ILSI Japan CHP Newsletter

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Contents

- 1 Project SWAN
- 2 Project IDEA
- 3 **Project PAN**



What's Project SWAN (Safe Water and Nutrition)?

WHO has reported that 1.1 billion people do not have access to safe drinking water, in many developing countries the intake of unsafe water and unhygienic environments cause diarrhea and infectious diseases among children. This interferes with the intake of necessary nutrients, resulting in malnutrition. Even if water treatment facilities exist, it is often found that these facilities are not properly designed and that proper treatment is not conducted, including the use of chemicals to remove contaminants, resulting in the failure to meet WHO microbiological chemical standards.

Project SWAN aims to establish sustainable water supply and health management models in rural and suburban areas through a participatory approach with inhabitants by knowledge of drinking enhancing water, nutrition, food hygiene and sanitation at the household level, optimizing the operation of water facilities treatment to meet Vietnamese standards, establishing effective management systems to sustain safe water supplies and promoting health communication by community-based participatory approaches.

It is expected that these models will be applicable to and can be expanded to other rural and suburban areas in Vietnam.

Project SWAN Project Evaluation Confirmed Sustainability

After completion of the three year Project SWAN, focus group discussion sessions were conducted with water management Unions, health collaborators and mothers in Hanoi and Nam Dinh to evaluate the impact and sustainability. Because duration of activities in Nanm Dinh was shorter, sustainability could not be confirmed at the time of project's completion. But through a survey the People's Union confirmed the effectiveness and usefulness of the program and committed to support the program for the Water Management Union. Improved hygienic practices by mothers were found to have been sustained. In Hanoi, Water Management Unions are continuing their programs based on the acquired knowledge and techniques.

Final Report on Project SWAN Published

The Final Report on Project SWAN I was published in April and summarized the activities of the previous three years. This report can be accessed through the ILSI homepage. The report describes the project framework, qualitative and quantitative evaluations, lessons learned and the established models. A plan is underway to make a new proposal to JICA to promote the SWAN program through building up the capabilities of local government officials.



Achievements of Project SWAN to Date

With an emphasis on rural areas in developing countries in Asia, where public water works are lacking, ILSI Japan CHP has since 2001 been investigating the quality of drinking water and the needs of local residents toward safe water supplies, food safety and hygienic environment. Through experiments we have confirmed that the water quality can be improved to meet the Vietnamese standards for drinking water by optimizing the operation of existing water treatment facilities.

Based on the preliminary investigations, a proposal titled "Participatory approach for improving safe water supply, nutrition and health environment" was proposed and approved by JICA (Japanese International Cooperation Agency) as a 3-year grassroots technical assistance project. In November 2005, the project was started in three communities (Hanoi-Tam Hiep · Hanoi-Dai Mo · Nam Dinh-Quang Trung) in northern Vietnam where 2,500 households are supplied from local water treatment facilities. The Water Management Union composed of a technical group and a IEC group has been working to generate a synergistic effect to improve the water supply and health management system. We have confirmed that the water quality has been improvement in the three communities following the WTF renovation.

Project SWAN was completed with great success in November 2008.

Project IDEA Cambodia Continued Survey

In January a survey was made to evaluate consumer awareness and their intention to purchase iron fortified fish sauce as well as the effectiveness of social marketing programs in Kampot. . Another survey is scheduled to evaluate anemia prevalence and food intake, 24 months after introduction of fortified fish sauce. A training workshop has been scheduled in August to build up the capabilities of local professionals related to the administration of food intake surveys and analyses.



What's Project IDEA (Iron Deficiency Elimination Action)?

The difficulty in maintaining a variety of food sources results in malnutrition and micronutrient deficiencies developing countries. Iron deficiency anemia, one of the most prevalent threats to public health, impairs development, immune system functioning, and learning ability in infants and children. It can also be a major cause of death among pregnant women, and dramatically reduces productivity among working adults, which in turn hinders the struggle against poverty. The UN ACC/SCN (the United Nations Administrative Committee on Coordination/ Sub-Committee on Nutrition) reported that 3.5 billion people suffer from iron deficiency anemia, and that it has been more difficult to overcome this than other micronutrient deficiencies.

Project IDEA works to reduce iron deficiency anemia (IDA) in developing countries by adding iron to commonly-eaten and commercially- produced foods such as condiments and staples, based on the dietary patterns unique to each country.

Feasibility in India

A white paper entitled "Fortification of Wheat Flour and Rice in India" was completed by a ISLI Japan consultant in India. Our review of the white paper concluded that we need to seek understanding from the government on the necessity for food fortification programs and we should pursue fortification of atta flour with iron and lysine as a priority. A workshop on the necessity of the food fortification program with government professionals is scheduled and an efficacy study on the double fortified atta flour will be conducted.

Efficacy Study on Iron-fortified Rice in Vietnam

An efficacy study of iron-fortified rice is scheduled to start in September. This project aims to improve nutrition status, especially anemia, in rural areas of Vietnam. This study also investigates possible impacts on absorption of other micronutrients such as zinc and selenium.

Achievements of Project IDEA to Date

In the Philippines, ILSI CHP has worked with FNRI on the stability and acceptability of several alternatives for the fortification of rice with iron. The overall evaluation indicated that extruded rice with ferrous sulfate and micronized ferric pyrophosphate are the most stable and have the most acceptable taste and color. An efficacy study was conducted for 6 months in 2004 by means of an intervention program using primary school pupils 6-8 years old in Metro Manila. The intervention program demonstrated that both of fortification alternatives significantly improved anemia prevalence. A market trial started in April 2008.

In Cambodia, fish sauce fortified with NaFeEDTA was introduced in Kampot in March 2007 and Siem Reap in August. ILSI Japan CHP is working with RACHA to promote social marketing programs, to establish quality monitoring of the market and to establish a surveillance system for monitoring IDA. A baseline survey was conducted in Kampot and Siem Reap. Akzo Nobel is supporting the project by donating NaFeEDTA.

A literature search on complementary feeding resulted in the report "Towards improved infant and young child nutrition in Asia through appropriate complementary feeding" which can be used as a basis for the research and development of complementary feeding.

In Vietnam, in collaboration with National Institute of Nutrition (NIN), ILSI CHP has pursued iron fortification (NaFeEDTA) of fish sauce. A series of studies verified that regular consumption of iron-fortified fish sauce significantly reduced the prevalence of anemia. Iron-fortified fish sauce was launched in 2006 based on the scientific outcomes of the research and development. The current plans call for 10 large production plants to produce fortified fish sauce by 2009. With financial support from GAIN, the national launch is scheduled in 5 years, which will include programs for production/distribution, quality assurance, communication of nutrition and health and monitoring/surveillance. ILSI Japan CHP will continue to provide professional support to ensure a successful national launch.

Market Trial of Fortified Rice Completed in the Philippines

Market trial of iron fortified rice in Orion Municipality in Bataan was completed in April. A survey is underway to evaluate awareness, market share, anemia improvement, etc. Market expansion to the entire Bataan Province is being planned and will be implemented in 2010.

Project PAN "TAKE 10! DVD Advanced" Has Been Completed

Our new audiovisual aid "TAKE10! ® DVD Advanced" was completed and is available now. It includes instructional comments about eating a balanced variety of foods daily and introductions on some fun games and exercises that encourage regular physical activity.

This DVD is suitable not only to be watched in the home, but also by groups such as gatherings of neighborhood elderly groups, public welfare service organized exercise classes at community centers, or health care programs in nursing homes. This DVD is sold directly over the internet at "niceday-kenko.net" (Niceday is a subsidiary of Meiji Dairies Corporation).



The related program "SumidaTAKE10!", which consists of follow-up classes at six venues in Sumida Ward, marked its fifth anniversary of activity in May. There is a waiting list for the classes and many participants would like for the classes to be held more frequently than the current once monthly per venue. However, it would be quite difficult to increase the frequency due to a lack of human resources. Therefore, we have organized voluntary assistant staff from among the participants in order to train team leaders for the formation of independent classes in the near future. "Sumida TAKE10! For Beginners" will begin with the seminar "Nutrition for the Elderly" by Professor Shu Kumagai, and training sessions at six venues will follow in September.

Seminar Open to the Public: "Minimizing Future Elderly Healthcare Needs"

We are organizing a seminar: "Minimizing Future Elderly Healthcare Needs" on Saturday, 1st August. Invited speakers are Mr. Kyoichi Tonai (Health and Welfare Bureau for the Elderly, Ministry of Health, Labour and Welfare), Dr. Shu Kumagai (University of Human Arts and Sciences), and an official in charge of welfare for the elderly in local government. They will provide insights into the implementation of specific and effective measures and policies for the welfare of the elderly.

TAKE10! ® Up To Now

An intervention study was conducted for 1400 elderly population in Nangai village, Akita Prefecture from July 2002 for one year. The study proved that TAKE10!® for the elderly can effectively be introduced to local communities and can improve regular physical exercise practices and dieting habits, maintain muscle strength and improve physiological functions.

The result of the study was reported at the Annual meeting of Japanese Society of Public Health in November 2004. Three national newspapers and eight local newspapers covered the study. More than 8,000 inquiries have been received, including inquiries from local government offices and organizations, and more than 20,000 copies of the booklets have been sold. Many lecture sessions by ILSI Japan CHP have been conducted.

The "Sumida TAKE10!®" program was started by Sumida Ward Government of Tokyo in October 2005. The program was conducted at six sites and included lecture sessions on the program and physical exercise practices.



"Masuda TAKE10!" Started

Since last year, Masuda Silver Human Resources Center (Masuda City, Shimane Prefecture) has trained 16 people to manage the "Minimizing Elderly Healthcare Needs Class" following a request from the local government and a local welfare center. ILSI Japan CHP sent a training instructor and handled training sessions and workshops for 14 days.

In June, they made a presentation for the local officials, public health nurses, directors of neighborhood welfare centers, and others. Some of the welfare centers were impressed with the presentation and decided to delegate management of the "Minimizing Elderly Healthcare Needs Class" to them.

This should be an ideal way to utilize the regional elderly human resources more effectively in preparation for the aging of society.

The Major Provider of Annual Physical Examinations Has Introduced the LiSM10!® Program

A major provider of annual physical examinations introduced the LiSM10 program as a health-guidance program for 106 employees belonging to the health insurance association of the Nichirei Group. Over the 6 months of the program, no one dropped out and some post-intervention effects, like decreasing body weight, decreasing abdominal girth and changing lifestyle, were clearly observed.

This time, LiSM10!® was able to start without the management of project researchers and ILSI Japan staff.

LiSM10! Up To Now

Intervention Study:

<Phase 1> starting in Dec. 2001 with the support of 2 companies, male employees 40 years or older participated for six months in the LiSM10! Intervention study aimed at improving the measures for risk factors related to lifestyle related diseases such as overweight and high cholesterol. These results were published in Preventive Medicine, Vol. 45/2-3; 146-152 (2007).

<Phase 2> with the aim of expanding the program, counselor training and preparation of tools and manuals began. In Dec. 2004, Nichirei Corporation agreed to participate in the LiSM10! Program. Analysis of the results following the initial 6 month intervention showed that overweight, HDL cholesterol levels, etc. had significantly improved.

<Phase 3> started from November 2006 at Nichirei Corporation. The LiSM10!® group has shown significant improvements by 7 outcome measures including BMI and blood glucose compared with the control group, and for the subjects with metabolic syndrome or at high risk, the LiSM10!® group showed significant improvement by 8 outcome measures. These results have already been presented at conferences.

Reduction of Medical Expenses: A simulation of the economic effect of the accompanying reduction in medical expenses per 1,000 people will be conducted at the 5 year point of this study.

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What's Project PAN (Physical Activity and Nutrition)?

To promote healthier aging, Project PAN seeks to prevent lifestyle-related diseases including obesity among middle-aged people and keep the elderly out of being bedridden. Project PAN develops science-evidenced programs to promote physical exercise and to improve nutritional status of people through changing their lifestyles.

ILSI Japan CHP is pursuing two programs named "TAKE10!®" and "LiSM10!®".

LiSM10!®

ILSI Japan CHP developed "LiSM10!®" (Lifestyle Modification) that supports improvements of risk factors of lifestyle-related diseases of employees in **worksites**. This program focuses on health promotion for physical activity and dieting after medical check-ups in worksites.

"LiSM10!®" is consists of 1) Individual objective setting and recording implementation. 2) Individual and periodical counseling by professionals to support individual program for 6 months, and 3) Support programs from worksites and families of individuals.

TAKE10!® for the elderly

Aiming support "Healthier to longevity" among the elderly and to reduce costs of the national health care program, ILSI Japan CHP developed TAKE10!® for the elderly. The program is featured by effective unique combination appropriate physical activity and proper dieting habits, which is different from conventional programs for preventing lifestyle-related diseases of adults.