correlation between illness and diet. Although the government had previously encouraged Westernization of the diet as part of Japan's modernization, it now indicated that the Japanese diet had been Westernized to the point that Japan had adopted not only the benefits of such a diet but also the deficits. The Japanese, too, were eating fewer fruits and vegetables and more meat and fat.

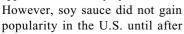
The Japanese diet was first recognized as generally superior to Western diets by the Ministry of Agriculture, Forestry and Fisheries of Japan in 1980. This recognition was based on the following three facts: 1. The 2,500-calorie diet of Japan in the 1980s provided the optimum nutritional balance, while the 3,200-calorie diet of Western nations was simply too much; 2. The Westernization of the Japanese diet following World War II reduced the excess carbohydrates and eliminated the deficiency in fats to provide the optimum nutritional balance of carbohydrates, protein and fat; 3. While the proteins found in Western diets are primarily animal proteins, the ideal nutritional balance of the Japanese diet is maintained with proteins derived from fish and vegetables.

Since the Meiji Period, Japan endeavored to modernize its diet by imitating the Western diet. Today, however, the tables have turned and the nations of the West are now attempting to imitate the nutritionally balanced Japanese diet.

International Adoption of the Japanese Diet

In the 1970s, the appearance of Japanese-manufactured products from transistor radios to cameras, televisions, motorcycles and automobiles on the world market triggered global interest in Japan's technical capabilities, economic strength and culture. At the same time, the Japanese diet came to be seen by many countries as an excellent way to maintain a long and healthy life.

One of the first Japanese food products to be appreciated and accepted internationally was soy sauce. Japanese soy sauce had been exported to Europe since the Edo Period (1603–1868), and was used as a 'secret ingredient' at the French court. Soy sauce was appreciated so much that imitation soy sauce—that produced locally—had appeared in Germany by 1875.





During the 17th century, soy sauce was exported to Europe in containers like this.

World War II. Often called 'bug juice,' soy sauce was considered a strange seasoning used only by poor Japanese immigrants. In the late 1950s, Kikkoman launched an aggressive campaign to capture American interest in soy sauce and to create a new market there. Once the Americans came to appreciate the wide variety of uses and excellent flavor of soy sauce, demand increased rapidly. The first production plant was built in the U.S. in Wisconsin in 1972, establishing full-scale supply capability. Today it is said that 40% of American households regularly keep soy sauce on hand.





A sushi chef who claims to have trained in the U.S. (Photograph by the author)

Tahitian-style sushi. Each dish is placed on a small canoe that floats around the circular bar. (Photograph by the author)

Kikkoman continued constructing overseas factories in California as well as in other nations including Singapore and the Netherlands. By 2000, one third of all Kikkoman soy sauce was produced overseas and accounted for half of total profits. Today, soy sauce is exported to more than one hundred countries and it has become so popular that it can be found almost anywhere in the world. Though finding a Japanese person may be extremely difficult, several varieties of soy sauce can even be found in the supermarkets of small Tahitian villages. Soy sauce has truly become a global seasoning.

The advance of Japanese restaurants into other nations has also been remarkable. Yoshinoya opened its first shop, serving simmered seasoned beef over rice known as a 'beef bowl,' in Denver, Colorado, in 1975, around the same time that the "Sukiyaki" song became popular. Today, there are eighty of these shops in California alone. Japanese cooking even had an affect on French cuisine. Now known as 'nouvelle cuisine,' this style caused a revolution in the cooking world by significantly reducing quantity and cooking times, so that the flavor of each ingredient could be tasted, as well as placing a high importance on the appearance of dishes.

The sushi boom was launched in the U.S. after the first conveyer belt sushi bar opened in Los Angeles in 1980. Europe soon followed with its first sushi restaurant opening in Paris in 1984, and the first European sushi factory, which prepared and packaged sushi for sale at supermarkets, was established in Amsterdam in 1988, delivering ten thousand packages of sushi per day. England's first sushi robot restaurant opened in London in the 1990s and was soon followed by a sushi bar that quickly found favor with the well-to-do for it's 'High-Tech Japan' motif in the world-famous Harrods department store. While sukiyaki and tempura were

once the dishes called to mind when considering Japanese food, sushi and sashimi have been the dishes representative of Japanese cuisine since the 1980s. Getting over their aversion to eating raw fish, Europeans and Americans now view this healthy food as a status symbol.



A sushi bar in London's Soho district. Each dish is covered by a clear plastic dome (@Alamy Images/PPS)

It seems that today, no matter where you find yourself in the world, a Japanese restaurant is near at hand. Sushi restaurants were the first Japanese restaurants to open in Fiji, Samoa, Tahiti, Tonga and Vanuatu. Japanese restaurants and sushi bars can be found in Ho Chi Minh City, Bali, Katmandu, Ulan Bator, Vladivostok, Kuwait, Dubai and even in Tanzania and Nairobi. The first Shogun restaurant was established in the U.S. and can now be found in places like New Caledonia, Stockholm and Oslo. The name of this chain of restaurants was influenced by the 'Shogun boom' launched by the television movie Shogun, adapted from James Clavell's epic novel loosely based on the life of William Adams, or Anjin Miura, diplomatic counselor to Ieyasu Tokugawa, who initiated the Edo Period.

Japanese food remains especially popular in the U.S., with the number of restaurants more than doubling over the past ten years. There are now over eight-thousand restaurants specializing in Japanese food in the U.S. Sushi, yakisoba and chilled noodle dishes are even available at the New York Times employee cafeteria. The sight of men in tuxedos drinking chilled sake from cups with salted rims is now considered trendy.

Sushi and sashimi are not the only Japanese foods popular around the world. Most Japanese dishes, from tofu and miso soup to pork cutlets, ramen, snapping turtle and even blow fish are now accepted. Evidence of the popularity of Japanese cuisine can be seen in the fact that the grand prize winner of the 2004 Gourmand World Cookbook Awards was Harumi's Japanese Cooking by Harumi Kurihara. This book received high praise as it enables people to enjoy Japanese food, previously eaten only in restaurants, at home. Japanese cuisine, once the healthy choice for dining out, is moving into the kitchens of the world and allowing people to enjoy healthy dining at home.

Improving the Diet

Upon his arrival in Japan, Supreme Commander of the Allied Powers in Japan General Douglas MacArthur is said to have remarked, "I came to replace the Japanese diet of rice, vegetables, fish and miso with bread, butter, milk and ham." Despite the fact that during the half century since World War II ended Europeans and Americans have gradually come to appreciate the benefits of a rice and fish diet, the Japanese people continue along the 'bread and butter' path. The Westernization of the healthy Japanese diet has, unfortunately, led to a rapid and tremendous increase in the number of diet-related health problems in Japan.

This trend became most apparent among the residents of Okinawa in 2003, when these people, who had long ranked number one in terms of life expectancy in Japan, suddenly found themselves ranked twenty-sixth. According to a national census conducted in 2000, the average life expectancy of men in Okinawa dropped from fourth in the nation in 1995 to twenty-sixth. The same census showed that among both men and women, Okinawa had the highest rate of obesity in Japan. While the average life expectancy of men over sixty-five remains the longest in Japan, the life expectancy of men under sixty-five has decreased, as has the life expectancy of women under fifty. The occurrences of obesity, diabetes, heart disease and stroke have increased tremendously for both men and women in younger age groups.

The primary force behind the incredible change in the Okinawan diet seems to be the temporary post-war administration of Okinawa by the U.S. Okinawa was 'Americanized' much faster and to a much greater extent than the rest of Japan. In consumption of soft drinks, for example, Okinawa leads the nation, consuming four to five times more cola than the rest of Japan. While this rapid westernization of the diet in Okinawa may have had its benefits early on, the aversion many Okinawans now show to their traditional diet has led to a significantly shorter life expectancy. We can only hope that the shock experienced by the Okinawan people over the results of the 2000 census sounded a warning bell for the rest of Japan.

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