2023

Nutrition Policy in Japan to

Leave No One Behind

-For Achieving Sustainable Societies

Pioneering examples of multisectoral collaboration and cooperation



Modality of the Tokyo Nutrition for Growth Summit 2021 and Commitments of the Government of Japan

Modality and participants of the Tokyo Nutrition for Growth Summit 2021

[Schedule] December 7-December 8, 2021

[Host] the Government of Japan

[Participants] Speeches were given by more than 90 VIPs including heads of state and ministers from around 60 countries, heads of international organizations, representatives from the private sector, civil society and academia.

[Major participants]

Prime Minister Mr. KISHIDA, Minister for Foreign Affairs Mr. HAYASHI, State Minister for Foreign Affairs Ms. SUZUKI, Minister of Agriculture, Forestry and Fisheries Mr. KANEKO, Minister of Health, Labor and Welfare Mr.GOTO.



Food, Health, & Prosperity for All

Mr. Félix Antoine Tshisekedi Tshilombo, President of the Democratic Republic of Congo, Ms. Sheikh Hasina, Prime Minister of Bangladesh, Mr. Taur Matan Ruak, Prime Minister of Timor-Leste, Mr. António Guterres, UN Secretary-General, Mr. David Malpass, President of World Bank, Ms. Henrietta H. Fore, Executive Director of UNICEF, Dr. Tedros Adhanom, Director-General of WHO

Outcomes of the Tokyo Nutrition for Growth Summit 2021

- The Tokyo N4G Summit addressed the double burden of malnutrition, which indicates the co-existence of undernutrition and overnutrition. The Summit also focused on five priority areas-- Health, Food, Resilience, Accountability, and Financing, to tackle nutritional issues aggregated by the COVID-19 pandemic.
- The Tokyo Compact on Global Nutrition for Growth was issued as an outcome document that indicates a direction for the international society to improve nutrition. The Tokyo Compact was endorsed by 215 stakeholders including 65 governments, 11 international organizations, 60 private sectors, and 58 civil society.
- Moreover, 396 commitments were submitted from 181 stakeholders including 66 countries, 26 private sectors, and 51civil society and over 27 billion USD of financial commitment were announced. The Summit gathered global efforts to nutrition improvement by promoting concrete actions by a wide range of stakeholders.
- Prime Minister Mr. KISHIDA announced that Japan would provide nutrition-related assistance to the world, which will amount to over 300 billion Japanese yen, equivalent to 2.8 billion USD, for the next three years, to contribute to achieving Universal Health Coverage among others. Prime Minister KISHIDA also stated that Japan would improve domestic nutritional status by promoting nutritional and environment-friendly dietary life, balanced diets, and health and productivity management.

- Commitments of the Government of Japan (excerpt)

- 1. Further promoting Japan's nutrition policies for leaving no one behind which is the foundation of a sustainable society throughout the life course as an important part of Universal Health Coverage (UHC) especially by the following measures:
- Deploying a policy package with major nutrition policy actions including the promotion of a healthy diet and sustainable dietary environment by addressing issues such as excess sodium intake, underweight among young women and nutritional disparities caused by economic conditions. This would be implemented in collaboration with the government, businesses, academia and civil society.
- Publishing the progress and achievements of these policies annually starting from 2023. (Omit 2-6)

History of nutrition policy in Japan



Since around the Meiji Restoration (late 1800s), nutrition-related activities had been undertaken in Japan. On that foundation, Japan started to develop its nutrition policy as a national effort in 1920 when the government established the National Institute of Nutrition, followed by the foundation of the Private Nutrition School by Dr. SAIKI Tadasu in 1924. Throughout the history of the country's nutrition policy, "Diets," "Specialists," and "Evidence" have always been the core elements.

After World War II, with the support from international organizations and other countries, Japan promoted various nationwide nutrition improvement activities, for instance, the national nutrition survey, school lunch program, and nutritional guidance in local communities. As shown in the graph above, Japan has been promoting its nutrition policy long before the huge increase in its real GDP and life expectancy of the Japanese citizens.

Japan has been continuously advancing the national nutrition policy according to the nutrition challenges at the times, before and after WWII "era of addressing nutritional deficiencies caused by food insecurity" and from the late 1960s to the 1990s "era of tackling NCDs increased along with the economic growth". By doing so, the country achieved the tremendous economic expansion and became the world's top country for longevity.

Since the 2000s, Japan has been in the "era of dealing with more complex nutrition challenges associated with declining birthrates and an aging society" and is tackling to solve nutrition challenges through further development of nutrition policy and promotion of nutrition improvement initiatives through multisectoral collaboration and cooperation.

Promoting the nutrition policy to leave no one behind

Policy that supports throughout the life-course, the sick/wounded, and disaster victims



The Nutrition Improvement Act (1952) stipulated that the government should work on nutrition improvement activities for the people. When this Act was revoked, the Health Promotion Act (2002) not only took over its contents but also added that the people themselves should actively make an effort to improve and maintain their health status.

Based on various nutrition-related laws including the Health Promotion Act, Japan has been continuously promoting the national nutrition policy that no one is left behind throughout the country.

Since Japan already has vast experience in addressing issues similar to challenges that many countries are facing today, the country believes that its knowledge on nutrition policy can be effectively utilized in those countries' actions.



Dietary support activities for the elderly through collaboration of various types of specialists



Local government registered dietitians, etc. dispatched to disaster-hit areas

Training and nationwide placement of specialists and community-based activities

Training and placement in a variety of facilities of registered dietitians/dietitians



Japan stipulates a placement of registered dietitians/dietitians and designates wide range of facilities to place them, such as hospitals, schools, and elder-care facilities. This rule started in 1947 when the Health Center Law (Currently: Community Health Act) required health centers to hire dietitians.

Since then, various laws have prescribed the placement of registered dietitians/dietitians in a variety of facilities, and Japan has been locating nutritional specialists nationwide under these laws. Additionally, registered dietitians/dietitians also promote nutrition improvement activities in companies and research institutes.

Volunteers supporting local nutrition improvement activities





In addition to registered dietitians/dietitians, a number of volunteers have also been working on nutrition improvement activities in local communities; a representative example is Volunteers for Promoting Improved Dietary Habits.

Volunteers for Promoting Improved Dietary Habits are another important specialist who support nutrition improvement activities in local areas. They are members of the Japan Nutrition Association, a volunteer organization promoting health through diets under the slogan, "Achieve our good health ourselves." After WWII, the Japan Nutrition Association played a central role in promoting the mobile dietary guidance service (nutritional guidance car service) and cooking demonstrations throughout the country to tackle the nutritional deficiencies caused by food shortages. Later, health centers in prefectures across Japan opened nutrition classes, and many people attended those classes and acquired proper knowledge/skills on nutrition. Afterwards, those people established volunteer groups which were then later integrated into one nationwide organization.

About 110,000 members (as of 2021) have been supporting nutrition/dietary habits improvement activities for local health promotion for a long time in cooperation with municipalities.

Development of a food environment that is naturally healthy for everyone through multisectoral collaboration and cooperation

Strategic Initiative for a Healthy and Sustainable Food Environment

Based on Expert Committee Report (released in June 2021) and the Japanese government's commitment at the Tokyo Nutrition for Growth Summit 2021, the Ministry of Health, Labour and Welfare (MHLW) launched the "Strategic Initiative for a Healthy and Sustainable Food Environment" in March 2022 as a system to promote the creation of a food environment through collaboration between industry, academia, government, professional associations, and civil society.

The Initiative recognizes nutritional issues such as "excess sodium intake," "underweight among young women," and "nutritional disparities caused by economic conditions" as well as "environmental issues" as critical social issues, and develop a food environment that is naturally healthy for everyone through multisectoral collaboration and cooperation. The goal is to extend the healthy life expectancy and realize a vibrant and sustainable society for people in Japan and around the world.



Strategic Initiative for a Healthy and Sustainable Food Environment

Activities in FY2022

Steering Committee : Held three times a year (July, November, and March)

The Steering Committee is responsible for reviewing and deciding on policies, etc. for the Initiative as a whole. Committee members include representatives of participating businesses, academics, SDGs/ESG experts, professional associations, and civil society organizations.

FY2022(from April, 2022 to March, 2023), the group developed operating rules, discussed goals for the Initiative, and examined rules for labeling and advocacy regarding participation in the Initiative.

Action Goal Implementation Subcommittee : Held three times a year (July, November, and February)

The Action Goal Implementation Subcommittee is responsible for supporting the PDCA process in regard to SMART-style action goals for each participating business (making recommendations on the setting and progress status of action goals for each participating business).

Committee members include academics, SDGs/ESG experts, professional associations, and civil society organizations.

FY2022, the group exchanged opinions with participating businesses and made constructive proposals regarding the setting of action goals.

Plenary Session : Held once a year (September)

The plenary session is attended by those involved in the Initiative (participating companies and expert committee members) to share and disseminate the results of the Initiative (including good practices related to the action goals of participating businesses).

FY2022, lectures by academics, case studies by participating businesses, and an exchange of opinions were held.

Other Events

In the Initiative, we have held exchange meetings among participating businesses to introduce examples of their efforts and to strengthen cooperation among participating businesses. In addition, to support the setting of ambitious and effective action goals, individual consultations as well as meetings to exchange opinions with academics and ESG affiliates have also been held.

The events held this fiscal year are as follows:

- Exchange meeting for participating businesses (June)
- Special Seminars(exchange of opinions with ESG affiliates) (October, March)
- Individual Business Consultations(October-November)
- Opinion Exchange Meeting and Exchange Meeting among Participating Businesses, Academics, and Other Related Parties(December)



Exchange Meeting among Participating Businesses, Academics, and Other Related Parties

Source : https://sustainable-nutrition.mhlw.go.jp/wp/wp-content/uploads/2023/03/hsfe2023v2_en.pdf

Focus on pioneering examples of multisectoral collaboration and cooperation

List of pioneering examples

① Koga City, Fukuoka Prefecture: Preventing Non-Communicable Diseases among young people \sim Gifting 'health sets' to newlyweds and others \sim

2 Sanjo City, Niigata Prefecture:

Health awareness to naturally reduce sodium intake. An approach that combines food environment improvement and information ~From invisible sodium reduction to sales of low-sodium food~

3 Hachimantai City, Iwate Prefecture:

Establishing and practicing appropriate eating habits from school age \sim Through hands-on learning at afterschool childcare clubs, efforts to form appropriate eating habits \sim

④ Yamato City, Kanagawa Prefecture:

Improving underweight and health issues in young women ~Health & Beauty PROJECT~

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Head Office

(5) Komatsu Ltd. : Health promotion of adults and the working generation ~Development and improvement activities of actions to improve workplace cafeterias and improve lifestyle habits~

(6) Hyogo Prefecture : Prevention of undernutrition and frailty in the elderly ~Comprehensive frailty measures project~

⑦ **Gosen City, Niigata Prefecture**: Establishment of food stockpiling system considering nutrition in preparation for largescale disasters ~Efforts using a Food Reserve Calculation Simulator~

Koga City, Fukuoka Prefecture |

Preventing Non-Communicable ~Gifting 'health sets' to newlyweds

Key Points of the Initiative

- The main target of the initiative is adults in their prime working years, to whom the municipality does not have easy access.
- The marriage is a timing for a couple to change their living environment, so it can be seen as a good opportunity to promote changes in their eating habits, and effective initiatives are being implemented to target this timing.
- This initiative was planned through close cooperation between municipal registered dietitians and public nurses, with the cooperation of the Citizen's National Insurance Division, and was realized through smooth cooperation within the city government.



Background and History of the Initiative

Fukuoka Prefecture has a high proportion of hypertensive persons compared to other prefectures. Furthermore, Koga City has a particularly high rate of hypertension in Fukuoka Prefecture. Under these circumstances, municipal registered dietitians and public nurses are aware of the problems in improving the nutrition and lifestyle of citizens and preventing non-communicable diseases and have always been discussing effective ways of approaching these problems.

As the elderly often have fixed taste preferences and eating habits, and it is sometimes difficult to encourage them to change their behaviors, it was considered important to start approaches from the younger generation in order to tackle nutritional improvement.

Additionally, the generations that the city has many opportunities to approach are mainly pregnant women and infants, those who are eligible for specific health checkups in their 30s and onwards (only those who are members of the National Health Insurance system) and the elderly, so there are few opportunities to approach citizens of the younger and working age groups. As a point of contact with people of that generation, the city focused on the timing of 'marriage registration'.

Marriage can be a major milestone in changing lifestyle habits, including eating habits. Therefore, the city thought it would be effective to make use of the timing of the marriage registration, and launched an initiative to give newlyweds a set of health-related goods that will help them reduce sodium intake when they register their marriages.

Diseases among young people and others \sim

Details of the Initiative

A set included measuring cups, a leaflet about appropriate sodium intake and cooking recipe cards are given as a wedding gift to those who have registered their marriage or declared a partnership in Koga.

Presentation of measuring cups

The initiative focused on the importance of measuring seasonings when tackling the reduction of sodium intake. Measuring cups were chosen as a gift to make the people easier to measure the amount of several liquid seasonings for mixing and measuring.

The initiative aims to encourage the use of the right amount of seasoning by using measuring cups, so that the taste of the appropriate seasoning becomes the standard for eating at one's home. The city hopes that the use of the right amount of seasoning in cooking will become the norm in each household, which will also lead to *Shokuiku* (food and nutrition education) for children.

Set of health-related goods (measuring cups, leaflets, recipe cards, etc.

Producing and giving leaflets on appropriate sodium intake

Registered dietitians and public health nurses jointly produce and distribute leaflets to inform people about the need to reduce sodium and to promote awareness of appropriate sodium intake.

The leaflet includes information on the target sodium intake per day, the amount of sodium contained in a meal, and ideas for reducing sodium in cooking and eating.

In addition to this leaflet, a leaflet on the risk and danger checklist for Non-Communicable Diseases and key points on diet, exercise and rest in health promotion has also been produced and distributed.



Measuring cups as a gift

The initiative to give a set of health-related goods as a gift was realized by the division in charge collaborating with the Citizen's National Health Insurance Division and the security company.

Departments within the City Hall are cooperating in this initiative, as the Health and Care Division prepares goods for the gifts, such as measuring cups and leaflets, while the giving gifts is carried out in cooperation with the Citizen's National Insurance Division, which is in charge of handling marriage notifications at the counter.

Additionally, a flyer has been prepared for those who submit a marriage certificate outside the opening hours of the municipal offices, such as on holidays, informing them that they will be given a set of health-related goods as the newlywed gift. This leaflet is distributed to the target citizens by security guards with the cooperation of the security company that guards the facility, and they are asked to come to the Health and Care Division during opening hours again at a later date to give them the set of health-related goods.



Counter at the Citizens' National Health Care Division where the sets of healthrelated goods are given

Creation and distribution of recipe cards

In order to promote cooking with the appropriate amount of seasonings, the city has been creating and distributing cards with five to six different recipes every year in cooperation with Volunteers for Promoting Improved Dietary Habits. The cards are also available at City Hall and libraries in the city for citizens to refer to. The recipe cards can be bound with rings. etc., so that citizens can keep track of the increasing number of recipe cards each year.

The city is also working on the distribution of cooking videos using a video-sharing website, which can be viewed via a QR code on the recipe card.

Municipal registered dietitians and Volunteers for Promoting Improved Dietary Habits are deeply collaborating with each other for example at monthly training courses for Volunteers for Promoting Improved Dietary Habits, guidance for Shokuiku at elementary schools and events related to reducing sodium intake in the community.



Recipe cards that can be bound and managed with rings



Outcome of the Initiative

Residents who received the sets of health-related goods have improved their awareness of sodium reduction

Citizens who received the sets of health-related goods commented, "I realized that I use more seasoning than I thought when I cook and season food according to my visual perception." and "It gave me an opportunity to discuss with my husband / wife about the saltiness of our meals".

The changes in the awareness and behavior of those who received the sets will be quantitatively monitored in the future.

Future Perspective of the Initiative

Expanding opportunities to distribute the sets for health-related goods

As with marriage, pregnancy and childbirth can be times of changing lifestyles and can be considered good opportunities to promote changes in eating habits, and from 2023, a box of congratulatory gifts (measuring spoons, measuring cups, sets of baby food, etc.) is planned to be distributed at the time of pregnancy notification.



Conducting a survey of citizens to whom the sets of health-related goods have been given

A survey is planned to be carried out by means of a questionnaire to those to whom the set of health-related goods have been given, asking them whether they got used to measuring seasonings and what kind of changes they have experienced after using the measuring cups.

Education on the correct understanding of sodium reduction

The city plans to raise awareness among all generations through publicity, events, lectures, etc. that the key to reducing sodium intake is not simply to "make it less salty" but to "measure the right amount".



Leaflet describing appropriate sodium intake, etc.

Sanjo City, Niigata Prefecture

Health awareness to naturally reduce An approach that combines food \sim From invisible sodium reduction to

Key Points of the Initiative

- Sanjo City has been promoting awareness of reduction of sodium intake to citizens of all ages by taking advantage of opportunities that the city government can provide, such as group health checkups, nutrition education promotion programs, cooking classes for parents and children at daycare centers, health classes held at companies, and health classes held at community gathering places where seniors in the community can gather and interact (*Kayoi-no-Ba*).
- Sanjo City is taking steps to encourage citizens to naturally reduce sodium intake in their daily lives who have little interest in health. In addition, the city is also planning to reduce usage of sodium at restaurants in order to increase the number of people who are aware of this issue.
- Sanjo City has been working in collaboration with stores that promote local production and local consumption in the "Operation to secretly get everyone to reduce sodium consumption", and as a result, the retailers with which Sanjo City collaborates are voluntarily promoting initiatives related to reduction of sodium intake.



sodium intake. environment improvement and information sales of low-sodium food \sim

Background and History of the Initiative

In Sanjo City, the incidence of cerebrovascular diseases is higher than the prefectural average, and in addition, the incidence of cardiovascular diseases (hypertension, etc.) is on the increase. This situation has led to an increase in medical costs. Sanjo City considered about excess sodium intake to be the main cause of higher medical expenses and conducted a "Survey on Sodium Intake Status" in 2015.

Having found the trend through the survey toward excess sodium intake among citizens and based on the dietary habits that lead to excess sodium intake, Sanjo City initiated a policy to reduce sodium intake. In 2017, Sanjo City prepared a pamphlet to inform citizens regarding the results of the "Survey on the status of sodium intake" and launched a project to raise public awareness of the importance of reducing sodium intake. Sanjo City has also been working to create a "smart wellness" community for those who are less concerned about their health. Through the concept of smart wellness, those people can become healthy just by living a normal life. In conjunction with these initiatives, Sanjo City launched the "Operation to secretly get everyone to reduce sodium consumption" campaign in 2017.

Details of the Initiative

In order to prevent cerebrovascular disease, which is a health issue in Sanjo City, and hypertension, which is a factor in cerebrovascular disease, the city is working to educate the citizens about the proper use of sodium and to sell low-sodium foods. The city is also working to create a system that allows citizens to naturally reduce sodium intake in their daily lives, regardless of their individual health literacy, from those who have high health awareness to those who have less health awareness.

Educational Activities for People of All Ages

Sanjo City conducts educational activities on reducing sodium intake through group health checkups for citizens and promotion of *Shokuiku* (food and nutrition education) programs conducted by the city, cooking classes for parents and children at daycare centers, health classes for companies and health classes for the elderly at *Kayoi-no-Ba*.

As an approach to those who are raising children, the Child Rearing Support Division provides educational activities for parents with health consultation for their 10-month-old children to reduce sodium intake. The health class for companies is an initiative realized by the city visiting and holding the classes together with public health nurses who have been working with companies on other projects. For the elderly, the city holds nutrition classes to prevent low nutritional status at places such as *Kayoi-no-Ba*, and as part of these classes, the city educates the elderly on how to reduce sodium intake.

These awareness-raising activities are not related to the health literacy of the target population, but rather are conducted for a wide range of age groups.

-Overall picture of the initiative-

1 2 3 4



Health awareness to naturally reduce An approach that combines food \sim From invisible sodium reduction to

"Operation to secretly get everyone to reduce sodium consumption"

By gradually reducing the amount of sodium used in the cooking of ready-made foods sold at local supermarkets to an appropriate level (0.2%/year) while maintaining their taste, the city has been creating a healthy food environment in which citizens can naturally reduce using sodium in their daily lives.

In order to spread these initiatives approachable to a wide range of generations, the project started by reducing the contain of sodium in ready-made foods at supermarkets. A supermarket promotes local production and local consumption and has its headquartered in Sanjo. It provides Sanjo City's first sample activities for this initiative, and is responsible for the development, improvement, sales, and promotion of the ready-made foods with low-sodium content in cooperation with the city government and the Niigata Prefecture Dietetic Association.

The city is also working with "*Karada ga Yorokobu Deli* (Delicatessen which can promote healthy and delightful food for your body)", which is an initiative of Niigata Prefecture to promote a healthy eating environment. Sanjo city is using the city's own logo to publicize this cooperative initiative. By using stickers with its own logo for the packages are intended to make it easier for health-conscious consumers to choose such ready-made dishes as ready-made food with low-sodium content.

Sodium concentration 1.4% 1.2% 1.0% 2017 2018 2019 (Year)

Stage-by-stage reduction of sodium content to an appropriate level while maintaining the delicious taste of ready-made dishes



A tasting event attended by Sanjo City, the Sanjo Branch of the Niigata Prefecture Dietetic Association, and partner stores



Logo mark "UMAMI SANJO" without the image of sodium reduction

The Program of Providing Healthy Meals at Shops Promoting Local Production and Local Consumption

Under the "Sanjo City Promoting Local Production and Local Consumption" system, as of March 2023, 210 restaurants, retail stores, etc. in the city have been certified as stores that actively use local agricultural products to produce and supply their products.

These certified stores are working to promote and educate the local people about certified healthy meals and to actually improve their existing menu items so that they can obtain the certification.

In addition, in cooperation with the Agriculture and Forestry Division, which is in charge of initiatives related to stores promoting local production and local consumption, the city is working to expand the number of stores promoting local production and local consumption.



Certificate of stores promoting local production and local consumption

sodium intake. environment improvement and information sales of low-sodium food \sim



Outcome of the Initiative

Improvement of "Eating Habits Leading to Excessive Sodium Intake" among Sanjo Citizens

In the "Survey on Sodium Intake by Citizens" conducted in Sanjo City, the percentage of respondents who answered positively on 8 out of 11 questions related to excessive sodium intake improved between 2015 and 2020.

Eating Habits that Lead to Excess Sodium Intake



Decrease in mortality rate caused by cerebrovascular diseases among Sanjo citizens

The mortality rate due to cerebrovascular diseases in Sanjo City (5-year average per 100,000 population) was 144.6 in the period from 2012 to 2016, before the start of the project, but was 134.1 in the period from 2015 to 2019, after the project started, showing a downward trend.

The mortality rate due to cerebrovascular diseases in <u>Sanio</u> City (5-year average per 100,000 population)



Retailers as the collaborating partners in this initiative are voluntarily promoting initiatives to reduce sodium intake

Through this initiative, supermarkets as the cooperating partners with the city began to voluntarily promote initiatives to reduce sodium intake, such as switching from granulated ready-made dashi to natural dashi and using less sodium for ready-made dishes, and purchasing a sodium meter and using it during cooking.

Future Perspective of the Initiative

From FY2023, the city plans to expand its initiatives for reduction of sodium intake from local supermarkets to the local restaurants (for eating out), through certifying low-sodium menus, and also certifying restaurants that promote such initiatives. The city is working with the Sanjo Restaurant Association to recruit restaurants to cooperate with this initiative.

The "Survey on the Status of Sodium Intake" conducted in FY2022 was targeted mainly the elderly people in the Sanjo city. Then, in FY2023, the city plans to conduct a survey for obtaining data on the status of sodium intake among the working-age population by utilizing opportunities to visit the local companies for health education classes.

Hachimantai City, Iwate Prefecture

Key Points of the Initiative

- Hachimantai City, in cooperation with the Liaison Council of Dietary Improvement Promoters and the after-school childcare clubs operating throughout the city, is working to provide children with opportunities for hands-on learning and other activities that contribute to improved nutrition from school age, particularly a proper understanding and practice of eating habits.
- Since 2022, the city has been holding nutrition education classes for children with the main theme of passing on food culture while also taking health into consideration, to create opportunities for children to think about the importance of reducing sodium and eating vegetables while experiencing local cuisine, and at the same time to provide opportunities for intergenerational exchange between Volunteers for Promoting Improved Dietary Habits and children.
- Through the classes, results have been achieved, such as a decrease in the proportion of children who are obese and a decrease in the proportion of children who feel that miso soup with a sodium reduction is not salty enough.



Background and History of the Initiative

Hachimantai City considers excessive sodium intake among adult citizens as a municipal health challenge, due to the high rate of hypertension in the results of specific health checkups for adults. The prevalence of diabetes among citizens is also high compared to other municipalities in Iwate Prefecture. In the questionnaire to be filled in during specific health checkups, the proportion of respondents who answered that they eat snacks three or more times a week and that they have dinner before sleeping three or more times a week were higher than those in other municipalities.

Looking at the situation of school-aged children, percentage of those who tend to be obese among primary school children is high in comparison with the national standards, and in addition, children eat the same seasoned diet as adults at home, resulting in an issue of excessive sodium intake among children.

Based on this situation in the local community, the city has been seeking projects that can be implemented in cooperation with the community, rather than by the government alone, and the city has been promoting projects in collaboration with Volunteers for Promoting Improved Dietary Habits. In recent years, the city has implemented the project in cooperation with the after-school childcare clubs that have been organized throughout the city, on the basis that moderate sodium intake, a well-balanced diet from childhood will lead to the prevention of Non-Communicable Diseases in the future.

Details of the Initiative

Training for staffs at after-school childcare clubs

For the implementation of this initiative, the city holds regular staff training for managers and instructors of after-school childcare clubs. In the staff training, the municipal registered dietitian provides information on municipal health issues, the need for health promotion, and points to keep in mind when implementing *Shokuiku* (food and nutrition education) and shares the policy of this initiative with the participants.

Shokuiku and hands-on learning

In order to acquire the "ability for choosing appropriate food" through visual and impressive handson learning, opportunities for *Shokuiku* classes and cooking workshops are provided at after-school childcare clubs. The city considers schoolhood to be an important period in which the lifestyle habits are basically formed and has implemented initiatives to combine impressive hands-on learning experiences and cooking lessons for children.

Measuring the sodium concentlation of the home-made miso soup

- After-school childcare clubs are asked to bring miso soup from home and measure the sodium concentration. The results are fed back to the children and their families, providing an opportunity to think about reducing sodium intake.
- The program is to provide children experience that tasty dishes can be cooked with less sodium. For this reason, Dashi soup stock is used in cooking workshops and tastings of Dashi are also conducted.



Measurement of sodium concentration in miso soup



Tasting of Dashi

Establishing and practicing ~Through hands-on learning at

How to choose snacks / vegetable weighing experience / homemade sports drinks / Onigirazu

- The children are given the opportunity to think about how to choose snacks by measuring the same amount of sodium, sugar and oil contained in commercial snacks, etc., and looking at the actual amounts.
- Through the experience for weighing vegetables, an initiative is implemented through which children try to choose vegetables and weigh them to have the approximate amount of vegetables. This amount is the target amount of vegetables which they should consume per day.
- Making a drink like a commercial sports drink with lemon, sugar and sodium provides an opportunity for children to think about how much sugar and sodium is contained in commercial sports drinks.
- Cooking workshops for children are provided to develop their ability to cook by themselves. "*Onigirizazu*", which can contain a variety of ingredients and is easy to prepare, is used as the subject of the workshop.



Experience of weighing vegetables



Cooking workshop (Onigirazu)

Conducting questionnaires on Shokuiku

• The current status and problems of dietary habits in different areas of the city are identified by investigating through questionnaires for children, for example, whether children have breakfast, about the nutritional balance at meals, and trends in snacking and sodium intake. Feedback is provided to parents and other relevant parties.

Cooking workshops for local cuisine

• Cooking workshops on the theme of inheriting food culture are also conducted. In 2023, *"Hittsumi-Jiru"* was chosen as the theme for introducing and tasting local cuisine in order to learn about reducing sodium intake and eating more vegetables.

Outcome of the Initiative

Methods of confirming the outcomes of the Initiatives

Hachimantai City uses relevant data accessible as a municipality and examines the outcomes of the initiatives from the formulation of initiatives to their evaluation (see diagram on the right).



Evaluation of the Process

In after-school childcare clubs, the participation rate of staff in training and the participation rate of children in *Shokuiku* classes have increased, as well as the number of projects for *Shokuiku* held in the community.

	Holding training courses	Holding nutrition education	Holding nutrition education
	for staff from after-school	classes at after-school	projects in the local
	childcare club	childcare clubs	community
Year	Participation rate 54.5%	Participation rate 56.2%	20 times
2016	(30 participants)	(154 participants)	(716 participants))
Year	Participation rate <mark>86.8%</mark>	Participation rate <mark>74.2%</mark>	<mark>30 times</mark>
2019	(46 participants)	(135 participants)	(858 participants)

Evaluation of Outcomes

Compared to the responses in 2016 and 2019, the proportion of children who tend to be obese and the proportion of children who feel that miso soup with a sodium content of 0.8% is not salty enough have decreased.

	Percentage of children who tend to be obese(3rd grade of elementary school)	Percentage of children who tend to be obese(6th grade of elementary school)	Percentage of children who feel that miso soup with a sodium content of 0.8% is not salty enough
Year 2016	12.1%	16.6%	46.1%
Year 2019	10.1%	13.3%	12.7%

Future Perspective of the Initiative

In order to establish face-to-face links between all (approximately 40) municipal registered dietitians and dieticians working in nurseries, schools, medical facilities, elderly care facilities and companies in the city, a liaison committee of dietitians has been established to promote city-wide initiatives to improve nutrition.

In addition, as opportunities for *Shokuiku* classes and hands-on learning have been reduced due to the outbreak of COVID-19, the city will further strengthen cooperation with the local community and Volunteers for Promoting Improved Dietary Habits so that initiatives can be implemented as before.

Key Points of the Initiative

- In Yamato City, various actions are being taken to improve underweight among young women in collaboration with the Health Promotion Division. Medical Health Checkup Division, Cultural Promotion Division, Board of Education, as well as Medical Associations, the Association of Obstetricians and Gynecologists, and others. As a high-risk approach, individual nutritional consultations are provided by municipal registered dietitians, and as a population approach, information is provided using various tools as well as events are organized to raise public awareness, with the aim of changing the value system that being underweight is attractive, etc.
- These actions are being implemented based on the recognition that it is necessary to raise awareness not only among young women, but also among men and society as a whole.
- As a result of the nutrition education for students, comments were received such as 'I was aware about underweight' and 'It was good to know about the relationship between underweight and babies with low birth weight', and the initiative has raised awareness about underweight among the younger generation.





Background and History of the Initiative

In Yamato City, an initiative to improve underweight among young women was launched in 2019, utilizing the expertise in the prevention of undernutrition among the elderly that had previously been undertaken.

Initially, the city worked to promote knowledge and awareness-raising to change the value system that being underweight is attractive. Later, the city started collaboration with the Yamato City Medical Association and the Yamato City Obstetrician-Gynecologist Association, with the expectation that the initiatives would lead to individual nutritional consultations, etc.

In order to effectively spread awareness of the initiative among the younger generation by using impressive illustrations and catchphrases, in 2021 the city also collaborated with the Cultural Promotion Division of the Culture and Sports Department and asked the winners of an illustration competition organized by the city to create illustrations for the project, which is a unique point of this initiative.

In addition, from planning to implementation, the initiative has been carried out through cooperation with a university and receiving its advice.



Illustration for promotion and awareness created by the winners of the illustration contest

Details of the Initiative

Nutritional counseling by a municipal registered dietitian in Yamato City.

Prior to the start of this initiative, Yamato City had been conducting monthly women's health checkups for women aged 39 and under, and around 60 people have received the checkups each time.

Nutritional counseling by a municipal registered dietitian has been offered to those who have undergone the women's health checkup and who wish to receive nutritional counseling, but since 2015, nutritional counseling has been offered to all women undergoing the checkup, not just those who wish to receive nutritional counseling.

Nutrition counseling provides consultation and advice regarding the appropriate amount of energy, the appropriate amount of protein, combinations of dishes, and others.



Nutrition counseling by registered dietitian

Nutritional counseling are currently conducted by the Medical Health Checkup Division.

High Risk Approach

"Nutrition Counseling Room for Adult Women" "Nutrition Counseling Room for High School Girls"

• The "Nutrition Counseling Room for Adult Women" generally targets women in their 20s and 30s, while the "Nutrition Counseling Room for High School Girls" targets female high school students, with a municipal registered dietitian providing free nutrition counseling.

Utilization of "Health Consultation Contact Form"

- The Health Consultation Contact Form, which had been used for the elderly and those with metabolic syndrome, was created for young women, and in 2019, the city began collaborating with the Yamato City Obstetricians and Gynecologists Association, utilizing the Health Consultation Contact Form as an information-sharing tool.
- The family doctor fills out the health consultation contact form, and the eligible person submits the form to the Health Promotion Division to receive individual consultation and advice from a municipal registered dietitian or public health nurse.
- From 2022, an additional contact form has been created for female athletes to share information such as athletic history, amount of practice, and motivation for taking the medical checkup.

Population Approach

Health & Beauty Fair

- The "Health & Beauty Fair" is held every year during Women's Health Week (March 1-8) to promote awareness through questionnaires and guizzes, and to provide individual Nutrition counseling to participants of the event. Private companies also cooperate with the fair.
- To attract the interest and attention of young women, the theme of the event is "Health & Beauty" and includes elements of beauty. The catchphrase "Build the right amount of fat and muscle in your body for the future" is used to convey the message of aiming for a "physically active" and "well-proportioned" body.



(from junior high school to university)

- Registered dietitians visit schools to give lectures and classes on women's health issues.
- At the beginning of the initiative, the target age group of the Health & Beauty PROJECT was 18-39 years old, so it was targeted at high school and college students. However, as the initiative progressed, it became clear that it was necessary to start working on improving underweight among the younger generation, and in 2023, nutrition education will also be provided at junior high schools.
- Besides sending out the message that "being too skinny is not good," the city is also trying to attract more students by showing them that eating properly can have a positive impact on their club activities and studies. Moreover, the nutrition education that is provided at junior high schools and universities is not exclusively targeted to girls, but also to boys.



"Health Consultation Contact Form"



An educational activity at the "Health & Beauty Fair"



Nutrition education at a junior high school



Outcome of the Initiative

Providing Nutritional counseling for high-risk individuals in cooperation with family doctors

A system was established to provide individuals nutritional counseling to those who are suffering from underweight and weight gain by sharing information between family doctors and municipal registered dietitians through the "Health Consultation Contact Form".

Raising awareness of "underweight among young women"

As a result of the nutrition education at junior high schools and a university, comments such as "I was aware of underweight" and "It was good to know the relationship between underweight and babies with low birth weight" were received, as well as comments from boys such as "I want to be careful about my little words and actions".

(Reference) Improvement in the percentage of "underweight" among female respondents who received health checkups

The percentage of "underweight" among female respondents who received health checkups decreased from 27.4% in 2014 to 16.5% in 2021.

Future Perspective of the Initiative

Nutrition education at junior high schools, which began in 2023, will continue to be offered to the younger generation, while reviewing the method of implementation.

In cooperation with neighboring municipalities, Yamato City aims to provide the same consistent support to students from outside the city who attend high schools in the city.

The city also intends to expand its contacts with young working women. In addition to working with restaurants and businesses in the city to expand initiatives, the city is also considering the use of the Web and SNS to reach young women more effectively.

Komatsu Ltd. | Health promotion of adults and the working generation \sim Development and improvement activities of actions to

Key Points of the Initiative

- Komatsu Ltd. is working to improve nutrition, mainly for adults and people in their prime working years, who are difficult for local governments to have contact with.
- It suggests healthier food options for health-conscious people, and is creating a system that encourages even those who are less concerned about health to naturally want to choose healthier options.
- Information on employees' health conditions is shared with food service providers to promote nutrition improvement activities tailored to specific issues at each office.

Komatsu Ltd.

Head Office: Tokyo

- Established: 1921
- Business: Construction and mining equipment, small machinery, forestry machinery, industrial machinery, etc.
- Number of employees (as of 2022) : 62,774
- Sales (as of 2022): 2,802.3 billion JPY

List of Relevant Parties Involved in the Initiative KOMATSU Relevant Parties outside Relevant departments within the company the company Health Promotion Food service provider Center* Canteen management General Affairs Division company of Human Resources Department Health and Safety Division of the Health and Safety Promotion Department Health Care Division Health insurance union * Main department in charge Labor union of the initiative

Background and History of the Initiative

Since 2019, Komatsu Ltd. has been working to improve the meals served at its offices and to create a better food environment for employees and to improve their health literacy, with the aim of "developing an environment and structure that enables employees to make healthy choices naturally."

In addition to the Health Promotion Center, which oversees the initiative, Komatsu has been working internally with the General Affairs Division of the Human Resources Department, the Health and Safety Division of the Health and Safety Promotion Department, health insurance union, labor union, and other departments to form multiple teams to promote the initiative. In addition, Komatsu has been working with related organizations outside the company, such as food service providers, to promote the initiative through multi-departmental and multi-organizational partnerships.



Details of the Initiative

Cooperation with food service providers

Cooperation with food service providers includes receiving materials and ideas for the creation of the KOMATSU Healthy Canteen Checklist, and obtaining cooperation for the creation and development of canteen menus.

Komatsu also cooperates with food service providers to provide information on employees' health issues at each office, and the food service providers use this information when devising and developing canteen menus.

KOMATSU Healthy Canteen Checklist

In 2019, the first year of the initiative, the group visited 20 offices in Japan and conducted interviews on health promotion activities at canteens, shops, etc., in order to understand the actual status of the activities conducted under the supervision of each office.

In 2020, the group compiled the KOMATSU Healthy Canteen Checklist consisting of 46 items, including the essential items for the standard for healthy meals certified by academic organizations, based on the best practices of each office gathered from the interviews.

Through the responses to the checklist, the group encourages each office to evaluate their initiatives and provides an opportunity to think about the priority of their initiatives.

In rolling out the checklist to each office, the group collaborates with the general affairs department of each office and the canteen management company.

			事業所名		工場
KON	ATSUヘルシー	-食堂チェックリスト	回答者名		
No.	項目	内容		優先的に 取り組む	
[Bas	ic】ヘルシーメニュ	- 提記する			
1	カロリー	1食あたり①450~650kcal未満、②650~850kcalの2段階の設定がある			
2	組み合わせ	料理の組み合わせは、「主食+主菜+副菜」パターン、「主食+副食(主菜、副菜)」パターンの2パターンである			
3	PFCパランス	たんぱく質13~20%E、脂質20~30%E、炭水化物50~65%Eの範囲に入る			
4	野菜等	野菜など(野菜、きのこ、海藻、いも)の重量は、140g以上である			
5	食塩	食塩相当量が①3.0g未満、②3.5g未満である			
6		牛乳・乳製品、果物が含まれている			
[Bas	ic】 ヘルシーメニュ	ーを選びやすくする			
7	情報提供	ヘルシーメニューの情報を提供している			
8	プロモーション	ヘルシーメニューに「おすすめ」と表示するなど、選択時にプロモーションされていることがわかる			
9	栄養情報	ヘルシーメニューの選択に必要な栄養情報等を、食堂内、掲示板等メニュー選択時にわかるよう提供している			
10	説明者	ヘルシーメニューを説明できる人が食堂内にいる			
【Bas	ic】健康な食堂を管	理する			
11		管理栄養士・栄養士がヘルシーメニューの作成・確認に関与している			
12		食堂内禁煙である			
【Adv	anced】より質の高	いヘルシーメニューを提供する			
13		ヘルシーメニューの主食が週3日以上、精製度の低い穀類を含む			
14		マンナンヒカリを利用した主食を提供する			
15		健康米を提供している			
16		麦ごはんを提供している			
17		主食量を、選択または調整できる			
18		ヘルシーメニューの主菜の主材料として、週3日以上、魚を提供している			
4.0		· · · · · · · · · · · · · · · · · · ·	_	_	_

"KOMATSU Healthy Canteen Checklist" (excerpt)

Komatsu Ltd. | Health promotion of adults and the working generation \sim Development and improvement activities of actions to

Improving the food environment through the provision of healthy meal

Each of Komatsu's offices has a different line of work: a direct worker, who works physically, and an indirect worker, who mainly does desk work such as office work.

Before this initiative, meals provided in the canteen of each office were mainly for direct workers, with high calories and sodium content.

The aim was to provide healthy meal options for diverse employees, as their daily activities varied depending on their job type.

In providing healthy meal in order to dispel the image that "healthy meal does not taste good", we hold tasting parties and serve meal without emphasizing that it is healthy meal, and so on.

The company also devised eating utensils and arrangements for healthy meal, and set up a system to encourage employees who are less concerned about their health to naturally choose healthy meal options.





Example of healthy meal provided in the canteen





example of meal provided on devising eating utensils and arrangements



improve workplace cafeterias and improve lifestyle habits \sim

Information exchange meeting on food environment improvement activities

Since 2022, information exchange meetings have been held to share information on food environment improvement activities of each office.

At the information exchange meetings, discussions are held on topics such as "Key points of food environment improvement activities being undertaken by offices" and "Initiatives to improve employees' eating habits," and good practices are planned to be spread laterally to other offices.

Outcome of the Initiative

Healthy cuisine takes over as an option

As a result of this initiative, healthy meal has become a popular option, with the rate of healthy eating employees reaching 20% in some offices.

Increased health awareness among employees

The provision of healthy meal has also led to increased health awareness among employees, with employees requesting recipes to make the healthy meal served in the canteen at home.

Future Perspective of the Initiative

An analysis of canteen usage shows that there are a certain number of employees who have never chosen healthy meal, and the company plans to strengthen initiatives aimed at such employees in the future.

In addition, the company will consider distributing recipes that can be used at home in order to respond to requests from employees that they would like recipes to make the healthy meal that is served in the canteen at home.



Scene of canteen use

Hyogo Prefecture | Prevention of undernutrition and frailty in the elderly ~Comprehensive frailty measures project~

Key Points of the Initiative

- Hyogo Prefecture has developed a "Frailty Prevention and Improvement Program" that provides an example of how municipalities in Hyogo Prefecture can take measures to prevent and evaluate the effects of frailty. The prefecture has also created a number of tools such as leaflets and videos that can be utilized in the prevention of frailty classes.
- In addition to the prefectural government, 11 parties, including cities and towns, businesses, academia and civil society, are involved in the initiative, which are being expanded and continued through multi-sectoral collaboration that leverages the strengths of each party.
- The program has improved the diversity of food intake and the subjective view of health of the program participants, and has also raised participants' awareness of measures to prevent frailty.



List of Relevant Parties Involved in the Initiative

- Relevant departments within the Prefectural Government and related organizations
- Health Promotion
 Division*
- National Health Insurance and Medical Care Division
- Aging Policy Division
- Wide-area federation
- Main department in charge of the initiative

 Relevant Parties outside the Prefectural Government

- Professional associations (10 associations: Medical Association, Dental Association, Pharmacists Association, Nursing Association, Registered dietitians Association, Dental Hygienists Association, Physical Therapists Association, Occupational Therapists Association, Speech Therapists Association, Long-term Care Support Professionals Association)
- National Health Insurance Federation
- Supermarkets
- Food distribution service providers
- Food-related businesses
- **Companies** (For development of the "Frailty Check" application)
- Kobe University
- Cities and Towns (Divisions of Health, Elderly* or National Health Insurance) * including community general support centers
- Medical insurers (National Health Insurance, Regional)
- Liaison Council of Volunteers for Promoting Improved Dietary Habits
- NPO (Food Bank)



Background and History of the Initiative

Hyogo Prefecture has a worrying trend in the health of its elderly residents, with a 'higher incidence of proximal femur fractures and a higher proportion of underweight compared to the national average'. To address this problem, in 2018, under the leadership of the prefecture's registered dietitians, a study was initiated to examine initiatives to improve undernutrition and frailty among the elderly.

At that time, there was a situation where initiatives to improve oral function and undernutrition, which would lead to measures against frailty, were not widespread enough in community gathering places where seniors in the community can gather and interact, such as "*Kayoi-no-Ba*". Having examined the factors behind this situation, as a result, it became clear that the lack of specialists for this field in municipalities (cities and towns) and the methods of handling measures, contents of materials and tools, and evaluation methods of the measures, were the factors causing this situation. Based on this situation, the prefectural government aimed to support the measures of municipalities to improve the oral functions and undernutrition of their residents by creating a program that could be used by the specialists of municipalities and that would also lead to changes in the behaviors of the participants.

Details of the Initiative

Creation of "Frailty Prevention and Improvement Program"

The program provides municipalities that are trying to implement measures to prevent frailty with examples of how to implement the measures and how to evaluate the content of the measures. To enable municipalities to flexibly implement measures in accordance with their local characteristics and conditions and the availability of specialists, four different plans for the frailty prevention classes are provided, which differ in terms of content, time required and specialists who participate in the classes.

Expansion of initiatives as the "Comprehensive Frailty Prevention Program" in 2022

The measures against frailty, such as the implementation of the frailty prevention program and the dissemination of the frailty check application, will be developed for elderly across the whole prefecture. In addition, opportunities for specialists such as dentists and registered dietitians to approach people at high risk of frailty have been strengthened, and exercise guidance has been provided to them in collaboration with health and sports physicians. Initiatives are also being made to develop a nutrition and dietary support system for persons in need.

2018 • Mo	odel project implemented in two municipalities eation of "Frailty Prevention and Improvement Program"
2019 🖕 Up	grade dissemination activities of the program and evaluation of initiatives
2020 🍦 Sti	rengthening the population approach
2021 🍨 Sti	rengthening the high-risk approach
2022 🌻 Ex	pansion of initiatives as the "Comprehensive Frailty Prevention Program"

Hyogo Prefecture | Prevention of undernutrition and frailty in the elderly ~Comprehensive frailty measures project~

■ Health-supporting food distribution services at "*Kayoi-no-Ba*", etc.

In this initiative, health-supporting food distribution services are provided at places such as *"Kayoi-no-Ba"* in cooperation with food distribution service providers, etc.

The diets served are nutritionally balanced and chewy diets that generally meet set standards per diet.

Through the nutritionally balanced and chewy diets, participants can understand the appropriate amount and balance of diet for themselves, and the program is also effective as an educational tool for frailty prevention. This initiative is also used as a "communal diet" where participants eat together.

The nutritionally balanced and chewy diet (generally meet set standards per diet)

- The meal must consist of a staple dish (rice), at least one main dish and at least two side dishes.
- (2) At least 100 g of vegetables are served.
- (3) At least 60 g of fish or 50 g of meat is used for the main dish.
- (4) Chewy foods must be included (e.g. grilled meat, pickled root vegetables, vinaigrette octopus, etc.)







Scenes from the frailty prevention class

Outcome of the Initiative

The diversity of food consumption and subjective view for health among the program participants have been increased.

As a result of the evaluation of the project implemented in nine municipalities in the prefecture in 2020 as a model case, it was confirmed that the diversity of food intake and the subjective view for health among program participants have been Increased (See diagrams below).

The program participants commented that they were aware and have learned about their own dietary habits, such as subconsciously choosing soft foods, as a result of participating in the program. In addition, 98.4% of the participants answered in the questionnaire that they would like to be aware of the three points for preventing frailty in the future, and 82.5% said that they had increased their knowledge about frailty and felt motivated through the class. The results of the questionnaire show that the program has raised participants' awareness of frailty.





Percentage of the Elderly with Undernutritional Tendencies Declines

According to the results of the "Survey on Nutrition and Dietary Habits of the Elderly in Hyogo," the percentage of the elderly with undernutritional tendencies (BMI below 20) decreased by 4.9 ppt for males and 2.1 ppt for females between 2016 and 2021.



In some areas, the initiatives have developed into activities for residents to look after each other.

The approach in this program is to disseminate tools that lead to effective learning in a short time about improving oral functions, nutritional status, etc. through the program, and to encourage participants to take action against frailty on their own initiative. In addition, as it is considered difficult for the specialists to participate in all initiatives at all times, future development will involve specialists in areas where individual support is required, while also working on human resource development so that residents can be widely involved in the part of looking after the elderly.

As of 2022, in some areas of Hyogo Prefecture, residents have taken the initiative in holding classes on preventing frailty, and these initiatives have developed into activities for residents to look after each other.

Future Perspective of the Initiative

With the expansion of the functions of the KDB (National Health Insurance Database) system in 2022, it is now possible for program implementers to obtain information on participants' health check-ups, medical care and nursing care. In the future, the program will continue to analyze and evaluate participants' conditions using the data from the KDB system that is being accumulated, as well as using the evaluation of participants' oral function and nutritional status that is being obtained within the program.

It is also expected that each of the specialists involved in this initiative will acquire know-how on measures against frailty through the program, from which various activities will be developed in collaboration with various types of specialists.

Key Points of the Initiative

- In Gosen City, registered dietitians of the city government's departments (Health and Welfare Division, Children Division, School Education Division) and registered dietitians from the prefectural health center are working together to prepare a disaster manual and a food stockpiling system in cooperation with the Disaster Prevention Section of the General Affairs Division using a food stockpiling calculation simulator, in order to create a disaster-resistant community.
- Regarding food stockpiling in preparation for a large-scale disaster, Gosen City uses a food stockpiling calculation simulator published by the Ministry of Health, Labour and Welfare of Japan to calculate possible food stockpiling quantities for nutrition and dietary support, considering health and nutritional aspects and also those who require special dietary support, to ensure the dietary support so that 'no one is left behind'.
- The stockpiled food that is approaching its expiry date is used as teaching materials for disaster prevention education, leading to the maintenance and improvement of disaster awareness among the citizens of Gosen.



system considering nutrition in preparation for large-scale disasters Calculation Simulator \sim 1/2/3/4

Background and History of the Initiative

In Gosen City, the Internal Review Meeting about Dietitians' Services was established in 2017 in order to strengthen cooperation between registered dietitians in the city government. The Internal Review Meeting about Dietitians' Services shares initiatives and issues related to nutrition that are being handled by each department and discusses how to solve their problems and implement nutrition improvement activities in a better way.

In 2018, Gosen City started a study on how to provide nutrition and dietary support in large-scale disasters.

In promoting food stockpiling for large-scale disasters, a 'Simple simulator for calculating nutritional food stocks in preparation for large-scale disasters' (hereinafter referred to as the 'simulator') released by the Ministry of Health, Labour and Welfare of Japan (MHLW) is used for preparations that lead to nutritional and dietary support, considering health and nutritional aspects as well as those who require special dietary support, such as infants, the elderly and residents with food allergies.

Details of the Initiative

Study for nutrition and dietary support activities in large-scale disasters

Since 2018, the roles required of registered dietitians in large-scale disasters have been studied, and a "Manual for Nutrition and Dietary Support Activities in Large-Scale Disasters" has been issued in accordance with existing manuals such as the "Disaster Action Manual of Gosen City Department of Health and Welfare", "Gosen City Public Health Nurses Disaster Response Manual", "Gosen City Regional Disaster Prevention Plan" and "Niigata Prefectural Regional Disaster Prevention Plan", etc. The manual for Gosen city was finally released in 2021.

In the process of issuing the manual, the prefectural local health center (Niitsu Health Center) joined this study group, and initiatives were promoted in collaboration with the relevant parties.

Dietary Support Activities	in Large-Scale Disasters"
Normal situations	At the time of a disaster
 Establishment of food supply system (food stockpiling for preventing disasters) Identification of people who require special dietary support and systems to support them Education on food stockpiling and emergency food for self- help 	 Initial response and information gathering Support for of people who require special dietary support Provision of meals (stockpiling and cooking) Relief supplies/support Preparation of necessary forms and materials

Main contents of the "Manual for Nutrition and _____ Dietary Support Activities in Large-Scale Disasters"

Usage of simulators for the establishment of a food stockpiling system

The simulator released by MHLW was created to promote food stockpiling in order to provide nutrition and dietary support in large-scale disasters, considering health and nutritional aspects and those who require special dietary support, and enables municipalities to estimate the amount of food stockpiles required within each municipality based on its basic information.

This has enabled Gosen City to estimate the nutritional requirements of its citizens in large-scale disasters and to provide data on excess or deficient nutritional values.

In Gosen City, the Disaster Prevention Section of the General Affairs Division and registered dietitians work together, and the simulator is also used to examine food for stockpiling in order to improve nutritional value.

Aim and usage of simple nutrition-based stockpiling simulator for large-scale disasters

○ The aim of this simulator is to have those in charge of disaster management departments in local governments acknowledge the importance of food stockpiling which focus on peoples' health/nutrition, and special needs, and to encourage such stockpiling.

Name	Simple nutrition-based stockpiling simulator for calculating the amount of food stock for large-scale disasters	
Background	This simulator was created as part of Ministry of Health, Labour and Welfare's budgeted project "Research and Analysis toward 'Nutrition for Growth Summit 2020' (tentative name)" under the supervision of an advisory committee whose members include experts on disaster nutrition.	
Aim	 To enable each local government to calculate the approximate amount of required food stock, with focus on peoples' health/nutrition and special needs. To enhance acknowledgment and understanding in local governments toward emergency stockpiling, in aim to establish a stronger support system for nutrition and dietary habits in preparation for large-scale disasters (disaster nutrition). 	
Intended Users	Those working in disaster management departments in local governments, etc. *This simulator should be used upon coordination with such persons as registered dietitians in health promotion departments as necessary.	
Functions	 It is designed to calculate automatically the amount of required food stock via Excel® once the basic information of each local government (number of intended persons, etc.) is entered into the system. Upon excluding items considered unsuitable for stockpiling by referencing government publications, the simulator is then able to calculate the optimal amount of food stock of selected items in consideration to nutritional aspects. (Reference) Ministry of Agriculture, Forestry and Fisheries: "Disaster Stockpiling Guide" (March 2019) Ministry of Agriculture, Forestry and Fisheries: "Household Emergency Stockpiling Guide" (February 2014) 	
	Ministry of Education, Culture, Sports, Science and Technology: "Food Composition Database" "Standard Tables of Food Composition in Japan - 2005 - (Seventh Revised Edition) 2018 Addendum"	

The basic concept adopted for the calculation of optimal amount of food stock with consideration to nutritional aspects

This tool uses the "demand" and "supply" concepts to calculate the optimal amount of food stock in consideration to nutritional aspects.

"Demand" is the "total required amount" of nutrient factors that is calculated by multiplying the amount of each daily required amount (calories, protein, vitamins, etc.) and the number of applicable days.

"Supply" is the "total supply amount" which is the sum of each nutrient factor included in foods selected. The simulator calculates the optimal amount of food stock to match (or nearly match) "demand" and "supply" in consideration to nutritional aspects.

Ministry of Health, Labour and Welfare of Japan 'Simple simulator for calculating nutritional food stocks in preparation for large-scale disasters' (only available in Japanese) https://www.mhlw.go.jp/stf/seisakunitsuite/bunya/0000089299_00004.html

system considering nutrition in preparation for large-scale disasters Calculation Simulator \sim 1234

Disaster prevention education in the local community

Stockpiled food is used as teaching materials for disaster education for citizens before its shelf life expires. In Gosen City, stockpiled food is tasted and introduced how to use in social studies at elementary schools, home economics at junior high schools, health classes and at community gathering places where seniors in the community can gather and interact (*Kayoi-no-Ba*) for elderly people in the local community, as well as cooking classes for parents and children at child-rearing support centers and nurseries, in cooperation with Volunteers for Promoting Improved Dietary Habits.

In replacing stockpiled food, the opinions of local residents at disaster prevention education events are shared with the Disaster Prevention Section of the General Affairs Division, leading to improvements in food stockpiling.

In addition, a pamphlet to educate about disaster prevention-related initiatives is distributed at the time of issuing the Maternal and Child Health Handbook.



Practice in cooking packed meals at day-care centers and voluntary disaster-prevention organizations

Outcome of the Initiative

- By using the simulator, cooperation between registered dietitians and the Disaster Prevention Section of the General Affairs Division has been strengthened, a food stockpiling system has been established to provide nutrition and dietary support in consideration of health and nutrition and those who require special dietary support, and initiatives to create a disaster-resilient community have been promoted in the city.
- Disaster education at nurseries, schools and *Kayoi-no-Ba* has led to the maintenance and improvement of citizens' awareness of disaster preparedness.
- The management of stockpiled food based on data from the simulator and the utilization of stockpiled food for disaster education, etc. provided the basis for conducting health crisis management at maximum levels within a limited budget.



Stockpiled food utilized as instructional material for education about disaster prevention

Future Perspective of the Initiative

The simulator will be used to continue strengthening the nutrition and dietary support system in preparation for large-scale disasters, and to expand cooperation with departments other than those already working together within the city government.

Cooperation with Volunteers for Promoting Improved Dietary Habits and staffs at various facilities is planned to be strengthened in order to educate leaders in disaster education at nurseries, schools and *Kayoi-no-Ba*.

Pioneering examples Cooperating Local Governments and the Company

- Koga City, Fukuoka Prefecture
- Sanjo City, Niigata Prefecture
- Hachimantai City, Iwate Prefecture
- Yamato City, Kanagawa Prefecture
- Komatsu Ltd.
- Hyogo Prefecture
- Gosen City, Niigata Prefecture

(Order of introduction)

Expert Group on the Progress of Nutrition Improvement Actions in Japan Based on the Japan's Commitment at the Tokyo Nutrition for Growth Summit 2021

Nakamura Gakuen University

- The Japan Dietetic Association
- University of Niigata Prefecture
- Kanagawa University of Human Services
- Japan Dietary Habits Association
- Aomori University of Health and Welfare

- Ms. MIZUMOTO Kaori
- Ms. MOROOKA Ayumi
- Ms. MURAYAMA Nobuko
- Ms. TANAKA Kazumi
- Ms. TANAKA Kumiko
- Mr. YOSHIIKE Nobuo O

(O:chairman) (alphabet order)



Issuer: Office of Nutrition, Health Service Division, Health Service Bureau, Ministry of Health, Labour and Welfare of Japan (March 2023)

Prepared by the Ministry of Health, Labour and Welfare Budget Project for FY2022 entitled "Survey on the Progress of Nutrition Improvement Actions in Japan Based on the Japan's Commitment at the Tokyo Nutrition for Growth Summit 2021".