Webinar Recap: Japan's School Food Program

Written by: Nicole Weber, MPH Candidate University of Toronto ('23)

The Japan School Food Program webinar on June 29th 2022, part of the series <u>School Food</u> <u>Around the World: Lessons for Canada</u>, welcomed experts who discussed school food programs (SFPs) in Japan, how they are funded, their underlying policy mechanisms, and how they are implemented and monitored. Also presented was a case study of food education in Yamagata Prefecture (province). The panel discussed how lessons learned from Japan can be applied elsewhere.

Participants:

Hosts:

- Nicole Weber Master of Public Health Candidate of University of Toronto
- Suvadra Datta Gupta Ph.D. Candidate of University of Saskatchewan

Panelists:

- Alexis Agliano Sanborn, director and producer of <u>Nourishing Japan</u>, AM Harvard University (East Asian Studies) and MPA, New York University
- Rie Akamatsu (赤松 利恵), RD, DrPH, Ochanomizu University, Faculty of Core Research, Natural Science Division, Professor
- Betty T. Izumi, PhD, MPH, RD, Associate Professor, Program Director, MPH in Health Promotion, OHSU-PSU School of Public Health
- Katsura Omori (大森桂), Phd., Professor, Academic Assembly, Yamagata University
- Mayumi Uejima-Carr (上島力一 真弓), President, <u>Table for Two USA</u>

Below is a summary of the presentations:

Part 1: Alexis Agliano Sanborn, director and producer of Nourishing Japan, AM Harvard University (East Asian Studies) and MPA, New York University (07:21)

History and Background:

- School lunches were not originally part of universal education but developed organically through grassroots networks across the country primarily to address hunger and malnutrition among impoverished school children.
- In 1954, *kyushoku* (school lunch) became an official part of the Japanese school system through the School Lunch Act during the post-war occupation era. It was updated in 2008 to include food education.
- The <u>Basic Law on Shokuiku</u> (food and nutrition education) came into effect in **2005** to mandate the promotion of food education in response to rising trends in unhealthy

eating patterns. The focus shifted from feeding children to using school lunches as a way to change tastes, increase knowledge of healthy eating, raise awareness of traditional foods, and support domestic agriculture.

Overview of School Lunch and Food Education Program:

- *Kyushoku* is prepared fresh daily either in-house at schools, or at a school lunch center in the municipality. Lunch fees for families are affordable and cover the cost of ingredients while the local government covers the costs of operations and labor. Meals have rigorous nutrition standards and feature seasonal local and heirloom ingredients as well as special holiday dishes.
- For the meals themselves elementary school students receive food education lessons a few times a semester covering topics from healthy diets to table manners.
- Some challenges do exist such as preparing meals for those with allergies and dietary restrictions and more recently rising ingredient costs, but all in all food education and school lunch is thriving in Japan.

"The Japanese school lunch is a cherished part of collective memory and an important part of society." 1

Part 2: Rie Akamatsu (赤松 利恵), RD, DrPH, <u>Ochanomizu University</u>, Faculty of Core Research, Natural Science Division, Professor | (17:52)

School Food Policy:

- The following are the key government stakeholders and school food policies:
 - Ministry of Education, Culture, Sports, Science, and Technology (MEXT)
 - School Lunch Act outlines the implementation of the school lunch program, including the School Lunch Nutritional Standards.
 - School Education Act forms the basis of a school system (i.e., National Curriculum Standard and <u>Guidance on Food and Nutrition Education at School</u>). A Diet and Nutrition Teacher's license is based on this law.
 - Ministry of Agriculture, Forestry, and Fisheries (MAFF)
 - Basic Law of Shokuiku describes food and nutrition education as a law not only for children but all Japanese people.
 - Ministry of Health, Labour, and Welfare
 - **Dietitians Act** is a law written for the national license for registered dietitian, a basic qualification of school dietitians or a diet and nutrition teacher.

¹ Sanborn, A. A. (2022, June 29). *Japan's School Food Program* [Webinar]. Coalition for Healthy School Food. From: https://www.youtube.com/watch?v=6VyHE4vO12g

- **Health and Nutrition** Promote the maintenance and enhancement of health through appropriate nutrition.
- Healthy Eating Habits Promote a better understanding of diet in everyday life, cultivate the ability to make sound judgments about eating throughout life, and cultivate desirable dietary habits.
- **Sociality and Cooperation** Enrich school life and cultivate brightness, sociality, and the spirit of cooperation.
- **Gratitude for Food and Nature** Promote a strong understanding of the fact that a dietary life is based on the blessings of nature, cultivate a spirit that respects life and nature, and develop an attitude that contributes to environmental conservation.
- **Gratitude for People** Promote a good understanding of the fact that the dietary life is supported by various activities of people involved in food and cultivate an attitude that places emphasis on labor.
- **Food Culture** Promote a better understanding of the excellent traditional food culture in our country or in each region.
- **Food System** Proper understanding of food production, distribution, and consumption.

School Lunch and Food Education Management Organization:

- School lunches are managed through local Boards of Education which are themselves overseen by the Ministry of Education, Culture, Sports, Science and Technology (MEXT).²
- Each school has various committees including the School Lunch Committee that is overseen by the principal. Members of the school lunch committee include the school diet and nutrition teachers or school dietitians, school lunch teachers, and sometimes a school lunch chief for schools with central kitchen facilities.
- The national and local governments cover some of the costs of school lunch.
 Expenses related to school lunch can be broadly divided into four categories: labour costs, facility and equipment costs, ingredient costs, and others.

² The Ministry of Education, Culture, Sports, Science and Technology, acronym MEXT, also known as Monka-shō, is one of the eleven ministries of Japan that composes part of the executive branch of the government of Japan. Its goal is to improve the development of Japan in relation with the international community. The ministry is responsible for funding research under its jurisdiction, some of which includes: children's health in relation to home environment, delta-sigma modulations utilizing graphs, gender equality in sciences, neutrino detection which contributes to the study of supernovas around the world, and other general research for the future. (From: https://en.wikipedia.org/wiki/Ministry_of_Education,_Culture,_Sports,_Science_and_Technology#:~:text=Ministry %20of%20Education%2C%20Culture%2C%20Sports%2C%20Science%20and%20Technology%20%2D%20Wikipedia)

- Labour, facility, equipment, and utility expenses are paid from national and municipal budgets. In particular, the national government bears part of the costs of the school lunch facility.
- Parents cover the cost of ingredients (food and beverages).
- The national average school lunch fee is 250 yen per meal or about \$2.50 CAD.

Currently, the School Lunch Act is divided into four chapters consisting of 14 articles:³

- Articles No. 4, 5, 11 and 12 highlighted in green below are the roles of the education board and the national government.
- Article No. 8 in red is the School Lunch Nutritional Standards which are updated each time the Dietary Reference Intakes for Japanese are updated. Diet and nutrition teachers or school dietitians create menus based on these standards.
 - Article No. 10 is the implementation of food and nutrition education in schools and outlines how each school should prepare an annual plan for food and nutrition education, such as when and what to teach throughout the year. In addition, the National Curriculum Standard states that food and nutrition education should be conducted in home economics, physical education, social studies, and science.
 - Article No. 1 states the purpose of the school lunch, and that apart from being a nutritional supplement, the Japanese school lunch is a part of educational activities.

Structure of the School Lunch Act

Chapter		Article		Article1: Not only for nutrition but also part				
1	General rule	1	Purpose	of educational activities				
		2	Goals of the school lunch program					
		3	Definition					
		4	Tasks for boards of education for compulsory education schools					
		5	Tasks for the national and local public governments					
2	Basic points relating to the implementation of the school lunch program	6	Facilities necessary for implementation of the school lunch program in two or more compulsory education schools					
		7	Diet and nutrition teacher or School dietitians					
		8	School Lunch Nutritional Standards					
		9	Standard for the Hygiene Control of School Lunches					
3	Food and nutrition education using school lunch (Article 10)							
4	Miscellaneous rules	11	Liability for expe	lity for expenses				
		12	National governments subsidy					
			Subsidy reimbursement					
		14	Commissioned to cabinet order					

³ Akamatsu, R. (2022, June 29). *Japan's School Food Program* [Webinar]. Coalition for Healthy School Food. From: https://www.youtube.com/watch?v=6VyHE4vO12g

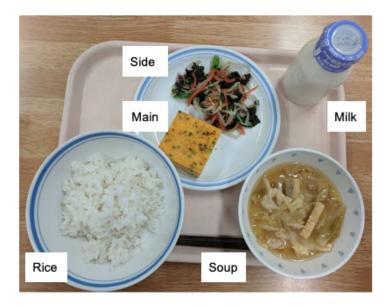
Part 3: Betty T. Izumi, PhD, MPH, RD, Associate Professor, Program Director, MPH in Health Promotion, OHSU-PSU School of Public Health | (27:20)

School Food Program Implementation:

- Participation rates are 99.1% at elementary schools and 86.6% at junior high schools
- School lunches in Japan are prepared at a school lunch center or an on-site kitchen, with few exceptions. They are described as:
 - School lunch center Utilized by over half of schools, school lunch centers serve more than two schools and generally more than fifteen hundred students. School lunch centers prepare meals from scratch, and on average 28% of ingredients are procured locally, defined as having been produced, harvested, or raised within the geographic boundaries of the prefecture (province) in which they are consumed.
 - On-site kitchen Utilized by 42% of schools, may be shared with a nearby school. On-site kitchens generally provide meals for fewer than 550 students and on average procure about 24% of their ingredients locally. On-site kitchens also prepare meals from scratch and one advantage is that students have more opportunities to engage with the school dietitian and the cooks.

School Lunch Toban (Duty) Group:

 Students generally eat lunch in their classrooms with their teachers and a small group of students rotate each week through a school lunch toban (i.e., being on duty). They are responsible for retrieving the lunch cart which contains the meal components, the serving and eating utensils, and lunch trays from the on-site kitchen or the receiving area where meals from a school lunch center are delivered. The school lunch toban group serves each student and the teacher a portion of each menu item. Occasionally the school dietitian, cooks, farmers, or other guests may



join them.

 School dietitians do not use cycle menus, so the meals vary greatly from day to day, however a typical meal usually includes rice, bread, or noodles, a main dish, and milk and soup. Pictured is rice, baked egg and vegetable dish, a seaweed and vegetable salad and a soup that contains strips of deep fried tofu and vegetables, and then also the milk. If there is fruit, it is served after the main meal as dessert.

Minimizing Food Waste:

- Eating with teachers has many benefits but one of them is helping to minimize food
 waste which helps to support the UN's <u>sustainable development goals</u>. School waste
 is measured and recorded daily and nationally less than 7% percent of food served is
 wasted as a comparison more than 30% of the food served in the U.S. national
 school lunch program is thrown away.
- There are several ways in which teachers lunchtime practices and their presence contributes to minimizing food waste:
 - First, teachers allow students to request smaller or larger portions of each item although they all do need to take at least a small portion of each item.
 - Second, some teachers set a timer for mogu mogu time, which is a short period of time when students eat mindfully in silence.
- Teachers promote food gratitude by jointly saying with students "Itadakimasu!" or "I
 humbly receive" and "Gochisousama-deshita!" or "Thank you for the meal!". The
 concept of mottainai is also deeply ingrained and means to respect resources and to
 use them to their fullest potential.

Part 4: Katsura Omori (大森 桂), Phd., Professor, Academic Assembly, <u>Yamagata University</u> and Mayumi Uejima-Carr (上島力一 真弓), President, <u>Table for Two USA</u> | (37:50)

Food education policy and implementation:

- Japan places a high priority on food education and the Basic Law of Shokuiku states food and nutrition plays the most important role in children's cultivation of humanity and acquisition of life skills.
- The law consists of the following goals and components with a focus on taking a comprehensive approach to food and nutrition education:
 - o To promote health in body and mind, as well as enriching human lives.
 - To support greater appreciation for and understanding of diet, including the various roles played by the natural environment and the people who produce, transport, and prepare food.
 - Voluntary movements for the promotion of Shokuiku should be developed nationwide.
 - Parents, educators, and daycare providers in particular should actively promote
 Shokuiku among children.
 - Understanding of dietary issues should be reinforced by taking advantage of all available opportunities at home, in schools, in the community, and elsewhere, to offer a variety of food-related experiences and activities.
 - Awareness and appreciation of traditional Japanese food culture as well as the food supply/demand situation should be promoted, and opportunities should be created for interaction between food producers and consumers, in order to revitalize rural farming and fishing regions, and to boost food production in Japan.
 - Appropriate information on food safety should be offered, to help people to eat proper diets.
- The federal government sets the direction while the local governments have a more detailed implementation plan, which also involves people in the community.
- The preparation and promotion of the <u>Basic Program for Shokuiku Promotion</u> is led by MAFF)⁴ in collaboration with other relevant ministries including Food Safety Commission of Japan, MEXT, and Ministry of Health, Labour and Welfare as well as community-level stakeholders such as schools, nursery schools, workers in the agriculture, forestry, and fisheries industries, food-related businesses, and volunteers.

Case Study – Food Education Implementation in Yamagata Prefecture:

https://en.wikipedia.org/wiki/Ministry_of_Agriculture,_Forestry_and_Fisheries_(Japan)#:~:text=Article%20Talk,and%20Fisheries%20is%20Taku%20Et%C5%8D.

⁴ The Ministry of Agriculture, Forestry and Fisheries is a cabinet level ministry in the government of Japan responsible for oversight of the agriculture, forestry and fishing industries. From: The Ministry of Agriculture, Forestry and Fisheries (Nōrin-suisan-shō) is a cabinet level ministry in the government of Japan responsible for oversight of the agriculture, forestry and fishing industries. From:

- Yamagata is an agricultural prefecture where high quality rice and fruit is produced.
 Based on these local characteristics, Yamagata prefectural agriculture, forestry, and fisheries departments promote food education along with another movement focused on local food production for local consumption, called "Chisan-Chisho."⁵
- Promotion is done via maintaining websites highlighting local foods along with raising awareness of "Perorin", a mountain shaped character which can be found on locally produced food products.
- Yamagata has above average school lunch program participation in schools, and a higher use of locally grown food.
- The prefectural departments promotes and provides subsidies for local food/
 "Chisan-Chisho" through two main projects:
 - Project 1: A subsidy is provided for school activities which invite local farmers into the classroom to eat lunch together and interact with the students.
 - Subsidy for one meal is 150 yen (\$1.43 CAD).
 - Project 2: Subsidies provided for use of locally grown food in school lunch.
 Completing Project 1 is required to receive this support.
 - Subsidies for including locally grown food in school meals is 5 Yen (\$0.05 CAD) for each meal, up to limit of 20 subsidies
 - Subsidies for usage of locally processed food is 33 Yen (\$0.3 CAD) per meal, up to two times.
 - Subsidies for use of rice bread instead of wheat bread.
 - o 30% of schools completed project 1 in 2019 with a goal of 100% by 2024.

Linkages Between Food Education and School Curriculum:

- Japanese children enter first grade at age six and the curriculum lasts six years.
- Food education is embedded across Living Environment Studies, Social Studies, Science, and Home Economics. See Table below for allocation of class hours per subject.
- Students participate in food education activities and experiences across these grades:
 - o 1st and 2nd grade students grow vegetables in Living Environment Studies
 - o 3rd grade learn how plants grow and about the agriculture industry in Japan
 - 5th grade Home Economics class starts for all genders, and they learn practical lessons in being green and ethical consumers and cooking.
- An important aspect of Home Economics as food education in Japan is a national culinary requirement that students learn to cook rice and miso soup as traditional Japanese dishes.
- At the Tsuruoka Wastewater Treatment Plant in Yamagata there is a unique activity called <u>Bistro Gesuido</u>. It aims to use municipal wastewater for agricultural purposes.
 Based on this, teachers developed a learning program on sustainable eating for 5th grade

⁵ Kimuta, A. H. and Nishiyama, M. (2008) 'The Chisan-Chisho movement: Japanese local food movement and its challenges'. Agriculture and Human Values, Vol.25 (1): 49-64.

- Social Studies class as water from the plant is used to grow leafy greens for the school lunch.
- The importance of "Food Literacy" has been discussed recently in Japan and has been defined as being the skills and knowledge to promote well-being in the community, and includes social, cultural, and economic aspects of the Japanese food systems. Improving food literacy is seen as essential to both individual health and a sustainable society, however the development of an effective curriculum is an ongoing task.

Curriculums & Courses of Study												
Classi	fication	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6					
	Japanese Language	306	315	245	245	175	175					
	Social Studies			70	90	100	105					
	Arithmetic	136	175	175	175	175	175					
Class	Science			90	105	105	105					
Hours of	Lives	102	105		2-455							
Each	Music	68	70	60	60	50	50					
Subject	Drawings and Handcrafts	68	70	60	60	50	50					
	Home Economics	200000	2000	20000		60	55					
	Physical Education	102	105	105	105	90	90					
Class Hour	Class Hours of Moral		35	35	35	35	35					
	oreign Language vities					35	35					
Class Hours of Integrate	f the Period of ed Study			70	70	70	70					
Class Hours of S	Special Activities	34	35	35	35	35	35					

(From Enforcement Regulation of School Education Act, 2008)

Range by grade level in class hours of curriculum (elementary schools) (IV - 15)

An Example of How to Implement Food Education Abroad (Table for Two USA):

- Mayumi is the president of Table for Two USA, a non-profit organization which seeks to tackle both sides of the global food imbalance by promoting healthy eating and healthy school meals to children in need. This is done through a Japanese food education inspired program called Wa-Shokuiku. The goal is to teach American children about healthy eating through Japanese food.
- The program was created to address the problems in the US of:
 - Childhood obesity and health issues related to unhealthy eating
 - Limited healthy food consumed among children

⁶ Educational System and Practice in Japan. n. d. From: https://www.criced.tsukuba.ac.jp/keiei/kyozai ppe f4 15.html

- Limited food education opportunities about 7 hours per year
- It teaches Japanese food knowledge, manners, and customs such as appreciation towards food and people and discusses food related issues such as food waste and what action students can take.
- Evaluating effectiveness through pre and post surveys, students can identify a balanced meal after the program and more students understand the importance of not overeating and want to practice the cooking skills at home.
- Lessons learned include taking a comprehensive approach that includes integrating food education into the classroom and hands-on cooking with adequate funding.
- The key points are learning how Japan prioritizes food education using a comprehensive approach and the example from Yamagata prefecture shows how food education can be embedded across subjects.

Questions and Answers Section:

Q: How and what percentage are the subsidies for school food supplied by the federal, prefectural, and municipal governments?

A: Every year each municipal government, which oversees the local schools, applies to the national government for funding. The national government supports half of the budget and the municipal government the other half.

Q: Are there any dietary requirements such as allergies or religious needs that are taken into account when making the meal at the schools?

Speaker 1: This depends on the community and is a case-by-case basis. Each municipality is informed of those who have dietary restrictions due to religious or food allergies reasons and school lunch service providers develop recipes with that in mind.

Speaker 2: Also, there are nutrition teachers who meet with the parents to learn about the allergy and make a customized menu for the student.

Speaker 3: In Yamagata schools they prepare special meals without eggs as allergy to eggs is the most common.

Q: Do school meals and food education continue beyond junior high school?

Speaker 1: Food education in the context of today's presentation was looked at through the school perspective but it is actually a nationwide movement that all members of Japanese

society are encouraged to participate in. There is food education in a classroom setting and the community, parents can attend cooking and harvesting activities. Although formal food education may end for a student, there are still ways for them to engage with food education in their local communities through volunteer support.

Speaker 2: Many senior high schools have home economics and cooking programs, and home economics is still a mandatory subject.

Q: Is there financial support for families who cannot afford the cost of the school meal and what would that support look like?

Speaker 1: Some municipalities support school meal fees instead of parents.

Speaker 2: The local government will support families not only for school meals but also for other everyday items. Although prefectures vary, the speakers' experience was that the school withdraws school meal costs directly from the parent's bank account. In the case of low income families, the money would be provided to their bank account from the government and then the school would withdraw the fee.

Q: Is a universal free school meal program being considered by the government?

A: Although some local schools cover the cost of ingredients, it is not currently being discussed within the government. Parents pay \$40 per month to cover the cost of ingredients for school meals.

Q: Who creates the resources for teachers to use for food education?

Speaker 1: The government is promoting having additional special teachers focused on food education.

Speaker 2: Japan also does well at integrating the school curriculum with the school lunch. All fifth graders learn about rice, how to grow and harvest it, and then eat it at school lunch but it is not part of food education directly. Also, social studies teachers and dietitians contribute. This helps to spread the workload, so the diet and nutrition teacher is not solely responsible for preparing all of the materials.

Q: Is there currently any resistance from society towards the national/prefectural governments providing the school meals rather than being the responsibility of the families?

Speaker 1: School is incredibly valued by families as it alleviates the burden on them to prepare meals everyday. Mothers especially value knowing what their child is receiving freshly prepared food that is nutritionally balanced while learning about various food cultures.

Speaker 2: Currently private consignment and consolidation have been considered to save costs but this also might cause quality degradation. This is an issue being debated.

Speaker 3: In terms of food education, Japanese law says food education is a fundamental education. When Japanese people hear about food education *shokuiku*, they think this is important for the school to teach about food. Outside of Japan, in the U.S. for example, food is considered more private, for the family to take care of. There is a big gap between how the U.S. and Japan think about food education, that in the U.S. food is a personal choice and not something one should learn at school.

Speaker 1: In Japan, nutrition standards are also so rigorous for each meal compared to other countries. People may prefer their child to bring their own lunches to ensure high nutrition standards are met for their child's development.

For more resources and information on the webinar please follow the links below:

- Japan School Food Program
 - Rie Akamatsu Slides
 - o Betty T. Izumi Slides
 - <u>Katsura Omori and Mayumi Uejima-Carr Slide</u>
- The Japanese School Lunch Program by Dr. Rachel Engler-Stringer
- Health Japan 21 National Public Health Promotion Website