

The 2006 Kikkoman Food Culture Seminar

The Transition of the Japanese-Style Diet

Will Japan's Food Culture Become the World's New Macrobiotic Diet and General Health Food?

Lecturer: Mr. Zenjiro Watanabe

Issues related to food and diet including food safety, self-sufficiency in terms of food, and nutrition education, have become major topics in our society. It is also interesting to note that the Japanese-style diet has been adopted in many countries around the world as a diet that promotes health and longevity. The dynamic spread of the sushi culture around the globe is evidence of this trend. It is a great pleasure to see the Japanese diet that sprouted during the late Edo period (1603-1868) blooming and contributing to the improved health of individuals around the world and even the happiness of families gathered around the dinner table. On the other hand, the deterioration of dietary habits recently observed among the Japanese has become worrisome.

Mr. Zenjiro Watanabe was invited to lecture on the transition of the Japanese-style diet and these issues at the Kikkoman Food Culture Seminar held on October 3, 2006. Mr. Watanabe is an expert in the study of food culture and has authored a series of articles on the evolution of the Japanese diet beginning with the Edo period for past issues of Food Culture. Mr. Watanabe's lecture has been reproduced for this issue of Food Culture.

Japan's Historical Longevity

Today Japan leads the world in terms of longevity, with an average lifespan of 81.9 years; eighty-five years for females and seventy-eight years for males. The rest of the world aver-

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 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 no Aru Machizukuri*, edited 1989, Gakuyoshobo; *Tokyo ni Nochi ga Atte Naze Warui*, collaboration 1991, Gakuyoshobo; *Kindai Nihon Toshikinko Nogyoshi*, 1991, Ronsosha.



ages around sixty-five years, meaning that Japanese people tend to live fifteen to twenty years longer than people from other countries. The average lifespan of Americans is seventy seven years and that of Europeans is around seventy nine years. It is said that the Japanese not only live the longest, but that they also live the longest healthy life of approximately seventy-five years.

It seems that the Japanese have always led long lives. A chapter on Japan in a Chinese history book, *Sanguo Zhi*, written about 2,000 years ago, refers to an ancient country in the Japanese archipelago called Yamataikoku. The following is a summary of a description of this country:

The people of this country dive into the sea to catch fish and shellfish. They grow rice and millet to eat. They eat fresh vegetables regardless of the season. They enjoy drinking alcoholic beverages. They live very long lives as those in their eighties and nineties are not uncommon. Some even live to be 100 years old.

This description reminds us not only how ancient Japan is, but also tells us that the Japanese have always enjoyed long lives. However, the credibility of this description comes into question as there is no way of knowing how the Chinese calculated age. Nonetheless, it is certain that the Chinese were impressed by the longevity enjoyed by the Japanese.

Much later, during the age of civil wars (1467–1615), Christian missionaries came to Japan, beginning with Francis Xavier (1506–1552). In a letter home, Xavier wrote that the Japanese rarely eat meat, and while they do eat fish, their meals frequently consist only of rice and barley. He further described the Japanese as generally small eaters who eat a lot of vegetables. He ended his description with the note that despite this diet, they are amazingly healthy and live long lives. Xavier's descriptions tell us that the Japanese of that time must have seemed very healthy to non-Japanese people. Historical records such as these lead to the assumption that Japan has always offered the environment of conditions and foods that are conducive to the longevity of its people.

U.S. Policy on Nutrition Education after the 1970s

After World War II, Americans began eating richer foods than they ever had before. As a result, the 1970s saw a rapid increase in heart disease, diabetes, stroke, and other diet-relat-

ed diseases and conditions in the U.S. and helped to dramatically increase the costs of healthcare. Alarmed by these figures, the U.S. Senate Select Committee on Nutrition and Human Needs was established to consider how best to deal with the situation. In 1977 this committee, chaired by Senator George McGovern, issued a report titled *Dietary Goals for the United States* (the McGovern Report). This report urged the American people to change their diet, which contained too much fat and too few carbohydrates. An imbalance of the primary nutrients—fat, protein and carbohydrates—was considered an contributing factor to a variety of diseases.

It is said that sixty percent of Americans today are overweight. In a book titled “*Fat Land: How Americans Became the Fattest People in the World*” research conducted in the U.S. suggested that the Japanese diet was the most recommendable. It seems that the Japanese diet of the 1970s offered the right proportions of the primary nutrients. Thus, this book suggested that Americans learn from the Japanese and eat less, reduce their fat intake, and eat more carbohydrates. With bread the major source of carbohydrates in the American diet, however, this advice is difficult to follow. Eating more bread means eating more fat in the form of butter and mayonnaise, as well as more meat. This may be one reason behind the great and continuing success of sushi in the U.S.

Japanese Food Establishes Itself

After the McGovern Report was published in 1977, the Japanese began focusing on the eating habits of their own country. Up to that time, Japan had spent its energies in striving to catch up with and surpass Western society. What we regard as “Japanese food” today does not date back to antiquity, but was established during the middle of the Edo period (1603–1868). The basic principles of this diet include polished white rice, three meals a day, and simple meals consisting of rice, soup, and a side dish.

We get a glimpse of the Japanese diet prior to establishment of what we now consider “Japanese food” from the memoirs of the daughter of a samurai retainer of Ishida Mitsunari (1560–1600), a warlord of the age of civil wars. Her family ate the same porridge of grain crops (other than rice and barley) boiled with vegetables for breakfast and supper. There was no lunch, except when her brothers went hunting in the mountains, when *nameshi* (rice cooked with plant leaves and stems) was prepared in the morning for the brothers to take with them for lunch. The rest of the family also ate this dish for lunch. In her old age, around the beginning of the Edo period, this woman wrote that young people of the time were absurd in their complaints about side dishes, as in her day, they could never expect to even have lunch every day. This remark leads us to speculate that from the age of civil wars to the early Edo period, the Japanese generally ate only two meals a day, and that they did not eat polished white rice, but rather, a porridge of brown rice or some other grain. Brown rice seems to have been common until the Genroku era (1688–1703).

In one of his haiku poems, Matsuo Basho (1644–1694) described the contrast of white sake against dark-colored rice. White sake refers to cloudy, unfiltered sake, while dark-colored rice certainly refers to brown rice or semi-polished rice. As Basho is considered a person representing the populace of the Genroku era, it can be presumed that the common people did not enjoy white rice before this time.

The most popular side dish in Edo after the Genroku era was *takuan* (pickled *daikon* radish). The emergence of *takuan* indicates the proliferation of polished rice, as rice bran is used to pickle the *daikon* radish to make *takuan*. It is thought that diverse food cultures brought to Edo from other provinces around this time met and were integrated to gradually culminate in a food culture unique to Edo.

Typical Japanese Food Developed During the Edo Period

The residents of Edo began eating out long before the Edo period, resulting in the evolution of many original Edo dishes. Buckwheat was the ingredient that first gained broad popularity. Originally used to make dumplings, porridge, and buns, it wasn’t until the beginning of the Edo period that thin buckwheat noodles, or *soba*, came into existence. Once *soba* noodles were sold on the streets, they became incredibly popular, resulting in approximately 4,000 *soba* restaurants in Edo by the end of the Edo period.

Another standard Japanese dish that developed in Edo is *tempura*. Originally a Western dish, *tempura* was the first type of Western cuisine introduced to the Japanese in Nagasaki by Christian missionaries. *Tempura* became popular in Kyoto at the beginning of the Edo period. A wealthy merchant, who was also a financial consultant to the first shogun, Tokugawa Ieyasu, suggested the dish to Ieyasu. However, it is said that Ieyasu died due to stomach ailments suffered after eating *tempura* made with sea bream. Thereafter, the Tokugawa family of shoguns considered the eating of *tempura* taboo.

Sushi is another well-known food that originated in Edo. The original *sushi* was fermented *sushi*, known as *narezushi*. Modern hand-formed *sushi* is generally believed to have developed in Edo around 1800. The exquisite combination of rice, fresh fish, and *wasabi* (Japanese horseradish) that can be prepared and served in very little time was an excellent innovation and can be considered a masterpiece of fast food.

This development of new dishes further encouraged the people of Edo to eat out, and Edo soon offered the largest number and variety of eateries in the country. Osaka playwright Nishizawa Ippo (1801–1852) compared the three major cities of Edo, Kyoto, and Osaka, to conclude that in terms of food, Edo led the others by an overwhelming margin, followed only distantly by Osaka, and then Kyoto.

The Diets of Edo and Europe Compared

During the Edo period, food became more than just a daily necessity, but something to be enjoyed unless famine restricted the luxury. During the affluent end of the Edo period, the

people of Edo enjoyed foods from the first harvest of any season above all others. Enjoying the first eggplant, the first flush of green tea, noodles made with the first buckwheat harvest, and such before anyone else was considered extremely chic.



Unohana-zuki (the month of deutzia flowers) by Utagawa Kunisada (property of Seikado Bunko; *Visual Hyakka Edo Jijo*, No. 1 *Seikatsu-hen* published by Yuzankaku, Inc.)

The painting by Utagawa depicts the sharing of the first bonito of the season, which was considered the best of seasonal firsts for the people of Edo. Around May, the first bonito of the season was caught off the coast of Kamakura, to the south of Edo, and sold at a price nearly equivalent to the annual salary of a maid. The women in the picture are most likely housewives living in a rowhouse and will share slices of the bonito, as an individual family could never afford to buy the whole fish.

In history class in Japan, the Edo period was described as a time of swaggering samurai warriors and common people exploited and taxed to the point of starvation. However, the reality seems to be completely different. Compared to other countries of the same period, Japan had the most affluent and stable society. In the history of the world, Japan is the only country that enjoyed peace, free of war, for a period of 260 years. Thus, Japan's Edo period can be considered a miracle of world history.

What of Europe at the same time? Due to its cold climates,



The Gleaners (by John Francois Millet, 1857; property of the Musée d'Orsay)

much of Europe is not suited to agriculture. For example, the average wheat crop in Europe yields only four times the amount of seed sowed, while in Japan, the average crop yields roughly thirty times the amount of seed sowed. In France, which is generally considered Europe's leading agricultural

nation, three quarters of all farmlands were owned by the king, aristocrats, and the Church, leaving only one quarter to the farmers. We can easily imagine how poor the diet of the French was at that time.

The well-known painting by Millet, *The Gleaners*, depicts peasant wives gathering harvest leftovers. The wheat collected in this manner would not be enough to make even one loaf of bread. In the distant background, the women's husbands can be seen laboring to bring in the abundant harvest for the large farm belonging to an aristocrat or the Church. The men on horseback are most likely overseers keeping the laborers hard at work. *The Gleaners* was first exhibited in 1857, ten years before the end of the Edo period (1603–1867) and the beginning of the Meiji era (1868–1912). The actual French farm depicted by *The Gleaners* defies the image the Japanese long held that life was much easier and more affluent in Europe than it was for their counterparts in Japan during the Edo period.

An American researcher studying Edo once noted that if he were alive during the Edo period, he would like to have been British if he were born noble, but if he were born a commoner, he would like to have been Japanese. Those well versed in Western history agree that life in Japan during the Edo period was good. It is about time to discard the old concepts regarding the Edo period, in which Europe is seen as having been advanced and affluent while Japan was backwards and poor.

The *Shinsengumi* Turn to Pig Farming

As the Edo period ended and the Meiji era began, Japan was diligently striving to catch up with Europe. A significant

change in the food culture from the previous period was the addition of meat to the diet. For well over over 1,000 years meat had been banned due primarily to religious principles. This made Japan the only civilized country of the time that did not raise livestock for food.

Prior to the Edo period, it was believed that meat contaminated the body so those who ate meat were not allowed to worship at shrines or temples. People who ate meat had to wait approximately one hundred days for their bodies to be purified again before they could pray at shrines or temples. Every once in a while, however, wild deer and boar were eaten. In fact, some regional lords of the Edo period regularly ate meat. Ii Naosuke, lord of the Hikone region, near modern Osaka, even presented the local specialty, beef preserved in *miso* (soybean paste), to the shogun and other regional lords. When the beef was sent to the shogun, it was labeled as medicine.

The *Shinsengumi*, the special police force organized by the shogunate that played an active role in trying to preserve the shogunate, were also forerunners in pig farming. This came about when the shogun's physician found many of the *Shinsengumi* suffering from lung disease caused by malnutrition and advised that they raise pigs on the leftovers from their own meals and then eat the pigs' meat.

The addition of meat to the Japanese diet was a significant modification. However, the Japanese are not considered true meat eaters, as they do not eat the entire animal.

Look at the photograph of the meat market. Europeans consider wild game to be quite a treat. In France, game hangs in butcher shops during hunting season, which starts around October. True meat eaters buy the entire animal, butcher and clean it at home, and use all of the individual parts, including the brain, nose, eyes, and ears, in various dishes.



Paris markets loaded with fresh game at the opening of hunting season (*Shukan Asahi Hyakka 2 Sekai no Tabemono/Furansu-hen*)

In modern Japan, people spend more on meat than they do on fish. Even so, the Japanese do not tend to eat meat in the same way that Europeans do.

Japanese-Style Western Cuisine

After the Edo period ended, many Western meat dishes were introduced to Japan. These dishes were modified to suit the Japanese palate. This modification resulted in three major types of Western dishes that are still favorites in modern

Japan: rice curry (curried rice), tonkatsu (pork cutlets), and *korokke* (croquettes). While pork cutlets are eaten with a fork and knife, *tonkatsu* is cut into bite-sized pieces before serving and then eaten with chopsticks. The Japanese made croquettes more economical by using potatoes in *korokke* rather than the cream used in croquettes.

Chinese cuisine made its way to the Japanese dinner table after the Great Kanto Earthquake of 1923. Since this time Western and Chinese cuisine, modified into unique Japanese versions of the various dishes, have spread throughout the entire Japanese population. In Japanese homes today, Western, Chinese, and Japanese dishes share the dinner table with no sense of awkwardness or imbalance. This is a characteristic unique to Japan that is not seen in other parts of the world. All types of food are eaten as if they were Japanese food with no concern for their true origins.

Interestingly, the only non-Japanese dishes to gain popularity in Japan are those that can be eaten with chopsticks or a spoon. The ability to eat dishes with chopsticks is one of the modifications applied to foods from other countries since the Meiji era (1868–1912). In Europe around the time corresponding to the Meiji era, common people did not always use forks and knives to eat.



Eating pasta with the hands in a 19th century Naples street (Spaghetti Museum; *Bunka Menruigaku Kotohajime* published by Foodeum Communication)

The picture of the Italian spaghetti vendor shows spaghetti being served and eaten with the hands. When farmers stormed and ransacked the Kremlin during the Russian Revolution, they were mystified by the forks they found. At that time only a handful of aristocrats and nobility used forks and knives to eat meat.

Variety Cultivates the Palate

By the first year of the Showa era (1926–1989), the Japanese people were eating both Western and Chinese foods, in addition to traditional Japanese foods, for a diet consisting of more variety in ingredients and dishes than anywhere else in the world. Considered a gourmet superpower, French cuisine

includes frog legs, pigeon, and snails, but there are only around 700 various ingredients used in French cuisine. In China, which is known to use a wide variety of ingredients, approximately 800 ingredients are used. The Japanese, however, with their successful incorporation of other food cultures, eat roughly 1,400 different ingredients with an especially great variety of marine products. The Japanese expedition to the Antarctic regularly includes 750 various foodstuffs in its one-year supply of food while its counterparts from other countries take only 300 or so different varieties.

Eating a variety of foods helps to develop the palate. Many Westerners seem to have a rather dull palate. While this is not quite so common among the French, Italian, and Spanish, it is among Anglo Saxons like the British and Americans. According to one American researcher, 25% of Americans and 12% of the British are blind to taste, while Japan boasts the world's lowest percentage of taste blindness at just 3%. This must be due to the wide variety of foods in the Japanese diet over such a long period of time. The outstanding palate of the Japanese was proven when Mr. Shinya Tasaki was chosen as the World's Greatest Sommelier in 1995.

Rice is the basis of the Japanese palate. Steamed rice is a wholesome staple food, and it is said that roughly 900 ml (slightly less than 4 cups) of cooked rice alone provides the daily requirement of protein. However, rice lacks the necessary amount of thiamin (vitamin B1), so a diet of rice alone will likely lead to beriberi. During the Edo period, many young people arriving in Edo from other regions soon developed beriberi by overindulging in white rice, which was seldom available in their own villages. At that time, beriberi was known as Edo disease. The 14th shogun, Tokugawa Iemochi, died of this ailment. Beriberi was a common and dreaded ailment for the Japanese until the Meiji era (1868–1912). During the Sino-Japanese War (1894–1895), 1,000 Japanese fell in battle while 4,000 succumbed to beriberi.

Post-War Corruption of the Japanese Diet

After World War II, and particularly during the 1970s, many mothers began working outside the home. This caused them to begin using shortcuts in meal preparation, adversely affecting the diets of their children. It is said that omelets, curried rice, sandwiches, fried Chinese noodles, spaghetti, and fried eggs became the dishes most frequently served in the 1970s, while hamburgers, ham and eggs, dumplings, toast, and cream stew were frequent dishes of the 1980s. The situation progressed until homes without kitchens could be found. A newspaper article reported that this concept of homes without kitchens derived from studio apartments targeting female college students, who said they didn't need a kitchen. Some say this trend signals the end of families dining together. A more serious concern to many is that many Japanese children cannot use chopsticks, though they are a basic component of the Japanese food culture. One survey shows that roughly 90% of elementary school children cannot use chopsticks properly. Moreover, an incredible 40% of school teachers cannot use

them either. This trend is truly a shame.

Though the Japanese like to boast of their great longevity, this longevity is quickly becoming a myth. Okinawa, the southernmost prefecture of Japan, which traditionally boasted the highest rate of longevity in Japan, had slipped to the 26th position in the 2000 census. Mr. Shigechiyo Izumi, who lived to an incredible age of 120, was from Tokunoshima, one of Okinawa's Amami Islands. The death rate of those aged seventy-five or older on Tokunoshima remains very low even today, but that of those in their thirties is triple the national average and the obesity rate is double the national average. This shows how changes in the diet have decreased the lifespan of even those born in an environment that facilitates longevity.

The Mysterious Diet of Buddhist Monks

Though they eat very little, Buddhist monks live very long lives. There are 200 monks at the famous Eihei Temple in Fukui Prefecture. Their daily meals consist of a thin porridge (one part rice to ten parts water), sesame seeds and salt, and one or two slices of pickled vegetables for breakfast; a steamed mixture of rice and barley, and vegetables with dressing for lunch; and the same steamed mixture of rice and barley, and a boiled side dish for dinner. They do not eat any fish or meat, and they have maintained this diet for 1,200 years. A nutritionist calculated the caloric content at 1,200 calories per day. Even with extreme food shortages and death from starvation following defeat in World War II, the average caloric intake was 1,400 calories. Despite a lower caloric intake, the monks at Eihei Temple are healthy and actively perform their difficult ascetic practices.

When they first begin their lives as monks at Eihei Temple, initiates lose weight and suffer from swollen feet for the first two months or so. With the third month, however, they gradually regain weight, and their complexion improves. Nutritionists have investigated this regular cycle, but have been unable to determine the reasons for it. The abbot himself is 104 years old, but remains healthy and lectures to many visitors every week.

One of the most severe ascetic practices seen in Japan today is the 1,000-day pilgrimage in the mountains and around Kyoto of Buddhist monks from Mt. Hiei's Enryaku Temple. During their pilgrimage, the monks eat two potatoes boiled in salted water, half of a block of tofu, and half of a dish of noodles twice a day. These are incredibly small meals for people running thirty to eighty kilometers a day. This practice was initiated when the Enryaku Temple was razed by the famous warlord Oda Nobunaga (1534–1582) in 1571. To date, only fifty monks have successfully completed the odyssey since its initiation. The diets of monks like these make one wonder about the true merits of Japanese foods and the nutritional science behind them. Perhaps nutritional analysis cannot shed any light on these questions. However, it is clear that the lifespan of the Japanese people is decreasing. It's about time to take another look at the Japanese diet.