

## Review

# School-based “Shokuiku” program in Japan: application to nutrition education in Asian countries

Miki Miyoshi RD MPhil<sup>1</sup>, Nobuyo Tsuboyama-Kasaoka RD PhD<sup>2</sup>, Nobuo Nishi MD PhD MSc<sup>1,2</sup>

<sup>1</sup>Center for International Collaboration and Partnership, National Institute of Health and Nutrition, Japan

<sup>2</sup>Department of Nutritional Epidemiology, National Institute of Health and Nutrition, Japan

This paper provides the overview of “Shokuiku” in Japan, and discusses the future perspective on application of its concepts to nutrition education in other Asian countries. In Japan, there has been a growing concern on increase of obesity and the metabolic syndrome among middle-aged men. Additionally, child obesity has also become one of the important health problems. The increased obesity among them is possibly associated with inappropriate dietary habits (eg skipping breakfast, excessive fat intake and insufficient vegetable). Under this circumstance, the “Basic Law on Shokuiku” was enacted in 2005, which was the first law that regulates one’s diets and eating habits. For effective implementation of Shokuiku program, dietitians and registered dietitians would play important roles in various settings. Japan has a long history of dietitian system as well as school-lunch programs. Later, in order to further enhance the school-based Shokuiku programs, the Diet and Nutrition Teacher System was established in April 2007. From an international point of view, “nutrition education” programs aim to improve dietary practices so as to ensure adequate energy or nutrient intake and also to reduce obesity and lifestyle-related diseases, whereas the concepts of Shokuiku have very wide approaches. Shokuiku’s efforts expand to support food culture, especially through school-based programs, as well as to improve food environment by providing information on appropriate diets. These approaches can be introduced in nutrition education in other Asian countries, not only to improve one’s health and nutritional status but also to secure food culture and food safety in each country.

**Key Words:** Shokuiku, food and nutrition education, dietitian, registered dietitian, Japan

## INTRODUCTION

In Japan, despite of various efforts to achieve the goals in the “Nutrition and Diet” area under the 3<sup>rd</sup> National Health Promotion Program called “Health Japan 21”, there has been a growing concern on increase of obesity and the metabolic syndrome among middle-aged men whereas proportion of underweight young women has increased due to an excessive desire of becoming thin.<sup>1</sup> Child obesity also has become one of the important health problems. Inappropriate dietary habits (e.g. skipping breakfast, unbalanced meals like excessive fat intake and insufficient vegetable intake), loss of traditional food culture as well as the emerging needs for risk communication on food safety and for increase in domestic self-sustaining food supply have become significant issues to be solved. Under this circumstance, the “Basic Law on Shokuiku” was enacted in 2005.

In Japanese, *Shoku* means diet and *iku* means growth and education. According to the “Basic Law on Shokuiku”, *Shokuiku* is defined as “Acquisition of knowledge about food and nutrition and ability to make appropriate food choices through various experiences related to food, in order to develop people with the ability to practice a healthy diet”.<sup>2</sup> “Shokuiku” is essential not only for the good physical growth, but also for the growth of intelligence and moral, hence, basis for life.

## “THE BASIC LAW ON SHOKUIKU” AND “THE BASIC PLAN FOR SHOKUIKU PROMOTION”

“The Basic Law on Shokuiku” is the first law that regulates diets and eating habits of Japanese population. One of the important characteristics of Shokuiku is that various ministries are involved in implementation of Shokuiku; Cabinet Office is the leading office to plan, formulate and coordinate Shokuiku policy and strategy, in collaboration with Ministry of Health, Labour and Welfare, Ministry of Education, Culture, Sports, Science and Technology and Ministry of Agriculture, Forestry and Fisheries.

This law shows seven fundamental concepts: 1) promotion of Shokuiku at home; 2) promotion of Shokuiku at schools or nursery schools; 3) promotion of approaches to improve dietary habits in the communities; 4) expansion of Shokuiku promotion activities; 5) promotion of interaction between farm producers and consumers; 6) supports

**Corresponding Author:** Ms Miki Miyoshi, Section of International Nutrition Research and Development, Center for International Collaboration and Partnership, National Institute of Health and Nutrition, 1-23-1, Toyama, Shinjuku, Tokyo, 162-8636, Japan.

Tel: +81-3-3203-5721; Fax: +81-3-5287-3404

Email: mikimiy@nih.go.jp

Manuscript received 11 February 2012.

for activities to inherit food cultures; and 7) study and information provision on food safety, nutrition, and other dietary habits, and promotion of international exchange.

Under the Basic Law on *Shokuiku*, the Basic Plan for *Shokuiku* Promotion (The Basic Plan) was formulated in March 2006. Based on this national Basic Plan, each prefecture sets “Prefectural Basic Plan”, so that local-level *Shokuiku* promotion plan can be implemented, reflecting regional characteristics.<sup>2</sup> Under the prefectural Basic Plan, *Shokuiku* programs are implemented at various settings with employing two types of approaches; high-risk approach and population strategy (eg school, mass media campaign, supermarket and community).

**ROLES OF REGISTERED DIETITIANS AND DIETITIANS IN SHOKUIKU**

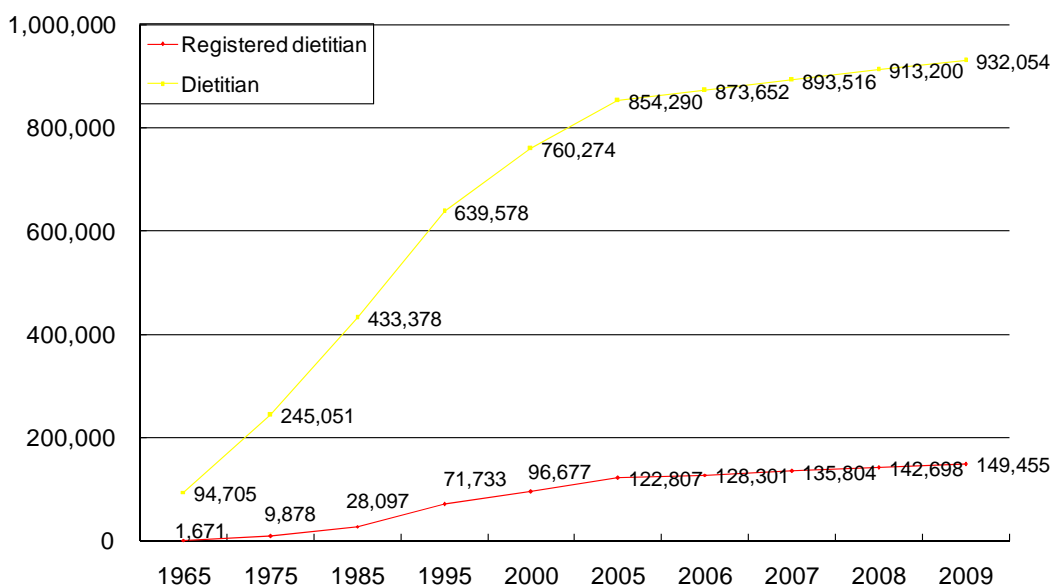
In Japan, there are two types of dietitians; Dietitian and Registered Dietitian. As is shown in Table 1, Registered Dietitians are responsible with more complicated tasks than Dietitians. Japan has a long history of dietitian systems. The first dietitian training school was established in 1920s, and the graduates worked as nutrition assistants.

Licensing of dietitians was first acknowledged in 1945, and then registration system of “Registered Dietitian” was established as a higher position of Dietitian in 1962. Furthermore, in order to improve the quality of “Registered Dietitian”, national examination was introduced in 1985. Figure 1 shows cumulative numbers of Dietitians and Registered Dietitian since 1965.<sup>3</sup> Japan experienced a serious food shortage after the World War II. As the diets of Japanese population improved, the roles of dietitians shifted from improvement of nutritional status to control of obesity and lifestyle-related diseases. Importance of proper diets has been recognized not only for control of lifestyle-related diseases, but more in various physical aspects to improve the Quality of Life, including the good growth of children. Therefore, roles of the Registered Dietitian are increasingly acknowledged.

Either type of dietitians would play important roles to implement *Shokuiku* programs in various settings. For example, in order to prevent childhood obesity as well as obesity in one’s later life, *Shokuiku* has been promoted as a multiple approach to improve one’s diet and eating habit, focusing on school-aged children and adolescents. In

**Table 1.** Major difference of dietitians and registered dietitians in Japan

	Dietitian	Registered dietitians
License issued by	Prefectures governor	Ministry of Health, Labour and Welfare
Authority/duty	Dietary guidance as a dietitian.	<ul style="list-style-type: none"> <li>* Dietary guidance to get medical treatment for sick and wounded persons</li> <li>* Nutrition education to maintain and promote health that requires high professional knowledge and technique, according to one’s physical and nutritional condition.</li> <li>* Food service management according to one’s physical and nutrition condition at the facilities with continuous meal supply to specific persons</li> <li>* Necessary education for nutritional improvement at the facilities with food service</li> </ul>
At least one person should be assigned at the facility with mass food service	Over 100 meals/time or over 250 meals/day	<ul style="list-style-type: none"> <li>- Over 300 meals/times or over 750 meals/day for those under medical treatment, who require specific meals</li> <li>- Over 500 meals/time or over 1,500 meals/day</li> </ul>



**Figure 1.** Cumulative Number of dietitians and registered dietitians

order to further enhance the school-based *Shokuiku* programs, the Diet and Nutrition Teacher System was established in April 2007.

#### **APPLICATION OF SHOKUIKU TO NUTRITION EDUCATION IN ASIAN COUNTRIES**

“The Basic Law on *Shokuiku*”, established in June 2005, is a notable policy in Japan, as such national legislation on food education can not be seen in other countries. *Shokuiku* is basically a term referring to the promotion of not just healthy eating, but all aspects of a sensible diet, from selecting the food through enjoying taste. There is a growing concern on the terms of “*Shokuiku*” in other Asian countries too, as is shown in the increased application to the “NIHN Fellowship Program for Asian Researcher” with the research theme on *Shokuiku*.

From an international point of view, “nutrition education” programs aim to improve dietary practices so as to ensure adequate energy or nutrient intake and also to reduce obesity and lifestyle-related diseases, whereas *Shokuiku* concepts have very wide approaches. *Shokuiku*'s efforts expand to support Japanese food culture, especially through school-based programs, as well as to im-

prove food environment by providing information on appropriate diets (eg The Japanese Food Guide Spinning Top). Each country has its own food culture and it is important to support the agricultural and fisheries areas as well as to secure availability of local foods and food safety. The concepts and approaches of *Shokuiku*, therefore, can be introduced in nutrition education, especially school-based one, in other Asian countries too. For which, it is important to enhance collaboration toward practical application of *Shokuiku* among the concerned ministries in each country.

#### **AUTHOR DISCLOSURES**

Miyoshi M, Tsuboyama-Kasaoka N and Nishi N, no conflicts of interest.

#### **REFERENCE**

1. Ministry of Health, Labour and Welfare. National Health and Nutrition Survey 2006. Daiichi Shuppan, 2009. (in Japanese)
2. Ministry of Agriculture, Forestry and Fisheries. What's “*Shokuiku* (Food Education)”? 2006.
3. Japan Dietetics Association. Number of persons issued the license of Dietitians and Registered Dietitians. J Jpn Diet Assoc. 2010;53:16.

## Review

## School-based “Shokuiku” Program in Japan: Application to Nutrition Education in Asian Countries

Miki Miyoshi RD MPhil<sup>1</sup>, Nobuyo Tsuboyama-Kasaoka RD PhD<sup>2</sup>, Nobuo Nishi MD PhD MSc<sup>1,2</sup>

<sup>1</sup>Center for International Collaboration and Partnership, National Institute of Health and Nutrition, Japan

<sup>2</sup>Department of Nutritional Epidemiology, National Institute of Health and Nutrition, Japan

### 日本以學校為基礎的“飲食營養教育”系統：於亞洲國家營養教育的應用

這篇文章提供日本“飲食營養教育(Shokuiku)”的綜述，並討論未來這些觀點在其他亞洲國家營養教育的應用。在日本，中年人的肥胖及代謝症候群的增加已越來越受關注。此外，兒童肥胖也變成一個重要的健康問題。這些肥胖族群的增加可能與不當的飲食習慣有關(例如不吃早餐、脂肪攝取過多及蔬菜攝取不足)。在這個情況下，“飲食營養教育基本法”在 2005 年被制定，這是第一個為個人飲食及飲食習慣訂定的法案。為了更有效的執行飲食營養教育計畫，地方政府發照的營養師以及厚生勞働省發照的營養師在各種場合扮演重要的角色。日本的營養師系統及學校午餐計畫有久遠的歷史。此後，為了更進一步加強以學校為基礎的飲食營養教育計畫，在 2007 年 4 月設立“飲食與營養教師”系統。從國際的觀點來看，營養教育系統的目的為改善飲食習慣以確保適當的能量及營養素攝取，進而降低肥胖及生活型態相關的疾病，有鑑於此，“飲食營養教育”的觀點有很廣的應用。飲食營養教育的努力，透過以學校為基礎的系統，擴大支持日本飲食文化；並透過提供適當飲食的資訊去改善食物環境。這些作法的觀點可以引入其他亞洲國家的營養教育，不僅助於改善個人健康與營養狀況，也可穩固每個國家的食物文化及食物安全。

**關鍵字：**Shokuiku、食物與營養教育、營養師、證照營養師、日本