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A WHOLE SYSTEMS APPROACH TO SCHOOL FOOD POLICY IN JAPAN

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In early November, elementary school children across Japan gather in fields and school gardens to harvest daikon. Some students are particularly excited because they sowed the seeds for these hearty root vegetables themselves. Teachers prep them with instructions like “Be sure to pull the daikon out straight” or “They have deep roots, so heave with all your might!” Children’s cries of amazement soon fill the air: “How heavy they are!” “I’ve pulled three . . . How about you?” Elderly neighborhood volunteers often lend a hand. Similar episodes of experiential food education occur throughout the year, as students harvest sweet potatoes, peas, and rice. After the harvest, each child receives a portion of produce to take home and enjoy. The remainder is gathered up and prepared for school lunch.

Japanese school lunch (*gakkō kyūshoku*) is regarded by specialists and the public alike for its nutritional quality, dynamic curriculum, and intentional integration into everyday life in local communities. The current design of the program is a result of two interconnected laws: the 2005 Basic Law on Food Education and the School Lunch Act of 1954—which was significantly revised in 2008.

Today, school lunch is a nearly universal program in Japan, serving 98.7 percent of elementary schools and 89.1 percent of junior high schools nationwide—over 29,000 schools in total.¹ Over 39,000 municipal food service workers prepare fresh meals for more than nine million

middle and elementary school children.² Institutions that implement school lunch programs strive to serve all members of the student body, and those who attend the school typically partake in the meal. Students with dietary or allergy restrictions are permitted to bring their own lunches from home. Municipal governments fund the labor and operations to produce meals, while guardians cover the costs of ingredients through monthly fees ranging from US\$33 to \$39 per child.³ These fees are considered part of “school costs,” which guardians pay as part of their child’s education. For guardians who cannot afford school lunches, local or prefectural governments subsidize the school lunch fees based on household income and size. The quality of school lunches nationwide remains relatively uniform due to government nutrition guidelines. Parents and guardians appreciate the convenience, nutrition, and affordability the lunches provide, as well as the food education (*shokuiku*) that is central to these meals. Students generally find meals tasty and satisfying.⁴

THE HISTORICAL DEVELOPMENT OF JAPAN’S SCHOOL LUNCH PROGRAM

School lunch in Japan began in the Meiji Era (1868–1912) and developed alongside universal education. The nation’s earliest known school lunch service began in 1889 at Chuai Elementary School at Daitokuji Buddhist Temple in Tsuruoka City, Yamagata Prefecture. Philanthropic monks provided simple, nutritious meals for their poor and hungry students. The early meals were basic fare: rice balls, pickled vegetables, and salted salmon.⁵ Over the next three decades, school lunch service expanded around the country through volunteer grassroots organizations and local networks.

By the turn of the twentieth century, the Japanese government realized that meals served in school could contribute to the development of healthy citizens.⁶ In 1932, Japan’s Ministry of Education provided a national subsidy to cover school lunch operations, and by 1940, lunch recipients included children in need, those with health issues, and those with undernourished or unbalanced diets.⁷ School lunch had become a matter of national interest.

World War II and its aftermath saw a dramatic transformation in the scope and national priority of school lunch. As the war deepened, food

access and quality around the country deteriorated, and in many places school lunch service was suspended. City dwellers were particularly hard-hit by food shortages. Under Japan's postwar occupation, school lunches were reinstated to address hunger. Beginning in December 1946, the US partnered with Japan's Ministry of Education, Ministry of Agriculture, and Ministry of Health & Welfare to launch an experimental school lunch for the urban population. By the end of the occupation, more than eight million children participated in the school lunch program.⁸ These post-war years built the foundations of national nutritional standards, mechanisms for sharing expenses, and the role of school lunch committees.

As the US occupation ended in 1952, the future of the school lunch program seemed uncertain. Japan had regained its independence through the 1951 San Francisco Peace Treaty, which brought an end to two programs that had helped fund school lunch: Government Appropriation for Relief in Occupied Area (GARIOA) and Licensed Agencies for Relief in Asia (LARA).⁹ Without this support, families now had to pay for students' meals out of pocket.¹⁰ Facing a significant budget crisis, Japan's finance minister advocated for the termination of Japan's portion of government subsidies and even school lunches themselves. Parent-teacher associations nationwide urged the government to continue school meals, and even opposition political party members joined forces to propose permanent legislation.¹¹ Ultimately, reports of malnourished children and natural disasters hastened the passage of new legislation: the School Lunch Act in 1954. The act established four nationwide objectives:¹²

- I. Promote a better understanding of diet in everyday life and cultivate desirable dietary habits;
- II. Enrich school life and cultivate sociability;
- III. Promote streamlining of dietary life, improvement of nutrition, and enhancement of health;
- IV. Lead to a proper understanding of food production, distribution, and consumption.¹³

The School Lunch Act also included a School Lunch Enforcement Ordinance, which stipulated mechanisms of cost-sharing and details of local and national funding. Although the act initially only covered public elementary schools, by 1956, the law extended to all compulsory education.¹⁴

In 1955, the School Lunch Association Act established regional associations to oversee school lunch quality. After several mergers and reorganizations, these associations reemerged as the Federation of Prefectural School Lunch Associations of Japan. Staffed by an array of retirees, education administrators, food service workers, and government employees, these associations continue to administer government-commissioned services, including the procurement and distribution of food. The associations maintain no commercial purpose, and their operational costs must be approved by the Ministry of Education.¹⁵ The associations' primary focus remains operational support, ensuring a stable supply chain relatively unencumbered by the concerns of private enterprise.

One of the defining culinary characteristics of postwar Japanese school lunch was the inclusion of bread and milk, two ingredients absent from the nation's traditional diet. During the occupation, the US donated surplus wheat flour for use in school lunches, and UNICEF supplied powdered milk to Japanese schools. Both foods were promoted by Western nations as excellent sources of vitamins and calories and helped to ameliorate malnourishment in children.¹⁶ Even after the occupation came to an end, the Japanese government encouraged the public to eat bread, meat, and dairy to build strong bodies, and Japan continued to import US wheat for use in school lunches. Bread-based school lunches spread to every part of the country by the 1960s,¹⁷ and milk accompanies school lunch to this day.

In the early 1980s, faced with a growing national debt and a sluggish economy, the government looked for new ways to cut spending and support the private sector.¹⁸ As a result, in 1985, the education ministry announced it would award private companies contracts to produce school lunch.¹⁹ This gave municipal governments the choice to either manage meal production themselves or engage private companies to prepare meals planned by a municipal nutritionist. Some communities complained about the contracted school lunch providers, and in the early 2000s, several citizen lawsuits argued that the contracts constituted an illegal use of public funds.²⁰ Those efforts failed, and today school lunch associations continue to partner with both public and private providers.

Faced with a severe economic recession that began in the 1990s and continued for decades, Japan embraced neoliberal policies designed to support free-market capitalism through lowered tariffs and limitations on

government spending. The increasingly globalized market led to the formation of a grassroots movement focused on *chisan chisho* (local production, local consumption)²¹ that emphasizes the quality and uniqueness of Japan's agricultural identity.²² The agricultural ministry adopted *chisan chisho* in 2002 to improve the country's dismal food self-sufficiency rates, revitalize rural communities, and address food safety concerns.²³ Prefectures and municipalities now offer matching funds or subsidies for schools to partner with local farmers, create new meals with local ingredients, and use locally produced food for food education activities.²⁴ The *chisan chisho* movement and policy have helped revitalize local agriculture and cultivate students' sense of place through school lunch.

FOOD EDUCATION LAW AND SCHOOL LUNCH ACT REVISIONS

Ongoing health concerns related to rising rates of diabetes and obesity, coupled with the desire to support and benefit from local agriculture, contributed to the development of the 2005 Basic Law on Food Education. This law encourages individuals and organizations to promote knowledge about food and nutrition and to foster the public's ability to make appropriate food choices. Lawmakers drew inspiration from the writings of Sagen Ishizuka (1850–1909), a military doctor and early proponent of the macrobiotic diet, whose philosophy influenced, for example, the law's supplementary provision²⁵ “Food education is the foundation for living and is positioned as the base of intellectual, moral, and physical education.” According to this precept, one should intellectually engage with food education by learning about nutrition. Physically, one should strive for a healthy diet and lifestyle. Morally, individuals should practice gratitude toward food, nature, and those who created the meal.

The resulting 2005 law had seven key objectives:

The Seven Objectives of the Basic Law on Food Education (2005)

- I. To promote health in body and mind, as well as to enrich lives;
- II. To develop a greater appreciation for and understanding of diets, including the natural environment and the various roles of people who produce, transport, and prepare food;
- III. To develop volunteer/grassroots movements to promote food education;
- IV. To encourage food education among children (as well as parents, educators, and daycare providers);

- V. To reinforce dietary knowledge through food-related experiences and activities including at home, schools, and in the community;
- VI. To promote awareness and appreciation of traditional Japanese food culture and food supply/demand, as well as opportunities for interaction between food producers and consumers to revitalize rural farming and fishing regions and boost food self-sufficiency in Japan;
- VII. To provide information on proper diets and food safety²⁶

Today, the Ministry of Agriculture, Forestry, and Fisheries (MAFF) oversees food education promotion plans in cooperation with other ministries, prefectures, and municipalities. To meet the seven objectives, prefectures develop food education plans and report progress every year. Table 1.1 shows a selection of target areas that the Basic Law on Food Education addressed starting in 2015 and their progress as of 2020. Like other pieces of Japanese legislation, the law relies on informal social consensus.²⁷

In 2008, the School Lunch Act was significantly revised and changed its aim from “improvement of dietary habits” to—in keeping with the Basic Law on Food Education—the “promotion of food education.”²⁸ Food education became an official part of the National Curriculum Standard for Japanese schools, and the School Lunch Act’s objectives were reworded and expanded in order to better align with the general aims of the Basic Law on Food Education.²⁹ Objectives four and five of the School Lunch Act now highlight ethics through appreciation of the natural world and the people who support the food industry. The newly added sixth objective highlights the importance of Japanese culinary history.

The Seven Objectives of the Revised School Lunch Act (2008)³⁰

+ indicates a new objective added in 2008

- I. Sustain and improve health through proper nutrition;
- II. Foster understanding, decision-making, and eating habits for an appropriate diet;
- III. Enliven school life and encourage an active, social, and considerate spirit;
- IV. Further appreciation of the gifts of nature that support us, foster respect of life and nature, and encourage a spirit of environmental conservation;+
- V. Acknowledge how the activities of many people support the food industry and respect their hard work;+
- VI. Further understanding of Japanese and local traditional cuisine;+
- VII. Foster an understanding of the mechanisms of food production, transportation, and consumption

Table 1.1 A selection of food education goals and target values, 2021–2025

Food education goals	2025 target values	Target status in 2020
Percentage of people interested in food education	90% or more	83.2%
Number of mutual meals such as breakfast or dinner eaten with family members	11 times a week or more	9.6 times per week
Percentage of children who skip breakfast	0%	4.6%
Frequency that local products are discussed in the food and nutrition teacher's lessons	12 times per month or more	9.1 times per month
Average intake of vegetables per day	350 g or more	280.5 g
Percentage of citizens with agriculture, forestry, or fishery experience	70% or more	65.7%
Percentage of citizens who have basic knowledge of food safety and can apply it	80% or more	75.2%
Percentage of municipalities that have made and implemented a plan for promoting food education	100%	87.5%
Number of citizens involved in volunteer or other groups promoting food education	370,000 or more	362,000

Note: See Ministry of Agriculture, Forestry, and Fisheries (MAFF), “The Fourth Basic Plan for the Promotion of Shokuiku (Provisional Translation)” March 2021, <https://www.maff.go.jp/j/syokuiku/attach/pdf/kannrenhou-30.pdf>.

Taken together, the Basic Law on Food Education and the revision of the School Lunch Act objectives helped school lunch to improve health and strengthen communities more effectively.

SCHOOL LUNCH TODAY AND ITS SEVEN OBJECTIVES

In the following sections, we explore some of the ways that students, teachers, and communities are fulfilling the goals prescribed in the School

Lunch Act while addressing broader issues facing Japanese society. We want to emphasize that the examples we use are not isolated but representative of numerous parallel practices at schools across the country.

OBJECTIVE I: SUSTAIN AND IMPROVE HEALTH THROUGH PROPER NUTRITION

Good nutrition is the foundation of school lunch and is key to a child's health and development. Indeed, for some children, school lunch may be their only nutritious meal of the day. Poverty rates in Japan have steadily risen over the past thirty years, and currently one in seven children lives in poverty.³¹ During breaks in the school year when meals are not provided, such as vacations and holidays, educators anecdotally report that they notice weight loss in some of their students.³² Research has shown that vitamins and minerals provided by school lunch alone may be sufficient for students to overcome dietary deficiencies.³³

School lunch providers follow government nutrition standards to create meals that meet one-third of a child's daily caloric requirement (530–830 calories). Lunch should provide the following quota of daily nutrition: protein (13–20 percent), lipids (20–30 percent), calcium (50 percent), and iron (40 percent), among other nutrients.³⁴ National guidelines state that providers should supply these nutrients from a variety of food types, including cereals, vegetables, beans, fruits, mushrooms, sea produce, seafood, meats, eggs, and dairy.³⁵ School lunch typically contains a main dish (protein), side dish, soup, and carbohydrates. School lunch providers strive to source the highest-quality affordable ingredients from domestic producers.

In addition to satisfying nutritional quotas, school lunch providers purposefully develop meals to prevent specific health issues. For example, in recent years, hypertension (high blood pressure) was designated a primary chronic disease in Japan,³⁶ and some providers are now developing low-sodium meals to cultivate students' taste in less salty foods from an early age. Schools may cook with more *dashi* (a savory stock of kelp and fermented bonito) to create naturally rich umami flavors that lessen salt use. Other providers enhance flavor through ingredients like garlic and ginger. One town in Iwate Prefecture is even experimenting with milk to increase savoriness.³⁷

OBJECTIVE II: FOSTER UNDERSTANDING, DECISION-MAKING, AND EATING HABITS FOR AN APPROPRIATE DIET

School lunch providers and educators use a variety of methods to foster an “intellectual appetite.” Some of their most versatile educational tools are the simple printouts of school lunch notices (*kyūshoku dayori*) and monthly school lunch menus (*kondate*), which are posted throughout school buildings and sent home with students.³⁸ The notices often include information from school nutritionists about health, table manners, and seasonal produce, featuring supplementary recipes for use at home. The menus highlight each ingredient’s nutritional purpose, often color-coded according to its function in the body. Some school districts have even created superhero characters based on red, green, and yellow, the colors that signify the food groups, and actors occasionally produce plays for children about adventures in healthy eating.

By the early 2000s, many dieticians were already providing food and nutrition classes in schools. Revisions to the School Lunch Act clarified their roles, stating that nutrition teachers could be employed in compulsory education (elementary and junior high school) and could be hired at the discretion of the prefectural government that would bear the cost.³⁹ Since then, the number of nutrition teachers in schools has gradually climbed, and in 2020, there were more than 6,500 nutrition teachers across the country.⁴⁰ Generally, nutrition teachers must have a license and a college degree. They help to manage the healthfulness, hygiene, and quality of school lunches across multiple schools.⁴¹ They also coordinate with schoolteachers to incorporate food education into the wider curriculum.

Several times a semester, nutrition or homeroom teachers lead formal food education classes on how to be a knowledgeable consumer and healthier citizen. National curriculum guidelines suggest that younger students begin by learning basic etiquette such as how to properly hold chopsticks to cut, scoop, and stir. (From the 1950s until the mid-1970s, the “spork” was the primary school lunch utensil.)⁴² Teachers discuss improper table manners such as using chopsticks to pull food apart or hovering the chopsticks over food.⁴³ Older students learn about proper food storage methods, the difference between “expiration dates” and “best by dates,” how to construct a nutritionally balanced meal, and the types of food that can exacerbate

heart disease.⁴⁴ Ideally, students will carry these lessons with them into adulthood.

OBJECTIVE III: ENLIVEN SCHOOL LIFE AND ENCOURAGE AN ACTIVE, SOCIAL, AND CONSIDERATE SPIRIT

Fostering cooperation and community spirit has been a goal of school lunch since 1958 when lunchtime was designated as a “school event” and, later, a “special activity” of classroom instruction. During lunchtime, students are expected to work collaboratively just as they would during other classes. School staff members set up hot bins at lunch stations in different parts of the building, and children participate in a rotating roster of student captains (*kyūshoku tōban*) who fetch the food and bring it to the classroom where they set up a buffet and serve their fellow students. This system of captains is instituted as early as first grade, with extra time built into the schedule for young students to practice the skills they need.

Once the students and teacher are served, the lunch captains lead the class in the traditional word of gratitude: “*itadakimasu*,” which translates to “I humbly partake.” No one can begin their meal before this word is spoken. Children then take approximately twenty minutes to eat lunch, listen to lunchtime announcements, and talk with their classmates. As lunch period draws to a close, captains lead their classmates in the closing phrase of thanksgiving: “*gochisosama deshita*”—“It was a feast!” Clean-up then ensues, followed by recess. From start to finish, this daily ritual involves cooperation, patience, and goodwill on the part of students. Children mature through the experience of serving all members of the class, friend or not, equally and with empathy.⁴⁵

Sometimes entire schools prepare and serve “vertical lunches” that bring together multiple grade levels. For example, at one elementary school, fifth graders planned and managed a vertical lunch to express gratitude to the graduating class of sixth graders. The first graders escorted sixth graders to special lunchtime classrooms where second and third graders presented specially prepared name tags and lunch placemats. Fourth graders created bingo games for everyone to enjoy. The school principal noted that while “children often tend to think only about themselves . . . vertical lunches provide a valuable opportunity for them to think about the concerns of



1.1 Students lead the class in a word of gratitude before the meal begins—“*Itadakimasu!*” Credit: Nourishing Japan, LLC.

others.”⁴⁶ At other times, students extend these unique lunch experiences to the broader community, sharing meals with nearby schools or senior centers.

OBJECTIVE IV: FURTHER APPRECIATION OF THE GIFTS OF NATURE THAT SUPPORT US, FOSTER RESPECT FOR LIFE AND NATURE, AND ENCOURAGE A SPIRIT OF ENVIRONMENTAL CONSERVATION

Cultivating an appreciation of nature is encouraged across the curriculum in Japanese schools, and school lunch is no exception. National elementary school curriculum guidelines require students to care for plants and animals at school, and even in crowded urban areas, nearly every school has a small garden plot where students grow some of the food they eat.⁴⁷

Students are encouraged to grapple with the cycle of life and death and their responsibility to the natural world. Every year, an elementary school teacher in Tsuruoka City reads to her second-grade class the picture book *Partaking of Life: The Day Little Mii Became Meat*. Centered around the inherent conflict of killing a beloved pet cow for food, this book explores the turmoil that many people—even meat producers—feel in relation to killing and consuming animals. The story inspires a sense of gratitude toward

animal life. In Joetsu, Niigata Prefecture, a class of fifth graders recently devoted an entire curriculum to learning about meat and where it comes from, including the delicate subject of end of life. Students watched a film to learn how cows and pigs “arrive at the table,” and a staff member from a wholesale meat processing plant visited students to discuss his work. Students had an opportunity to cut, grill, and compare various cuts of meat, and they later visited a wholesale meat market.⁴⁸ One child reflected: “It was shocking to learn how a pig is killed. From now on I will try to eat mindfully and not have any leftovers.” Another student stated: “I learned that I live through the lives of others. I want to eat with gratitude.”

Students also acquire greater respect for the natural world by learning about, and working to mitigate, food waste. In 2019, the government passed a law to reduce the estimated six million tons of food waste generated every year.⁴⁹ Some schools have daily “weigh-ins” of leftovers or competitions for the least wasteful class,⁵⁰ while others shortened the lunchtime distribution time to ensure more time for eating. At the same time, educators strive not to pressure students to eat when they are not hungry. School lunch providers also note which meals or ingredients go uneaten and adjust recipes to make meals more appetizing.⁵¹

Student-led environmental committees implement other sustainable ecological practices such as recycling, conserving electricity, and using both sides of paper.⁵² One of the most important school-wide initiatives is recycling empty milk cartons from lunch. Children unfold, rinse, and dry the cartons, which many schools exchange for toilet paper from a local supplier. The environmental committee at one school in Saitama Prefecture awards special school currency called “camphor trees” to students in exchange for each notable environmental deed they complete. They can use the “trees” to make purchases at the school environmental fairs. Recently, the fair featured morning glory seedlings raised by first graders who harvested the seeds the year before and sunflower seedlings sprouted from Fukushima sunflower seeds, whose purchase supported those impacted by the March 11, 2011, earthquake and tsunami.⁵³

OBJECTIVE V: ACKNOWLEDGE HOW THE FOOD INDUSTRY IS SUPPORTED BY THE ACTIVITIES OF MANY PEOPLE AND RESPECT THEIR HARD WORK

Students begin learning about the food industry at an early age, often in preschool, through visits to farms, factories, kitchens, and school lunch centers. When students from one school visited a school lunch center, a staff member quizzed students about the various people who were involved in producing their meals, from administrators to the delivery staff. As part of the exercise, students were asked to guess how many employees were included in each category. At the end of the activity, on learning that eighty-four people were responsible for the center's daily work, the young students let out a cry of amazement. Their surprise and newfound appreciation found their way into follow-up letters to food industry workers. "Thank you for the warm rice and delicious bread! The *koshihikari* rice from Maizuru was very delicious!" wrote one student to the school lunch cooking staff. "Thank you for waking up every day at five in the morning to deliver our milk," wrote another to the milk delivery man.⁵⁴ One student wrote in an essay, "When I visited the school lunch center, I came to understand something I hadn't before: that so many people are working so hard to make school lunch every day. I'm sorry that I dreaded lunch [and all the vegetables I didn't like]. From now on, I'll be sure to eat all of my lunch to become big and strong. Thank you for always making our meals."⁵⁵

Schools invite farmers, fishers, and other producers to share with students the nature of their work. One vegetable farmer likes to talk about the importance of soil to the success of his crops.⁵⁶ Another explains how colder weather makes certain types of vegetables sweeter. Personal interactions like these deepen the understanding of food for students. After these visits, students often remark that they feel grateful and find it easier to eat previously disliked vegetables.⁵⁷ Gratitude can also promote greater enjoyment of eating and thereby reduce food waste.⁵⁸

Schools in urban settings throughout the country partner with agricultural communities to develop unique educational experiences for school-age children, from harvesting crops to cooking. Since 2009, students from Tokyo's Haketa Elementary School have taken a three-hour train ride to visit Sanjo City, in rural Niigata Prefecture, one of the country's largest producers

of rice. In 2017, thirty-eight fourth- and fifth-grade students who visited Sanjo City worked with volunteers to harvest rice by hand using a sickle.⁵⁹ No matter where students live, by the time they finish elementary school, they understand where their school lunch comes from and know that many people work to make it possible. This reinforces their connection to the community and country and helps the producers, in turn, to feel supported.⁶⁰

OBJECTIVE VI: FURTHER UNDERSTANDING OF NATIONAL AND LOCAL TRADITIONAL CUISINE

School lunch is considered an important means of preserving and celebrating Japanese culture, and the judging criteria for the National School Lunch Tournament, which began in 2006, reflects that value, favoring regional products that highlight local culinary traditions. In 2019, out of some 1,400 applicants, the winning meal came from the Tamba-Sasayama School Lunch Center in Hyogo Prefecture. The menu included *kuromame* rice using black soybeans, which urban third graders grew, harvested, and cooked, as well as mackerel topped with locally grown *Dekansho* leeks.⁶¹ The soup contained wild boar and local root vegetables, including Amochi Taro, an heirloom variety that was once a local specialty but has declined in recent years. City fourth graders grew the taro in partnership with the community, helping to revitalize and protect it.⁶²

Similar stories of school lunch contributing to the local community's food culture are widespread. In Hachijojima, an island off the coast near Tokyo, members of the Hachijojima Fisheries Cooperative were surprised to learn that island fish were not included in local school lunches. "Children who live on the islands should be able to eat island fish," stated one of the cooperative members. They partnered with the local school lunch center to develop a recipe featuring local fish,⁶³ simultaneously expanding the fishermen's market while helping children experience their local heritage. Similar examples exist across the country, as school lunch providers work to support regional specialties and culinary traditions.

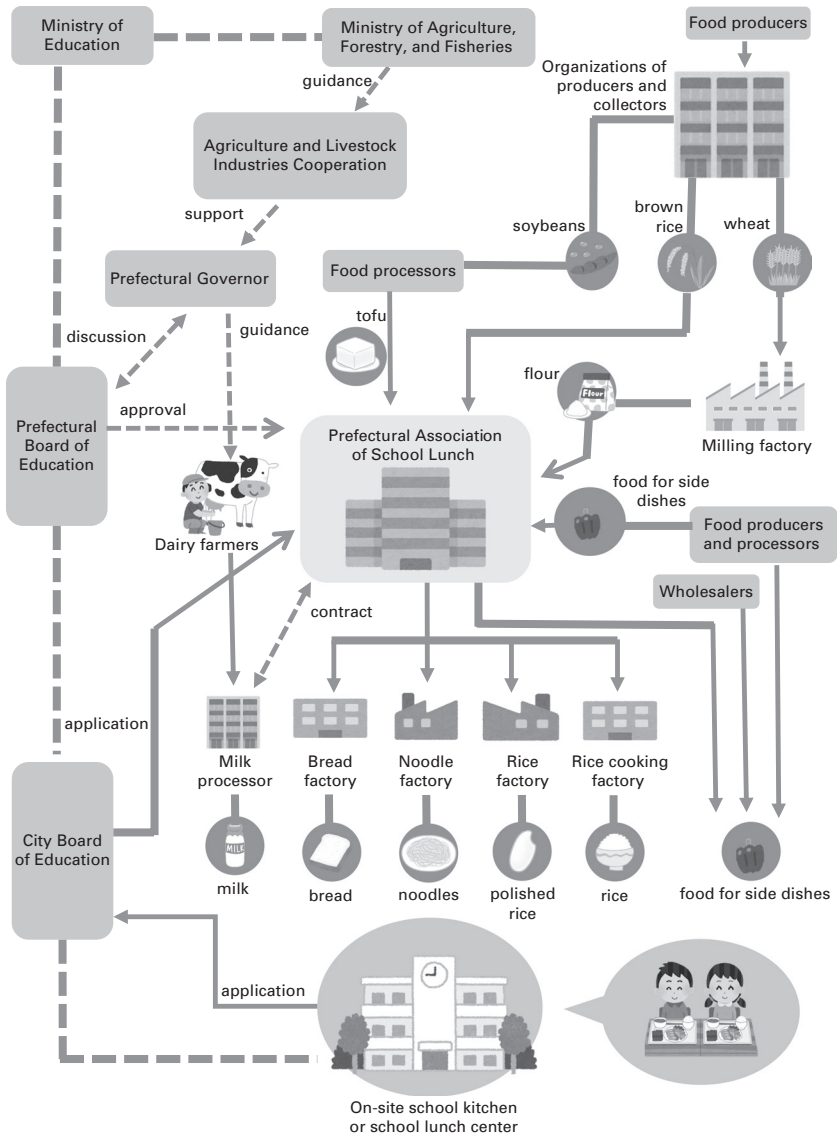
School lunch also provides an opportunity for students to experience seasonal flavors and cuisines associated with both nationwide and regional annual observances. Cooking traditional or seasonal foods may prove challenging to some families or guardians due to unfamiliarity with cooking

methods, lack of time, or the high cost of ingredients. School lunch becomes a reliable way for children to participate in the country's seasonal and cultural cuisine. For example, on Children's Day, May 5th, many school lunches feature traditional bamboo shoots. Autumn flavors may include favorites like chestnuts, sweet potatoes, and mushrooms. Even foreign foods and traditions have entered the seasonal rotation with a Japanese twist, including Halloween, Christmas, and Valentine's Day. It is not uncommon for kabocha pumpkin to appear on the menu on Halloween and fried chicken on Christmas, foods now associated with these holidays in Japan.⁶⁴

OBJECTIVE VII: FOSTER AN UNDERSTANDING OF THE MECHANISMS OF FOOD PRODUCTION, TRANSPORTATION, AND CONSUMPTION

As school lunch programs orient children to national and local concerns, they also enable the exploration of issues like trade, food safety, and transportation networks that can be international in scope. The country's self-sufficiency rate (i.e., capacity to meet its own food needs from domestic production) decreased from 79 percent in 1960 to 40 percent in 2003. In 2020, Japan had one of the lowest food self-sufficiency rates among developed countries,⁶⁵ importing 7.19 trillion yen (\$69 billion USD) of food.⁶⁶ School lunch is not exempt from these trends. On average, 27 percent of school lunch ingredients are imported, and the highest import rate per product is wheat (66 percent), fruit (40 percent), fish (40 percent), and dairy (40 percent).⁶⁷ As children learn about how food travels through supply networks and onto their lunch trays, educators hope that they will become consumers who prioritize domestic produce and contribute to the nation's economic vitality. Figure 1.2⁶⁸ illustrates a simple learning tool demonstrating how school lunch is produced, adapted from the Federation of Prefectural School Lunch Associations of Japan.

As in other countries, the COVID-19 pandemic highlighted structural weaknesses within Japanese food production and procurement systems. When schools closed in the spring of 2020, news reports showed vegetables ordered for school lunch rotting in the fields, dairies with school lunch milk with nowhere to go, and parents struggling to juggle work while also providing midday meals for their children. When schools eventually began



1.2 A flowchart of school lunch from producers to children. Clip art credit Irasutoya.

to reopen in August 2020, the country breathed a collective sigh of relief, and citizens felt a renewed sense of gratitude for this valuable public service. Today, school lunches have assumed an even greater symbolic value than before, suggesting resiliency, recovery, and a return to normalcy.

THE FUTURE OF SCHOOL LUNCH

In Japan, school lunch is a national priority. Yet, as school communities come together to provide meaningful experiences and wholesome nutrition to their students, they still face challenges. One concern is the increase of food-based allergies and anaphylaxis among children. Government-issued food allergy manuals and guidelines for production⁶⁹ may be inadequate for addressing the individualized nature of this health threat. School lunch producers are finding ways to adapt.

One nursery school has changed their meals to exclude egg, wheat, or dairy products altogether.⁷⁰ A school lunch center in Yamagata City has begun preparing supplementary meals without allergens like egg and milk, served to affected students in individual containers so they can still participate in classroom lunchtime activities.⁷¹ Yet this special treatment for children with allergies may be considered stigmatizing, and some communities are still searching for a long-term solution to this issue. Streamlining and adapting to food allergies will take time and ingenuity across various sectors.

School lunch centers have become increasingly popular over the last few decades, and currently 52 percent of meals are produced at centers, while 47 percent are still prepared at on-site school kitchens.⁷² Although centers are convenient, the increasing use of these facilities presents new challenges: maintenance, upkeep, and staffing. Moreover, the jobs available through contracted, privatized lunch production tend to be less stable than those offered through public government-run school lunch programs, which come with certain protections and benefits. Yet, in both the private and public sector, the country's ongoing labor shortage contributes to high turnover and overreliance on part-time workers. Despite food education's emphasis on valuing labor and the people who make school lunches possible, the growth of school lunch centers and contracted meals may reduce professional career paths in the sector and yield more part-time jobs.

Ultimately, the future of school lunch in Japan depends on the country's ability to make significant structural changes to the school lunch system as Japan's population ages and shrinks. One report estimates that more than one-third of the school lunch centers currently being developed would be underutilized in the latter half of the lives of the facilities.⁷³ Moreover, population decline may gradually diminish tax revenues and available funding for school meals. Maintaining high-quality equipment is an expensive but critical endeavor. Outdated equipment has already led to insects or even bits of metal showing up in school meals. Safe sanitation is another crucial expense. In 1996, there was a wide-spread outbreak of the pathogen *Escherichia coli* O-157 in school lunches.⁷⁴ National standards for hygiene management were adopted the following year and updated in 2008, but with funding shortages, food safety could be a risk again.

As these challenges unfold, the country's commitment to local control may prove insufficient to maintain a relatively uniform national system. The Basic Law on Food Education relies on *promotion* rather than enforcement of objectives. As a result, the success of school lunch depends on the commitment and capacity of local stakeholders. Against budgetary pressures, the law's flexible design may yield uneven and unreliable implementation of food education and reduce the quality of food served in Japanese schools.

Yet there is hope. In the past thirty years, Japanese school lunch has greatly improved and attracted significant public interest. School lunch's far-reaching integration into daily life is now a remarkable source of national pride and a unique rallying point for engaging communities in food politics. One meal at a time, school lunch nourishes the bodies of children, contributes to local and national enterprise, and supports public health. Ultimately, the Basic Law on Food Education and the School Lunch Act are an investment in the future, strengthening the social fabric of Japanese society. The current system ensures that lunchtime provides students with education, nourishment, and an opportunity to cultivate a sense of mindfulness. By comprehensively meeting the needs of each child through school lunch, the meals transcend nutrition and become a pervasive positive force in society.

Although advocacy groups remain limited in size and influence, more citizens are helping to play a part in shaping their food future. At the

local level, in Samukawa Town, Kanagawa Prefecture, for example, citizens' input helped structure the new school lunch center's public management.⁷⁵ Families and guardians have also maintained pressure on local governments to ensure proper radiation testing of school lunch ingredients in the months following the 2011 Great East Japan Earthquake and Fukushima nuclear plant meltdown.⁷⁶ In some communities, the public has increasingly called for free universal school lunches. Although the implementation of free-for-all meals appears unlikely in the near-term, such advocacy work highlights the growing organization of Japanese citizens. School lunch has blossomed because of its connection to the community, and it is this connection that will help society address future challenges. The community connections represent an integrated systems-based approach to harnessing the potential of school lunch. This potential is ignited by recognizing the right of all people to consume nutritious food at school and to receive a robust education about food systems.

NOTES

1. MEXT, "Ryō wa 3-nendo gakkō kyūshoku jisshi jōkyō-tō chōsa no kekka o oshirase shimasu, Gakkō Kyūshoku Jisshi Jōkyō-Tō Chōsa," 2021, <https://www.mext.go.jp/content/20230125-mxt-kenshoku-100012603-1.pdf>.
2. MEXT, "Ryō wa 3-nendo."
3. MEXT, "Gakkō Kyūshoku-Hi Heikin Getsugaku: Gakkō Kyūshoku Jisshi Jōkyō-Tō Chōsa (Heisei 28-Nendo Chōsa Kekka)," 2016, https://www.mext.go.jp/b_menu/toukei/chousa05/kyuushoku/kekka/k_detail/___icsFiles/afiedfile/2019/02/26/1413836_001_002.pdf; National Institute for Education Policy Research, "School Lunch Program in Japan," National Institute for Education Policy Research, 2013, <https://www.nier.go.jp/English/educationjapan/pdf/201303SLP.pdf>.
4. More than 90 percent of students in Tomigusuku-city, Okinawa answered that school lunch was delicious. About 60 percent of the girls and 70 percent of the boys at elementary school liked school lunch in Miki-city, Hyogo, 2021, <https://www.city.miki.lg.jp/uploaded/attachment/22629.pdf> and <https://www.city.tomigusuku.lg.jp/userfiles/TM020/files/anke-tohonpen.pdf>.
5. Tsuruoka City, "Gakkō Kyūshoku No Rekishi—Tsuruoka No Kyūshoku," June 14, 2016, <https://www.city.tsuruoka.lg.jp/kyoiku/gakko/kyushoku/kyusyokunorekisi.html>.
6. Astri Andresen and Kari Tove Elybakken, "From Poor Law Society to the Welfare State: School Meals in Norway 1890s–1950s," *Journal of Epidemiology and Community Health* 61, no. 5 (2007): 374–377.
7. National Institute for Education Policy Research, "School Lunch Program in Japan."

8. Michael Conlon, "Japan Agricultural Situation: The History of U.S. Exports of Wheat to Japan," USDA Foreign Agricultural Service GAIN Report, June 29, 2009, <https://www.usdajapan.org/wpusda/wp-content/uploads/2016/04/History-of-US-Exports-Wheat-to-Japan.pdf>.
9. National Institute for Education Policy Research, "School Lunch Program in Japan."
10. Masayo Kaneda and Shigeru Yamamoto, "The Japanese School Lunch and Its Contribution to Health," *Nutrition Today* 50, no. 6 (December 2015): 268–272.
11. National Institute for Education Policy Research, "School Lunch Program in Japan."
12. "Gakkō Kyūshoku Hō Shikō Rei: Cabinet Order 212," E-Gov Law Search, 1954, <https://elaws.e-gov.go.jp/document?lawid=329CO000000212>.
13. Hiromi Ishida, "The History, Current Status, and Future Directions of the School Lunch Program in Japan," *The Japanese Journal of Nutrition and Dietetics* 76 (2018): S2–S11, <https://doi.org/10.5264/eiyogakuzashi.76.S2>.
14. Related legislation includes the following: School Meals in Part-time Night Courses of High School Education (1956) and the Law concerning School Lunches in Special-needs Schools of Pre-Primary and Upper Secondary Stages (1957).
15. House of Representatives, Japan, "Nihon Gakkō Kyūshoku-Kai-Hō," 1954, http://www.shugiin.go.jp/internet/itdb_housei.nsf/html/houritsu/02219550808148.html.
16. Masayo Kaneda and Shigeru Yamamoto, "The Japanese School Lunch and Its Contribution to Health."
17. Nobuko Iwamura, "Why Rice Is Vanishing from Japanese Tables," *Nippon*, August 22, 2012, <https://www.nippon.com/en/currents/d00046/>.
18. James Elliott, "The 1981 Administrative Reform in Japan," *Asian Survey* 23, no. 6 (1983): 765–779, <https://doi.org/10.2307/2644390>.
19. Hiroshi Shinmura, "Gakkō Kyūshoku-Hō Ni Okeru Gakkō Kyūshoku Un'ei No Chokuei Gensoku" Ni Tsuite No Ronshō," accessed May 18, 2021, <https://core.ac.uk/download/pdf/230919686.pdf>.
20. Alice Gordenker, "Can Our Kids Get a Healthy Meal for Less?" *Japan Times*, April 10, 2003, <https://www.japantimes.co.jp/life/2003/04/10/lifestyle/can-our-kids-get-a-healthy-meal-for-less/>.
21. *Chisan Chisho* is an abbreviation of *Chiiki seisan chiiki shōhi*.
22. Aya Kimura and Mima Nishiyama, "The Chisan-Chisho Movement: Japanese Local Food Movement and Its Challenges," *Agriculture and Human Values* 25 (January 1, 2008): 49–64, <https://doi.org/10.1007/s10460-007-9077-x>; Barbara Greene, "Moyashimon and Agrarian Nationalism: The Transition from Policy to Pop Culture," *Tokyo International University* 18, no. 2 (September 8, 2018), <http://www.japanesestudies.org.uk/ejcsj/vol18/iss2/greene.html>.
23. Nishiyama, Kimura Mima, and Aya Hirata, "Alternative Agro-Food Movement in Contemporary Japan," *Chiba University, Horticultural Department Bulletin* 59 (2005), <https://core.ac.uk/download/pdf/96956504.pdf>.

24. Ministry of Agriculture, Forestry, and Fisheries (MAFF), “Shokuryō Sangyō 6 Jisangyō-Ka Kōfu-Kin No Uchi Chiiki de No Shokuiku No Suishin,” 2021, <https://www.maff.go.jp/j/syokuiku/attach/pdf/torikumi-226.pdf>.
25. Japanese Law Translation, “Basic Act on Shokuiku (Food and Nutrition Education),” June 17, 2005, <http://www.japaneselawtranslation.go.jp/law/detail/?id=3419&vm=04&re=02>.
26. Ministry of Agriculture, Forestry, and Fisheries (MAFF), “What Is Shokuiku (Food Education)?” accessed November 12, 2020, <https://www.maff.go.jp/e/pdf/shokuiku.pdf>.
27. For background on this legislative and legal approach, see Eugen Ehrlich’s essays on “Living Law,” in *Living Law: Reconsidering Eugen Ehrlich*, ed. Marc Hertogh (Sydney: Bloomsbury, 2008).
28. Nobuko Tanaka and Miki Miyoshi, “School Lunch Program for Health Promotion among Children in Japan,” *Asia Pacific Journal of Clinical Nutrition* 21, no. 1 (2012): 155–158.
29. OECD, *OECD Reviews of Public Health: Japan: A Healthier Tomorrow* (Paris: OECD Publishing, 2019), <https://www.oecd.org/japan/oecd-reviews-of-public-health-japan-9789264311602-en.ht>.
30. National Association of School Lunch, “Gakko Kyushoku no Mokuhyo,” accessed March 29, 2023, <https://www.zenkyuren.jp/lunch/aim.html>.
31. MHLW, “2019-Nen Kokumin Seikatsu Kiso Chōsa No Gaikyō,” 2019, <https://www.mhlw.go.jp/toukei/saikin/hw/k-tyosa/k-tyosa19/dl/14.pdf>.
32. Chieko Yamashita, “Natsuyasumi Ni Yaseru Kodomo-Tachi e Fūdobanku de Hirogaru Shien,” July 26, 2019, <https://www.asahi.com/articles/ASM7963HCM79UTIL04J.html>.
33. Keiko Asakura and Satoshi Sasaki, “School Lunches in Japan: Their Contribution to Healthier Nutrient Intake among Elementary-School and Junior High-School Children,” *Public Health Nutrition* 20, no. 9 (June 2017): 1523–1533, <https://doi.org/10.1017/S1368980017000374>.
34. MEXT, “Gakkō Kyūshoku Jisshi Kijun No Ichibu Kaisei Ni Tsuite (Tsūchi),” 2018, https://www.mext.go.jp/content/20210212-mxt_kenshoku-100003357_1.pdf.
35. MEXT, “Gakkō Kyūshoku Jisshi Kijun No Ichibu Kaisei Ni Tsuite: Monbu Kagaku Shō,” July 31, 2018, https://www.mext.go.jp/a_menu/sports/syokuiku/1407704.html.
36. MEXT, “Gakkō Kyūshoku Jisshi Kijun No Ichibu Kaisei Ni Tsuite: Monbu Kagaku Shō”; World Health Organization, Regional Office for South-East Asia, “Japan Health System Review,” *Health Systems in Transition* 8, no. 1 (2018), <https://apps.who.int/iris/bitstream/handle/10665/259941/9789290226260-eng.pdf>.
37. Shinbun Sankei, “Hirogaru Gakkō Kyūshoku No ‘gen’en’ Usuari de Shōrai No Seikatsushūkanbyō Yobō,” February 1, 2017, <https://www.sankei.com/article/20170201-A5A6JOIL5BNBJEJP2A2BPHPYOY/>.
38. For a weekly sample kondate translated into English see the ancillary materials for this book. Matsushiritsu Shimane Gakkō kyūshoku sentā, “12gatsu Gakkō Kyūshoku

Kondate Hyō,” December 2020, http://www1.city.matsue.shimane.jp/kyouiku/gakkou/kyusyoku/shimane_joho/shimane-kondatehyo.data/R2.12_shimane_kondatehyou.pdf.

39. MEXT, “Eiyō Kyōyu No Haichi Sokushin Ni Tsuite (Irai) (Heisei 21-Nen 4-Gatsu 28-Nichi Zuke 21 Monka Su Dai 6261-Gō),” April 28, 2009, https://www.mext.go.jp/a_menu/shotou/Eiyō/1279734.html.

40. MEXT, “Eiyō Kyōyu No Haichi Jōkyō (Heisei 28-Nendo),” January 15, 2021, https://www.mext.go.jp/content/20210115-mxt_kenshoku-100003340_1.pdf.

41. MAFF (Ministry of Agriculture, Forestry, and Fisheries), “Gakkō Kyūshoku Ni Okeru Dentō-Tekina Shoku Bunka Wo Keishō Shita Kondate No Katsuyō,” May 17, 2016, https://www.maff.go.jp/j/syokuiku/wpaper/h27/h27_h/book/part2/chap6/b2_c6_2_01.html.

42. Yoshiaki Kawai, “Kyūshoku No Rekishi—Dasshifun’nyū Kara Age Pan, Sofuto Men e,” *Yomiuri Shimbun*, October 30, 2017, <https://www.yomiuri.co.jp/fukayomi/20171030-OYT8T50149/2/>.

43. MEXT, “Shōgakusei You Shokuiku Kyōzai ‘tanoshii Shokuji Tsunagaru Shokuiku’; Jidō-Yō (Teigakunen),” accessed November 13, 2020, https://www.mext.go.jp/component/a_menu/education/detail/_icsFiles/afieldfile/2016/12/13/1367897_2.pdf.

44. MEXT, “Shōgakusei You Shokuiku Kyōzai ‘Tanoshii Shokuji Tsunagaru Shokuiku’; Jidō-Yō/(Kōgakunen),” accessed November 13, 2020, https://www.mext.go.jp/component/a_menu/education/detail/_icsFiles/afieldfile/2016/03/10/1367897_4.pdf.

45. Elinor Ochs and Carolina Izquierdo, “Responsibility in Childhood: Three Developmental Trajectories,” *Ethos* 37 (December 1, 2009): 391–413, <https://doi.org/10.1111/j.1548-1352.2009.01066.x>.

46. “Katsushika Kanamachi-Shō de `tate-Wari Kyūshoku-Kai’- i Gakunen to Mitsu Ni Kōryū, Sotsugyō Iwau,” *Katsushika Keizai*, March 3, 2015, <https://katsushika.keizai.biz/headline/1227/>.

47. MEXT, “Shōgakkō Gakushū Shidō Yōryō (Heisei 29-Nen Kokuji) Kaisetsu,” 2017, https://www.mext.go.jp/component/a_menu/education/micro_detail/_icsFiles/afieldfile/2019/03/18/1387017_006.pdf.

48. “Inochi Wo Itadakimasu!,” *Jōetsu Myōko Town Jōhō*, March 12, 2019, <https://www.joetsu.ne.jp/74450>.

49. “Japan Enacts Legislation to Tackle Nation’s Food Waste,” *Xinhua News*, May 24, 2019, http://www.xinhuanet.com/english/2019-05/24/c_138086356.html.

50. Consumer Affairs Agency Consumer Education Promotion Division, “Shokuhin Rosu Sakugen Kankei Sankō Shiryō—Shōhishachō,” February 12, 2020, https://www.caa.go.jp/policies/policy/consumer_policy/information/food_loss/efforts/pdf/efforts_200214_0001.pdf.

51. Uji City, Kyoto Prefecture Garbage Reduction Promotion Division, “Reduce the Tabenokoshi—Shōgakkō de No 10 No Torikumi to Sono Kōka,” 2017, <https://www.env.go.jp/recycle/%E3%80%90%E5%AE%87%E6%B2%BB%E5%B8%82%E3%80%>

91%EF%BC%A829%E5%AD%A6%E6%A0%A1%E7%B5%A6%E9%A3%9F%E5%A0%B1%E5%91%8A%E4%BC%9A%EF%BC%88%E6%8A%95%E5%BD%B1%E7%94%A8%E8%B3%87%E6%96%99%EF%BC%89.pdf.

52. “Kankyō Iinkai Ga Chūshin to Natta Katsudō Wo Rei Ni Shita ‘Gakkō-Ban Kankyō ISO’ No Torikumi-Kata,” Sasebo City, accessed November 17, 2020, <https://www.city.sasebo.lg.jp/kankyo/kansei/documents/torikumi.pdf>.

53. “Ekomāketto Daiseikō!,” Kawaguchi Angyō Elementary School Blog, June 26, 2019, <https://bit.ly/3tYO6sT>.

54. Zenkoku gakkō kyūshoku Kōshien (National School Lunch Competition), “14-Kai Taikai Kesshō Taikai Shutsujō Hyōgo Tanbasasayama Shiritsu Seibu Gakkō Kyūshoku Sentā,” 2019, https://kyusyoku-kosien.net/2019final_detail_hyogo/.

55. Reo Nakano, “Kyūshoku Sentā Wo Kengaku Shite,” Kyūshoku Hiroba National School Lunch Memories Writing Contest, 2019, <http://www.jcfs.or.jp/news/pdf/191119/sakuhin09.pdf>.

56. *Nourishing Japan*, directed by Alexis Agliano Sanborn (2020; United States-Japan Foundation and Independent Filmmaker Project / The Gotham).

57. MAFF (Ministry of Agriculture, Forestry, and Fisheries), “Shokuryō Jikyū-Ryoku Jikyū-Ritsu No Kōjō Ni Muketa Torikumi u Chisanchishō No Suishin Jōkyō,” accessed November 15, 2020, https://www.maff.go.jp/j/wpaper/w_maff/h20_h/trend/part1/chap2/t1_06.html.

58. Rie Akamatsu et al., “Gratitude for Food May Help to Decrease Food Dislikes in Children,” *Journal of Nutrition Education and Behavior* 51, no. 7 (July 1, 2019): S110, <https://doi.org/10.1016/j.jneb.2019.05.548>; Betty Izumi, Rie Akamatsu, Carmen Byker Shanks, and Kahori Fujisaki, “Exploring Factors That Minimize School Lunch Waste in Tokyo Elementary Schools,” *Journal of Nutrition Education and Behavior* 51, no. 7 (July 1, 2019), <https://doi.org/10.1016/j.jneb.2019.05.318>.

59. “Tōkyō no shōgakusei ga kyūshoku de tabete iru kome ga seisan sarete iru Sanjō de inekari,” September 18, 2017, http://www.kenoh.com/2017/09/18_haketa.html.

60. Zenkoku gakkō kyūshoku Kōshien (National School Lunch Competition), “Nihon’no Gakkō Kyūshoku Dai 2-Kai Oishikute Eiyō Baransu No Toreta ‘gakkō Kyūshoku’ No Kondate-Dzukuri to Chōri,” *Kyusyoku Kosien*, April 30, 2016, <https://bit.ly/3w7BeRY>.

61. “Jidō Sodateta Dentō Sakumotsu Tsukai, Kyūshoku Chōten ‘metcha Ureshii’ Chiiki to Issho Ni Saibai, PR Mo,” *Tanba Shinbun*, last revised June 13, 2020, <https://bit.ly/3gHUjWl>.

62. Zenkoku gakkō kyūshoku Kōshien (National School Lunch Competition), “14-Kai Taikai Kesshō Taikai Shutsujō Hyōgo Tanbasasayama Shiritsu Seibu Gakkō Kyūshoku Sentā,” 2019, https://kyusyoku-kosien.net/2019final_detail_hyogo/.

63. Ministry of Agriculture, Forestry, and Fisheries (MAFF), “Furusato Kyūshoku Jiman, Tōkyōto, Murobushi Gohan,” 2008, <https://www.maff.go.jp/j/pr/aff/2008/food01.html>.

64. See J. T. Quigley, “A Kentucky Fried Christmas in Japan,” *The Diplomat*, December 11, 2013, <http://thediplomat.com/2013/12/a-kentucky-fried-christmas-in-japan/>.

65. "Japan's Food Self-Sufficiency Rate Hits Its Lowest Level in 25 Years Due to Wheat Production," *Japan Times*, August 6, 2019, <https://www.japantimes.co.jp/news/2019/08/06/national/japans-food-self-sufficiency-rate-hits-lowest-level-25-years-due-drop-wheat-production/>.
66. "Import Value of Foodstuffs to Japan 2010 to 2019," Statista, 2020, <https://www.statista.com/statistics/649071/japan-import-value-foodstuff/>.
67. "Yunyū Shokuhin to Gakkō Kyūshoku," *Gakkō Kyūshoku Nyusu* 166 (November 2014), <http://gakkyu-news.net/data/2014-11.pdf>.
68. Figure 1.2 created by the authors using information provided by the Japan Association for Promotion of School lunch. Zenkoku gakkō kyūshoku-kai rengō-kai, "Seisansha Kara Kodomotachi Eno Gakkō Kyūshoku No Nagare," accessed December 10, 2020, https://www.zenkyuren.jp/pdf/leaf_03.pdf.
69. MEXT, "Gakkō Kyūshoku Ni Okeru Shokumotsu Arerugī Taiō Ni Tsuite," 2015, https://www.mext.go.jp/a_menu/sports/syokuiku/1355536.htm.
70. Nipponham, "Shokumotsu Arerugī Taiō No Zen'in Kyūshoku Wo Jitsugen Shita Ichikawa Hoikuen Vol. 1," accessed May 17, 2021, <https://www.food-allergy.jp/use/scene/interview/detail/id=831>.
71. "Arerugī Taiō-Shoku No Teikyō Ni Tsuite," Yamagata City, accessed April 13, 2021, <https://www.city.yamagata-yamagata.lg.jp/shimin/sub6/kyusyoku/4b725pd1125133726.html>.
72. MEXT, "Heisei 30-Nendo Gakkō Kyūshoku Jisshi Jōkyō-Tō Chōsa No Kekka Ni Tsuite," February 26, 2019, https://www.mext.go.jp/content/1413836_001_001.pdf.
73. MUFG, "Korekara No Gakkō Kyūshoku Sentā Seibi Ni Okeru Kadai to Kanōsei," August 3, 2015, https://www.murc.jp/report/rc/column/search_now/sn150803/.
74. Mie Prefecture Headquarters, "Kiseikaikaku No Ken-Shō—Gakkō Kyūshoku Chōri Gyōmu No Minkan Itaku Ni Taisuru Kōsatsu," accessed May 18, 2021, https://www.jichiro.gr.jp/jichiken_kako/report/rep_okinawa31/jichiken31/1/1_2_j_10/1_2_j_10.htm.
75. Samukawa Town, "Oishiī Min'na No Gakkō Kyūshoku -Reiwa 5-Nen 9 Gatsu Kyūshoku Sentā Ōpun," September 27, 2020, http://www.town.samukawa.kanagawa.jp/chosei/koho/kouhoushi/koho_backnumber/2020/20201001/20201001_1/10908.html.
76. Hiroko Tabuchi, "Angry Parents in Japan Confront Government over Radiation Levels," *New York Times*, May 25, 2011. See also: "Radiation Testing on School Lunches Issues," Education in Japan Community Blog, <https://educationinjapan.wordpress.com/edu-news/radiation-testing-on-school-lunches-issues/>.

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