

Japan's School Food Program

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Overview

In 1954, *kyushoku* (school lunch) became an official part of the Japanese school system through the School Lunch Act. 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.¹ Since then it has evolved and school lunches are now viewed as a “living textbook” to introduce regional culture and cuisine, gratitude, and educate on food production, distribution, and consumption.² The Japanese school lunch program has been praised worldwide as an exemplary model with its focus on fresh scratch made nutritious meals and comprehensive food education program.³

Policy

Japan's school food program (SFP) is notable as it is part of a comprehensive, nation-wide promotion of food education called *Shokuiku* (Food and Nutrition Education) to address rising trends in unhealthy eating patterns across all ages.⁴ The Basic Law on *Shokuiku*⁵ came into effect in 2005 and mandated the promotion of food education. Policies and programs target the promotion of *shokuiku* in schools, nurseries, at home, and in communities, and involves close coordination and collaboration across several levels of government, public and private sectors, and community stakeholders (e.g., schools, nursery schools, workers in the agriculture, forestry, and fisheries industries, food-related businesses, and volunteers).

The Ministry of Agriculture, Forestry and Fisheries (MAFF)⁶ creates and releases the Basic Plan for *Shokuiku* Promotion every five years and sets the basic policies including targets for evaluation.⁷ MAFF coordinates with relevant ministries and agencies including the Food Safety Commission of Japan (FSCJ), the Consumer Affairs Agency (CAA), the Ministry of Education,

¹ The Coalition for Healthy School Meals. 2022. Japan's School Food Program (Webinar). Available from: <https://www.youtube.com/watch?v=6VyHE4vO12g>

² Ministry of Education, Culture, Sports, Science and Technology. n.d. Japanese school lunches and *shokuiku* (food and nutrition education). https://www.mext.go.jp/content/20211012-mxt_kenshoku-000008678_2.pdf

³ More than a meal: school lunch in Japan. n.d. From: <https://www.asianstudies.org/publications/ea/archives/more-than-a-meal-school-lunch-in-japan/>

⁴ Kurotani, K. & Shinsugi, C. 2019. Promotion of *Shokuiku* (food and nutrition education): Lessons learned from Japanese context. From: https://www.nibiohn.go.jp/eiken/programs/shokuiku_report.pdf

⁵ See Basic Act on *Shokuiku* (Food and Nutrition education). From: <https://www.japaneselawtranslation.go.jp/en/laws/view/3419/en> and What is “*Shokuiku* (Food Education)”? From: <https://www.maff.go.jp/e/pdf/shokuiku.pdf>

⁶ MAFF website includes information on the basic act and plan, evaluation, white papers, summaries, and dietary guidelines. n.d. From: https://www.maff.go.jp/e/policies/tech_res/shokuiku.html

⁷ Ministry of Agriculture, Forestry and Fisheries. 2021.

Culture, Sports, Science and Technology (MEXT) and the Ministry of Health, Labour and Welfare (MHLW). While MAFF sets the direction, the local governments are responsible for creating a more detailed implementation plan which involves community members.⁸ Meanwhile, MEXT is the main national governing body overseeing the implementation of school lunch and *shokuiku* (food education) in schools.

Within the same period as the introduction of *shokuiku* (food education) policy, the Health Promotion Act was issued by the Ministry of Health, Labour and Welfare in 2003 outlining the nutrition management policy in school lunch facilities. These two policies led to the significant amendments of the School Lunch Act in 2008 and changed the goal of the school lunch program from prioritizing feeding children to utilizing school lunch to change student tastes, increase knowledge of healthy eating, raise awareness of traditional foods, and support domestic agriculture.⁹

These amendments led to the establishment of:

- Food education goals in school curriculum aligned with school lunch program
- School lunch nutritional standards
- School lunch hygiene safety control standards
- Diet and nutrition teachers in schools

See Appendix 1 and 2 to view the revisions to the policy and goals in the School Lunch Act in detail.

The roles of government and school lunch administrators (e.g., school principals, central managers for school lunch preparation, diet, and nutrition teachers) were established and responsibilities were clarified. School lunches are managed through local and prefectural Boards of Education which are overseen nationally by MEXT.

The school lunch program is guided by the School Lunch Act¹⁰, School Lunch Nutritional Standards, and the School Education Act. MEXT also sets the National Curriculum Standard including food education and established the Diet and Nutrition Teacher system.¹¹ The Dietitians Act sets the national licensing requirements for registered dietitians acting as school dietitians or diet and nutrition teachers. The National Curriculum standards were revised starting in 2017 to

⁸ The Coalition for Healthy School Meals. 2022. From: <https://www.healthyschoolfood.ca/school-food-programs-around-the-world>

⁹ Ibid.

¹⁰ Translation of School Lunch Act: <https://school-lunch-support.jp/en/act/>

¹¹ The Coalition for Healthy School Meals. 2022. From: <https://www.healthyschoolfood.ca/school-food-programs-around-the-world> From: <https://www.healthyschoolfood.ca/school-food-programs-around-the-world>

reflect further promotion and incorporation of *shokuiku* across all educational activities at school.¹²

MEXT developed the following goals based on the Basic Act of *Shokuiku*:

- (1) maintain and enhance the well-being of school children through appropriate nutritional intake,
- (2) provide school children with opportunities to learn about appropriate diet, develop the ability to make sound judgements about a healthy diet, and to adopt positive dietary habits,
- (3) foster a happier society and a spirit of cooperation in children,
- (4) facilitate understanding of the gifts of the natural world, thereby fostering a respect for life and nature and a positive attitude toward environmental conservation,
- (5) facilitate the understanding that a dietary practice is supported by many people engaging in food production, thereby fostering a sense of appreciation for the work of these people,
- (6) facilitate better understanding of varied culinary cultures,
- (7) and facilitate appropriate understanding of production, distribution, and consumption of food.¹³

The SFP is designed with long-term benefits in mind, by educating children to have a better understanding of food, nutrition, and food systems so they will develop healthy habits throughout their lives.¹⁴ Public elementary and junior high schools must endeavor to provide school lunch and nearly all do.¹⁵

In 2005, MEXT established the Diet and Nutrition Teacher System, which promotes the placement of Diet and Nutrition Teachers in public schools (elementary and junior high) to enhance the uptake of *shokuiku* in schools.¹⁶

The duties of Diet and Nutrition teachers includes:

- (1) actively participates in developing the basic plans for school lunches (i.e., sits on School Lunch Committee),

¹² Kurotani, K. & Shinsugi, C. 2019. Promotion of Shokuiku (food and nutrition education): Lessons learned from Japanese context. From: https://www.nibiohn.go.jp/eiken/programs/shokuiku_report.pdf

¹³ Ministry of Education, Culture, Sports, Science and Technology. n.d. Japanese school lunches and *shokuiku* (food and nutrition education). From: https://www.mext.go.jp/content/20211012-mxt_kenshoku-000008678_2.pdf

¹⁴ Ministry of Education, Culture, Sports, Science and Technology. 2021. Overview of Education, Culture, Sports, Science and Technology - Japan. From: https://www.mext.go.jp/en/content/20210325-mxt_kouhou02-200000029_1.pdf

¹⁵ Appel, D. 2019. Japan's school lunch program serves nutritious meals with food education. *Hunter College New York City Food Policy Center*. From: <https://www.nyfoodpolicy.org/food-policy-snapshot-japans-school-lunch-program/>

¹⁶ Ministry of Education, Culture, Sports, Science and Technology. (n.d.)

- (2) formulating balanced nutritious menus,
- (3) ensure hygiene and sanitation standards are met,
- (4) provides personal or group instruction to students on diets with the classroom teachers support,
- (5) promotes collaboration between parents and local communities through school lunches (e.g., invite local farmers into the classroom for lunch and learns, order local ingredients for lunches, meet with parents to discuss nutritional concerns of students such as allergies¹⁷),
- (6) oversees concerns related to food allergies using "Guidance for Children with Food Allergies in School Lunch."¹⁸

As of 2022 there are 6,843 school diet and nutrition teachers across Japan, although there are regional discrepancies which indicate the need for establishing a more effective placement system.¹⁹

Funding

The SFP is funded through a cost-shared agreement between the federal, prefectural (comparable to provincial in Canada), and local governments, with contributions from parents.²⁰ See Appendix 3 for school food operational cost breakdown. Labour costs are covered by municipal tax (office workers etc. wages) and prefectural tax (diet and nutrition schoolteacher, and school dietitian wages). The federal and municipal governments share costs for school lunch facility equipment, including tableware, while utility costs are covered by municipal tax. To receive funding, the municipal government must apply each year through the national government.²¹ Prefectural governments may sometimes financially support school lunch promotion projects.²² The parents cover the cost of the ingredients through monthly direct billing,²³ though many local governments provide subsidies to cover half of the original price of meals with 4.4% of elementary and junior schools offering free meals.²⁴ The national average school lunch fee per meal in elementary school in 2021 is 256 yen or about \$2.39 CAD (as of 25 July 2023).

¹⁷ The Coalition for Healthy School Meals. 2022. From: <https://www.healthyschoolfood.ca/school-food-programs-around-the-world>

¹⁸ Kurotani, K. & Shinsugi, C. 2019. Promotion of Shokuiku (food and nutrition education): Lessons learned from Japanese context. https://www.nibiohn.go.jp/eiken/programs/shokuiku_report.pdf

¹⁹ Ministry of Education, Culture, Sports, Science and Technology. n.d.

²⁰ Ministry of Education, Culture, Sports, Science and Technology. n.d.)

²¹ The Coalition for Healthy School Meals. 2022. From: <https://www.healthyschoolfood.ca/school-food-programs-around-the-world>

²² Nara Prefectural Budget. 2021. From: <https://www.pref.nara.jp/secure/235953/202008sankou1.pdf> (Japanese).

²³ Fuchu City. 2019. About school lunch. From: <https://www.city.fuchu.tokyo.jp/kyoiku/gako/kyushoku/kyushoku.html>

²⁴ Waida, Y., & Kawamura, M. 2022. Japanese school lunch and food education. In *School Food, Equity and Social Justice*. Taylor & Francis.

Federally, the national budget sets aside funding for SFP under activities related to the "Promotion of *Shokuiku*" and by bearing some of the operational expenses ensures the stability and sustainability of the program.²⁵

Specific activities funded through MEXT included:

- utilization of school meals to address social problems,
- projects for *shokuiku* promotion through work with diet and nutrition teachers, nursing teachers, families, local producers, and other related groups,
- improvement to school lunch fee collection and management duties,
- research on contemporary issues of school lunch (e.g., investigation on hygiene management of school lunches during Covid-19 pandemic),²⁶
- school facility environment improvement grant (for facility maintenance and upgrade).

The Ministry of Environment also utilized funding to develop initiatives for the promotion of the 3Rs (reduce, reuse, and recycle) to fight against waste from school lunch, including the development of school education support packages to educate on food loss and environmental issues.

Food Literacy Education

Japan places very high priority on food literacy education²⁷ and the Basic Law of *Shokuiku* states that food and nutrition plays the most important role in children's cultivation of humanity and acquisition of life skills.²⁸ Food education is introduced through school lunch (i.e., "living textbook") and school lunch *toban* (i.e., student school lunch duties, please see below), curriculum involving experiential learning such as cooking and gardening, and education coordinated with the local community (e.g., chefs, farmers, producers).^{29,30}

School lunch *toban*

The school lunch *toban* are the students responsible for serving their classmates and teachers lunch which is eaten together in the classroom.³¹ Students *toban* duties include retrieving the lunch cart which contains the meal components, the serving and eating utensils, and lunch trays

²⁵ Ishida H. 2018. The history, current status, and future directions of the school lunch program in Japan. *Jpn J Nutr Diet* [Internet]. 2018;76(Supplement):S2–11. From:

https://www.jstage.jst.go.jp/article/eiyogakuzashi/76/Supplement/76_S2/_article

²⁶ Ministry of Education, Culture, Sports, Science and Technology. From:

https://www.mext.go.jp/content/20211207-mxt_kenshoku-000018564_0007.pdf (Japanese)

²⁷ Omori K., Kaneko K. 2021. International trends in food literacy studies, *J. of Home Economics of Japan*, 72(4), 206-217

²⁸ Kurotani, K. & Shinsugi, C. 2019. Promotion of *Shokuiku* (food and nutrition education):

Lessons learned from Japanese context. From: https://www.nibiohn.go.jp/eiken/programs/shokuiku_report.pdf

²⁹ Ministry of Education, Culture, Sports, Science and Technology. n.d.

³⁰ The Coalition for Healthy School Meals. 2022. From:

<https://www.healthyschoolfood.ca/school-food-programs-around-the-world>

³¹ Ibid.

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 come to school and give lectures. Through this the students should gain an understanding of the value of food culture and gratitude for food while also enjoying a meal together with others.

Food education curriculum

Article 10 of the School Lunch Act requires schools to prepare an annual plan for food and nutrition education, including when and what to teach throughout the year.³² In addition, food education is embedded within the National Curriculum across Living Environment Studies, Social Studies, Science, and Home Economics in elementary schools.

Home Economics starts in grade 5 for all students and continues through junior high and high schools.³³ As part of Home Economics, there is a national culinary requirement for students to learn how to cook rice and miso soup as traditional dishes in Japan.³⁴

Curriculum components include learning to grow vegetables in Living Environment Studies class in grade 1 and 2, learning about the domestic agriculture industry and how plants grow in grade 3, and Home Economics education including practical lessons to gain cooking skills and how to become environmentally responsible and ethical consumers.

Community involvement

Some prefectures promote food education along with encouraging the involvement of the local community through initiatives supporting local food production for local consumption.³⁵ For example, rural Yamagata's Prefectural Agriculture, Forestry, and Fisheries department promotes local food production to students, and broader community, through their educational websites and local food labelling on packages (i.e., "Perorin", a mountain shaped character which can be found on locally produced food products). See Appendix 4 for an example of their promotional materials. The agricultural department also provides subsidies to schools for activities which invite local farmers into the classroom to eat lunch and interact with the students using locally grown food in the school lunch. The subsidy covers 150 yen (\$1.40 CAD) for each student meal during the lunch and learn event, after which the school can then apply for an additional subsidy towards the costs of ordering local vegetables, processed foods, and rice bread.

³² The Coalition for Healthy School Meals. 2022. From: <https://www.healthyschoolfood.ca/school-food-programs-around-the-world>

³³ Ibid.

³⁴ Ibid.

³⁵ Ibid.

While there is no mandated requirement to use local ingredients, MAFF has set the goal for 30% of ingredients to be procured from locally or domestically grown products. This has been challenging to achieve given Japan's low levels of food self-sufficiency and dependence on imports.³⁶

Nutrition

Article 8 of the School Lunch Act stipulates School Lunch Nutritional Standards which are adjusted each time the national Dietary Reference Intakes (DRI) are updated.³⁷ The Council of Collaborators in Studies and Research on School Lunch Nutrition Standards established by MEXT uses the results from the Survey on the Meal Situation of Children conducted by MHLW to set the Nutritional Standards in schools.³⁸

One-third of the Recommended Daily Allowance (RDA) of most nutrients should be supplied through lunch, although nutrients students tend to be deficient in are supplied at higher levels.³⁹ These standards are meant to be applied in a flexible manner with consideration of the individual health and life activities of students in the school and in the local and regional context.⁴⁰

Diet and nutrition teachers or school dietitians create menus based on these standards but do not use cycle menus. The meals vary greatly from day to day; however, a typical meal usually includes rice bread or noodles as a main dish with milk and soup.⁴¹ Menus incorporate consideration of holidays with inclusion of specialty menu items (e.g., roasted soybeans for *Setsubun*, a traditional Japanese event in February) and local ingredients (e.g., *Tsuyahime*, Yamagata's local rice with fish and vegetable side dishes). The monthly school lunch menu is distributed to the parents and homeroom teacher to ensure they are aware of ingredients and to encourage their involvement in the food education. The school lunch newsletter includes the menu items, the ingredients listed in food groups (e.g., “yellow food groups to provide you with energy and power, red to build your muscle and blood, and green to improve your health condition”), and calories. See Appendix 5 for a sample school lunch newsletter. Also, Appendix 6 shows Japan's national food guide called “Spinning Top.”

³⁶ Sanborn, A. A. 2021. Lunch Interrupted! COVID-19 and Japan's School Meals. *Gastronomica*, 21(1), 92–96. From: <https://doi.org/10.1525/gfc.2021.21.1.92>

³⁷ The Coalition for Healthy School Meals. 2022. From: <https://www.healthyschoolfood.ca/school-food-programs-around-the-world>

³⁸ School Lunch Act. 2015. From: <https://school-lunch-support.jp/en/act/>

³⁹ Ishida H. The history, current status, and future directions of the school lunch program in Japan. *Jpn J Nutr Diet* [Internet]. 2018;76(Supplement):S2–11. Available from: https://www.jstage.jst.go.jp/article/eiyogakuzashi/76/Supplement/76_S2/_article

⁴⁰ Kurotani, K. & Shinsugi, C. 2019. Promotion of Shokuiku (food and nutrition education): Lessons learned from Japanese context. https://www.nibiohn.go.jp/eiken/programs/shokuiku_report.pdf

⁴¹ The Coalition for Healthy School Meals. 2022. From: <https://www.healthyschoolfood.ca/school-food-programs-around-the-world>

Implementation

The school lunch program offers a uniform menu five days per week to all students in every school with a program.⁴² There are three types of meal programs: full meal including bread/rice, milk, and side dishes; supplemental meal of only milk and side dishes; and a milk program where only milk.⁴³ Alternate meals are offered to students who have food allergies (doctor's note required), religious food restrictions, or are vegetarian.⁴⁴ If not possible to accommodate, then a student can bring in their own meal. The full meal is provided to 98.8% of elementary schools, 79.9% of junior high, and 87.3% special support education schools as of 2019, which represents more than 30,000 schools across Japan.⁴⁵ Implementation of supplemental meal and milk only is rare with implementation rates of 0.6% and 1.1% respectively across all school types. Some schools may lack capacity to offer full meal service. In these cases, students may bring in their own meals or schools may contract with a company that provides students with bento (i.e., lunch) boxes.⁴⁶

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 as a main dish with milk and soup. See Appendix 7 diagram of three meal types and Appendix 7 for a sample school lunch plate.⁴⁷

Under the direction of MEXT, local Boards of Education manage the school lunches through providing guidance to the School Lunch Committees at each school. The School Lunch Committees are led by the principal and 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.⁴⁸ The day-to-day operations of the school food program falls to the diet and nutrition teachers, school dietitians, and school lunch cooks to oversee.

School lunches in Japan are prepared at a school lunch centers (55% of production) or an on-site kitchen (42%), with a few exceptions.⁴⁹ In total, approximately 45,000 cooking staff are employed. School lunch centres serve more than two schools with generally more than fifteen hundred students. These centres prepare meals from scratch, and on average 28% of ingredients

⁴² Miyawaki, A., Lee, J. S., & Kobayashi, Y. 2019. Impact of the school lunch program on overweight and obesity among junior high school students: A nationwide study in Japan. *Journal of Public Health*, 41(2), 362–370. <https://doi.org/10.1093/pubmed/fdy095>

⁴³ <https://www.pref.fukushima.lg.jp/sec/70059a/kenkokyoiku07.html>

⁴⁴ The Coalition for Healthy School Meals. 2022. From: <https://www.healthyschoolfood.ca/school-food-programs-around-the-world>

⁴⁵ Ministry of Education, Culture, Sports, Science and Technology (MEXT). 2019. Heisei-30-nendo gakkoukyushoku jisshi-jyoukyou-tou chousa no kekka nitsuite [About the result of the 2018 school lunch implementation status survey]. https://www.mext.go.jp/content/1413836_001_001.pdf

⁴⁶ <https://www.town.samukawa.kanagawa.jp/material/files/group/34/kawaraban1gou.pdf>

⁴⁷ The Coalition for Healthy School Meals. 2022. From: <https://www.healthyschoolfood.ca/school-food-programs-around-the-world>

⁴⁸ Ibid.

⁴⁹ Ibid.

are procured locally. Locally is defined as having been produced, harvested, or raised within the geographic boundaries of the prefecture in which it is consumed. On-site kitchens provide meals internally but may be shared with a nearby school. They 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 (food literacy) opportunities to engage with the school dietitian and cooks. See Appendix 9 and 10 for the organization charts for on-site kitchens and school lunch centers. Appendix 11 discusses the merits and demerits of different cooking and delivery system for operating school lunches in Japan.

Oversight

As the main governing body, MEXT evaluates school food programs by conducting surveys such as the “Nutrition Report of School Lunches”, “School Lunch Implementation Survey”, and “Survey on School Lunch Expenses”.⁵⁰ Assessment of school lunch menus is based on the Nutrition Standards outlined in the School Lunch Act, as well as by proper portioning, taste, colors (visual appeal), texture, temperature, sanitation, and safety. Schools are required to conduct nutritional assessments (e.g., physical condition, nutritional status, and lifestyle habits) of students regularly and to ensure the quality of school lunches using the Plan-Do-Check-Act cycle (PDCA).⁵¹ See Appendix 12 and 13 for a list of surveys conducted to assess school food implementation and expenses. See Appendix 14 and 15 for all surveys conducted by differing governing bodies to assess school lunch related to “healthy development of children” and “operation of school lunch program”.

Challenges and Benefits

The challenges include:

- Difficulty hiring diet and nutrition teachers for certain regions in Japan
- Insufficient local agriculture to support local/domestic procure goals
- Rising cost of ingredients owing to climate change, soaring oil prices, and weak yen have made it challenging for staff to keep meal price within budgets for parents and as 70% of regions require parents to pay the full cost of ingredients there are increasing issues with unpaid school lunch fees.⁵²

⁵⁰ Kojima Y, Nakanishi A, Ishida H. 2018. Monitoring and evaluation systems for the school lunch program in Japan: Organizing items with reference to acts and surveys. *Jpn J Nutr Diet ;76(Supplement):S74–85*. Available from: https://www.jstage.jst.go.jp/article/eiyogakuzashi/76/Supplement/76_S74/_article

⁵¹ Nagura H, Takahashi S. 2018. Survey of a Japanese elementary school lunch program menu planning, quality control, and nutrition management: A case study. *Jpn J Nutr Diet ;76(Supplement):S38–49*. Available from: https://www.jstage.jst.go.jp/article/eiyogakuzashi/76/Supplement/76_S38/_article/-char/en

⁵² Schools in Japan struggle to serve affordable lunches as food prices surge. 2022, June 6. The Japan Times. From: <https://www.japantimes.co.jp/news/2022/06/06/national/school-lunch-affordability/>

- Currently recruiting private food service contractors and consolidation are being considered to save costs, but concerns related to decrease in food quality means the issue is being debated.⁵³ This especially a concern given Japan's decreasing population resulting in increasingly higher costs associated with on-site cooking.⁵⁴

The benefits include:

- There are rigorous nutrition standards and comprehensive school food education program and high trust and support from the public for SFPs.⁵⁵
- Japanese law enshrines food education as a fundamental education demonstrating commitment to evolving the program using evidence.
- In Japan, nutrition standards are rigorous compared to many other countries and there is high parent/caregiver trust that meals will support their child's development.⁵⁶
- There are several ways in which teachers' lunchtime practices and their presence contributes to minimizing food waste and helps to support UN sustainable development goals.⁵⁷ 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 brief period of time when students eat mindfully in silence. 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.^{58,59}
- 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.⁶⁰

⁵³ The Coalition for Healthy School Meals. 2022. From:

<https://www.healthyschoolfood.ca/school-food-programs-around-the-world>

⁵⁴ Maruyama S, Kurokawa A. 2018. The operation of school lunches in Japan: Construction of a system considering sustainability. *Jpn J Nutr Diet*; 76(Supplement):S12–22. Available from:

https://www.jstage.jst.go.jp/article/eiyogakuzashi/76/Supplement/76_S12/_pd

⁵⁵ School Lunches: The Key to Children's Health and Prosperity. 2021, November 18. Kizuna. The Government of Japan. From: https://www.japan.go.jp/kizuna/2021/11/school_lunches.html

⁵⁶ The Coalition for Healthy School Meals. 2022. From:

<https://www.healthyschoolfood.ca/school-food-programs-around-the-world>

⁵⁷ Izumi, B.T., Akamatsu, R., Byker Shanks, C., Fujisaki, K. (2020). An ethnographic study exploring factors that minimize lunch waste in Tokyo elementary schools. *Public Health Nutrition*, 23(6), 1142-1151.

⁵⁸ The Coalition for Healthy School Meals. 2022. From:

<https://www.healthyschoolfood.ca/school-food-programs-around-the-world>

⁵⁹ Byker Shanks, C., Banna, J., Serrano, E.L. (2017). Food Waste in the National School Lunch Program 1978-2015: A Systematic Review. *J Acad Nutr Diet.*, 117(11): 1792-1807.

⁶⁰ The Coalition for Healthy School Meals. 2022. From:

<https://www.healthyschoolfood.ca/school-food-programs-around-the-world>

Appendix 1⁶¹ – School Lunch Act before and after amendments made in 2009

Table 2 Structure of the School Lunch Act

Structure of the School Lunch Act (1954 to March 2009)		Structure of the revised School Lunch Act (since April 2009)			
Objective	Article 1	Chapter 1	General rule	Objective	Article 1
Goals of the school lunch program	Article 2			Goals of the school lunch program	Article 2
Definition	Article 3			Definition	Article 3
Tasks for the founders of compulsory education schools	Article 4			Tasks for the founders of compulsory education schools	Article 4
Tasks for the national and local public organizations	Article 5			Tasks for the national and local public organizations	Article 5
		Chapter 2	Basic points relating to the implementation of the school lunch program	Facilities necessary for implementation of the school lunch program in two or more compulsory education schools	Article 6
				School lunch nutritionist	Article 7
				Criteria for the provision of school lunches	Article 8
				Standard for the Hygiene Control of School Lunches	Article 9
					Article 10
		Chapter 3	Guidance on diet for school lunch		
Liability for expenses	Article 6	Chapter 4	Miscellaneous rules	Liability for expenses	Article 11
National government subsidy	Article 7			National government subsidy	Article 12
Grant proposal etc.	Article 8				
Subsidy reimbursement etc.	Article 9			Subsidy reimbursement etc.	Article 13
Commissioned to cabinet order	Article 10			Commissioned to cabinet order	Article 14

⁶¹ Ishida H. The history, current status, and future directions of the school lunch program in Japan. 2018. Jpn J Nutr Diet [Internet]. 2018;76(Supplement):S2–11. From: https://www.jstage.jst.go.jp/article/eiyogakuzashi/76/Supplement/76_S2/_article

Appendix 2⁶² – Goals of SFP in School Lunch Act before and after 2009 amendments

Table 3 Goals of School Lunches Prescribed in the School Lunch Act[†]

Before revision (1954 to March 2009)	After revision (since April 2009)
I. Promote a better understanding of diet in everyday life and cultivate desirable dietary habits	I. Promote the maintenance and enhancement of health through appropriate nutrition
II. Enrich school life and cultivate bright sociability	II. 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.
III. Promote streamlining of dietary life, improvement of nutrition and enhancement of health	III. Enrich school life and cultivate brightness, sociability, and the spirit of cooperation.
IV. Lead to a proper understanding of food production, distribution and consumption	IV. Promote a strong understanding of the fact that a dietary life is based on the blessings of nature and cultivate a spirit that respects life and nature, and develop an attitude that contributes to environmental conservation.
	V. 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.
	VI. Promote a better understanding of the excellent traditional food culture in our country or in each region.
	VII. Proper understanding of food production, distribution and consumption.

Appendix 3⁶³ - Operational cost breakdown for school lunches in Japan

Table 3 A break down of the operating expenses for school lunches in Japan

A break down of the cost of resources	Costs
(1) Labor costs	Municipal tax (Public expenses); office workers, etc. Prefectural tax (Public expenses); diet and nutrition school teachers · school dietitian
(2) Ingredient costs	Parents (Beneficiary)
(3) Facility equipment costs (facility equipment and tableware)	National government and municipality (Public expenses)
(4) Other costs (Photothermal water costs, etc.)	Municipal tax (Public expenses)

Appendix 4⁶⁴ – Picture is a sample screen of Yamagata’s Prefectural Agriculture, Forestry, and Fisheries department website promoting local food consumption through the “Perorin”, a mountain shaped character which can be found on locally produced food products grown within the prefecture.

⁶² Ibid.

⁶³ Maruyama, S. & Kurokawa, A. 2018. The Operation of School Lunches in Japan: Construction of a System Considering Sustainability. From:

https://www.jstage.jst.go.jp/article/eiyogakuzashi/76/Supplement/76_S12/_pdf/-char/ja

⁶⁴ The Coalition for Healthy School Meals. 2022. From:

<https://www.healthyschoolfood.ca/school-food-programs-around-the-world>



Appendix 5⁶⁵ – Sample of monthly school lunch newsletter sent to the homeroom teacher and parents. Note columns includes the name of dish, ingredients organized into food groups, and calories.

5月号 給食だより		第 601 号	
今月の目標 ~給食当番を安全にしよう~		令和 2 年 4 月 20 日発行 茨城県学校給食センター	
品名	献立名	黄身の食品 動物性たんぱく食品	赤身の食品 植物性たんぱく食品
1	ワンタンスープ	ワンタン、ワンタン皮	ワンタン皮、ワンタン皮
2	ごぼうの炒め物	ごぼう、人参、鶏肉	ごぼう、人参、鶏肉
3	わかめ汁	わかめ、わかめ	わかめ、わかめ
4	ゆめしぼり	ゆめしぼり、ゆめしぼり	ゆめしぼり、ゆめしぼり
5	ゆめしぼり	ゆめしぼり、ゆめしぼり	ゆめしぼり、ゆめしぼり
6	ゆめしぼり	ゆめしぼり、ゆめしぼり	ゆめしぼり、ゆめしぼり
7	ゆめしぼり	ゆめしぼり、ゆめしぼり	ゆめしぼり、ゆめしぼり
8	ゆめしぼり	ゆめしぼり、ゆめしぼり	ゆめしぼり、ゆめしぼり
9	ゆめしぼり	ゆめしぼり、ゆめしぼり	ゆめしぼり、ゆめしぼり
10	ゆめしぼり	ゆめしぼり、ゆめしぼり	ゆめしぼり、ゆめしぼり
11	ゆめしぼり	ゆめしぼり、ゆめしぼり	ゆめしぼり、ゆめしぼり
12	ゆめしぼり	ゆめしぼり、ゆめしぼり	ゆめしぼり、ゆめしぼり
13	ゆめしぼり	ゆめしぼり、ゆめしぼり	ゆめしぼり、ゆめしぼり
14	ゆめしぼり	ゆめしぼり、ゆめしぼり	ゆめしぼり、ゆめしぼり
15	ゆめしぼり	ゆめしぼり、ゆめしぼり	ゆめしぼり、ゆめしぼり
16	ゆめしぼり	ゆめしぼり、ゆめしぼり	ゆめしぼり、ゆめしぼり
17	ゆめしぼり	ゆめしぼり、ゆめしぼり	ゆめしぼり、ゆめしぼり
18	ゆめしぼり	ゆめしぼり、ゆめしぼり	ゆめしぼり、ゆめしぼり
19	ゆめしぼり	ゆめしぼり、ゆめしぼり	ゆめしぼり、ゆめしぼり
20	ゆめしぼり	ゆめしぼり、ゆめしぼり	ゆめしぼり、ゆめしぼり
21	ゆめしぼり	ゆめしぼり、ゆめしぼり	ゆめしぼり、ゆめしぼり
22	ゆめしぼり	ゆめしぼり、ゆめしぼり	ゆめしぼり、ゆめしぼり
23	ゆめしぼり	ゆめしぼり、ゆめしぼり	ゆめしぼり、ゆめしぼり
24	ゆめしぼり	ゆめしぼり、ゆめしぼり	ゆめしぼり、ゆめしぼり
25	ゆめしぼり	ゆめしぼり、ゆめしぼり	ゆめしぼり、ゆめしぼり
26	ゆめしぼり	ゆめしぼり、ゆめしぼり	ゆめしぼり、ゆめしぼり
27	ゆめしぼり	ゆめしぼり、ゆめしぼり	ゆめしぼり、ゆめしぼり
28	ゆめしぼり	ゆめしぼり、ゆめしぼり	ゆめしぼり、ゆめしぼり
29	ゆめしぼり	ゆめしぼり、ゆめしぼり	ゆめしぼり、ゆめしぼり
30	ゆめしぼり	ゆめしぼり、ゆめしぼり	ゆめしぼり、ゆめしぼり

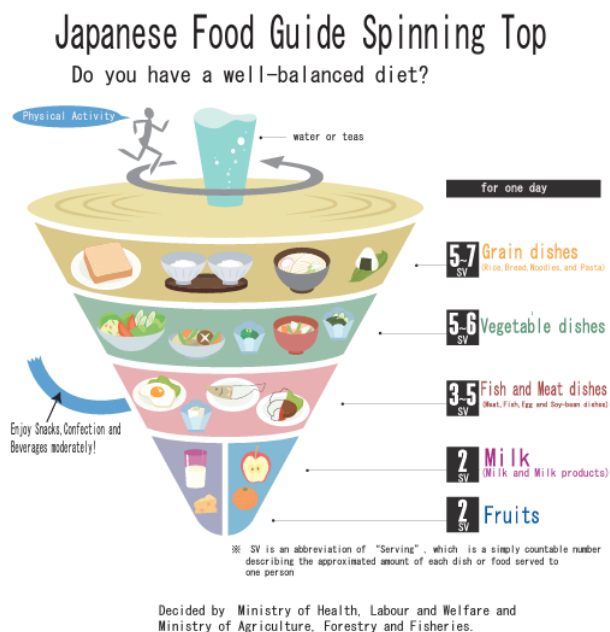
Monthly School Lunch Letter

Yellow food to provide you energy and power. Red food to build your muscle and blood. Green food to get yourself into good condition.

Appendix 6⁶⁶ – The Japanese food guide “Spinning Top”

⁶⁵ Ibid.

⁶⁶ The Japanese food guide “Spinning Top.” From: <https://www.mhlw.go.jp/bunya/kenkou/pdf/eiyou-syokuji5.pdf>



Appendix 7⁶⁷ – The three school meal types in Japanese schools.

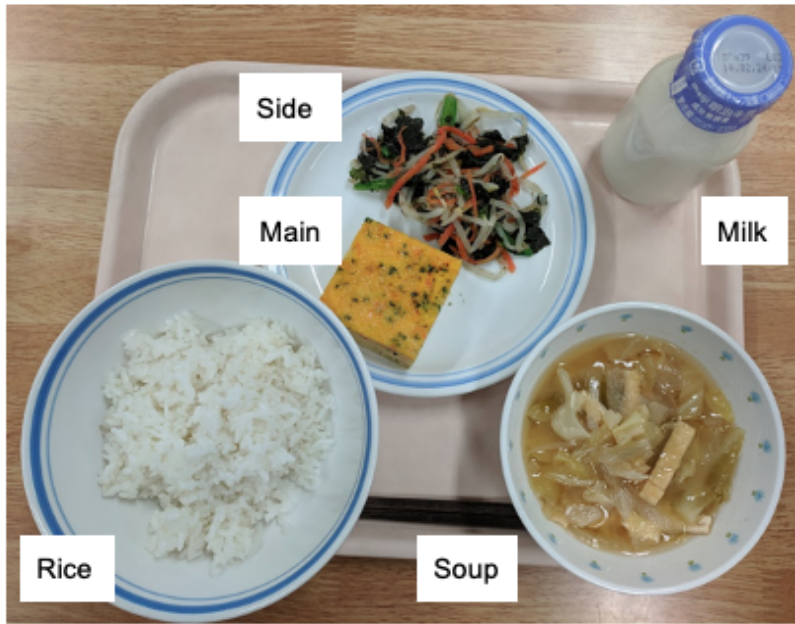
Full lunch	Supplementary lunch	Milk lunch
<p>A set meal comprising staple foods such as bread and rice; main dishes that are protein-rich, such as meat and fish; side dishes with fruits and vegetables; and milk.</p>	<p>Meals that are not complete or balanced, such as a main course dish and milk, or a staple food and milk.</p>	<p>Lunch comprising only skimmed milk, or milk.</p> <p>Lunch menus consisted of only miso soup.</p>

FIGURE 12.1 Three types of school lunch menu structure

Appendix 8⁶⁸ – Sample school lunch plate which includes rice, baked egg and vegetable dish, a seaweed and vegetable salad and a soup that contains strips of deep-fried tofu and vegetables, and milk. If there is fruit, it is served after the main meal as dessert.

⁶⁷ Waida, Y., & Kawamura, M. 2022. Japanese school lunch and food education. In *School Food, Equity and Social Justice*. Taylor & Francis.

⁶⁸ The Coalition for Healthy School Meals. 2022. From: <https://www.healthyschoolfood.ca/school-food-programs-around-the-world>



Appendix 9⁶⁹– Organizational chart for school lunch operations for on-site kitchen facilities

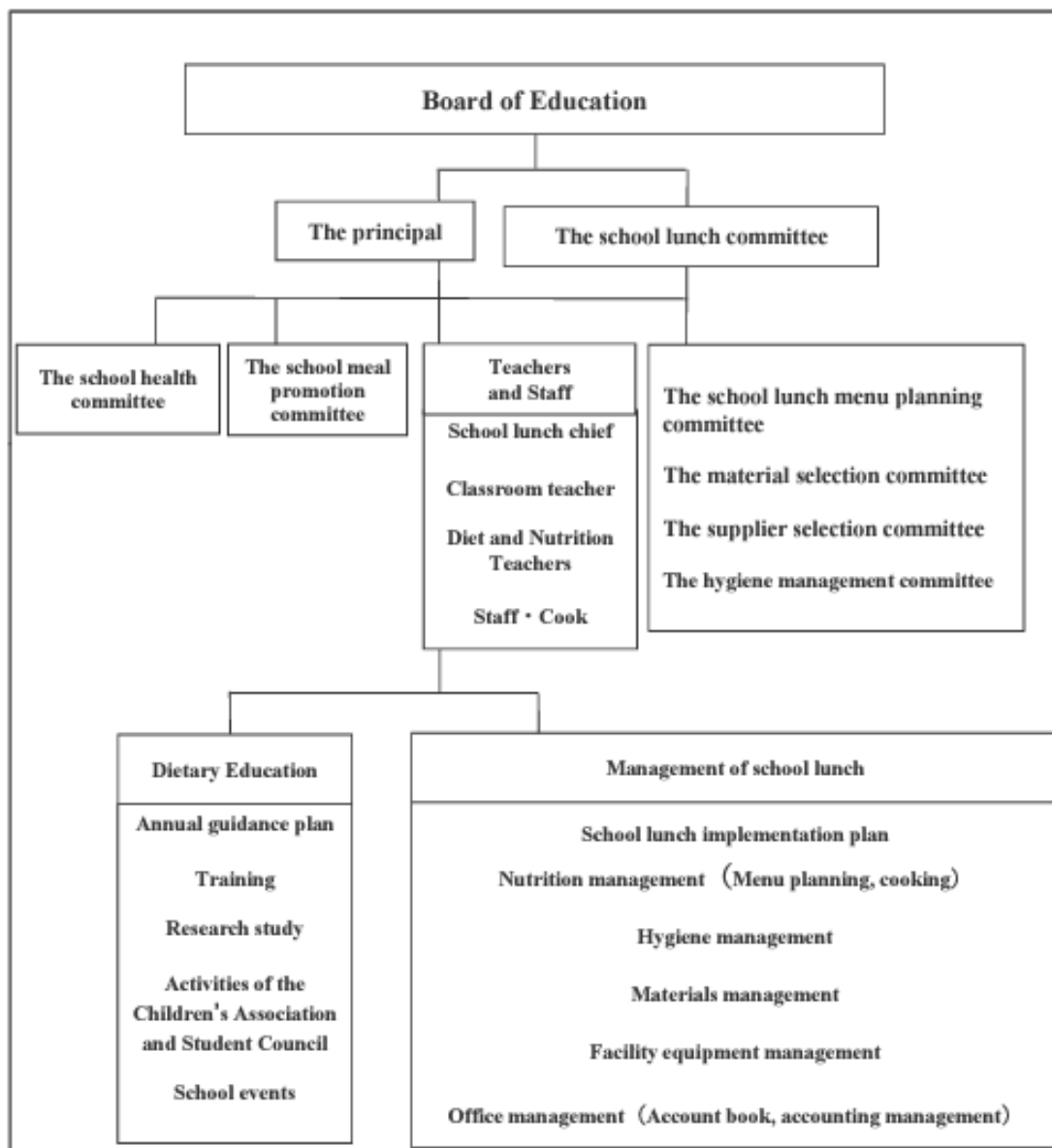


Figure 1 Operating organizations of school lunches (single school)

Partial modification of Nagano Prefecture Board of Education School Lunch Instruction Manual Operation Management Section 1, School Lunch Operation I School Lunch Operation Organization example^{11, 16)}.

⁶⁹ Maruyama S, Kurokawa A. 2018. The operation of school lunches in Japan: Construction of a system considering sustainability. Jpn J Nutr Diet [Internet]. 2018;76(Supplement):S12–22. From: https://www.jstage.jst.go.jp/article/eiyogakuzashi/76/Supplement/76_S12/_pdf/-char/ja

Appendix 10⁷⁰ – Organizational chart for school lunch operations for central kitchen facilities

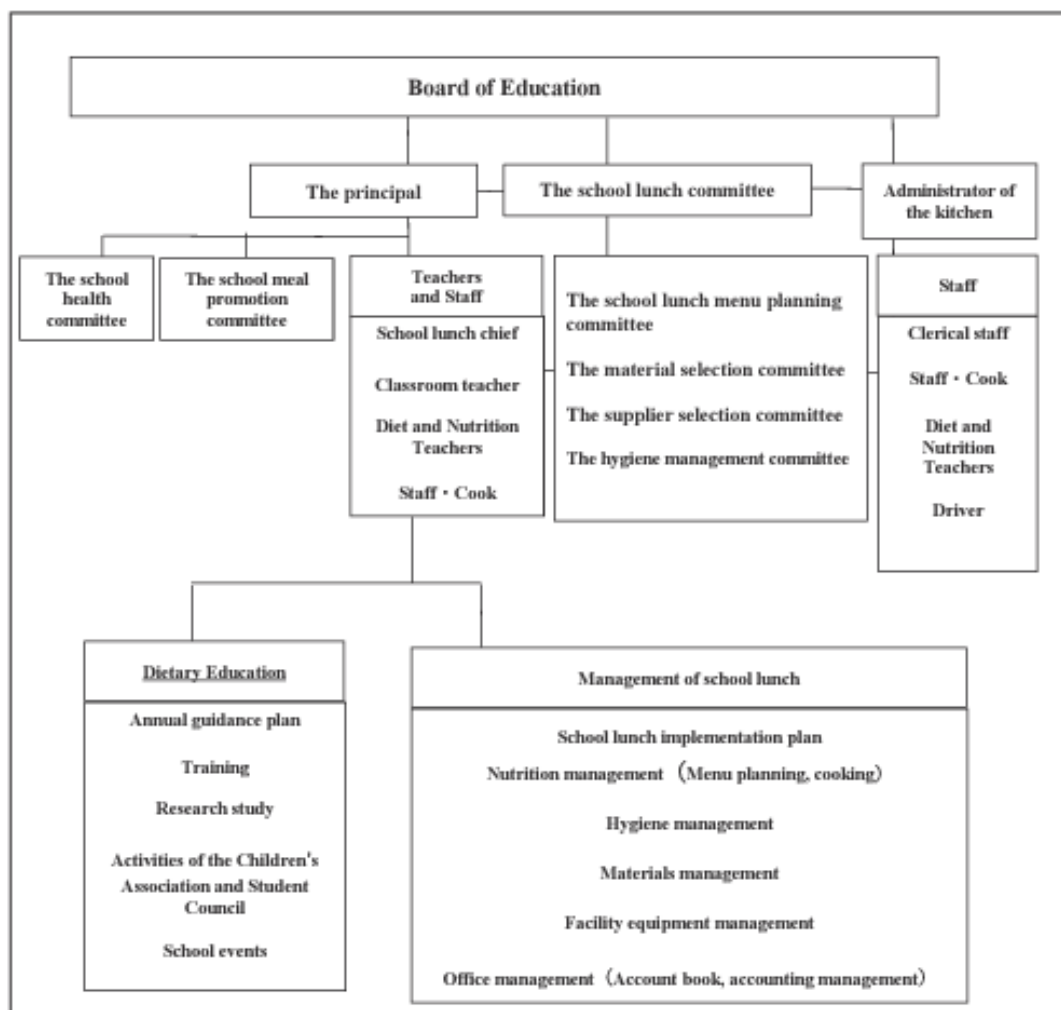


Figure 2 Operating organizations of school lunches (joint-cooking station)

Partial modification of Nagano Prefecture Board of Education School Lunch Instruction Manual Operation Management Section 1, School Lunch Operation I School Lunch Operation Organization example^{11, 16)}.

⁷⁰ Maruyama S, Kurokawa A. 2018. The operation of school lunches in Japan: Construction of a system considering sustainability. Jpn J Nutr Diet [Internet]. 2018;76(Supplement):S12–22. From: https://www.jstage.jst.go.jp/article/eiyogakuzashi/76/Supplement/76_S12/_pdf/-char/ja

Appendix 11⁷¹ – Overview of the cooking and delivery system for operating school lunches in Japan

Table 1 Overview of the cooking and delivery system for operating school lunches in Japan

Method	Conventional system (Cooking station is in the school)	Commissary system (Center cooking)	Parent-child system of school lunch	The delivery system
Contents	There is a kitchen in the school premises for cooking school lunch for that school	We cook multiple school lunches at once and deliver them to each school	The parent cooks the school lunch for his/her child's school that does not have a kitchen or delivery system	School lunches made at the facility are delivered to private schools (there is also a boxed lunch system)
Cooking time	Merit	Possible to ensure cooking time (3 and a half hours to 4 hours)		
	Demerit		Delivery time becomes shorter for child's school (3 and a half hours)	Delivery time becomes shorter (2 and a half hours to three hours)
Cooking process	Merit	Long cooking time, small number of meals, so elaborate cooking is possible		
	Demerit		Short cooking time because of the large number of meals and the use of processed foods such as frozen	Midway between the conventional system and commissary system
Delivery time	Merit	From the delivery preparation room to the classroom		
	Demerit		Delivery by the school lunch time of the farthest school (within 2 hours max)	Delivery by child's school lunch time (within 2 hours max)
Effect of food temperature	Merit	Offer at an appropriate temperature	Offer at an appropriate temperature	Offer at an appropriate temperature
	Demerit		Dependent on thermal insulation cans, refrigerated food cans, containers, etc.	Dependent on thermal insulation cans, refrigerated food cans, containers, etc.
Safety	Merit			
	Demerit		Large damage when food poisoning occurs	Large damage when food poisoning occurs
Work efficiency	Merit			
	Demerit		Work efficiency is good for mass cooking	
Effect of Food education	Merit	Students understand the cooking situation		
	Demerit		Students do not know how to cook	Students at the child's school do not know how to cook
Economy	Merit	Land area is small		
	Demerit	Both initial investment and maintenance costs are maximum	Initial investment and maintenance cost is cheaper than the single school method	Initial investment is the acceptance maintenance expenses of the school, only the consignment fee as maintenance fee

Modified from Kyoto Prefecture Shika Town Board of Education Proceedings Heisei 25, The second⁷⁰

Kobe Municipal Junior High School Lunch Concept Study Committee School Lunch System (Legal Positioning and Implementation Method) Comparison of School Lunch Implementation Method⁷⁰.

⁷¹ Maruyama S, Kurokawa A. 2018. The operation of school lunches in Japan: Construction of a system considering sustainability. Jpn J Nutr Diet [Internet]. 2018;76(Supplement):S12–22. From: https://www.jstage.jst.go.jp/article/eiyogakuzashi/76/Supplement/76_S12/_pdf/-char/ja

Appendix 12⁷² – MEXT implementation surveys

table number	statistical table
1	School lunch implementation situation
2	School lunch implementation status (elementary school, junior high school, compulsory school, secondary school (first term))
3	School lunch implementation status by prefecture (number of public elementary schools)
4	School lunch implementation status by prefecture (number of children in public elementary schools)
5	School lunch implementation status by prefecture (number of public junior high schools)
6	School lunch implementation status by prefecture (number of public junior high school students)
7	Implementation of school lunches by cooking method by prefecture (number of public elementary and junior high schools, compulsory education schools, secondary education schools (first term))
8	School lunch implementation status by prefecture cooking method (public elementary and junior high school, compulsory education school, secondary education school (first term) student number)
9	Communal kitchen installation status by prefecture size (public)
10	School lunch cook placement situation (public)
11	Placement of school lunch cooks by prefecture (public/full-time)
12	School lunch cook placement situation (public)
13	Outsourcing situation for school lunches (public)

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<https://www.e-stat.go.jp/stat-search/files?page=1&layout=datalist&toukei=00400802&tstat=000001016540&cycle=0&tclass1=000001126135&tclass2=000001126136&tclass3val=0> (Japanese)

Appendix 13⁷³ – MEXT school lunch expenses surveys

table number	statistical table	Survey date
1	Average monthly school lunch fee (public elementary/junior high school/part-time night high school)	2018
2	Average monthly school lunch expenses by prefecture (public elementary/junior high school/part-time night high school)	2018

Appendix 14⁷⁴ – The monitoring and evaluation items for Japanese school lunch related to “healthy development of children”

Table 1 The monitoring/evaluation items and references related to “healthy development of children”

Major items	Minor items	Monitoring/evaluation items	References	Subjects	Implementation time/frequency
QOL	Enjoyment	QOL related to school * I experience enjoyment in going to school * I experience enjoyment in seeing friends * I have some favorite classes	National Assessment of Academic Ability (National Institute for Educational Policy Research) ¹²⁾	Sixth-grade elementary and third-grade junior high-school children, complete survey	Every April
		QOL related to eating * A time when you enjoy eating	Survey of School Children’s Dietary Habits (Japan Sport Council) ¹³⁾	Fifth-grade elementary and second-grade junior high-school children and their parents, about 10,000 About 2,500 class teachers	In 2000, 2005, 2007, and 2010
	Sense of belonging to a school	Children’s sense of belonging to school (6 items)	Programme for International Student Assessment (PISA) ²¹⁾	First-grade senior high-school students, 198 schools across the country 6,600 students are randomly selected (2015)	Every three years
Academic ability		Academic ability (Japanese, arithmetic, mathematics)	National Assessment of Academic Ability (National Institute for Educational Policy Research) ¹²⁾	Described before	Described before
		Academic ability: reading comprehension, mathematical literacy, scientific literacy	Programme for International Student Assessment (PISA) ²¹⁾	Described before	Described before
		Arithmetic, mathematics, science	Trends in International Mathematics and Science Study (TIMSS) ²²⁾	4,400 fourth-grade elementary school children 4,700 second-grade junior high-school children (2015)	Every four years
Physical strength		Physical strength Grip strength, sitting up, long seat type body antelexion, jumping side to side, 20 m shuttle running, 50 m sprint, standing broad jump, softball throwing Frequency of exercise/sport, duration of time per day of exercise/sport, belonging or not to an athletic/sport club	Survey of Physical Strength/Sporting Ability (MEXT) ¹¹⁾	Elementary and junior high-school children, complete survey Number of samples 13,536 elementary school children 8,460 junior high-school children (fiscal year 2015)	From May to July every year in elementary and junior high schools
Health/nutritional status	Growth status	Height/body weight	School Health Statistics (MEXT) ¹⁰⁾ Regular health examination (MEXT) * School Health Statistics is the aggregated data of the extracted data from the regular health examination in the complete survey.	Extracted from all children from the first grade of elementary school to the third grade of junior high school	From April to June every year
	Health/nutritional status	Health status Nutritional status; presence or absence of disorders/abnormalities of the spine/thorax and conditions of the extremities; vision and hearing ability; presence or absence of disorders/abnormalities of the eyes; diseases of the ear; nose and throat and skin disorders; dental/oral disorders or abnormalities; tuberculosis; disorders/abnormalities of the heart; urine; other diseases or abnormalities	School Health Statistics (MEXT) ¹⁰⁾ Regular health examination (MEXT)	Described before	Described before
		Health status * Height/body weight, abdominal circumference, blood pressure, lipids in blood, bowel movement * Mental health (7 items, 11 items)	Surveillance of School Children’s Health Status (Japan Society of School Health) ¹⁴⁾	From the first grade of elementary school to the third grade of junior high school 123 schools in fiscal year 2014 19,219 children	From December to February every two years
		Health status * Feeling hungry or not before school lunch * Unidentified complaint (6 items)	Survey of School Children’s Dietary Habits (Japan Sport Council) ¹³⁾	Fifth-grade elementary and second-grade junior high-school children and their parents, about 10,000	In 2000, 2005, 2007, and 2010

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<https://www.e-stat.go.jp/stat-search/files?page=1&layout=datalist&toukei=00400802&tstat=000001016540&cycle=0&tclass1=000001126135&tclass2=000001126137&tclass3val=0> (Japanese)

⁷⁴ Kojima Y, Nakanishi A, Ishida H. Monitoring and evaluation systems for the school lunch program in Japan: Organizing items with reference to acts and surveys. Jpn J Nutr Diet [Internet]. 2018;76(Supplement):S74–85. Available from: https://www.jstage.jst.go.jp/article/eiyogakuzashi/76/Supplement/76_S74/_pdf/_char/en

Table 1 (continued) The monitoring/evaluation items and references related to “healthy development of children”

Major items	Minor items	Monitoring/evaluation items	References	Subjects	Implementation time/frequency
Dietary habits	Meal intakes	Nutrient intake by food groups (one day)	National Health and Nutrition Survey (Ministry of Health, Labour and Welfare) ²⁴	7 to 14 years old About 600 children	Every November
		Nutrient intake by food groups (each one weekdays and holidays) Comparison between days with school lunch and days without it	Survey of School Children's Dietary Habits (Japan Sport Council) ¹³	Third-grade and fifth-grade elementary school and second-grade junior high-school children About 5,700 children	In 2002, 2007, and 2010
	Eating behavior	Breakfast intake, snack intake, help in cooking, Greetings at meal, Food that school children dislike	Survey of School Children's Dietary Habits (Japan Sport Council) ¹³	Fifth-grade elementary and second-grade junior high-school children and their parents, about 10,000	In 2000, 2005, 2007, and 2010
		Breakfast, dinner, snacks between meals, etc. Frequency of eating breakfast, eating breakfast alone, eating dinner alone, eating late-evening snacks, having leftovers and eating too much confectionery, and the kind of the dishes eaten for breakfast or dinner	Surveillance of School Children's Health Status (Japan Society of School Health) ¹⁴	Described before	Described before
Knowledge/skill/attitude	Dietary attitude/skill	Dietary perception and preferences * Favorite and least favorite food at school lunch * Matters that require attention in dietary life (12 items) * Cooking skill * Way of holding chopsticks * Favorite and least favorite menu	Survey of School Children's Dietary Habits (Japan Sport Council) ¹³	Fifth-grade elementary and second-grade junior high-school children and their parents, about 10,000	In 2002, 2007, and 2010
	Knowledge	Food knowledge * Three-color Classification System for Food Groups			
Food environment	Food environment	Items pointed out for caution by family (6 items) Washing hands before eating meals; greeting at meals; way of holding chopsticks; way of putting utensils on the table; not eating with elbows on the table; not being picky about eating			

Appendix 15⁷⁵ – The monitoring and evaluation items for Japanese school lunch related to “operation of school lunch program”

Table 2 The monitoring/evaluation items and references related to “operation of school lunch program”

Major items	Minor items	Monitoring/evaluation items	References	Subjects	Implementation time/frequency
Nutrition/ dietary control	Intake	Nutrient intake in school lunches Energy, protein, animal protein, lipid, animal lipids, calcium, iron, vitamin A, vitamin B ₁ , vitamin B ₂ , vitamin C, dietary fiber, salt, magnesium, zinc	Nutrition Report of School Lunches (MEXT) ¹⁵⁹	Public elementary and junior high schools, including the first half of secondary schools, and evening part-time high schools where full meal school lunches, cooked in a lunch preparation center, are offered (One out of 50 schools)	For 5 days, every May and November
		Intake by food group Flour, rice, enriched rice, milk (for drinking), potato and starch, sugars, pulses, nuts and seeds, green and yellow vegetables, other vegetables, fruits, kinds of mushrooms, marine algae, fish and seafood, meat, eggs, dairy, fat, dried wheat gluten snack, beverages, seasoning and spices, cooked and processed food	Nutrition Report of School Lunches (MEXT) ¹⁵⁹		
		Nutrient intake and intake by food group in school lunches Nutrient intake in school lunches, Comparison between days with school lunch and days without it	Survey of School Children's Dietary Habits (Japan Sport Council) ¹⁵⁰	Third-grade and fifth-grade elementary school and second-grade junior high-school children About 5,700 children	In 2002, 2007, and 2010
Menu control	School lunches of rice as a staple food	Frequency of school lunch with rice as staple food (per week)	School Lunch Implementation Survey (MEXT) ¹⁶⁰	National, public, and private elementary and junior high schools (including the first half of secondary schools), special-support schools, and evening part-time schools Complete survey	May 1, every year
Receiving, storage, and inventory control of food-stuffs/Financial management	School lunch fee	Monthly school lunch fee	School Lunch Implementation Survey (MEXT) ¹⁶⁰	Described before	Described before
	Cost of foodstuff	Average foodstuff expenses per serving (conventional system or commissary system, elementary or junior high school)	Nutrition Report of School Lunches (MEXT) ¹⁵⁹	Described before	Described before
	Ingredients in foodstuff	Utilization rate of local products and domestic products * objectives of the 3rd <i>Shokukoku</i> Promotion Basic Plan	Nutrition Report of School Lunches (MEXT) ¹⁵⁹	Described before	Described before
Production control	Hygiene management	Card 1: Periodic inspection card for school lunch equipment	Standards of Hygiene Control of School Lunches (MEXT) ¹⁶¹	All facilities offering school lunches	Inspection once a year
		Card 2: Periodic inspection card for hygiene control of school lunch facilities			Inspection three times a year
		Card 3: Periodic inspection card for receiving and storing of foods for school lunches			Inspection three times a year
		Card 4: Periodic inspection card for the cooking process			Inspection once a year
		Card 5: Periodic inspection card for hygiene and health conditions of personnel engaged in school lunches			Inspection three times a year
		Card 6: Processing card for periodic fecal examination			Inspection twice a month
		Card 7: Periodic inspection card for hygiene controls in school lunch service			Inspection once a year
		Card 8: Routine inspection card for school lunches			Inspection every day
Personnel management	Posts of school lunch staff	Commissioning cooking of school lunches to the private sector Number of Diet and Nutrition Teachers/school dietitians and the number of cooks for school lunches (full and part-time employment)	School Lunch Implementation Survey (MEXT) ¹⁶⁰	Described before	Described before

Additional Resources

- [MEXT Guidance on Food and Nutrition Education at School](#)
- [MEXT 2021 Budget \(Japanese\)](#)
- [Japan's E-stat school lunch implementation survey reports \(Japanese\)](#)
- [Actions to Prevent Food Allergy-related Accidents in School Lunches](#)
- [Trends in Intervention Studies on Food and Nutrition Education in Japan Utilizing the School Lunch — A Systematic Review](#)

⁷⁵ Kojima Y, Nakanishi A, Ishida H. 2018. Monitoring and evaluation systems for the school lunch program in Japan: Organizing items with reference to acts and surveys. Jpn J Nutr Diet [Internet]. 2018;76(Supplement):S74–85. From: https://www.jstage.jst.go.jp/article/eiyogakuzashi/76/Supplement/76_S74/_pdf/-char/en