《Review》

Dietary Transition and Food and Nutrition Policies in Japan

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Dietary Transition and Current Issues in Japan

Washoku: Traditional Dietary Cultures

In 2013, *Washoku*: Traditional Dietary Cultures of the Japanese was registered on UNESCO's list of Intangible Cultural Heritage. *Washoku* is a social practice based on the essential spirit of the Japanese people and their respect for nature. There are four defining characteristics of *washoku*¹):

- Using fresh ingredients and highlighting their natural tastes
- Eating a well-balanced and healthy diet
- Emphasizing the beauty of nature in the food's presentation
- Connecting foods to annual events

The Japanese islands are located in the Asian monsoon zone, with most of the region belonging to the warm temperate zone. These regions are affected by westerly winds, with well-defined seasons and a wide variety of plant and animal life. In addition, as an island nation, Japan is surrounded by water and has many regions of the country bordering the sea directly. Japan's many mountains provide nourishing water which flows into the sea and creates rich fishing grounds along the coasts, fostering a diverse range of fish and shellfish. In addition, the areas where warm and cold currents meet include a number of world-class fishing grounds. Forests cover about 70% of the entire country. The local forests and mountains near human settlements are the source of providing us with various foods, such as edible wild plants, mushrooms, nuts, and sometimes birds and other animals. There is not much farmland in Japan, but the soil is rich. Due to limited areas available for farming, farmers have been directed to increase their productivity. Various crops have been grown sustainably by a number of small agricultural businesses. Meanwhile, the water—a valuable resource for farming and cooking—is soft and relatively safe.

We cook by creatively adapting various recipes to various foods. Various cooking techniques are used including those unique to *washoku* such as serving food raw which does not cook or change the flavor of the food itself, and also grilling, simmering, dressing, and boiling/steaming are used. In recent years, frying in oil and sautéing have also been adopted.

The *washoku* diet includes a staple food along with the traditional "One Soup and Three Dishes" and is an ideal menu for maintaining health and longevity. "One Soup and Three Dishes" in *washoku* style can been said to be a meal combining rice (the staple) with a main dish, soup, and side dishes. Before World War II, the normal daily meal was just "One Soup and One or Two Dishes". "One Soup and Three Dishes" was only eaten on special occasions and was to supply nutrition not only to the body but mind as well. In around 1980, the *washoku* diet was said to have an ideal protein, fat, and carbohydrates (PFC) balance².

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The Changing Food Environment

Changes in Japanese society after World War II have significantly altered how people worked, where they lived, and what foods were available to them on a daily basis. After World War II, Japan's food situation was in crisis. In response, economic aid from the United States increased, including the importation of large amounts of wheat. Bread and powdered skim milk were both first introduced to the national school lunch program at this time which might have been a major influence on the popularity of bread afterwards.

Later, because of large-scale procurement for the Korean war, the Japanese economy recovered to levels before World War II. The food shortage problem was also solved by this time. With high economic growth between 1955–1960, it was possible to make a good living. Economic disparity was reduced compared with before World War II, but began expanding in the 1980s. After the burst of the bubble economy, there was an increase in the number of non-regular employees caused by downsizing, and by an increase in the number of those job-hopping, part-time workers, and NEETs. This resulted in a difficult employment environment, particularly the effects it had on young people.

Throughout this time, the workforce shifted to industrial jobs from agriculture. People moved to cities from farms and villages. Nuclear families, two-income families, and business bachelors also increased²). At the same time, new pollution and food contamination issues began to arise. The food self-sufficiency ratio (energy base) declined to 38% (2017) from 79% (1960)⁴). This figure is very low compared with other countries worldwide. In particular, the soybean and wheat self-sufficiency ratios are very low. The vegetable and seafood self-sufficiency ratios are comparatively high but are declining. Only the rice and egg self-sufficiency rates are almost 100% currently in Japan⁵).

In 1950s, the electric refrigerator became popular along with the appearance of the supermarket. There was also considerable progress of the cold supply chain using low-temperature transportation. This made it possible to eat fresh vegetables, fish and meat, ham and sausages, milk, butter, cheese, soft drinks, beer, and so on anytime. Also, at this time, city gas and propane gas became more popular and, being available anytime, made it easy to cook Western-style or Chinese-style food. Now, individuals at home could not only roast but also fry in oil and sauté easily. Incidentally, the electric rice cooker and other appliances reduced working hours' housewives and urged the social advancement of the woman⁶.

Japan's population reached 128,000,000 in 2010 but was just 94,000,000 in 1960. At present however, the population is decreasing. The population is also rapidly aging³⁾ and the number of single-elderly households is increasing.

Shifting Dietary Preferences

With a changing society, along with the changing availability of foods, a Westernized diet began becoming rapidly popular in nuclear families living in city centers in the 1960s.

The rates of eating out and having ready-made meals increased sharply from 1975 to around 1995. Family-oriented restaurants and fast food chains, including specialty restaurants such as beef/tempura bowl restaurants, appeared in many parts of Japan. Eating out and enjoying a meal was expanding at the same time. It is important to remember that the expansion of restaurant chains like this also brings with it a uniformity of cooking techniques and tends to affect the use of oils and fats. After 1995, readymade meal rates continued to increase but eating out didn't³⁾. The development of bento shops and convenience stores were the main factors of ready-made meals becoming popular. That is to say, the system of providing cooked food, including precooked food, that could be had easily and at any time had improved in many parts of Japan. Today, most readymade meals are produced by in factories. But these days, conventional restaurants are also actively selling bento boxes. Today, there is a great demand for ready-made meals as the average diet has changed to

eating alone from eating with one's family. In fact, there are fewer chances for having a good time and enjoying a meal with one's family. In 2016, only 60% of people who lived with family ate breakfast and dinner with them almost every day⁷). Because there's a chance that people all act independently due to factors such as women's advancement in society or children attending afterschool programs, the rate of children eating alone has especially increased. As a result, the demand for instant foods has come to occupy a big position in the present diet⁶).

Another factor that has changed is when people eat. Since many people have the habit of being active at night, more people are used to eating late at night. Associated with that, the breakfast skipping rate has seen an overall increase since 1999, in both males and females, until 2011 when it began to decline. In 2017, males and females in their 20s had the highest rate of skipping breakfast, with 30.6% of males and 23.6% of females, respectively. Interestingly, the breakfast skipping rates of those in their 20s in single person households were about 70% for males and about 30% for females⁸.

Transition of Food and Nutrient Intake

Due to changing lifestyles and food preferences, the nutritional makeup of the average Japanese diet has also changed greatly in recent times. For example, rice consumption is declining sharply. Before World War II, the per capita rice consumption was 160 kg, but slumped to below half of that at 71 kg in 1986⁶). The percentage of energy derived from grains went down. Now, more bread is eaten at breakfast than rice. Additionally, since 1988, the supplied amount of meat and dairy products has been greater than that of seafood products. The Japanese diet, which traditionally was centered on rice and fish, has changed significantly²).

From the 1950s to the 1970s, as energy intake increased, the intake of animal fat, animal protein and total lipids all increased, while carbohydrate intake has decreased. What is more, the intake of iron and salt has decreased to lower levels than 1946. In 1960, the PFC balance was P-12.2%, F-11.4%, and C-76.4%. In 1980 the balance was P-13.0%, F-25.5%, and C-61.5%, and in 2011, it was P-13.0%, F-28.6%, and C-58.2%²). The highest energy intake was reached in 1970 and has been on a downward trend since, but the PFC balance did not change so much³). Calcium intake, same as protein, increased after World War II but began to decrease after about 1975. Total calcium intake has never reached 600 mg/day.

Under these circumstances, health and nutrition issues have shifted from malnutrition being the main issue in the past to obesity now being the primary concern⁸⁾.

Quality of Life and Quality of Environment Issues

Despite these changes, Japan is one of the countries with the highest longevity worldwide (average lifespan: male: 81.09; female: 87.26), on the other hand, metabolic syndrome due to obesity and lifestyle-related diseases are major health challenges and greatly affect the backbone of quality of life (QOL). Also, at issue are underweight women in their 20s and the malnutrition in the elderly. In addition, dietary changes, allergic diseases have also been increasing considerably.

The food supply needed to support the quality of environment (QOE) is dependent on other countries for the most part. As a part of that, it is becoming increasingly necessary to obtain superior agriculture land, to accumulate bearers of agriculture, to cultivate and secure, and to build a production and supply system. Also, generating a large amount of food waste which is causing increased strain on the environment.

Food and Nutrition Policies Dietitians and Registered Dietitians

Dr. T. Saeki established the first nutrition school and started training dietitians in 1925. Fifteen dietitians were certified in March 1926. Today, there are about 20,000 dietitian licenses granted every year and about 11,000 registered dietitian licenses granted. As of 2016, a total of 1,023,005 dietitians have been trained along with 205,267 registered dietitians.

Before World War II, the standing of dietitians was not guaranteed because their role was not officially recognized. That changed as the Dietitians Regulation was established in 1945 and nutritional guidance for common people was standardized thereafter. The Dietitians Act (Act No. 245 of 1947) was passed in 1947 and the former Dietitians Regulation was abolished. At that time, dietitians provided nutritional guidance in factories, offices, and schools by providing lunches, and by creating seminars for common people and using mass media to distribute information. Health center dietitians were responsible for nutritional guidance not only in the seminars held at the health center, but also on the street corner or in the farming village.

As Japanese nutrition and the overall health condition of the population has been changing, dietitians have become to be seen as leaders with advanced knowledge and skills needed to prevent malnutrition caused by food shortages and also obesity or other lifestyle-related diseases caused by the Westernization of the diet. Due to their importance, the registered dietitian system was established in 1962. Today, cooking, menu planning, and general nutritional guidance are within the purview of dietitians while nutritional management and nutritional guidance based on the evaluation of nutritional targets are the responsibility of registered dietitians⁹.

Health Promotion Act (Act No. 103 of 2002)

In 1952, the Nutrition Improvement Act was passed in order to improve public health and fitness. The law contained sections related to 1) a national nutrition survey, 2) nutritional consultation, 3) technical nutritional consultations in prefectures, 4) a nutrition counselor system, 5) nutritional management at group feeding service facilities, 6) special nutritive food, and 7) nutritional labeling, among others. In 2003, the Health Promotion Act was passed in order to change national policy from nutritional improvement to health promotion.

The Health Promotion Act was needed to create

a legal basis for various health promotion activities such as the government's primary and secondary health promotion measures and Health Japan 21. These activities included:

- Defining the responsibilities of individuals, the national and local governments, and health promotion service providers such as insurers, business operators, municipalities, and schools;
- Formulating the health promotion plans of prefectures and municipalities;
- Creating the national health and nutritional survey;
- Conducting lifestyle-related disease consultation in municipalities;
- 5) Providing technical nutrition consultation in prefectures;
- 6) Training nutrition counselors;
- Improving nutritional management at specified food service facilities; and
- 8) Revising nutritional labeling.

These nutritional improvement activities are being conducted as part of the health promotion measures aimed at preventing lifestyle-related diseases⁹.

Now, health promotion based on the Health Promotion Act is being pushed ahead as the second term of National Health Promotion Movement in the 21st century (Health Japan 21: The Second Term). Health Japan 21 creates specific targets with the goal of extending healthy life expectancy (i.e. length of life that an individual lives without limitation of daily activities due to health problems). It also encourages health promotion based on the free decision of the nation to agree on health promotional measures. This is accomplished by joining all national healthrelated agencies and organizations comprehensively and effectively¹⁰⁾. In sum, the aims were to enhance the quality of life of the public and to develop a sustainable society. Characteristics of Health Japan 21 included developing a better social environment to support an individual's health promotion, setting improvement goals, and evaluating each of the nine target areas (nutrition and diet, physical activity and

exercise, relaxation and mental health, tobacco, alcohol, dental health, diabetes, cardiovascular disease, and cancer) with an emphasis on primary prevention. The national government as well as prefectures and municipalities formulated and evaluated their health promotion plans. Health Japan 21 began in 2000 and final evaluations were conducted in 2010. The outcomes "reached the goal" and "improvement trend" accounted for about 60% of the total evaluations, so some improvements were seen. As a result, and based on the issues identified in the final evaluations, Health Japan 21 (The Second Term) was established in 2013.

Health Japan 21 (The Second Term), was launched under the circumstances of needing to address an aging population with a falling birth rate and one that has had a transitioning disease structure in recent years. Due to the changing social and economic situation and with keeping our eyes focused on population changes over the past ten years, Health Japan 21 (The Second Term) aimed for all citizens from infants to the elderly to have hopes and dreams and to find meaning in their lives while supporting each other. It also aimed to achieve a vibrant society with healthy and spiritually rich lives according to one's stage of life (i.e. each stage of human life such as infancy, childhood, adolescence, adulthood, older ages and so on), and therefore, creating a sustainable social security system. The basic direction and goals of Health Japan 21 (The Second Term) were as follows¹¹:

- Extension of healthy life expectancy and reduction of health disparities
- Prevention of the onset and progression of lifestyle-related diseases (prevention of noncommunicable diseases [NCDs])
- Establishment of a social environment where the health of individuals is protected and supported
- Improvement of the social environment and lifestyles such as through nutrition and dietary habits, physical activity and exercise, rest, drinking alcohol, smoking, and oral health

Shokuiku Basic Act (Act No. 63 of 2005)

The *Shokuiku* (Food and Nutrition Education and Promotion) Basic Act was established in 2005. Its objective was to change the environment surrounding the dietary life of the people, as well as to sustain a healthy mind and body and nurture the rich humanity of people of all ages. The law was charged with providing concepts in order to sustain comprehensive and systematic efforts to promote *shokuiku* while aiming to contribute to the achievement of current and future health and cultural life of the people to continue building rich and vibrant communities. There were seven basic policies of the Act:

- Promoting a healthy mind and body and nurturing the rich humanity of the people;
- Understanding and showing gratitude towards food and nutrition;
- 3) Developing shokuiku campaigns;
- Defining the roles of parents and educators in providing *shokuiku* for children;
- 5) Experiencing activities concerning food and nutrition and *shokuiku*;
- 6) Understanding traditional food culture, consideration for production, and supporting a harmonious environment, the revitalization of farming, and mountain and fishing villages, as well as contributing to improving food self-sufficiency; and
- Clarifying the role of *shokuiku* in ensuring food safety;

The *Shokuiku* Basic Act also provides the responsibilities of stakeholders (such as the national and local governments, educators, agricultural/forestry/ fishery workers, food-related businesses, and the general public), legal measures and annual report, the *shokuiku* promotion plan, basic policies (promotion at (1) home and (2) school, nursery school, etc., (3) promotion of dietary improvement in the community, (4) the development of the *shokuiku* promotion campaigns, (5) promotion of the interaction between producers and consumers, and revitalization of agriculture, forestry and fisheries working in harmony with environment, (6) support for food

culture activities, and (7) food safety, survey, study and information about nutrition or dietary life, and promotion of international exchange), and creating a *shokuiku* promotion committee.

The Shokuiku Promotion Committee was set up in the Ministry of Agriculture, Forestry and Fisheries (the Chairman is the Minister of Agriculture, Forestry and Fisheries, but until March 2016 the Committee was set up in the Cabinet Office, and the Chairman was the Prime Minister), and provides and promotes the Shokuiku Promotion Basic Plan. The first term (April of 2006 - March of 2011) of the Shokuiku Basic Plan set nine targets. The second term (April of 2011 - March of 2016) of the Shokuiku Basic Plan was promote the "to create action from awareness" concept and set eleven targets within three broader priorities: (1) Shokuiku promotion to continue throughout one's life based on their stage of life, (2) Shokuiku promotion to improve and prevent lifestylerelated diseases, and (3) Shokuiku promotion for children through eating with their family. The third term (April of 2016 - Present) of the Shokuiku Basic Plan focuses on the "let's broaden links of action" concept and sets twenty-one specific goals about fifteen items within five broader priorities: (1) Shokuiku promotion centering on the younger generation, (2) Shokuiku promotion of diverse lifestyles, (3) Shokuiku promotion to realize extending healthy life expectancy, (4) Shokuiku promotion to increase consciousness of the circulation of food, nutrition, and environment, and (5) Shokuiku promotion to hand down food culture to future generations. Examples of initiatives include:

- Eating breakfast or dinner with family more than 11 times per week;
- Dining with people who want to eat together in the community 70% or more of the time;
- Reducing breakfast skipping in the younger generation to 15% or less;
- Utilizing domestically produced food in school lunches 80% or more;
- Having meals combining the staple, main dish, and side dish twice or more per day to 70% or more of the time;

- Acting to reduce food loss to at least 80%; and
- Inheriting and handing down traditional dishes and manners in the community and the family to 50% or more¹²⁾.

Ongoing Programs and Activities Related to Food and Nutrition Education and Promotion

The National Health and Nutrition Survey

The poor state of Japan after World War II in 1945, combined with the need to obtain basic data for receiving food aid from abroad, led the command of General Headquarters, the Supreme Commander for the Allied Powers (GHQ/SCAP), to begin the National Nutrition Survey (National Health and Nutrition Survey). The first survey was conducted in December of 1945 including 6,000 households and approximately 30,000 people in Tokyo. Since 1948, the National Nutrition Survey has been conducted using stratified random sampling from all parts of the country.

During the initial surveys, questions and research was focused on nutrient deficiency and stunted growth, food availability, purchase price, household employment, and urban and rural differences. Since 1952, the National Nutrition Survey has been conducted according to the Nutrition Improvement Act. Survey questions on dietary intake, as well as height and weight measurements were the same as the initial survey, but other items were changed in accordance with the economic revival, improved food situation, high economic growth, greater satiation, and an improved domestic social and living environment. Since 1956, the survey began recording blood pressure measurements. In 1971, items related to nutritional deficiency were removed. In 1972, hemoglobin measurements were added to the survey. In 1986, questionnaire items, such as amount of exercise, drinking and smoking habits, and antihypertensive medicines taken were adopted. In 1989, the blood test section (blood biochemistry and hemoglobin) was expanded and the amount of physical activity was added. In 1995, the food consumption survey

was changed to a proportional distribution method, and dietary intake of the family unit and individuals was investigated. Since 2003, the National Health and Nutrition Survey has been conducted according to the Health Promotion Act, with the goals to clarify status of body, nutrition intake, and lifestyle of the people for comprehensive national health promotion.

Until 1963, the survey was conducted four times a year, but since 1964, it has been conducted once a year. Until 1994, the survey term was three to five days, but since 1995, it is just one day¹³.

Dietary Reference Intakes for Japanese

Dr. T. Saeki, who founded the Institute of Nutrition, was also the first person who tried setting a standardized nutrient amount for the Japanese people. Until 1945, basic research was done and the nutrient criteria for the Japanese was developed mainly in the Institute of Nutrition. But because of the food shortage brought about by a long-term war, some government-related organizations also announced separate nutrient criteria at that time. After World War II, a decision was made to unify organizations. The result was the Prime Economic Stabilization Board (1949), at the time a part of the Science and Technology Agency, but since 1959, responsibility belongs to the Ministry of Health and Welfare which extends to the present (Ministry of Health, Labour and Welfare)¹⁴.

Nutrient criteria are now revised every five years as part of the Dietary Reference Intakes for Japanese (2015). Dietary Reference Intakes for Japanese proposes target values for desirable dietary intake of energy and nutrients for Japanese people to maintain and promote their health. It is specified by the Minister of Health, Labour and Welfare in accordance with Article 30-2 of the Health Promotion Act. Development policies are as follows:

 Dietary Reference Intakes for Japanese (2015) includes the prevention of progression of lifestyle-related diseases (LRDs) in its development purposes, in addition to the prevention of LRD onset.

- Applicable populations are healthy individuals and groups. It also includes those who are being treated for hypertension, dyslipidemia, diabetes, or chronic kidney disease.
- Dietary reference intakes (DRIs) were determined based on scientific findings for which data were available. If there were some important issues but sufficient scientific evidence was not available at the present moment, the research topics were summarized and organized¹⁵⁾.

The Post-World War II Era (1945–1955)

In December of 1946, school lunch was not only for poor or frail children but for all students. Since January of 1947, the commissioner of each region was notified that school lunch should be provided during the school day at lunchtime. In 1954, the School Lunch Act (Act No. 160 of 1954) was passed. This act mandated that serving school lunch for each person in compulsory education at various schools was established with government assistance¹⁶⁾.

The Reconstruction Era (1956–1965)

In 1958, the Licensed Cooks Act (Act No. 147 of 1958) was passed. The cooking license was established under a licensing system administered by each governor.

In June of 1963, the Science and Technology Agency announced the third revised Japan standard tables of food composition. And in November of that year, the first Registered Dietitian Examination was held with field trials being conducted in February of the next year¹⁶⁾.

The Health and Physical Training Era (1966–1977)

In 1972, the Health Promotion Model Center Facility Construction Government Subsidy was established, and Health Promotion Centers were established in Kasai, Hyogo Prefecture and in Miyazaki, Miyazaki Prefecture. There, residents could get practical guidance on how to improve their health in accordance with each state's health, living, and nutrient intake guideline¹⁶.

The 1st National Health Promotion Measures Era (1978–1987)

In April of 1978, comprehensive health promotion policies were developed as the first year of their health promotion activities. In the same year, the Ministry of Health and Welfare notified each governor of the installation of community health centers, wherein constructing such centers was recommended. In May, the Nutrition Improvement Act was revised (seventh time), in which the Nutrition Council was abolished, and was integrated with the Public Health Council, Nutrition Division.

In 1980, the Municipal Nutrition Improvement Project State Subsidy was created which promoted a nutritional improvement project run by dietitians employed in municipal districts.

In August of 1982, the Health and Medical Services Act for the Aged (Act No. 80 of 1082) was passed. In October of that year, the Committee on Science and Technology Agency reported and announced the fourth revised Japan standard tables of food composition. In 1983, government subsidies for educating volunteer members for promoting dietary improvement were created.

In May of 1985, the Public Health Council submitted opinions concerning Dietary Guidelines for Health Promotion¹⁶⁾.

The 2nd National Health Promotion Measures Era (1988–1999)

In April of 1988, the 2nd National Health Promotion Measures Active 80 Health Plan was developed.

In September of 1990, the Public Health Council submitted opinions concerning Dietary Guidelines for Health Promotion (by individual characteristics). In 1994, the Public Health Center Act was abolished and the Community Health Act (Act No. 84 of 1994) was approved in its place. Since April of 1997, nutritional consultations and general nutritional guidance were conducted by municipalities. As a part of that, the Public Health Center provided professional and technical nutrition guidance, including any necessary technical assistance to municipalities and guidance to kitchens to provide meals for large groups.

In May of 1995, a nutrient labeling system was established¹⁶.

The 3rd National Health Promotion Measures Era (2000–2009)

In 2000, the Dietitians Act was partially revised to clarify registered dietitian's duties including complex or difficult tasks and nutritional counseling services such as for injured persons who received a license from the Minister of Health. In March, Dietary Guidelines were determined with cooperation from the Ministry of Education, Ministry of Health and Welfare, and Ministry of Agriculture, Forestry and Fisheries. The National Health Promotion Movement in the 21st Century (Health Japan 21) was started as the 3rd National Health Promotion Measures. In November of that year, the fifth revised Japan standard tables of food composition was announced, and the fifth revised and enlarged edition was published in 2005.

In August of 2002, the Health Promotion Act was passed and was implemented in 2003. In May of 2004, the Nutrition Teacher System was established and put into operation starting in April of 2005.

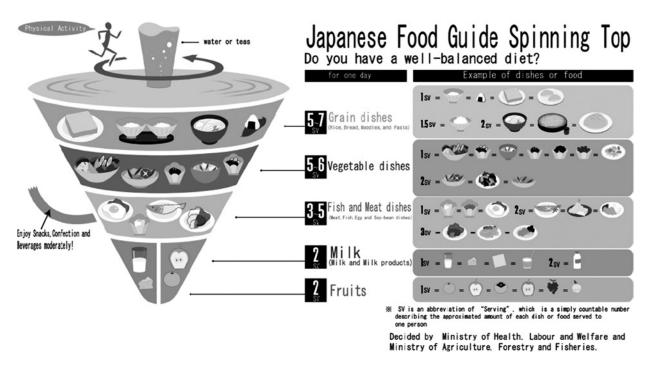
In November of 2004, Dietary Reference Intakes for Japanese (2005) was announced. And in May of 2009, the revised Dietary Reference Intakes for Japanese (2010) was released.

In June of 2005, the *Shokuiku* Basic Act was established and the Japanese Food Guide Spinning Top was created by the Ministry of Health, Labour and Welfare along with the Ministry of Agriculture, Forestry and Fisheries as a concrete action plan illustrating the Dietary Guidelines. In 2006, the first term of the *Shokuiku* Promotion Basic Plan was conducted and the Physical Activity Reference Value for Health Promotion 2006 – Physical Activity, Exercise and Fitness – was announced.

In April of 2008, the Health and Medical Services Act for the Aged was revised to include the Act on Assurance of Medical Care for Elderly People with the Specific Health Examination and Specific Health Guidance to be made mandatory and conducted by health insurance providers on the insured (those 40–74 years old) to prevent lifestyle-related diseases.

In September of 2009, the Consumer Affairs

Agency was set up to plan and execute a food labeling system based on the Food Sanitation Act (Act No. 233 of 1947). Additionally, the Health Promotion Act was moved to the agency as well¹⁶.



http://www.maff.go.jp/j/balance_guide/b_use/pdf/eng_reiari.pdf

The 4th National Health Promotion Measures Era (2010–Present)

In 2010, Japan standard tables of food composition 2010 was announced. In it, nutritional items were matched with Dietary Reference Intakes for Japanese. In 2011, the second term of the *Shokuiku* Promotion Basic Plan was created. In 2012, the Cabinet Office made and announced A Guide to *Shokuiku* to promote *shokuiku* according to each generation and to cherish connections at each stage of life ranging from infants to the elderly.

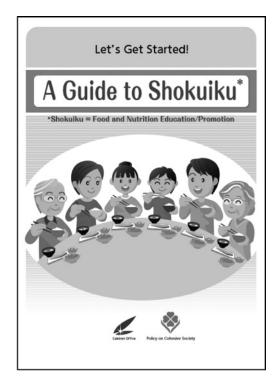
In 2005, Health Japan 21 announced that the mid-term evaluation and campaign period had been extended until 2012. In July of 2012, Health Japan 21 (The Second Term) was announced, and basic directions regarding health promotion activities were amended¹¹).

In 2013, the Physical Activity Reference Value for

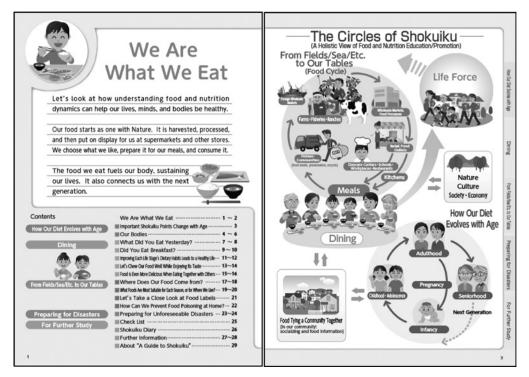
Health Promotion 2006 and Physical Activity Guideline for Health Promotion 2006 (Exercise Guide 2006) were revised as the Physical Activity Reference Value for Health Promotion 2013 and Physical Activity Guideline for Health Promotion (Active Guide) and subsequently released by the Ministry of Health, Labour and Welfare.

In 2013, the Consumer Affairs Agency established the Food Labeling Act (Act No. 70 of 2013) which comprehensively integrated three existing laws: the Food Sanitation Act, the Health Promotion Act and the Act on Standardization and Proper Quality Labeling of Agricultural and Forestry Products (Act No. 175 of 1950). The new food labeling law was created to ensure that all consumer choices and all food ingested were safe. In 2014, Dietary Reference Intakes for Japanese (2015) was announced¹⁶.

In June of 2016, Dietary Guidelines were partially



(front cover)



(p.1-p.2)

revised because 16 years had passed from the original 2000 guidelines and progress had been made in food and nutritional policies. This progress included establishing the *Shokuiku* Basic Act, starting the second term of Health Japan 21, and registering *Washoku*: Traditional Dietary Cultures of the Japanese on UNESCO's list of Intangible Cultural Heritage¹⁷⁾.

Food and Nutrition Education and Promotion for Families

The Current Family Situation

Since 2015, the Japanese population has begun to decline due in large part to a decreasing birthrate and a population aging at a speed unmatched by other countries. The total number of households is expected to decrease starting from 2020. For the time being, however, a population decline means there will continue to be an increase in the number of some household types accompanied by a reduction in household size. Above all, the single household will continue increase after 2020, but will finally decrease after 2030. The estimated percentage of single households will increase from 32.4% in 2010 to 36.5% in 2030. In particular, single households of the elderly (aged 65 or older) are increasing. In 2015, 13.3% of elderly men and 21.1% of elderly women were living alone. It is projected that, in 2040, 20.8% of elderly men and 24.5% of elderly women will live alone. In addition to single person households, the number of single parent households and two-income households are also increasing. Since 1997, twoincome households have become more common than households consisting of the husband working and an unemployed wife. Meanwhile, total housework time, such as cooking and washing, remains noticeably different between men and women, being overwhelmingly skewed towards women. The children of single parent households are often living in poverty and family life is diverse overall^{3,18)}.

Issues

As mentioned above, those living in difficult family situations must rely on individual efforts alone to ensure healthy dietary practices. To increase support, the Community Comprehensive Care System focusing on the elderly and the Comprehensive Child Care Support System focuses on the nuclear family are being built in hopes of establishing an improved social environment.

Based on these situations, and in order to increase *shokuiku* opportunities and improve the local community, several initiatives have been proposed. These include providing opportunities for eating with others in hopes of increasing communication and having rich food experiences, and establishing a food environment with related organizations cooperating and collaborating with each other to ensure that all people, including children and the elderly, are eating a healthy and fulfilling diet.

In fact, communicating while eating with one's family around the table is the origin of shokuiku. In doing so, people not only enjoy the meal but it also serves as the basis of food and livelihood through eating with others. There is a report which states that people eating with others with high frequency had: (1) better mental health status with fewer subjective symptoms such as being distracted, apathetic, and so on, and (2) improved dietary life with less utilization of fast food and a higher frequency of eating fruits and vegetables. There is another report which says that as many as 62.3% of people eating with others almost every day were generally eating a meal combining the staple with a main dish and the side dish and thus, having well balanced meals. While about 90% of people think that it is important to eat with their family, the frequency of eating with family members in their 20s-50s is less likely.

Behind these issues, the promotion of *shokuiku* forming the basic lifestyle habits of children and providing education on food and nutrition for pregnant women, nursing mothers, babies, infants, children, young people, and their parents at home are necessary¹⁸.

Food and Nutrition Education and Promotion for the Community and Family

It is becoming important for people who want to facilitate communication by eating with others but are have difficulties to do with their own family to eat with variety of people belonging to their community.

In recent years, kodomo shokudo (eateries for children) have begun providing free or low-cost, nutritious meals in a warm environment. These are run as voluntary efforts by local residents and are in the process of increasing. These eateries provide an opportunity to eat with others not only for children who have difficulties to do so with their family, but also people who want to talk with someone about their child-rearing problems, elderly people living alone, and disabled people. Also, through shokuiku, people can gain knowledge of food and nutrition, as well as having meals provided to them. These efforts are also aimed at eating a balanced meal with enjoyment, gaining knowledge of the food cycle from the farm to the table, and communicating food culture, food knowledge, and personal experiences to the next generation through exchanges between generations. Additionally, those are becoming triggers for the whole community to cooperate through activities such as food banks where donating food is done to reduce food loss.

While *kodomo shokudo* activities are increasing as voluntary initiatives, the Ministry of Education, Culture, Sports, Science and Technology is promoting a national movement of home education centered around the idea of "early to bed and early to rise makes breakfast" for children to develop healthy living habits.

The Ministry of Health, Labour and Welfare is also promoting awareness for a number of initiatives including: preventing childhood obesity, Food Guide Sinning Top for Pregnant and Lactating Mothers, Dietary Guidelines for Pregnant and Lactating Mothers, and Breastfeeding and Weaning Support Guide. Since April of 2015, in the fourth plan of national health promotion measures Healthy Parents and Children 21 (The Second Term), the goal of improving maternal and child health in the 21st century was started.

Work-life balance has also been promoted by the ministries, including having men participating in housework and child-rearing activities and having the family around the dinner table and communicating with greater frequency¹⁸.

Healthy Eating to Support the Longevity of the Japanese People

Healthy Eating to Support the Longevity of the Japanese People

While the life expectancy of the Japanese is among the longest in the world, there are also a variety of issues. Japanese food makes such longevity possible. In June of 2013, the review committee for Healthy Eating to Support the Longevity of Japanese People was launched. A discussion involving experts and practitioners, as well as nutritional and medical experts was carried out from viewpoint of several broad areas related to food such as cooking, food culture, food service, as well as production and distribution.

They discussed many topics including: (1) what is Healthy Eating: the concept, significance, and components, (2) the specific reference's quantity which taken into amount the type of food combination, food composition and dietary patterns, and (3) consideration for easily choosing cuisine and properly combining with eating based on the simple information of the reference. Decisions were made based on scientific evidence as much as possible while taking into account Dietary Reference Intakes for Japanese (2015).

Views on Healthy Eating to Support the Longevity of the Japanese People were as follows:

- Healthy Eating includes the nutritional balance needed to maintain mental and physical health as well as the promotion of sustainability.
- It is important for the fulfillment of Healthy Eating to take over the simple goodness of the food culture of Japan; it is important to eat delicious food and to enjoy the meal. Tastiness and joyfulness are made up of a wide variety of factors such as food ingredients and cooking techniques,

the formation of food preferences, views of food, and the choice of food setting.

- For Healthy Eating to take root deeply, societal, social, economic, and cultural conditions must be made so people can access the appropriate food on a daily basis using reliable information.
- Healthy Eating in the whole society only comes to fruition by providing educational and experiential activities about ensuring the stable supply of food and by diets making use of the unique characteristics of the community, daily practices of each person, while working on both together to act synergistically. This contributes to the maintenance and improvement of the community empowerments concerning food, their health, and QOL³⁾.

Healthy Eating (Smart Meals) & Food Environment Certification System

In September of 2015, the Ministry of Health, Labour and Welfare released the Health Director's plan concerning the promotion of Healthy Eating to Support the Longevity of the Japanese People. In this notification, it explained that the reference meal to prevent lifestyle-related diseases and promote health was being expanded with further ideas to try and create more ways of eating using a wide variety of nutritionally balanced meals. Local governments and related organizations were asked for their cooperation in developing activities to educate the public and society about Healthy Eating & Food Environment. Their goal was to do this by using and expanding the reference and according to the community and target.

The Healthy Eating & Food Environment Promotion Project was started by the Japanese Society of Nutrition and Dietetics working with Japanese Society of Nutrition and Foodservice Management among others. Its aim was to promote the food environment in order to have a balanced, nutritious diet. A Healthy Eating & Food Environment Consortium was also started comprised of societies related to lifestylerelated diseases and organizations promoting health management who cared deeply about this project. Since April of 2018, the Healthy Eating (Smart Meals) & Food Environment Certification System was started.

This system was tasked with certifying shops and companies which provide Smart Meals regularly as part of their food service, those who make readymade meals, or through creating healthy spaces (such as by making an environment that is working to provide nutritional information and to prevent passive smoking). In this system, healthy eating means having nutritionally balanced meals which positively contribute to one's health. It also is defined as a meal combining the staple with a main dish and side dish. The certified facilities can advertise that they are providing Smart Meals by using the mark of Healthy Eating & Food Environment¹⁹.

Conclusion

I hope that people in good health and living well can maintain strong connections to the community which they feel attached. These connections are inherited from one generation to the next, but society is continually developing. As such, it is necessary for us to reconsider how food and nutrition should be defined and aim for the sustainable and harmonious coexistence of QOL and QOE²⁰⁾ based on past experience and how we think the future will unfold.

At present, with the goal of becoming a multicultural community in mind, the development of a comprehensive community care system is underway everywhere. To facilitate that, we should clarify the role of food and nutrition in people's lives and what exactly food and nutrition contributes to them. It is also expected that people should contribute independently in whatever ways they are able.

References:

- Government of Japan, WASHOKU. www.maff.go.jp/j/ keikaku/syokubunka/ich/pdf/leaflet_e2ok.pdf (Accessed September 26, 2018)
- Okumura, A.: The Book to Understand WASHOKU Basis, pp.4–11 (2015) nousangyosonbunkakyoukai, Tokyo (in Japanese)

- Ministry of Health, Labour and Welfare, Japan: The Report of Verification Committee about "Healthy Eating" to support the longevity of the Japanese people (in Japanese). https://www.mhlw.go.jp/stf/shingi2/0000059931. html (Accessed September 26, 2018)
- Ministry of Agriculture, Forestry and Fisheries, Japan: What is the food self-sufficiency ratio? (in Japanese). http://www.maff.go.jp/j/zyukyu/zikyu_ritu/011.html (Accessed September 26, 2018)
- Sakai, T., Koori, T.: Public Nutrition, pp.1–39 (2015) Koudansha Scientific, Tokyo (in Japanese)
- 6) Ministry of Agriculture, Forestry and Fisheries, Japan: History of Japanese Dietary Life (in Japanese). http:// www.maff.go.jp/j/keikaku/syokubunka/culture/rekishi. html (Accessed September 26, 2018)
- Ministry of Agriculture, Forestry and Fisheries, Japan: 2017 Annual Report on *Shokuiku* (Food and Nutrition Education/promotion) (in Japanese). http://www.maff. go.jp/j/syokuiku/wpaper/h28_index.html (Accessed September 26, 2018)
- Ministry of Health, Labour and Welfare, Japan: Outline of Result from 2017 National Health and Nutrition Survey (in Japanese). https://www.mhlw.go.jp/stf/houdou/0000177189_00001.html (Accessed September 26, 2018)
- Nakamura, T.: History of Resisted Dietitian, Introductory Education 2nd Edition, pp.46–51 (2016) Ishiyakushuppan, Tokyo (in Japanese)
- 10) Japan Health Promotion & Fitness Foundation 2000: Health Japan 21 (in Japanese). www.kenkounippon21. gr.jp/ (Accessed October 3, 2018)
- Tanaka, H.: A Role and Duties of a Registered Dietitian stipulated by laws, Introductory Education 2nd Edition, pp.9–14 (2016) Ishiyakushouppan, Tokyo (in Japanese)
- 12) Ministry of Agriculture, Forestry and Fisheries, Japan: Shokuiku Basic Act. (in Japanese). www.maff.go.jp/j/ syokuiku/kannrennhou.html (Accessed October 4, 2018)
- 13) Ministry of Health, Labour and Welfare, Japan: National Health and Nutrition Survey (in Japanese) https://www. mhlw.go.jp/bunya/kenkou/kenkou_eiyou_chousa.html (Accessed October 9, 2018)
- Hishida, A., Sasaki, S.: Dietary Reference Intakes for Japanese, 2015 (2014) Diichi-shuppan, Tokyo (in Japanese)
- 15) Ministry of Health, Labour and Welfare, Japan: Overview of Dietary Reference Intakes for Japanese (2015) https://www.mhlw.go.jp/file/06-Seisakujouhou-10900000-Kenkoukyoku/Overview.pdf (Accessed Octo-

ber 9, 2018)

- 16) 5) pp.19–26.
- Ministry of Health, Labour and Welfare, Japan: Dietary Guidelines (in Japanese) https://www.mhlw.go.jp/stf/ seisakunitsuite/bunya/0000128503.html (Accessed October 9, 2018)
- 18) Ministry of Agriculture, Forestry and Fisheries, Japan: 2018 Annual Report on *Shokuiku* (Food and Nutrition Education/promotion) (in Japanese). http://www.maff. go.jp/j/syokuiku/wpaper/h29_wpaper.html (Accessed October 10, 2018)
- 19) "Healthy Eating (Smart Meal) & Food Environment" Promotional Programs Secretariat: "Healthy Eating (Smart Meal) & Food Environment" Certification System (in Japanese). http://smartmeal.jp/index.html (Accessed October 11, 2018)
- Adachi, M., Eto. K.: Expectations for "Shokuiku" (Food and Nutrition Education and Promotion), Jpn. J. Nutr. Diet., 63(4), 201–212 (2005) (in Japanese)