

Chapter 3

History of Nutritional Improvement in Japan



Abstract Japan has solved the problems of nutritional deficiency due to shortage of food before and after the war II, and overnutrition associated with westernization after high economic growth. Japan has solved this double burden of malnutrition and has become to be a healthy longevity country. To find out why Japan has succeeded in improving nutrition, it is necessary to study the history of Japanese nutrition.

Nutritional science was introduced from the West after the Meiji Restoration. The Meiji government proclaimed, “wealthy country, strong military” and “promotion of industry and commerce” and focused on nutrition in order to improve the physical condition of the people. The modernization of the Japanese diet did not result in the exclusion of Western food, but rather in the formation of a new food culture through the fusion of Western food with Japanese food.

Dr. T. Saeki felt that it would be difficult to improve the nutritional status of the people only by providing information by nutrition researchers. He established the “Nutrition School” to train nutrition professionals. Dietitians were born in the “Dietitian Act” in 1948, they were assigned to group meal facilities to provide meals with excellent nutritional balance while utilizing the limited amount of food available, and to ensure nutrition education. Using facilities were schools, industrial concerns, hospitals, welfare facilities.

The “Kitchen Car” in which the rear part was converted into a kitchen for cooking demonstration, and dietitians boarded and provided nutrition education to every corner of Japan.

The children’s physique has improved remarkably as a result of the school lunch program. Top: immediately after the start of the school lunch, middle: 4 months later, bottom: 2 years later (numbers indicate the same child.)

Keywords Meiji restoration · The modernization · Western food · Beriberi · Basic Law on Food Education · Sino-Japanese War · Russo-Japanese Wars · National Institute of Nutrition · Nutrition School · Dietitian Regulations · Nutrition Improvement Act · Nutritional guidance · Kitchen Car · Food truck · Food policy · Nutrition policy · National Nutrition Survey · Japan Dietetic Association · Dietitians Act · Dietitians · Registered dietitian · National Training Seminar on Pathological Nutrition · Non-communicable chronic diseases: NCDs

3.1 Introduction to Nutrition

We decided to unravel the history of nutrition in Japan. It is important to preserve for future generations what we have done, and it is also helpful in creating a vision for the future. There are several descriptions of the history of nutrition and diet. Most of them are deterministic, and few of them go into the social background or the thoughts and efforts of the people and groups involved. However, history is called history. In other words, it is his (he's) story (Story), and since it is greatly influenced by the talents of outstanding people, we have decided to approach the personalities who moved history. This is because I thought that this would be helpful for young people who will be responsible for nutrition in the future. If Dr. Tadasu Saiki, Dr. Kanehiro Takaki, Mr. Kiku Morikawa, or Dr. Norimasa Hosoya had not appeared in their times, the history of nutrition in Japan would have been completely different.

3.1.1 *The Concept of Chinese Medicine*

It was after the Meiji Restoration that nutritional science was introduced to Japan. Before the Meiji Restoration, Chinese medicine was the foundation of medical care in Japan. Chinese medicine is classified into drug therapy, acupuncture and moxibustion therapy, and dietary regimen. However, the purpose of dietary regimen was not to consume energy and nutrients properly as in current dietetic treatment, but to systematize food selection and cooking methods based on the theory of yin-yang and five elements. Moreover, the fundamental feature of dietary regimen was that “medicine and food have the same source”, which means that medicine and food were interpreted as one and the same thing, and the efficacy of food as a whole is organized according to its dietary function, taste, and nature. Food has five major tastes: sour, bitter, sweet, spicy, and salty, and each taste is considered to have a specific effect (Table 3.1). On the other hand, in nutrition, nutrients are divided into five groups according to the characteristics of their constituents and their roles in the body (Table 3.2). It is interesting to note that the characteristics of both Chinese Medicine and nutrition science were classified into five groups.

Diet regimen is based on categorizing the characteristics of foods based on long years of dietary experience, and selecting foods according to the user's signs (constitution). For example, the body's constitution is largely divided into two types: the deficiency-cold type and the actual-heat type, and the foods to be taken and the foods to be avoided are thereby determined. For example, in the case of a

Table 3.1 Foods with five flavors and their effects (Chinese medicine)

1	Acidity	Lemon, Japanese apricot, tomato, plum, yogurt, etc. It has astringent and anti-inflammatory effects, and is effective for night sweats, diarrhea and polyuria.
2	Bitterness	Celery, green pepper, coffee, tea, seaweed, etc. It has the effect of drying and firming water retention and is effective for fever.
3	Sweetness	Cereals, potatoes, eggs, milk, meat, fish, fruits, vegetables, etc. It has the effect of nourishing the weakness of the human body and relieving pain, and is effective in nourishing deficiency of blood.
4	Spicy	Leek, radish, garlic, chives, ginger, pepper, sansho (Japanese pepper), etc. It warms and dilates the body and improves the circulation of qi and blood.
5	Salty	Salt, barley, soy sauce, miso, pickles, salted fish and meat, etc. It has a soothing and moistening effect and is effective for lumps under the skin, swelling of the Lymph is a fluid and constipation.

Table 3.2 Five nutrients, food groups and their actions in nutritional science

Energy-producing nutrients	
1	Proteins: Meat, seafood, eggs, soy products A source of amino acids, which are the building blocks of the body
2	Lipids: Fats and oils A source of fatty acids, an efficient source of energy and a functional ingredient
3	Carbohydrates: Grains, potatoes Carbohydrate that is digested and absorbed as an energy source and has physiological functions and food function as fermentable energy
Micronutrients	
4	Vitamins: Milk and dairy products, vegetables, fruits Organic compounds that are not synthesized or insufficiently synthesized by the body to regulate metabolism
5	Minerals: vegetables, fruits, milk and dairy products Inorganic compounds that act to regulate metabolism and are components of the body.

cold-related deficiency – the body wouldn't be deficient in cold, the foods that possess the heat-supplementing property, such as those that are warm and those that are sweet and spicy in taste, should be taken, while in the case of the actual heat, the foods that have the purgative cool property, such as those that are cold and those that are sour and bitter in taste, should be taken in relatively large quantities. In the Edo period and the early Meiji period, this type of dietary cure was used as a dietary therapy and dietary indicator by the Japanese. For example, “eat eel on Saturdays” and “take porridge and pickled plums when you are sick” are some examples of such dietary wisdom.

3.1.2 Anglo-American Nutrition and German Medicine

Modern nutritional science was introduced from the West after the Meiji Restoration. Nutritional science does not merely classify foods as in Chinese medicine, but analyzes the ingredients in foods that are effective for the organism and selects foods according to their contents. In 1859, Dr. Hepburn (James Hepburn) came to Japan from England and opened a clinic in the port of Yokohama, which had been opened to foreigners. He was known as the founder of the “Anglo-American Yokohama School” because he introduced modern medicine to Japan. His students included Mr. Yukichi Fukuzawa and Dr. Kanehiro Takagi, who later contributed to the development of clinical nutrition in Japan. On the other hand, in 1887 (Meiji 20), by a resolution of the Diet the Japanese government introduced German medicine in order to modernize medicine. At the time, German medicine was based on experimental medicine, which put it at odds with the Anglo-American Yokohama School, which was based on positivism and insisted on the importance of clinical medicine. In fact, the subsequent controversy between Dr. Rintaro Mori (Army), in the mainstream of German medicine, and Dr. Kanehiro Takagi (Navy), who had studied British medicine, seems to have been based on this fact. In other words, practical nutrition in medicine was influenced by Britain and the United States, while basic nutrition as an academic discipline was influenced by German medicine. Dr. Feucht, a German physician, gave a lecture on the concept of nutrition to the students of the Faculty of Medicine at the University of Tokyo, saying that food should not be eaten according to taste, but according to the nutritional components it contains.

3.1.3 A Fusion of Traditional Japanese Food and Western Food

The Meiji government, with its goal of establishing a modern nation, proclaimed “wealthy country, strong military” and “promotion of industry and commerce” as policies and focused on nutrition in order to improve the physical condition of the people. The introduction of nutritional science and nutritious Western food was a way to improve the health of the people. The westernization of dietary habits was essential as a national policy, and nutrition was actively utilized as the logical basis for this policy. A symbol of the modernization of the diet was the “encouragement of meat-eating”. Japanese people’s preference for abstinence from meat-eating dates back to the time when their food culture was originally centered on rice cultivation, and when Emperor Temmu ruled 673–686, under the influence of Buddhism, issued a decree banning meat-eating, which lasted until the Edo period. In the latter half of the Edo period, however, trade with foreign countries increased, and places

influenced by Western cuisine gradually emerged in urban areas and open-port regions, with a beef stew shop opening in Yokohama in 1862 and a butcher shop in Takanawa, Edo in 1867. Later, Western cuisine was introduced through cook-books, newspapers, and magazines, a Japanese-Western eclectic cuisine, which combined Japanese and Western food, was born and gradually spread.

The modernization of the Japanese diet did not result in the exclusion of Western food, but rather in the formation of a new food culture through the fusion of Western food with Japanese food. The Westernization of the diet, which was recommended by the government as a national policy, was a result of the traditional culture of rice cultivation, the climate of Japan, and the ingenuity of the common people, and it had the advantage of improving nutrition by providing energy, protein, fat, vitamins, and minerals, which had been in short supply.

3.2 The Beriberi Controversy and the Basic Law on Food Education

3.2.1 Longing for White Rice and Beriberi

For the Japanese people, a full meal of white rice was a dream come true. Rice was a crop that had to be paid as annual tribute and was not easily available to the common people. Even among the wealthy farmers of the countryside, rice was used only mixed with minor grains, and the common people ate sweet potatoes, barley, and Japanese millet as their staple foods. This means that Japanese people originally ate a diet based on minor grains in general. In 1873 (Meiji 6), when the Meiji government changed the taxation system to payment in money, rice was left in the hands of the farmers. At the same time, improved rice cultivation increased production and the development of the just 'silk' industry provided a cash income with which to purchase rice. The consumption of rice increased, and a new staple food-oriented eating pattern was formed. Furthermore, with the progress of threshing technology, the dream of white rice became a common food.

Ironically, this widespread dependence on white rice led to an epidemic of beriberi, which became a problem, especially in the military. White rice was used in advertising campaigns to recruit men to join the military, with the promise that recruits could eat as much white rice as they wanted. However, Dr. Kanehiro Takagi, who had studied at the Anglo-American Yokohama School and became the navy's medical superintendent, claimed that this diet was the cause of beriberi. He had studied epidemiology in England and believed that the reason why Europeans did not suffer from beriberi was the difference in diet, and he changed the diet on warships from Japanese to Western.

In contrast, Dr. Rintaro Mori, an army doctor who had studied under Dr. Robert Koch, a bacteriologist who had followed the mainstream of German medicine introduced by the Meiji government, directly opposed Takagi's theory, arguing that the cause of beriberi was a microbial infection.

The beriberi controversy between the Army and Navy developed into a beriberi war between the two branches of the military.

3.2.2 The Army and Navy Legume Controversy

In December 1882 (Meiji 15), the 371 crew members of the naval training ship "Ryujo" sailed from Japan to New Zealand, Chile and Peru, returning home after a voyage of 272 days. Among the crew there were 160 cases of beriberi and 25 deaths from it. During the voyage, the sailors continued to eat a Japanese diet consisting mainly of white rice. The navy was so shocked that it rushed to introduce Western-style food, and Takagi conducted a large-scale clinical experiment to prove his point: for 187 days beginning in February 1884 (Meiji 17), he had the warship "Tsukuba" sail along the same route as the "Ryujo", the ship that had suffered the attacks. During this time, the ship's crew was fed a completely Western diet of barley rice, meat, condensed milk and biscuits. As a result, of the 333 crew members on board, the number of people who developed beriberi was reduced to six and the number of people who died of beriberi to zero. The Navy made similar changes to the diet on other warships and at shore facilities. In 2004 (Heisei 16), Dr. Hidenori Kido and his colleagues analyzed the data from 16 warships and 8 shore facilities using a new statistical method. As a result of the change, the incidence of beriberi in all facilities decreased from 27% to 14%, and the odds ratio was significantly reduced to 0.38 by meta-analysis.

In 1894 (Meiji 27), during the Sino-Japanese War, the government argued for a change to a Western diet of barley rice, but this was not implemented due to opposition from senior army officials. The following year, Dr. Rintaro Mori wrote a book entitled "The Theory of Food for Japanese Soldiers", in which he criticized Takagi's improvement of diet for sailors. Since no conclusion was reached to this conflict, it was eventually resolved in the Sino-Japanese and Russo-Japanese Wars. During the war, the number of people who developed beriberi in the Army was about 1200 times greater than in the Navy, and the number of people who died of beriberi was about 4000 times greater. Incidentally, the number of deaths in the Army from beriberi was four times the number of those killed in action, meaning that many soldiers in the Army died from malnutrition rather than from guns (Table 3.3).

Table 3.3 Occurrence of beriberi during the Sino-Japanese and Russo-Japanese Wars

	Army	Navy
Numbers of Troop	240,616 people	3096 people
Deaths in action	1132 people	337 people
Numbers of Beriberi patients	41,431 people	34 people
Deaths from beriberi	4064 people	1 people

In 1913 (Taisho 2), the Army changed its ration to seven parts white rice and three parts wheat, and after that, the number of patients with beriberi decreased dramatically. Thus in 1924 (Taisho 13), the Provisional Investigation Committee concluded that “beriberi was caused mainly by vitamin deficiency”. During this period, Dr. Umetaro Suzuki isolated and crystallized an effective ingredient for the prevention of beriberi from rice bran, and this played an important role in the beginning of vitamin research. In other words, we have entered an era in which nutrients are not only energy sources, but also include micro-nutrients, vitamins and minerals, that regulate our physical condition.

3.2.3 Promulgation of the Nutrition Education Basic Act

By the way, in 2006 (Heisei 17), the Japanese government promulgated the Nutrition Education Basic Act as the world’s first national basic law. It states that dietary education, which is the foundation of intellectual and physical education, is necessary for raising healthy children (Table 3.4). Every month for a year, a review meeting was held at the Prime Minister’s Office, and I participated as one of the members (Table 3.5). The members of the review committee were outstanding, and

Table 3.4 Nutrition Education Basic Act

For the development of Japan in the twenty-first century, it is important to cultivate sound minds and bodies in children so that they can spread their wings toward the future and the international community, and to ensure the physical and mental health of all citizens so that they can live vibrant lives throughout their lifespan. In order for children to develop a rich sense of humanity and acquire the ability to live, food is of the utmost importance. In addition, it is necessary to promote dietary education so that children can acquire knowledge about food and the ability to choose food through varied experiences, and so that they can practice sound dietary habits. While dietary education is necessary for all generations of citizens, dietary education for children has a significant impact on their physical and mental growth and the formation of their personalities, and serves as the basis for cultivating a sound mind and body and nurturing a rich humanity throughout their lives.

Table 3.5 Study Committee Members for the Nutrition Education Basic Act

Chairman	
Junichiro Koizumi Prime Minister	
+	
Committee members (25)	
Hiroyuki Hosoda	Chief Cabinet Secretary
Yasufumi Tanahashi	Minister of State for Special Missions (Food safety and nutrition education)
Taro Aso	Minister of Internal Affairs and Communications
Chieko Noono	Minister of Justice, Minister of State for Special Missions Youth development and measures for declining birth rates
Nobutaka Machimura	Minister for Foreign Affairs
Sadakazu Tanigaki	Minister of Finance
Nariaki Nakayama	Ministry of Education, Culture, Sports, Science and Technology
Hidehisa Otsuji	Minister of Health, Labour and Welfare
Mineichi Iwanaga	Minister of Agriculture, Forestry and Fisheries
Shoichi Nakagawa	Minister of Economy, Trade and Industry
Kazuo Kitagawa	Minister of Land, Infrastructure and Transport
Yuriko Koike	Minister of the Environment
Yoshitaka Murata	Chairman, National Public Safety Commission
Committee members (25)	
Shoko Ichiba	Vice President, Japanese Association for Dietetic Research and Education
Ichio Itou	Mayor of Nagasaki
Hamae Okura	Chairman, Association of Women's Organizations
Toshiko Kanda	Secretary General, Consumers Japan
Koji Sasaki	Chairman, Japan Chain Stores Association
Kuniko Takahashi	Professor, Faculty of Education, Gunma University
Teiji Nakamura	Chairman, The Japan Dietetic Association
Yukio Hattori	Principal, Hattori Nutrition College
Shu Hara	President, Japan Food habitat improvement promoters association
Chieko Fukushi	Deputy General Manager, Life Information Department, Yomiuri Shimbun Tokyo Head Office
Yoshiaki Itsumi	Vice President, Parents & Teachers Association of Japan
Sho Watanabe	Board Chairman, National Institute of Health and Nutrition

many ministers who played a central role in the country participated in the sessions. Apart from the discussions at the committee, opposing views began to emerge, mainly from the opposition parties. The objection was that people should be free to decide what kind of food they want to eat and that the state should not interfere in the family dining room.

On the last day of the committee meeting, the chairperson, Prime Minister Junichiro Koizumi, in his closing remarks, referred to the controversy between the army and the navy over beriberi, and at the end of the meeting said,

“In Japan, the nation once made a mistake in its nutrition policy, causing many deaths and inconveniencing people. Nutrition is important for the nation, and I want to make this law the basic law of the nation”. He was sitting right in front of me, and I remember being moved by the fact that he was not an ordinary person.

3.3 Establishment of the National Institute of Nutrition and the Rice Riots

3.3.1 Dr. Tadasu Saiki and Nutrition

One of the most important people who contributed to the development and spread of nutrition in Japan was Dr. Tadasu Saiki. He studied physiology, biochemistry, and also bacteriology at Yale University in the United States in 1905 (Meiji 38). His research work was going well and he had planned to settle in the United States, but when he returned to his home town of Saijo in Ehime Prefecture to see his grandfather who had cancer, he found out about the current situation of nutrition in Japan and decided to pursue his research work in Japan. In 1913 (Taisho 2), he came to Tokyo and became the director of Kanasugi Internal Medicine Sanatorium in Surugadai, Kanda, where he treated patients and conducted laboratory research.

At that time, nutrition science was just beginning to understand the need for trace amounts of vitamins and minerals in addition to the nutrients that provide energy, and the main task of research was to discover new nutrients. In other words, many nutritionists were immersed in basic research, and practical and applied research in nutrition was not considered to be a scientific subject. This tendency is still somewhat in evidence today, but nutritionists at that time were not interested in real-world nutritional problems.

However, Tadasu Saiki had a strong interest in the practical aspects of nutrition, because he believed that nutrition was meaningful only when it was put into practice to help people. He established the “Nutrition Research Institute” with his own funds in 1914 (Taisho 3) in Sanko-cho, Shirokane, Shiba, Tokyo. At the Institute, various research on nutrition was conducted, and terms such as “eclipse”, “nutritional diet”, “complete nutritional diet”, “nutritional efficiency”, “nutritional guidance”, and

others which are now commonly used in the field of nutrition, were born at the Institute. In 1920 (Taisho 9), with the aim of actively promoting nutritional policy, the government made Saiki's Institute a National Institute. The following year, a new building was established in Koishikawakagomachi, and the first director was Dr. Tadasu Saiki.

3.3.2 Establishment of the National Institute of Nutrition

Why did the Japanese government decide to take an active role in nutrition policy by establishing a national nutrition research institute? It was due to the serious historical background of the time. The specific trigger was the “rice riot” that occurred in 1918 (Taisho 7). With the modernization of the nation, the income of the people increased, and people were able to eat rice. In the case of farmers, their income also increased through [sericulture](#) and other means, and they were able to eat rice instead of wheat and Japanese millet. However, the economic boom caused by World War I led to an increase in the number of industrial workers and an exodus of human resources from the farming sector, resulting in sluggish growth in rice production. Furthermore, rice imports decreased due to the effects of the war, and the price of rice gradually became higher, and [landowners](#) and [merchants](#) began to [speculate in rice](#) and to trade in rice. The price of rice soared.

3.3.3 Rice Riots and Nutritional Research

Under these circumstances, the [Terauchi Cabinet](#) announced the [invasion of Siberia](#) as a foreign policy [on August 2, 1918](#), and distributors and merchants further accelerated their efforts to stock rice in order to take advantage of the special demand caused by the war. The price of rice skyrocketed abnormally, making it difficult for the common people to obtain rice, an anti-government movement to “give us rice” broke out in major cities, and rallies and incidents of arson took place all over the country. More than one million people participated in the movement, which developed into a nationwide riot. This was the “Rice Riots”.

The government realized the importance of nutrition and established the “National Institute of Nutrition”. At the institute, comprehensive research on nutrition, including physiology, pathology, bacteriology and chemistry, was carried out, just as Dr. Saiki had dreamed. On the other hand, the Institute was also actively engaged in activities to promote nutrition through newspapers, radio and general magazines. Although a great deal of information on nutrition was distributed in the dissemination activities for improved nutrition, the underlying idea was to increase protein, fat, vitamins, and minerals by enriching the content of side dishes, rather

than relying too heavily on rice as the staple food. This had the public health goal of making people healthier through improved nutrition, as well as the policy goal of alleviating the people's dependence on rice and preventing a recurrence of the rice riots. Dr. Saiki advocated for the "Economic Nutrition Act" because he believed that, in the midst of poverty, there was a need for improved nutrition through inexpensive food, and at the same time, improved nutrition would lead to an increased labor force and economic development.

3.4 The State of Nutrition During and After World War II and the Birth of the Nutritionist System

Dr. Saiki felt that with the serious food situation and the low knowledge level of the people at that time, it would be difficult to improve the nutritional status of the people only by providing information by nutrition researchers through the mass media. In other words, he thought about training practical nutrition instructors.

It was difficult for food preparers to study medical topics so Dr. Saiki tried to create a profession that had knowledge of both medicine and food preparation. This situation was also occurring on a global scale. In the twentieth century, advances in nutritional science led to the discovery of various nutritional deficiencies, and the effectiveness of dietary improvements in their prevention and treatment became apparent. Specialists began to emerge to disseminate and educate people about these results. The malnutrition caused by food shortages during World War I was particularly serious, and experts who provided guidance on improving diets based on nutritional science were highly regarded by society. As a result, activities to improve nutrition, which had initially been undertaken as a hobby or by volunteers, grew into the profession of nutritionist.

3.4.1 Establishment of a Nutrition School

In 1924 (Taisho 13), at the site of a private nutrition research institute, Dr. Saiki established Japan's first "Nutrition School" to train nutrition professionals (Photo 3.1). The school's faculty included leading nutrition researchers of the time. At that time, there were no textbooks, so the content of the education was based on practical application. In 1926 (Taisho 15), the first 13 graduates of the school completed their studies, and they were called "dietitians" (Photo 3.2). Graduates went on to work as food researchers, nutrition specialists in government agencies, hospitals, and food service facilities, and became active on the front lines of nutrition improvement. However, being a dietitian was not yet an official specialty recognized nationally.



Photo 3.1 Saiki Nutrition School at the foundation (around 1924)



Photo 3.2 First graduation ceremony of Saiki Nutrition School (March 15, 1926, Tokyo Shiba Kanasugi Kawaguchichō). In circular inset – Dr. Tadasu Saiki

In 1945 (Showa 20), the government enacted the “Dietitian Regulations” in Ordinance No. 14 of the Ministry of Health and Welfare. The government had understood the importance of nutrition even before the war, and because malnutrition had become a serious social problem due to the war, a proactive nutrition policy became essential. During the confusion, not to mention the many deaths from

starvation, disreputable nutritional foods and health methods became popular, and people were unsure of what to believe and what to eat. The government enacted the “Dietitian Regulations” with the following objectives in mind: (1) to establish the status and duties of dietitians on a national basis, and to unify and provide thorough guidance on national nutrition and (2) to strengthen nutritional guidance after the provision of food for factories, business establishments, and rural areas, which were the foundation of the war effort.

3.4.2 Founding of the Japan Dietetic Association

For the wartime government, improving nutrition was an important national issue, and the training of dietitians was an urgent task. The “Dietitian Regulations” stated that dietitians were “those who use their expertise to provide nutritional guidance to the public” On May 21 (1945), the year of the end of the war, a general meeting was held at the Imperial Hotel to establish the “Great Japan Dietetic Association” in the midst of the air raids on Tokyo. In fact, the ceremony held in 2009 (Heisei 21) to commemorate the 50th anniversary of the founding of the Japan Dietetic Association was also held at the Imperial Hotel as the sacred place where the Dietetic Association had its origin. After the end of the war, it was decided to make the event even more grand, and the “The 1st General Meeting of the Japan Dietetic Association” was held at the Takarazuka Theater on October 21 and 22, 1946 (Showa 21) (Photo 3.3). The ceremony was a great success, with the participation of Dr. Tadasu Saiki and others



Photo 3.3 The First General Meeting of the Japanese Dietetic Association (at the Takarazuka Theater)

who had worked hard to establish the dietitian system, Dr. Crawford Sams from Public Health and Welfare in GHQ, Director Yukimasa Miki from the Ministry of Health and Welfare, and the governors of Osaka and Hyogo.

The following year, 1947 (Showa 22), the “Dietitian Regulations” became the “Dietitian Act” with Law No. 245, which came into effect in January 1948 (Showa 23). Dietitians became a national qualification in name and reality. At that time, 18 schools were approved as training schools, including Saiki Nutrition School, Women’s Nutrition Junior College, Japan Women’s University, and other women’s colleges and vocational schools.

Improving nutrition during and after the war, when food was scarce, was extremely difficult. Many people in the field of nutrition bravely tackled this difficult task. We can learn about some of these efforts from the experiences of Setsuko Honda, who worked as a dietitian at the time, in her book “Living on Food: Hon no Izumi-sha”. She studied nutrition at the Shokuryo Gakko (Food School) in 1945 (Showa 20). Her practical training while at the school included menu planning, cooking, and serving, and her research project was to gather potato vines, crayfish, and snails and develop a cooking for them. She was also involved in the development of “Special Pan”, a bread invented by the [Imperial Japanese Army](#) to conserve flour and enhance nutrition. In addition to wheat flour, soybean flour, fishmeal, carrots, and spinach were kneaded into the dough of this bread to make it more nutritious. After graduation, she was recruited as an army dietitian at the Oita Men’s Flying Corps School, where she was in charge of the meals for about 1000 soldiers. Around June of the last year of the war, “kamikaze pilot” who was ready to die came to her and said, “I’m leaving for Okinawa tomorrow”, to thank her for his daily meals, and she was moved to tears.

3.4.3 The End of the War and the Deterioration of Nutritional Conditions

Immediately after the war, there was not enough food to maintain the lives of all the people. Around August 1945 (Showa 20), Tokyo was burnt to the ground, the suffering from hunger reached a peak, the black market was rampant, and many people turned to black-market rice to survive. Since the sale of rice was controlled by the government, purchasing rice from the black market was illegal. However, people could not meet their nutritional needs through rationing alone, so many people turned to the black market. In 1947 (Showa 22), a shocking incident occurred: Judge Yoshitada Yamaguchi of the Tokyo District Court starved to death because he refused to eat black market rice out of a sense of justice as a law-abiding citizen. This became big news.

According to the data published by the Society for the Study of Living Issues in 1946 (Showa 21), the amount of daily nutrition obtained from rations was 1209 kcal and 32.2 g of protein, while that from non-rations was 765 kcal and 26.9 g of protein.

There was no way for the common people to survive without breaking the law. However, both the government and GHQ strengthened the crackdown under the Food Control Law in order to preserve law and order in the country. For example, in 1948 (Showa 23), when the crackdown was most severe, the number of arrests nationwide reached 917,324 cases and the number of arrestees 927,301 people. The food shortage became a social problem, demonstrations of “Give us rice” took place all over the country, and the worsening of nutritional conditions due to food shortages became an important issue for the nation.

3.5 Postwar Reconstruction and Improvement of Nutrition in Japan

3.5.1 Setting Up the Nutrition Improvement Act

At the same time that it was working to disseminate nutritional knowledge through newspapers and radio, the government formulated the “Nutrition Improvement Act” in 1952 to make it mandatory to assign dietitians and to facilitate the implementation of nutritional improvements.

The purpose of this law was to assign dietitians to group meal facilities to provide meals with excellent nutritional balance while utilizing the limited amount of food available, and to ensure nutrition education. Using facilities that serve meals to a large number of people at the same time, such as schools, industrial concerns, hospitals, and welfare facilities, dietitians began to improve the content of the meals served and to spread knowledge of nutrition, and this work was called “nutrition guidance”. The speciality of the dietitian was positioned as “nutritional guidance”. This distinctive Japanese method of improving nutrition, which combines the provision of meals with nutritional education, is rare world-wide, and we believe it is a method to be proud of.

3.5.2 This “Kitchen Car” Is Not a “Food Truck”

Immediately after World War II, the Japanese suffered from severe malnutrition with no food or money. Initially, the country relied on food imported from the United States. On the other hand, in the victorious United States, advances in agricultural technology had led to an excess of crops. The US government considered selling this excess food to foreign countries, and one target was Japan, which was suffering from food shortages. In 1954, a meeting was held between Japan and the United States on “the use of market development costs associated with the acceptance of surplus agricultural products in the United States.” However, there was no money in Japan to buy these products, and it was difficult for Japanese people who ate rice as their staple food to accept wheat bread and dairy products.

After discussions, the decision was made on the condition that the US government could hold the money that Japan to purchase food from American farmers for a while and use part of the money to promote and spread imported food in Japan. In recent years, some have argued that this was a long-term strategy to westernize the Japanese diet and make it dependent on American agricultural products. However, the only way to survive the severe hunger of the time was to rely on imported food must be from abroad. In particular, supplementing nutritionally inadequate Japanese food with highly nutritious Western food was an effective means of resolving malnutrition. Furthermore, the important point is that advertising funds were provided to promote unfamiliar imported food among the Japanese. Japan actually provided nutritional education to resolve malnutrition, although it was said that this was an advertising expense for the United States.

The Japanese government with the money for advertising expenses, bought a “Kitchen Car” in which the rear part was converted into a kitchen for cooking demonstration, and dietitians boarded and provided nutrition education to every corner of Japan. This “kitchen car” was not a “Food Truck” that provides meals as can be seen in the United States today, but a special car that could provide nutrition education that also served as a cooking demonstration (Photos 3.4 and 3.5). Dietitians along with Health Mates who were [dietary habits improvement promoters](#) as volunteers participated in the community nutrition improvement.



Photo 3.4 Kitchen Car on Japan in 1950



Photo 3.5 American's Food Truck in 2020

This sort of activity has become widely recognized in Japanese society, and dietitians have been assigned to health centers, schools, companies, hospitals, long-term care facilities, and so on. This has allowed Japan to create a social environment in which people can access a healthy and nutritious diet wherever they eat. In other words, “Japan changed the US food policy into a nutrition policy that made people healthier”, and this result has since become a deterrent to obesity in a society where the economy is highly successful and food is abundant.

3.5.3 Improved Nutritional Status

With the improvement of the food situation and the nutritional guidance by dietitians, malnutrition in the postwar period was rapidly and peacefully addressed. In order to understand the results of the improvement of nutrition in Japan, it is helpful to refer to the “Trends in Nutrition in the Postwar Showa Period: Looking Back on

40 Years of the National Nutrition Survey” supervised by the Nutrition Guidance Institute of the Japan Dietetic Association. The basic data for this report came from the “National Nutrition Survey” conducted in 1945 (Showa 20) by order of the GHQ in order to establish the basis for emergency food measures.

The “National Nutrition Survey” was later included in the “Nutrition Improvement Act” and became a basic factor in the PDCA cycle (plan-do-check-act cycle) for understanding and improving the nutrition of the Japanese people. “The National Nutrition Survey” was renamed the “National Health and Nutrition Survey” in 2003 (Heisei 15) and is conducted annually to provide basic data on the nutritional status of the Japanese people and their nutrition-related health conditions. Based on these results, problems are identified and a plan is drawn up to solve them. Following this plan, dietitians take the lead in providing nutritional guidance to the public. No other nation has implemented such a thoughtful nutrition policy, and this is the basis of “Japan Nutrition”.

In the report, the postwar recovery of nutrition is classified into four periods.

① Immediately after the war to 1948 (Showa 23): Postwar turmoil

A period of severe hunger and malnutrition caused by extreme food shortages, with many starvation deaths in the cities.

② From 1949 to 1954 (Showa 24~29): A period when the food situation gradually improved

School lunches became a full meal program in 1950 (Showa 25), and the nutritional status of children improved. This was an era of increased intake of animal products, legumes, fats and oils, and of a marked increase in the intake of animal protein, fat, calcium and vitamin A.

③ The 1950s (Showa 30): A period of rising national income known as the “consumer revolution”

During this time, consumption of ham, sausage, and instant noodles increased, and dietary habits began to become more Westernized and diversified. The consumption of fats and oils, meat, eggs, milk and dairy products also increased, and the intake of protein, vitamins and minerals also increased, leading to an average improvement in the nutritional status of the Japanese people.

④ 1960s (Showa 40): a period of high economic growth that led to a significant rise in incomes

Except for carbohydrates, intake of all nutrients increased.

⑤ From 1975 to 1988 (Showa 50~63): The mild decline in rice consumption continued with other food groups remaining unchanged

The postwar problem of low nutrition had been completely solved and nutrition status became relatively stable (Fig. 3.1).

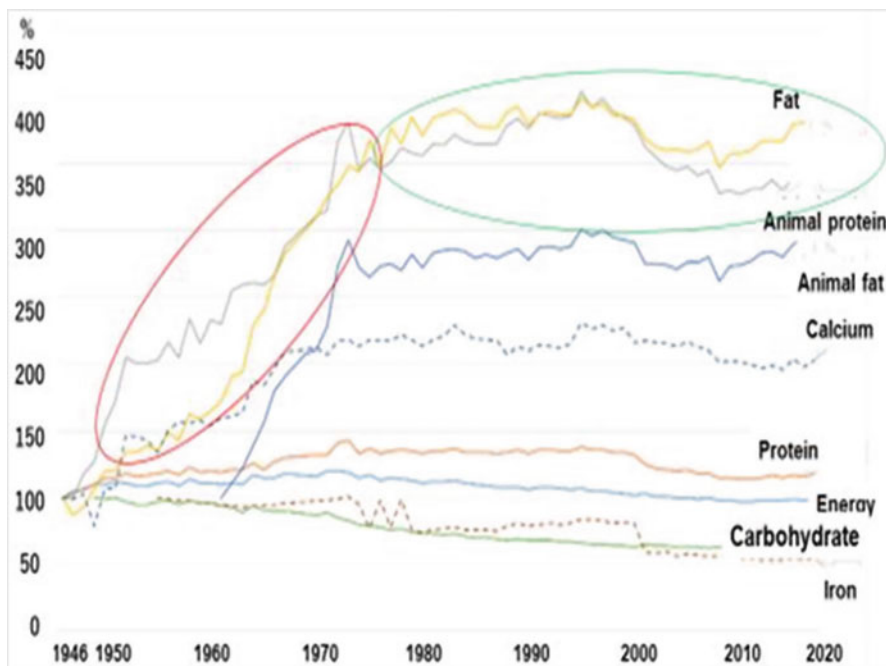


Fig. 3.1 Trends in nutrient intakes

Note: Nutrient intakes in 1946 set at 100 (Carbohydrate intake in 1949, animal fat in 1970 and iron in 1972 set at 100)

3.6 Achievements in Improving Nutrition and the Crisis of the Dietitian System

As nutritional improvement progressed and people were able to break free from nutritional deficiencies, they began to forget how grateful they had been to be able to eat and the significance of eating with nutrition in mind. This led to the emergence of the theory that nutrition and dietitians were unnecessary. At the root of this was the belief, held by many people at the time, that “nutritional problems would be solved by economic development”. People thought that nutrition was important because of the extreme poverty and food shortages caused by the war; however now that the war was over and the economy had developed, they thought that the “nutrition problem was solved”. This is a natural consequence for people who have suffered from hunger and nutritional deficiency caused by long-term poverty. They could not have imagined that the time would come when there would be an abundance of food and they would suffer from overnutrition.

3.6.1 Prevention of the Bill to Abolish Dietitian Act and the Establishment of the Society for Nutrition Improvement

In 1951 (Showa 26), a debate arose in the Local System Council to abolish the Dietitian Act. It was argued that nutrition no longer needed to be a national policy. The Japan Dietetic Association campaigned to prevent the repeal bill on the grounds that there was still insufficient improvement in nutrition for the poor and rural areas. This was the first time that The Japan Dietetic Association waved a flag against the government. At the same time, there was some concern that the status of dietitians would be unstable and that they would not be able to take root as a distinct profession under the “Dietitians Act” alone. In other words, there was debate about the need for a system that would legally support the status of dietitians. As a result, in 1952 (Showa 27), the “Nutrition Improvement Act” was promulgated and enforced with the aim of improving the health and physical strength of the people. This Act included a national nutrition survey, nutritional consultation offices, specialized nutritional guidance by prefectures, a system of nutritional advisors, nutritional management at group meal facilities, special nutritional foods, and nutritional labeling. The Act also instructed the public on the need for improved nutrition and required that dietitians be assigned to group meal facilities. Dietitians were now recognized both in name and reality as an official profession. Incidentally, “The Japan Society for the Improvement of Nutrition” was established in 1954 to take advantage of this formulation to study the significance and methods of improving nutrition in an academic setting.

In 1957 (Showa 32), another unpredicted crisis for dietitians occurred. This was the introduction of the “Cooking Improvement Bill” in the Diet. The proposal was made by a group of cooks, and they demanded a law that aimed to make the placement of cooks mandatory, just like dietitians. An opposition alliance was formed involving the Japan Dietetic Association, Saiki, and the Medical Association. The reason for the opposition was that “the purpose of improving cooking was already included in the Nutrition Improvement Act, and there could be no improvement in cooking without a foundation in nutrition, and this was a job that could only be done by dietitians”. About 70,000 opposition signatures were gathered, and in the end, the “Cooking Improvement Bill” was defeated at the last minute, and the authority regarding menu planning and cooking for the purpose of improving nutrition as the work of dietitians was upheld.

The nutrition improvement movement developed into a national movement, and, combined with postwar reconstruction, it contributed greatly to improving the nutritional status of the Japanese people. Nutritional guidance, which enabled people to make effective use of limited food resources, was widely accepted by society, and the social reputation of dietitians gradually increased. Dietitians prepared menus and provided nutritional guidance for group meals at factories, offices, schools, and other facilities, and also held seminars nation-wide and provided nutritional education using the mass media.

3.7 Emergence of Lifestyle-Related Diseases and the Birth of the Registered Dietitian system

With the promotion of nutritional guidance, the increase in agricultural products, and the development of the economy and distribution, the problem of low nutrition caused by food shortages was almost completely solved by the 1960s. The adverse effects of the Westernization of the diet began to occur, and obesity and non-communicable diseases: NCDs, also known as lifestyle-related diseases, began to increase. nutritional deficiency diseases caused by food shortages result from unbalanced foods, improper cooking, and other factors for which solutions can be found in agricultural science and home economics. NCDs are caused by individual habits and metabolic disorders, and solutions could not be found without the development of clinical nutrition research and education.

In addition to the training of dietitians by junior colleges and vocational schools, the need to train high-level dietitians at universities became apparent. In April 1962 (Showa 37), the Dietetic Council of the House of Councilors Committee on Social Welfare and Labour proposed a “New Dietitian System”. According to the records of the Council, “In the past, dietitians have been responsible for the nutrition, rational consumption, and nutritional effects of food in group meal facilities, but for complex and difficult cases, dietitians with special training are required”.

In September of that year, the Diet approved an amendment to the “New Dietitians Act” to establish a system of registered dietitians to combat NCDs. In April 1962, the Department of Nutrition was established at the Faculty of Medicine of the National University of Tokushima. Dr. Keizo Kodama, then dean of the Faculty of Medicine at the University of Tokyo, became president of the University of Tokushima and established the Department of Nutrition at the medical school to research and teach nutrition as part of medical education.

In April 1963 (Showa 38), the Dietetic Council submitted a proposal to the Minister of Health and Welfare for the “establishment of specialized departments and divisions to enable students to obtain the title of Registered Dietitian: RD” when it reported on the “Standards for the Examination and Training Institutions for registered dietitian”. In response to this proposal, the Ministry of Education approved a course for the training of RDs at the Department of Nutrition, Faculty of Medicine, National University of Tokushima, and appropriated funds for the expansion of the course in the government budget for 1964 (Showa 39).

The substance of the Council’s conclusions at that time was as follows.

1. Concept of the new Department of Nutrition

In considering the criteria for a new Department of Nutrition to award the title of Bachelor of Nutrition, it is appropriate to adopt the following policy:

- (a) This Department of Nutrition must have enough content to become a stand-alone department in order to be able to award a new bachelor’s degree even if it is placed within an existing department.

- (b) This Department of Nutrition shall target a new comprehensive field of academic research on nutrition and shall be distinguishable in content from the existing Department of Nutrition in the Faculty of Agriculture and the Faculty of Home Economics.
- (c) The main purpose of this curriculum of the Department of Nutrition should be to train academic researchers on nutrition.

2. Characteristics of the School of Nutrition, Department of Nutrition

The new Department of Nutrition will focus on research and teaching in the basic areas of nutrition, and food preparation may not be required.

As a result of the above, the Standards for the Establishment of Universities were established in March 1965 (Showa 40) with Ordinance No. 7 of the Ministry of Education, and the system of RD was officially born.

Although it was decided to train a registered dietitian as a professional occupation for NCD measures, the specific work was not fully defined, and the law stipulated that an RD was a “person who performs complicated and difficult work.” For the past 35 years, the specific duties of RD have remained unclear, and also the division of roles between dietitians and RD has remained unclear until 2000.

3.7.1 Pathological Nutrition Workshop and End

Under these circumstances, the National Training Seminar on Pathological Nutrition was held by the Japan Dietetic Association in 1971 (Showa 46). The textbook “Pathological Nutrition” (Dai-ichi Shuppan) (Photo 3.6) was produced by prominent clinicians. It was actually planned and edited by Kiku Morikawa, the third president of the Japan Dietetic Association. He (Photo 3.7) was one of the first to recognize that RD in Europe and the United States were trained as part of the same medical professions as doctors, nurses, and pharmacists, and he had a strong desire to make RD in Japan similar.

At this time this training program was equal to the best in Europe and the United States. Many aspiring dietitians from all over Japan took part in this training program, and it became a pioneering program. However, the problem with this training program was that it was conducted without determining the purpose of the training, the status of those who completed the training, or the duties of those in the medical field. The training program ended in 1988 (Showa 63) without developing into a specific qualification system. In the end, the training ended with dietitians only learning the basic knowledge of medicine to teach medical students.



Photo 3.6 Textbook of Pathological Nutrition Workshop



Photo 3.7 Kiku Morikawa, the third president of the Japan Dietetic Association

But in 1978 (Showa 53), the 5 points for nutritional dietary guidance by a registered dietitian as a medical fee covered by universal health insurance was newly added for chronic disease guidance. At the time, it was said that the 50 yen (50 cents US) fee was not even enough to pay for a cup of coffee, but this was the first time that a registered dietitian who was not a doctor had received such a fee, and it was the first time that a dietitian's professional skills were recognized. Since then, it has become, in 2020, 260 points for 30 min for the first consultation and 200 points for the after the second time.

In 1982 (Showa 57), another major event occurred. As part of its policy of administrative simplification, the government considered a proposal to abolish the "Dietitian Act". The government believed that nutritional deficiencies had been eliminated, and that although a dietitian system had been created, its role was unclear, and the government no longer needed to be proactive in its nutrition policy. This was a third crisis for dietitians. The Japan Dietetic Association was at the forefront of the campaign to stop the abolition of the "Dietitian Act", collecting petitions from the public to withdraw the bill to abolish dietitians, and staging demonstrations at the Diet. The reason for the opposition was not that there were no more nutritional problems in our country, but rather that "non-communicable chronic diseases: NCDs caused by overeating have increased, the nutritional problems of the people have diversified, and nutrition policy is becoming more important". The government promised to work actively on the prevention of NCDs, and the proposal to abolish the dietitian system was eventually scrapped (Photo 3.8).



Photo 3.8 Blocking the proposed abolition of the Dietitian system

The public movement against the abolition of the “Dietitian Act”, while raising the fundamental question of whether or not dietitians are necessary, also served as an opportunity to reaffirm the importance of dietitians, and became the catalyst for the future “Law Reform 2000”.

3.8 School Lunches and Nutrition Education

3.8.1 *History of School Lunches*

School lunches began in 1889 (Meiji 22) as a relief measure for needy students at Chuai Elementary School in Tsuruoka, Yamagata Prefecture. Later, they were implemented in Hiroshima, Akita, Iwate, Shizuoka, and parts of Okayama prefectures. School lunches were born out of social necessity, much like today’s “children’s cafeterias”. In 1914 (Taisho 3), Dr. Tadasu Saiki recognized the need for school lunches, and with the support of a scientific research grant from the Ministry of Education, he began to provide school lunches to children in nearby schools. In 1923 (Taisho 12), school lunches were encouraged in a notice from the Vice-Minister of Education, “On the hygiene of elementary school children”. In 1932 (Showa 7), the Ministry of Education issued a directive entitled “Temporary School Meal Service Facilities”, and school meals were provided to poor children with government subsidies. In 1940 (Showa 15), school lunches were extended to include not only poor children but also malnourished children and physically weak children, and in 1944 (Showa 19), school lunches were provided to about 2 million elementary school children in six major cities with special rations of rice, miso and other foods. In other words, school lunches had already been implemented before the war as part of the campaign to improve nutrition.

The present school lunch, in which all students eat the same meal together, did not start as a national policy until after the war. By the way, it is said that the resumption of school lunches after the war started with skimmed milk powder from LARA supplies, but this is not necessarily true. LARA (Licensed Agencies for Relief in Asia) was an aid organization for Asian countries established and authorized by the government’s [Relief and Control Commission in 1946](#) (Showa 21). However, there was resistance to aid to Japan. At the time, the [anti-Japanese](#) movement was still raging in the US, and there was feeling that there was no need to save the children of enemy countries. It is said that [sympathetic](#) Americans and Japanese-Americans who were concerned about their homeland desperately collected supplies. On August 30, 1946 (Showa 21), the GHQ issued a memorandum regarding the receipt and

distribution of relief supplies to LARA, and the Ministry of Health and Welfare responded with a plan for distribution on September 20.

The plan stated that “relief supplies will be distributed fairly on the basis of need, without regard to nationality, religion, political party, or political faction”, and that priority would be given to facilities for the socially vulnerable. This shows the excellence of the administrative officials of the time. This philosophy led to the extension of relief supplies to schools. Aid was provided from November 1946 to June 1952 (Showa 27), and totaled 33 million pounds. This included 25.22 million pounds of food, including a wide variety of nutritious foods such as whole milk, skimmed milk powder, sugar, baby food, dried fruit, soybeans, dried eggs, canned goods, and flour.

It was in the summer of 1946 that former president Herbert Hoover of the United Nations Relief and Rehabilitation Commission visited Japan and advised GHQ to resume school lunches. In October of the same year, Colonel Sams of GHQ recommended that the government implement the program, and GHQ promised to assist. However, despite the promise, there was no food for school lunches left anywhere in the country. Therefore, the canned food and LARA supplies that the former Japanese army had were used. In December 1947 (Showa 22), the Ministry of Education, the Ministry of Agriculture and Forestry, and the Ministry of Health and Welfare issued a notice from the vice-minister stating that “from the standpoint of improving the physical condition of schoolchildren and nutritional education, it is desirable to widely provide school lunches”, and school lunches were officially resumed. This notice stated that school lunches should be provided with the goal of improving the physical condition of schoolchildren and nutritional education, and this principle has been carried over as the philosophy of school lunches to this day.

When school lunches were first reintroduced, food was scarce and there were no school lunch facilities because the schools themselves had been destroyed. At first, military canned foods such as corned beef, canned spinach, and tomato ketchup were used, and at one school, only tomato ketchup was served, which was sometimes eaten with a bowl of rice. The contents of school lunches gradually improved with the release of LARA supplies, but staple foods could not be provided, so families brought in boiled potatoes and bread. In 1949 (Showa 24), UNICEF began to provide support, milk and flour were distributed, and the prototype of the current school lunch with bread was created. At that time, a comparison was made between schools that received UNICEF support and those that did not, and it was reported that in six months the height and weight of schoolchildren in the supported schools increased by one year’s growth compared with those in the control schools. In 1954 (Showa 29), the School Meal Law was formally enacted to include elementary and junior high school students (Photo 3.9).



Photo 3.9 Improvement of physique through school meals

The children's physique has improved remarkably as a result of school meals. Top: immediately after the start of the school meal, middle: 4 months later, bottom: 2 years later the same number indicates the same child

3.8.2 *Enactment of the Nutrition Teacher System and the Nutrition Education Basic Act*

Since then, reducing or abolishing school lunches has been repeatedly debated, but thanks to the efforts of those involved in nutrition, they have developed into what they are today, and are highly regarded world-wide. The reason for this is that school lunches in Japan began as a way to rescue children from hunger and poverty, but the provision of meals was positioned as part of nutrition education, and menus were considered a living educational medium (Table 3.6). If children continue to eat nutritionally balanced meals for 6 years or more during their growth period, they can physically learn what kinds of meals are preferable.

. In addition, by delivering the “School Lunch Report” to the families every week to convey the children’s experiences to the families, the children can use the report as a topic to talk about nutrition at the family dining table, which improves the meals at home. With the development of the economy, the diet became richer and some of it became Westernized, but the over-all diet of the Japanese did not become Westernized, and this helped to form a Japanese style diet with an excellent nutritional balance centered on rice. This philosophy led to the development of the “nutrition teacher system” in 2005 (Heisei 17).

The nutrition teacher is a category of teacher that was established in 2005 (Heisei 17) to ensure the healthy development of children. The nutrition teacher’s duties include the management of school lunches as well as the education of children so that they can develop the ability to manage their own food and acquire desirable eating habits, using school lunches as a living teaching tool. With the increase in lifestyle-related diseases, there was a need to strengthen nutrition education for children. Dietitians have long had a strong desire to actively implement nutrition education as regular teachers, and the founder of the Japanese Association for Dietetic Research and Education, President Nobu Tanaka, has long been a leader in this movement. When the Ministry of Education, Culture, Sports, Science and

Table 3.6 Goals of school lunches

1	To promote the maintenance of health through the intake of appropriate nutrition.
2	To deepen the correct understanding of meals in daily life, to cultivate the ability to make sound judgments about eating habits, and to develop desirable eating habits.
3	To enrich school life and to cultivate a cheerful sociability and a spirit of cooperation.
4	To deepen understanding of the fact that diet is based on the benefits of nature, and to cultivate a spirit of respect for life and nature and an attitude that contributes to the preservation of the environment.
5	To deepen understanding of the fact that life is supported by the various activities of people involved in food, and to develop an attitude of respect for their work.
6	To deepen understanding of the excellent traditional food culture of our country and of each region.
7	To lead to a correct understanding of the production, distribution and consumption of food.

Technology (MEXT) held a meeting of the committee to study the issue, President Tanaka told me.

“Dr. Nakamura and I are the only two who understand the necessity of this system, and all the other committee members are against it.”

In recent years, Japan’s school lunch system has been gaining recognition overseas. Some countries have opened outlets and restaurants in schools, or distributed commercial lunches, with the aim of eliminating food loss. However, these are school lunches that do not consider the meaning of providing meals in schools, which are educational institutions, and they are not true school lunches. The primary goal of school lunches is to function as education in nutrition, food and diet.

Timeline of the History of Nutritional Improvement in Japan

Japanese calendar	A.D	Event in Japan
Meiji 1	1868	Meiji Restoration
4	1871	Theodore Hoffmann, (German) military physician (internal medicine) introduced nutrition to Japan
5	1872	Beginning of providing meals to 300 people at the Tomioka Silk Mill in Gunma Prefecture
17	1884	Dr. Kanehiro Takagi added wheat to military rations to prevent beriberi
19	1886	Dr. Rintaro Mori wrote “The Theory of Japanese Military Food”.
22	1889	School lunch started at Yamagata Chuai Elementary School
43	1910	Dr. Umetaro Suzuki discovered oryzanin in rice bran
Taisho 3	1914	Dr. Tadasu Saeki established the Nutrition Research Institute
7	1918	Request for unification under “Nutrition”
9	1920	National Institute of Nutrition of the Ministry of the Interior established
13	1924	The Extraordinary Committee on Beriberi Disease concludes beriberi is mainly caused by vitamin deficiency
		Food and Nutrition Research Institute, Faculty of Medicine, Keio University is established
		Saiki Nutrition School opened
15	1926	First graduates of the Saiki Nutrition School, 15 “Dietitians” are born
Showa 9	1934	First issue of “Journal of the Dietitians Association” published “Nutrition Society of Japan” was recognized as the 13th subcommittee of the Japanese Medical Association
13	1938	Opening of nutritional therapy clinic attached to the National Institute of Nutrition The Institute was transferred from the Ministry of Home Affairs to the Ministry of Health.

(continued)

Japanese calendar	A.D	Event in Japan
20	1945	End of war Promulgation of the Dietitian Regulations. Establishment of the All-Japan Dietetic Association
21	1946	Colonel Howe takes up his post National Nutrition Survey started Memorandum regarding GHQ LARA supplies, 1st Japan Dietetic Association held (Takarazuka Theatre). “The Council for National Food and Nutrition Policy” is established at the Headquarters for Economic Stabilization, Nutrition Section established in the Public Health Bureau of the Ministry of Health and Welfare.
22	1947	Start of the school lunch system “Dietitian Act” established to define and regulate the work of dietitians, Public Health Service Act established to assign dietitian to provide public nutrition services
23	1948	Japan’s hospitals are rated as medieval by the U.S. military with the promulgation of the “Medical Care Act”.
24	1949	First National Examination for Dietitians
25	1950	Inauguration of the complete food service system in hospitals
26	1951	Victory in the campaign to prevent the abolition of the “Dietitians Act”
27	1952	Promulgation of the “Nutrition Improvement Act”
29	1954	Promulgation of the “School Lunch Act” The Japanese Society for the Improvement of Nutrition established
33	1958	The Japan Dietetic Association’s official journal “Nutrition Japan” launched
34	1959	The Japan Dietetic Association established as a corporation
37	1962	Registered Dietitian System established Department of Nutrition, Faculty of Medicine, The University of Tokushima founded
46	1971	Japan Dietetic Association’s “Course on Pathological Nutrition Techniques” started
53	1978	Dietician’s nutritional guidance added to medical service fees
57	1982	Promoting the campaign against the abolition of the dietetic licensing system
60	1985	The National Examination System for Registered Dietitians established Inauguration of the Japan Society for Venous and Enteral Nutrition
62	1987	The Japan Dietetic Association’s “Lifelong Learning System” established
Heisei 6	1994	New hospitalization meal treatment system established
9	1997	Implementation of the Community Health Act Dr. Norimasa Hosoya Chairperson, “Committee on the Role of Registered Dietitians in the 21st Century”, Ministry of Health, Labour and Welfare

(continued)

Japanese calendar	A.D	Event in Japan
12	2000	Amendments to the “Dietitians Act”, changing from registration to licensing of dietitians
14	2002	The “Nutrition Improvement Act” becomes the “Health Promotion Act”
17	2005	Nutrition management teams added to medical services
18	2006	Promulgation of the “Nutrition Education Basic Act”
20	2008	Nutritional administration added to medical service fees, “Nutrition Japan” becomes “Journal of the Japan Dietetic Association”, Specific medical consultation and specific health guidance started, Nutrition Care Station opened The 15th International Congress of Dietitians (ICD2008) is held.
22	2010	Nutritional support teams added to medical service fees
23	2011	The Great East Japan Earthquake, JDA-DAT established
24	2012	The Japan Dietetic Association established as a public interest incorporated association Abolition of the additional fee for nutritional administration; included in the basic hospitalization fee calculation requirements
26	2014	The Japan Dietetic Association’s “Lifelong Learning System” becomes the “Lifelong Education System”.
28	2016	Establishment of Nutrition Day (4 August) and Nutrition Week (1–7 August)
30	2018	Certified Nutrition Care Station Program Launched Simultaneous revision of medical and long term care fees in fiscal 2018, provision of nutritional information is rated.

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