ENVIRONMENT-FRIENDLY SCHOOL MEALS OUTLOOK

Jin-young, Jeong Korea Organic Farming Association, Republic of Korea E-mail kofa@chol.com

Key words: Environment-friendly school meals, local food network

1. Implication of Environment-friendly School Meals

International communities face severe crisis of various disasters driven by rapid change of global environment, and they try to come up with cooperative measures to tackle the global warming or carbon emission. However, what's the most urgent is to make environment-friendly school meals take deep roots in each society to resolve the problems of teenagers who are our future hope. School meals are provided to children and teenagers from the age of 7 to 19 (for 13 years) which is the most important period in terms of health promotion, experience of traditional food culture, and educational perspectives.

In Korea, school meals were introduced from a public welfare perspective, and are now taking roots. School meals are evaluated as effective and encouraging in that they provide 'true education' about food as a form of our lifestyle.

To maintain healthy and energetic mental and physical life, we need to intake clean and safe foods, which can be gained from natural environment.

However, in a modern society, we have been exposed to about 24 million-kinds of chemicals and heavy metals for the last 50 years under the name of 'science'. Environmental degradation gets acute and our nature has been polluted to death, so our foods have lost their unique natural tastes. We can't enjoy our traditional food made by our mothers with love and affection, but we are just indulged into simple and fast foods. Now our palates are accustomed to 580 types of food additives, sugar, salt, and chemical seasonings.

Environment-friendly school meals are the best solution to enable our offspring to get out of uniform and monotonous tastes, and to experience colorful and rich tastes.

To put it simple on the eating habits of people in advanced countries: the percentage of eating out is increasing. Consumption of premium food, indulgence food, or fancy food is rising up. People pursue simple convenience. The trend to intake fat and meat is rising. Nutrition gap is widening between the rich and poor. However, in contrast, more and more people have huge interest in nutritious and safe food and health. If so, what's the solution to resolve such problems related to eating habits? That's environment-friendly school meals as a part of public education which will teach traditional eating culture to our descendants and which will provide health food.

2. Current Status of Environment-friendly School Meals

As of the end of 2009, Korea had 11,303 schools, and among them 11,225 (accounting for 99.3%) provided school meals: 10,136 (90.3%) directly managed and provided school meals, but 1,089 (accounting for 9.7%) consigned other companies to manage and provide them. However, directly-managed school meals were increasing (statistics of ministry of education in 2009).

However, the awareness that school meals made up with products based on conventional agriculture couldn't be conducive to improving the health of children, so since 2002, civic groups had conducted the campaign for school meals made by environmentally-friendly ingredients, and persuaded local governments to revise the ordinances on environmentally-friendly school meals.

Finally, in 2004, Jeju special provincial government and Naju city government were the first to revise their ordinances to provide environmentally-friendly school meals. After that, local governments revising the relevant ordinances were snowballing to the point where 234 city/county governments and 10 provincial governments revised them. As of 2009, 90% of local governments revised their ordinances and appropriate additional budgets.

Particularly, in local election, June 2010, quite many candidates pledging free school meals based on environment-friendly foods were elected, and the positive awareness of local governments on free school meals made by environmentally-friendly ingredients is accelerating.

Within 6 years, environment-friendly school meals have been spread to entire Korea, enabled children to get out of health problems caused by chemical seasonings and fried foods (which had been provided to students) and to get well-nourished foods. Thanks to such school meals, students can i) reduce the consumption of meat by using a lot of growth hormone, antibiotics, and tranquilizers, ii) avoid the overeating of various junk foods based on 158 types of chemical additives, ii) quit having GMO food or imported grains which are processed after harvest. They take in environment-friendly/organic foods which are locally produced and have a lot of safe and functional ingredients. Clean, safe, and nutritious school meals can allow teenagers and youth to improve their health drastically.

3. Outcome of Environment-friendly School Meals

Gayang elementary school in Seoul showed great success. It started to provide all students (866) with 100% organic school meals on March 2nd, 2008.

At the same time, it also performed training courses to students and their parents on i) the value of environmentally-friendly products, ii) dermatitis or atopyic dermatitis triggered by food additives and iii) weekend family farms or urban agriculture to grow vegetables without using chemical fertilizers. 7 months later, the survey conducted on September 30th showed outstanding results.

Initially, 20.5% of students (177 students) were atopyic patients, but 7 months later, 52% of the patients (92 students) got fully recovered.

In a meanwhile, local government-run 5 childcare centers in Gwangjin-gu, Seoul provided organic foods from July 1st, 2008 to November 31st, 2008 (5 months). They conducted surveys before and after the provision of organic foods. On April 22nd 2008 (before the provision), 18.6% of children got atopyic dermatitis, but 5 months later on December 18th 2008, 62% of the patients said they were fully recovered.

In case of serious atopy, patients decreased from 47 to 18 children, showing 62% of recovery rate. Regarding light atopy, it decreased from 31 to 7, recording 78% of recovery rate.

Additionally, gu-government run-childcare centers located in Guro-gu, Seongdong-gu, and Dobong-gu provided organic meals, showing that 60% of atopyic patients were recovered.

4. More Tasks for Environment-friendly /Organic School Meals

1) Free School Meals based on Environment-friendly Ingredients

The government should set up the 4-staged plan under the motto from childcare to education. The 1 step shall be free school meals based on environmentally-friendly foods, which should be offer to small-sized schools whose enrolled students are less than 300 and daycare centers.

The second step is to expand free school meals to all elementary schools by 2011. The third step is to expand them to middle schools by 2012. The last step is to expand free school meals to high schools by 2013.

2) Revision of Regulations and Ordinances

We'll seek to revise 'School Meals Act' to lay the foundations for the central government to provide financial supports. Mayors, provincial governors, superintendents of education offices, and members of city/provincial councils have to lead the campaign to call on the central government to revise the law and regulations on school meals and to provide financial supports.

Additionally, local governments need to i) revise their ordinances related to free school meals made from environmentally-friendly foods in order to give financial supports and ii) establish environment-friendly school meals supportive centers which manage distribution and production of the foods.

3) Education given to Parents and Community Residents

Local governments should offer regular education programs on right eating habits by connecting with the local communities, establish the local food network required to vitalize urban-rural exchanges, and set up the stable demand-supply model.

In addition, they must give opportunities for students and their parents to visit organic farms managed in environmentally-friendly way so that they can learn the value of organic products and consume them more.

5. Problems Solutions and Future Development

The urgent issue related to environment-friendly school meals is the imbalance between demand and supply. We can make approaches to this issue from two angles. First, product items and product quantity are not sufficient to satisfy the needs. To resolve this problem, each local government will establish 'an environment-friendly school meal supportive center' which should play important roles in increasing the contracts between consumers and producers.

Second, if we stick to the lowest bidding system, we have some difficulties in purchasing and inspecting environment-friendly foods which are 1.4~1.9 times expensive. Therefore, we have to simplify the distribution system, facilitate direct markets, or establish school meal supportive centers which are public organizations. After that, we can ensure the transparent and fair purchase scheme and prevent price-off competition to allow producers to achieve decent income.

Environment-friendly school meals can contribute to the health of students, public wellbeing and the development of local and rural communities. By doing so, we can fulfill social roles and responsibilities to recover environment and a sustainable society. To this end, we need to manage the distribution and production of necessary food in clean, transparent, and environmentally-friendly manner.

Until now, school meals have been relied on conventional agricultural products and processed foods emphasizing convenience, aggravating the health of teenagers. Their obesity rate is 25%, close to 31% of adult obesity rate, which is expected to get severe further.

42% of obese teenagers showed the symptom of abnormal metabolism like hypertension and hyperlipidemia, and they suffered from various complications when they are in 20~30s like cardiac infarction, stroke, diabetes, renal failure, and retina disorders (statistics released by Sanggye Baek Hospital in 2007).

When it comes to environmental diseases, among kids and teenagers up to the age of 14, asthma patients stood at 26%, atopyic patients reached 29.5%, and ADHA patients were 30% (according to the ministry of education in 2007). Among married

couples between 30 and 40 years old, 1 million couples suffered from infertility, driving Korea into huge crisis (according to the governmental statistics in 2006).

However, certified environment-friendly products accounted for 12.2% of total agricultural products in Korea (in 2009, the report of the ministry of agriculture, marine affairs, and food). By using these products, we can make environment-friendly school meals take deep roots and we can prevent and treat adult diseases and environmental diseases. Many medical researches already record some success stories.

Therefore, when we expand environment-friendly school meals continuously and rally the movement to encourage parents to consume such products, we can i) understand the close relationship between natural environment and human beings, and social environment, and ii) choose the right foods required to improve individual, social, and natural health.

Through this, we can contribute to prosperity and development as well as ensure that the leaders of organic farming can strengthen their roles and social status in terms of mental and physical culture.

Again I strongly argue that environment-friendly/organic school meals are the critical way to ensuring the future hope of 6.8 billion people in the world. So environment-friendly/organic school meals should be provided to 100% of schools and 237 countries should keep it in mine to adopt such nutritious school meals.