Establishment and Issues of New Educational System by Nutrition Teachers

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Summary The Japanese school lunch system, which has over 100 y of history, has gained world attention for its well-developed and steady system, healthy Japanese-style menus including rice, and educational programs utilizing the school lunch system. Meanwhile, risk factors of health among students have been continuously worsening for the past dozen years or so. Therefore, Japan had hastened to develop better educational programs utilizing the school lunch and nutritional teachers. Under such circumstances, the Japanese Diet passed a bill to amend the School Education Law (hereinafter called the Amendment) which includes the establishment of an educational system by nutrition teachers in May, 2004. This system will be enforced in April, 2005. This system by nutrition teachers in Japan is well organized in both the legal and administrative senses and is attracting domestic and international attention as an example of an educational measure to improve the dietary life of students. The reason for this article in English is the additional intention of enlightening other countries by showing the political promotion problems of educational administration agencies, educational contents of nutrition teachers and some issues of the new educational system by nutrition teachers.

Key Words Japanese school , educational system, nutrition teachers, health education

In Western countries, alarm over the imbalance of nutritional intake and the increasing risk factors of cardiovascular diseases has been raised for more than a decade. Take the United States as an example. The Clinton administration pushed its health policy by implementing the Healthy People 2000 program, which focused on the primary prevention and setting of concrete target figures to improve pure nutritional intake and obesity among students. Enforcement of this policy brought robust achievement. With the success of this plan, Healthy People 2010, which looks ahead to 2010, is currently in progress. In Asia, some countries have a large number of youngsters with malnutrition. On the other hand, in countries with an abundant food supply such as Japan, Thailand, and Korea, the percentage of obese student exceeds 10%, and the percentage of students with hypercholesterolemia has become larger than that in the United States. Given this situation, Thailand implemented a national policy to combat obesity among students through school lunch menus, and the Korean Diet approved an educational system by nutrition teachers in 2002 to enhance school education in nutrition.

Meanwhile, the Japanese school lunch system, which has over 100 y of history, has gained world attention for its well-developed system, healthy Japanese-style menus including rice, and educational programs utilizing the school lunch system. Under such circumstances, the Japanese Diet passed a bill to amend the School Education Law which includes the establishment of an educational system by nutrition teachers in May, 2004. This system will be enforced in April, 2005. In the countries with an abundant food supply, a health problem among students concerning their nutritional intake as described above becomes an urgent issue. The realization of the educational system by nutrition teachers in Japan is attracting domestic and international attention and is considered a precedent enforcement of an educational policy that can enlighten other countries.

Since the employment of the system is thought to be significant, the background, political promotion problems of educational administration agencies, and points at issue of the educational system are discussed in English in this article.

I. Background of the Establishment of an Educational System by Nutrition Teachers

1. Shifts in health risk factors among students

Risk factors for health among students have been continuously worsening for the past dozen years or so. According to the “Report on the Surveillance Program of Health among Students in 2002” (1), the percentage...
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of hypercholesterolemia among 5th and 6th grades boys was 15.6%, and the percentage among 9th grade boys was 10.4%. The percentage among both 5th and 6th grade girls and 9th grade girls was 16.5%, when the standard value used for judgment of hypercholesterolemia was above 200 mg cholesterol/dL (blood). Furthermore, according to the “Statistic Report of School Health 2002” (2) by the Ministry of Education, Culture, Sports, Science and Technology (Monbu-kagaku-syo: called MEXT), the percentage of overweight students judged by school doctors among 6th graders and among 9th graders were 10.9% and 9.3%, respectively (In 1987, they were 8.1% and 6.8%, respectively). When we search the background of these high figures in the results of the National Nutrition Survey, Japan in 2002 (the Health, Labor and Welfare Ministry), a polarization of the amount of energy intake (an excess energy intake group and a deficient energy intake group) and an increase of energy intake percentage from between-meal eating are pointed out. Among teens, cholesterol intake was 440–480 mg/d (boys) and 400–410 mg/d (girls). The fat ratio for energy intake was 28.7% (boys and girls). The salt intake was 10.1–12.0 g/d (boys) and 8.9–10.2 g/d (girls). These figures are near the upper limit of the recommended level. It is necessary to observe the development of intake carefully, because when intake exceeds the limit, it turns to risk factors for circulatory system diseases in future. According to the “Report of the Survey on the Dietary Situation among Students 2002” (3), although they take in enough nutrients essential for the growth phase such as protein, calcium, iron, vitamin A, B1 and C, their intake of those on the days they do not eat a school lunch is not sufficient either in quality nor in quantity. On the other hand, the “Report on the Surveillance Program of Health among Students in 2002” (1), mentioned above shows that 3.3% of 6th graders and 3.2% of 9th graders have food allergies (in 1987, they were 1.6% and 2.0%), Incidents of anaphylactic shock were 1.6% and 1.7% (boys), and 2.0% and 2.1% (girls). According to the “Health and Physical Education” in 2001 in which food allergies are mentioned, the percentage of food allergies was 3.0% and 3.1% (boys), and 3.2% and 3.3% (girls). School lunch is not sufficient either in quality nor in quantity. On the other hand, the “Report on the Surveillance Program of Health among Students in 2002” (1), mentioned above shows that 3.3% of 6th graders and 3.2% of 9th graders have food allergies (in 1987, they were 1.6% and 2.0%), Incidents of anaphylactic shock are also increasing. In addition, many issues that require individual guidance (counseling) including various symptoms, such as anorexia nervosa and exercise anemia, unhealthy diet and regular use of supplements, excessive consumption of between-meal snacks rich in salt, sugar, and fat, disrupted eating habits such as skipping breakfast, and a slimming obsession are recognized.

2. School education in dietary life and the necessity of the establishment of the educational system by nutrition teachers

The phrase “school education in dietary life” originated in the report from the Health and Physical Education Council of Ministry of Education (hereinafter called ME’s HPE Council) (4) in September 1997 where the concept of an educational system by nutrition teachers was proposed for the first time. Although quite a few similar terms such as nutrition education, education in diet, diet education, etc. are used, “school education in dietary life” is understood as “education in dietary life by all teaching staff in the whole school education.” New educational systems by nutrition teachers have been promoted to cultivate human resources with expertise as a part of the development of the structure for a “school education in dietary life.”

II. Process of the Establishment of the Educational System of Nutrition Teachers

1. Proposal of the establishment of an educational system by nutrition teachers in the report from the ME’s HPE Council in September 1997

ME’s HPE Council submitted a report on “Health Education and Sports Promotion to Maintain and Improve Lifelong Physical and Mental Health” (4) in September 1997 after being consulted on measures against health problems among students. In the report, it pointed out that “new health problems stemmed from dietary habits” and proposed “an introduction of a new licensing system” focusing on the utilization of the school lunch system.

2. Proposal of the establishment and implementation of the system in the report from MEXT’s Central Council for Education in September 2002

Amid deterioration of the health index of students, MEXT’s Central Council for Education has been repeatedly consulted on comprehensive measures to enhance physical strength among students. As a result of subsequent continuous discussions, the council submitted the report saying “It is necessary to consider the establishment of new systems concerning dietitian staff at schools (hereinafter called the nutrition staff) such as the “educational system by nutrition teachers (tentative name)” and to forge leadership in education in dietary life among students” (5). Five years after the report from ME’s HPE Council in 1997, progress toward the establishment of the educational system by nutrition teachers begun to accelerate.

3. Specified examination of the system at MEXT’s committee of collaborators for survey research

Along with the discussions at MEXT’s Central Council for Education described above between April 2001 and September 2002, MEXT’s Committee of Collaborators for Survey Research was set up, which consists of participants from the private sector and public institutions, and it conducted concrete discussions. In the primary report (6) of MEXT’s Committee of Collaborators, the council made suggestions on the educational function of nutrition teachers, such as nutrition counseling for students, educational activities in the classroom and at special events and coordination of education about dietary life and some measures at the institutional level to enhance the initiative of nutrition teachers. In the secondary report (7) of MEXT’s Committee of Collaborators, it spelled out the specific plan for the entire system including administrative duties concerning the school lunch system, and the placement, qualification, and position of nutrition teachers in addition to the above.

4. The report from MEXT’s Central Council for Education in January 2004 (the final plan for the educational system by nutrition teachers)

Based on the report from the MEXT’s Committee of Collaborators for Survey Research, MEXT set up the
Subcommittee for School Education in Dietary Life in the Committee for Sports and Students of MEXT’s Central Council for Education. The subcommittee deepened the discussion in accordance with the Committee for Primary and Secondary Education and completed an interim report (proposal). After hearing the view of the public and related entities, MEXT’s Central Council for Education prepared the final report (proposal). In January 2004, the General Assembly of MEXT’s Central Council for Education deliberated on the final report and announced MEXT’s Central Council Report (8) called the Proposal Concerning the Development of the Leadership for School Education in Dietary Life. It says: “The council greatly expects that education in dietary life will be promoted under close cooperation among schools, families, and communities. It is necessary to establish an educational system by nutrition teachers where teachers who acquire essential educational qualifications in addition to the current qualifications of school nutrition staff and to develop an effective leadership in school education in dietary life.

5. Amendment passed by the Japanese Diet in May, 2004

Based on the report by the Central Council for Education in January, 2004, the proceedings of the Diet on the “Amendment of the School Education Law” were conducted, and the Amendment was passed on May 14th, 2004. The articles regarding nutrition teachers in the Amendment are Article 1: “A part of the School Education Law (the 26th Law in 1947) shall be amended as described below”: Section 2. Article 28: “Elementary schools can employ nutrition teachers and other necessary staff”; Section 7. Article 28: “Nutrition teachers are responsible for nutritional education and management of the student.”

III. Significance of the Establishment of the Educational System by Nutrition Teachers

1. Qualifications to obtain a nutrition teacher’s license

Nutrition teacher’s licenses are categorized into three kinds; a teacher’s license for special category, first-category and second-category teacher’s license as any other teacher’s license. For the improvement of the qualification for a license, the two points described below are thought to be worthy of recognition.

(1) Requirement to have an equivalent qualification of national registered dietitians

The report from the MEXT’s Central Council for Education in 2004 (8) stated, “the first-category nutrition teacher’s license, as a standard license of its kind, should require the acquisition of national registered dietitians.” The Amendment also stated that a first-category nutrition teacher’s license requires the acquisition of 82 credits in compulsory subjects which are equivalent to the requirement for national registered dietitians. The main reason for this requirement is that cases which require individual responses in clinical and nutritional aspects are increasingly seen among students, and the content of these cases is becoming more diversified and specialized. Therefore, the total number of required credits for a nutrition teacher’s license is the largest among kinds of teacher’s licenses.

(2) Establishment of subjects concerning education by nutrition teachers

A nutrition teacher’s license requires the acquisition of “subjects concerning education by nutrition teachers” (4 credits for special and first-category teacher’s licenses, and 2 credits for second-category teacher’s licenses) in addition to 18 credits in “subjects concerning the teaching profession which are a common requirement for all teacher’s licenses. The establishment of these subjects concerning education by nutrition teachers has a great significance for the cultivation of nutrition teachers. In other words, these subjects were established to foster the educational ability to promote education in dietary life in the whole school education by integrating the expertise of nationally registered dietitians and educational expertise. Section 3, Article 10 of the Enforcement Regulation of the Teacher’s License Law, which appeared after the Amendment was passed, specifies four areas: the items concerning roles and job description of nutrition teacher, items concerning issues on nutrition among infants and students, historical and cultural items concerning dietary life, and items concerning educational methods in dietary life.” Educational institutes that train future nutrition teachers will be required to create curricula using these subjects in accordance with their purposes. The subjects are expected to become a focus point in the training of nutrition teachers in the future.

2. Improvement of school education in dietary life utilizing the educational system by nutrition teachers

(1) Reinforcement of an educational foundation by establishing the formal position of nutrition teachers

The Amendment will assure an educational position and the working conditions of nutrition teachers that general teachers have. In addition to planning, operation, and management of the school lunch system, they will be entitled to participate in faculty meetings and contribute to the annual educational plan and the leadership of the school lunch system committee. This will allow nutrition teachers to understand the lifestyle or backgrounds of students and is expected to contribute to the improvement of school education in dietary life.

(2) Specified educational content nutrition teachers will engage

The primary (6) and secondary (7) reports by MEXT’s Committee of Collaborators for Survey Research, which was mentioned before concerning the job description of nutrition teachers, and MEXT’s Central Council for Education’s “Development of Leadership for the School Education in Dietary Life” (8) in January 2004 show the educational contents described below. Since the Amendment was passed in the Diet based on the content of this report, nutrition teachers will carry out school education in dietary life described below.

1) Nutrition counseling for students. As mentioned in 1, individual issues such as anorexia nervosa and exercise anemia, unhealthy diet and regular use of supplements, excessive consumption of between-meal snacks rich in salt, sugar, and fat, and disrupted eating...
habits are increasing, and the need for nutrition counseling at schools has become greater in recent years. Since individual dietary issues often have psychologically sensitive factors, it is essential for nutrition teachers to understand each child’s personality and background and to provide sensitive individual guidance in cooperation with homeroom teachers, school doctors, and teachers for the handicapped. They are also required to support and work with the families.

2) Educational activities in the classroom and at special events. Section 1. Article 2 of the School Lunch Law states that one of the goals of the school lunch system is “to promote correct understanding about diet in everyday life and to cultivate desirable dietary habits.” In relation to this, the section concerning special activities of the school curriculum guideline by MEXT includes (A) Classroom Activities; (2) School lunch and formation of desirable dietary habits.” Based on these guidelines, nutrition teachers are required to lead 1-h classroom activities and short-term guidance during school lunch hours in cooperation with classroom teachers. Educational effectiveness rises in experience, repetition and modeling.

3) Coordination of education about dietary life in school. In general educational activities and school events, educational efforts using food as a clue are often conducted under the theme of environment, international understanding, community understanding, and the cultivation of healthy minds and sociality. Nutrition teachers are expected to work as coordinators not only in the education about dietary life in classroom activities and the study of related subjects, but also in these whole-school educational activities and in coordination with families and communities.

IV. Points at Problems

(Issue 1) Placement of nutrition teachers

1. Improvement in the placement of nutrition teachers and a fixed number of students per teacher

The Amendment entrusts the discretion of each prefecture to place nutrition teachers and does not oblige the placement. Some boards of education do not plan to place any nutrition teachers with the excuse of financial difficulties because hiring them instead of school nutrition staff costs more. It is desirable to employ the proactive measure of placing a nutrition teacher in each school in the future.

2. Equalization of educational situations between individual school kitchens and joint kitchens (school lunch cooking centers) for multiple schools

Nutrition teachers who work for a single school kitchen and those who work for a school lunch cooking center have different degrees of understanding of student’s dietary lives, educational responses, and everyday interactions with students. These differences are thought to be reflected in the frequency, content, and effectiveness of the school education in dietary life. From the viewpoint of the equality of educational opportunity, reform measures to equalize the placement and the educational condition of nutrition teachers who work for a single (school) kitchen and who work for a school lunch cooking center should be implemented in the future.

(Issue 2) Enhancement of educational qualifications

1. Lectures to become nutrition teachers

Some boards of education will pass on placing nutrition teachers and will not hold lectures for qualifying as a nutrition teacher as mentioned above. Because of this, there is a possibility that regional differences in the distribution of nutrition teachers and the content and frequency of the guidance in dietary life will be an issue in the future.

2. Training programs for nutrition teachers

Based on the laws that apply to civil servants in the field of education (Article 23 and 24), school teachers are required to participate in beginning teacher’s training and a 10th year teacher’s training. However, this is not applicable to nutrition teachers. Although the additional resolution of the deliberation on the Amendment by the Diet mentioned states the “assurance of training opportunities,” it is essential for nutrition teachers.

(Issue 3) The need to develop fundamental educational theory and educational programs in dietary life

1. Application of behavioral modification theories

In health and dietary education in Western countries, educational development applying behavioral modification theory such as the Know Your Body Program and CATCH Program in the United States are conducted. Desirable dietary habits are formed by the accumulation of healthy dietary behaviors. Educational development based on the behavioral modification theory utilizing the school lunch system as “living educational material” is expected in Japan.

2. The development of school educational programs in dietary life in accordance with developmental stages

In terms of any subject or area of study, effective educational development is conducted at various research institutes such as universities. However, in the field of education in dietary life, even research on fundamental theory is behind. The development of educational programs in accordance with each developmental stage and the accumulation of empirical studies applying developmental learning theory in educational psychology will be needed in the future.

(Issue 4) Mutual understanding and cooperation among educational staff within a school

The Amendment says that nutrition teachers may not teach classes alone. It does not guarantee the hours and place to conduct education in dietary life at a school. In order to secure them, proactive efforts by nutrition teachers and mutual understanding within the whole school are essential. Especially principals, vice-principals, and the Heads of the instruction department should understand the importance of education about dietary life and make efforts to include it into the annual educational guidelines. Classroom teachers, home economics teachers, and physical education teachers also should try to proactively integrate the expertise of nutrition teachers into their education in relevant subjects.
(Issue 5) Linkage to the National Health Movement in the 21st Century

The Ministry of Health and Welfare (at that time) established the National Health Promotion Campaign for the 21st Century in March, 2000. It also said, “It requires dissemination of knowledge and education through various routes.” Nutrition teachers are expected to coordinate community health and school education and develop educational activities in accordance with the framework of the National Health Promotion Campaign for the 21st Century.

(Issue 6) Association with the Basic Law on Nutrition Education (proposal)

The Basic Law on Nutrition Education, which targets all stages of life, was proposed in March, 2004 and is currently under continuous discussion in the Diet. In the process of the passage of this proposal and the penetration of the policy, nutrition teachers are expected to disseminate information on healthy dietary life and dietary culture from the school to the families and the communities and to play a role as a coordinator for dietary education in cooperation with the welfare administration in the community.

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