



A COMPARATIVE STUDY OF SCHOOL LUNCH PROJECT BETWEEN THAILAND AND JAPAN*

การศึกษาเปรียบเทียบโครงการอาหารกลางวันโรงเรียนระหว่างประเทศไทยและญี่ปุ่น



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Abstract

Objectives of this research article were: 1. To study and compare the history and development of the lunch program in primary schools in Japan and Thailand and 2. To explore the current condition of the lunch program in primary schools in Phitsanulok Province. The qualitative method was used in conjunction with a comparative study of national policies related to the school lunch program based on document analysis and field survey methods by means of purposive selection of 3 administrators and 3 teachers from 3 schools in Phitsanulok Province by interviewing executives. Data were analysed using content analysis.

The results of the research were found that: 1. The school lunch program in Japan started about 60 years ago, and the content, standards, guidelines, and qualifications of nutrition teachers were clearly defined in the Shokuiku policy. for the study of food and nutrition in Japan while in Thailand the school lunch program started with funding support. It then focused on malnourished and needy children in 1999. Free lunch was extended to all primary school students. In 2008, the National Food Commission was established to oversee the country's food management and food education. 2. The results of the survey found that schools

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in Phitsanulok Province have policies and educational elements regarding food and nutrition in the school lunch program as recommended by the OBEC.

Keywords: School Lunch Project; Food and Nutrition Education; Primary Schools

บทคัดย่อ

บทความวิจัยนี้มีวัตถุประสงค์ 1. ศึกษาเปรียบเทียบความเป็นมาและการพัฒนาโครงการอาหารกลางวันในโรงเรียนประถมศึกษาของประเทศญี่ปุ่นและประเทศไทย และ 2. สำรวจสภาพปัจจุบันของโครงการอาหารกลางวันในโรงเรียนประถมศึกษาในจังหวัดพิษณุโลก ใช้วิธีการเชิงคุณภาพร่วมกับวิธีการศึกษาเปรียบเทียบเชิงเปรียบเทียบนโยบายระดับชาติที่เกี่ยวข้องกับโครงการอาหารกลางวันในโรงเรียนโดยอาศัยการวิเคราะห์เอกสารและ วิเคราะห์ภาคสนาม โดยวิธีการคัดเลือกแบบเจาะจงกับผู้บริหาร 3 และครู 3 คน ของ 3 โรงเรียนในจังหวัดพิษณุโลก โดยการสัมภาษณ์ผู้บริหารใช้การวิเคราะห์ข้อมูลเชิงเนื้อหา

ผลการวิจัยพบว่า 1. โครงการอาหารกลางวันในโรงเรียนของญี่ปุ่นเริ่มต้นเมื่อประมาณ 60 ปีก่อน และเนื้อหา มาตรฐาน แนวทาง และคุณวุฒิครูโภชนาการได้รับการกำหนดไว้อย่างชัดเจนในนโยบายโชคุอิคุ (Shokuiku) เพื่อการศึกษาด้านอาหารและโภชนาการในประเทศญี่ปุ่น ในขณะที่ประเทศไทย โครงการอาหารกลางวันที่โรงเรียนเริ่มต้นด้วยการสนับสนุนด้านงบประมาณ จากนั้นมุ่งเน้นไปที่เด็กที่ขาดสารอาหารและขาดสาร ในปี พ.ศ. 2542 ได้มีการขยายอาหารกลางวันฟรีให้ครอบคลุมนักเรียนชั้นประถมศึกษาทุกคน ในปี พ.ศ. 2551 ได้มีการจัดตั้งคณะกรรมการอาหารแห่งชาติขึ้นเพื่อดูแลการจัดการด้านอาหารและการศึกษาด้านอาหารของประเทศ 2. ผลการสำรวจ พบว่า โรงเรียนในจังหวัดพิษณุโลกมีนโยบายและองค์ประกอบการศึกษาด้านอาหารและโภชนาการในโครงการอาหารกลางวันในโรงเรียนตามคำแนะนำของสพฐ.

คำสำคัญ: โครงการอาหารกลางวันในโรงเรียน; การศึกษาด้านอาหารและโภชนาการ; โรงเรียนประถมศึกษา

Introduction

People easily connect with the world and can move to rest of the world and enjoys life more than before. However, various global-scale matters occur by human activities, such as climate change, food crisis, economic growth slowing and income gap widened, environmental contamination, moral hazard, etc., (Xia, 2022) in the world. UN sets the 17 sustainable development goals. Asia-Pacific region will be one of the heaviest malnutritional places in the 21st century. Because, the number of undernourished people in the Asia-Pacific region already



becomes majority in the world (Harada, 2018). And, matter is who is the donor against it. The GDP of emerging countries is already higher than developed countries. In 1948, school lunch project in Japan became an integral part of primary school curriculum, to help students to understand what constitutes a nutritionally balanced meal while learning the fundamentals of proper eating and table manners. “Food and Nutrition Education” or “Shokuiku” has officially been integrated into school lunch project (Turco, 1983). School lunch project in Thailand began without consistently support. However, it was developed to a significant campaign of the government with the late King’s 60th anniversary in 1987. The budgeting support began to provide for school lunch in all primary schools. According to Jumpatong, food insecurity related with children’s cognitive function, weight, social skills. And School lunch project appears to deal with the malnutrition and learn dietary habits, agricultural activities, values and social manners, it also helpful to improve school attendance of students in rural areas.

Comparative education provides reference for reforms, and through studying the educational systems of other countries we can discover which reforms are possible and desirable. Therefore, this research would like to explore the historical development of Food and Nutrition Education in primary schools of Japan in comparison to the that of Thailand. And, to know more about the actual conditions in primary schools of Thailand, a survey of Food and Nutrition Education in school lunch projects of primary schools in Phitsanulok Province will also be explored. It is expected that doing so would bring about better understanding of School lunch project with Food and Nutrition Education in two different countries, and the knowledge should benefit educational policy makers of both countries and should provide a background knowledge for other educators in general. (Chavasit et al., 2013)

Research Objectives

1. To explore and compare the historical development of school lunch projects in primary schools in Japan and Thailand as related to Food and Nutrition Education.
2. To explore the actual situations of Food and Nutrition Education in school lunch projects in primary schools in Phitsanulok province.



Methodology

The research procedure combined documentary analysis of the historical development of school lunch projects in primary schools between Japan and Thailand and field survey method was used a questionnaire technique with samples by purposive sampling.

To explore and compare the historical development of school lunch projects in primary schools in Japan and Thailand as related to Food and Nutrition Education, a documentary analysis of previous studies were descriptive conducted on the historical developments of Food and Nutrition Education in school lunch projects in primary schools in Japan and Thailand. The analysis by using the content analysis which focused on the forces and the factors responsible for the noted differences such as:

1. The objectives of Food and Nutrition Education
2. The administrative systems of Food and Nutrition Education
3. The inputs, i.e., policy, budgets, etc.
4. The managerial processes of Food and Nutrition Education
5. The outputs and outcomes of Food and Nutrition Education.

The field survey method was used by focusing on three selected schools in Phitsanulok Province which the instrument was an interview form. A smartphone was used as digital voice recorder to capture qualitative data with permission from the three principals and a few teachers at primary schools in Phitsanulok. The principals and teachers were asked fifteen questionnaires and open-ended questions of the Shokuiku that freely express their ideas and knowledge on the school lunch project process. When the data collection was done, content analysis was used to examine the information gathered during the interview session. The questionnaires and open-ended questions of the Shokuiku as following:

1. Is your school in or outside of urban area?
2. What is the average income status of your school children's parents?
3. Are there practices related to measuring and recording school children's weight and height?
4. Are there any teaching contents or actual practices related to food and nutrition?



5. Are there any teaching contents or actual Practices related to danger of salty snacks, sugar, and sweets?
6. Are there any teaching contents or actual practices related to danger of high fat food?
7. Are there any teaching contents or actual practices related to food that causes cancer?
8. Are there any teaching contents or actual practices related to acknowledgement of food production date and expiration date?
9. Are there any teaching contents or actual practices related to nutrition facts (energy, sugar, protein, etc.) on food packages?
10. Are there any teaching contents or actual practices related to nutritional problems?
11. Are there any teaching contents or actual practices related to proper nutrition required in each age?
12. Are there any teaching contents or actual practices related to boiled food as a style of healthy cooking?
13. Are there any teaching contents or actual practices related to 30 – 40 minutes of physical exercise daily routine?
14. Are there any teaching contents or actual practices related to the differences between cultivated and wild vegetables?
15. Are there any teaching contents or actual Practices related to the importance of eating breakfast?

Results

According to the study and survey of school lunch projects and Food and Nutrition Education, the results concluded:

1. A Comparison of Historical Development of Food and Nutrition Education in School lunch projects of Japan and Thailand

- 1.1 An Analysis of Forces and Factors Responsible for The Differences There are different forces and factors responsible for mandating the objectives of Shokuiku that cover education about food and nutrition in Japan; and the objectives of Food Education of Thailand that seems to pay less attention to “nutrition”. The analysis of data in the next paragraph should give more



information about the administrative systems which were different as shown in table 1.

Table 1 A Comparison of the Forces and Factors Responsible for Objectives of Food and Nutrition Education in Japan and Thailand

Japan		Thailand	
2004	From the Cabinet and the Food Guide Committee	2008	The National Food Committee Became the major force for “food Education” and its objectives, in Accordance with the provision of the Act for National Food Committee of B.E.2551.
2016	The general objectives of Shokuiku (Food and Nutrition Education) for all people from birth to death are announced by MAFF; while the objectives of Shokuiku in school lunch project of primary school are the forces that come from MEXT.	2023	The School lunch project Fund Bureau, Ministry of Education, announced 10 measures for school lunch project funding.

In Japan, the Food and Nutrition Education was emerged under the administration of the Cabinet Office (CAO). Then, in 2016, the responsibility for planning of Basic Plan for Shokuiku was transferred to the Ministry of Forestry and Fisheries (MAFF). Under the administration of CAO, three ministries and several other organizations are responsible. The Ministry of Education, Culture, Sports and Technology (MEXT) takes care of the course of study, diet and nutrition teachers, school lunch project, and Food and Nutrition Education. MAFF takes care of food safety and consumer affairs, Food and Nutrition Education evaluation committee, and regional agricultural administration. MHLW and the other agencies are standing committees in the National Food and Nutrition Education Committee. Each prefecture has Board of Education that manages Food and Nutrition Education (Shokuiku) in school lunch projects, and Prefectural Shokuiku Suishin Kyogikai (Food and Nutrition Education Committee of the Prefecture) to promote Food and Nutrition Education in schools under its jurisdiction. The promotion structure of Shokuiku in Figure 8 shows that the national campaign is regularly held at the upper level; while people of various groups/organization including volunteers promote physical and mental health under the comprehensive system of administration of Shokuiku.



In Thailand, the administration of Food Education in school lunch projects of primary schools is responsible by each school, accordingly to its administrative system, but to meet the standards set by the School lunch project Fund Committee in order to receive school lunch promotion budget.

1.2 Related to the management processes The management processes of Shokuiku /Food Education were different forces and factors which related to inputs, processes and outputs of Shokuiku in Japan and Food Education in Thailand, as shown in Tables 2, the inputs that affect Shokuiku in Japan are more carefully provided; while those for Food Education in primary schools in Thailand are less comprehensively provided, especially those concerning with food and, diet and nutrition teachers and the guidelines for management of Food and Nutrition Education. Another big different point is related to the objectives of Shokuiku that add socio-cultural and environmental aspects including the promotion of regional and local cuisine and the understanding of food production and consumption; while the 10 measures for school lunch projects in primary schools of Thailand only focus on having enough food to eat and managerial aspects of the school lunch projects.

Table 2 A Comparison of the Inputs that Affect Shokuiku in Japan and the Inputs that Affect Food Education in Thailand

Japan	Thailand
- Objectives as legal provision which covers 7 elements including PE & health education, food science, socio-cultural and environmental education.	- Objectives as legal provision which covers health and physical education, food production, and school lunch self-management.
- Comprehensive system for the promotion and administration from the national level to prefectural and school levels.	- National support of budget with suggestions about management system of school lunch project.
- Food and nutrition teachers are required by law.	- Food and nutrition teachers are not required by law.
- Guidelines as carefully prepared and distributed from all related ministries and agencies.	- Guidelines are broadly prescribed.



2. The actual situations of Food and Nutrition Education in school lunch projects in primary schools in Phitsanulok province.

Three schools under the supervision of the Office of Primary Education Area Office, in Phitsanulok No.1 which were headed by the school principal who have been appointed by the Office of Basic Education Commission (OBEC), the Ministry of Education.

2.1 The Learning Contents and Actual Practices of Food Education Using the 7seven elements of Food and Nutrition Education (Shokuiku) as the framework for surveying learning contents and actual practices of Food Education in school lunch project of three School, answered by the school principals and the head teachers of school lunch project, the findings are shown in Table 3 below.

Table 3 The learning contents and actual practices

No.	Shokuiku Element	Evidences of Learning Contents or Actual Practices
1	Sustaining proper nutrition	Almost agree of interview answers shown in the questionnaire, that schools provide sustaining proper nutrition.
2	Fostering understanding, decision-making and eating habits	Almost agree of the contents of health education taught as a subject and the counseling during lunch hours.
3	Encouraging social & considerate spirit	Almost agree of the contents of moral education as a sub-learning area and the counseling during lunch hours.
4	Furthering respect of life & nature and spirit of environmental conservation	Almost agree of the contents of civic education as a sub-learning area and the home-room counseling.
5	Acknowledging about food industry and people's hard work which should be respected	Almost agree of the contents of civic education as a sub-learning area and the home-room counseling.
6	Understanding about traditional, regional and local cuisine	Almost agree of the contents of career education classes and counseling during school lunch hours.
7	Understanding of food production, transportation, and consumption	Almost agree of the contents of civic education as a sub-learning area.

From Table 3, the seven elements of Shokuiku were also practiced during school lunch hours or taught as required contents in some subjects / learning areas in three School in Phitsanulok.

2.2 Survey of 3 primary schools in Phitsanulok Province

	Thailand	Japan
Characteristics of School lunch project	● Integration of Sufficiency economy training ● Food security-based school lunch project ● Request of No skipping breakfast and Decreasing unhealthy dietary habits by school ● School lunch project by discretion of school	● Daily duty in school lunch time ● Prepare, eat, and clean together ● No cooperation, no fun lunch time

In the interview, skipping breakfast, a kind of family who doesn't make breakfast, children buy unhealthy food, etc., are the concerns and matters of School lunch project in Phitsanulok Province. School principals and teachers make efforts to urge not to do it.

2.3 The new body of knowledge Characteristics of School lunch project as shown in table 4.

Table 4 Characteristics of School lunch project

	Thailand	Japan
Characteristics of School lunch project	● Integration of Sufficiency economy training ● Food security-based school lunch project ● Request of No skipping breakfast and Decreasing unhealthy dietary habits by school ● School lunch project by discretion of school	● Daily duty in school lunch time ● Prepare, eat, and clean together ● No cooperation, no fun lunch time

1. Integration of Sufficiency economy training: In Thailand, the school lunch project integrates Sufficiency economy training. In Japan, there is no sufficiency economy training in school lunch project.

2. Daily duty of School lunch project: In Japan, children have daily duty at school lunch time. Children have to cooperate and enjoy with others to eat school lunch. Selfish children don't fit in school lunch time. Empathy and altruism are the base of character education. However, whether understanding food literacy or not is another story. In Thailand, there seems no daily duty at school lunch time. Children just visit canteen, get/buy food and then eat with friends.



3. Healthy dietary habits and eating breakfast: According to the survey result, there are shops which sell unhealthy foods among schools. Principals and teachers urge children to not buy it outside of school, they also teach the reason for it. And, there is sometimes family who doesn't make breakfast. In that case, the school principal or teachers request that the family give breakfast to the children.

School lunch project in Japan experienced World Wars, next, several laws and policy enacted and revised. Japan resumes Rice-based meals, qualified nutritionists and educational role. Nevertheless, food-related matters occur in Japan. Just scaling up the policy of School lunch project to overcome undernutrition are useless for the maintenance of health career and cultural asset in Japan. Due to it, Food and Nutrition Education is needed to cover socio-cultural, environmental aspects and etc., legislated in 2005. Food Education in Thailand mainly focuses on having enough food and managerial aspects of the School lunch projects. And the implementation process whether it works or not has an influence on School lunch project success.

In Thailand. Not only food security-based policy making, also educational role, nutrition, socio-cultural and other aspects towards maintenance of health career and cultural asset are expected to define in Food Education with target value in Thailand.

The survey of the three selected primary schools in Phitsanulok reveal that 2 out of 3 schools are surrounded by convenient stores and food vendors where children often buy snacks and sweets on the way to school, and after lunch. Although the school sizes and class levels differ among the three, the communities that support the schools are largely composed of parents who cannot afford to send children to elite schools in the city which is not very far away from School No.1 and School No.3, but very far away from School No.2. The administrative system of the three schools is similar. The 7 elements of Shokuiku are also practiced during school lunch hours or being taught in some subjects / learning areas at School No.1, 2 and 3 in Phitsanulok; but Element No.1 is mostly taught and actually practiced in the school lunch period. The other elements (Elements No.2-7 of Shokuiku) are integrated in related subjects or in counseling activities.



Discussion

School lunch project in Japan was earlier than in Thailand. The Meiji Restoration reformed compulsory education, which was very ambitious. Voluntarily support of Buddhist temples and geographical locations of schools were good for collecting food are the possible factor of compulsory education in Thailand. After the WW II, the system of education both countries was influenced and reformed by the United States. (The National WWII Museum, 2020) Japan seems to more advanced in the integration of her traditional character education and moral education into the school lunch project. Japan makes an effort on the base of historical and socio-economic backgrounds. (Hans & Korda, 2019) Thailand seems to struggle more because of the double burden of malnutrition. Japan is being highly evaluated by most food and nutritious educators. The findings from this survey reveal that many elements of Food and Nutrition Education of Japan are not much recognized in the school lunch projects of the primary schools for the case study. (Hirama et al., 2003) Though the provision of sample menus is found, it is only broadly prescribed. When examined more closely into the contents of Guidelines for Shokuiku of Japan and other guidebooks provided by MAFF and local organizations in Japan, there are many other aspects to be considered if the improvement of Food Education in school lunch project of primary schools in Thailand is targeting towards the Zero Hunger Goal. The results of this research related the Food and Agriculture Organization of the United Nations (Agriculture Organization of the United Nations, 2020). It aims to support countries not only to ensure that children in school consume adequate, nutritious, diverse, safe and enjoyable food for improved learning, but also to foster lasting, healthy food-related practices that extend to their families and, when possible, to favourably impact the local food system and economies in the process. The School Food and Nutrition Framework is focused on four areas: a) promoting a healthy food environment and school food; b) integrating effective food and nutrition education throughout the whole school system; c) stimulating inclusive procurement and value chains for school food; and d) creating an enabling political, legal, financial and institutional environment. Each of these has explicit linkages, points of entry and areas of technical support. (Prime minister's office,



Headquarter for healthcare policy, 2015) Agriculture Organization of the United Nations.

Recommendations

The survey of the selected schools is not enough to represent the current status of Food Education in primary schools in Thailand. Therefore, the number of schools should be increased with deeper considerations on the seven elements of Shokuiku.

Improving the quality of nutrition, which receive advice from all involved parties in improving the lunch program.

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