

ILSI Japan CHP Newsletter

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Project SWAN

Three-year Project has completed

Project SWAN (Safe Water and Nutrition) in Vietnam, sponsored by ILSI Japan CHP and National Institute of Nutrition (NIN), with the Grassroots Partner Project Fund from Japan International Cooperation Agency (JICA), was completed in November 2008. The results of the evaluation in three project sites showed positive outcomes by many of the indicators.

Through these outcomes, we concluded that the purpose of the project “establish sustainable water supplies and health communication models in rural areas through a participatory approach with the inhabitants” has been accomplished.

From November 2008 to March 2009, we are evaluating the prospects for expanding the effects of the three-year project and developing a final report to disseminate results of the projects to the general public.

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.



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 and 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 enhancing knowledge of drinking water, nutrition, food hygiene and sanitation at the household level, optimizing the operation of water treatment facilities 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.

IEC Activity

- Improved nutritional status of children
- Decreased childhood diarrhea
- Improved food hygiene practices

- Improved understanding of:

- Clean water
- Water management

Technical Activity

- Improved water quality

- WTF operation

- Maintenance

- Recording

- Improved water distribution

- Increased water volume

- Decreased rate of water loss

- Penalties against water theft

Sustainability

- Increased confidence

- Increased responsibility

- WMU leads:

- Water management

- Communication

- Increased revenue

Project PAN

Development of “TAKE 10! ®DVD Advanced”



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.



We are producing a new audiovisual aid “TAKE10!® DVD Advanced” sponsored in part by Coca Cola Japan Company. As we already have provided several tools to support understanding of “TAKE10!®” such as a text booklet, a manual for tutors, cookbooks and VTR/DVD “TAKE10!® stretch and basic muscle training”, we will encourage people to view the new DVD which will offer a basic understanding of TAKE10!® by explaining the dietary habits recommended in the TAKE10!® Program. We will also offer the new physical activities for use as entertainment for those who have been practicing TAKE10!® for several years already.

The “Sumida TAKE10! Program” is moving ahead with more than 600 participants over 4 years. Many of the participants said that they felt fitter and were able to move more agilely than before after taking “TAKE10!®” class. As the classes receive a favorable reception, the follow-up classes have been packed. The originally illustrated calendars which we have been distributing monthly are popular and contribute to the increased attendance and encourage recording of daily exercise and food intake.

In addition, we have continued to assist the “Senior Work Program” in Tsuwano, Shimane Prefecture and to train people to be leaders to manage the “Minimizing Care Needs Class” in Masuda City through the “TAKE10!® program”. Requests from many municipalities for training are expected to increase.

Intervention Study of “TAKE10!® for Correspondence Study” Started

From December 2008, ILSI Japan CHP and Sapporo Medical University, Hokkaido was undertaking a joint study to verify the capability of the correspondence study of “TAKE10!® Program”. As it is quite difficult to meet together and participate in health promotion programs for the elderly in rural areas or areas with heavy snow-fall, the development of alternative methods are required. About 130 elderly participants over 70 from 3 districts (Toyako-cho, Makkari-village and Hidaka-cho) received briefing sessions and baseline health surveys including blood tests and assessments of physical fitness at each site.



“Capacity Buildup Seminar for Supporting Health Behavior Change in Health-Guidance” was held

The needs for effective health-guidance programs have been rising with the administrative institutionalization of health-check and health guidance for people aged 40 and over.

We organized a “Capacity Buildup Seminar for Supporting Health Behavior Change in Health-Guidance” for providers of health-check and health-guidance to build the skills necessary to promote behavioral changes through LiSM10!® in cooperation with our partner, Nichirei Foods Inc. in August, 2008.

The seminar included such themes such as “methods for a behavioral science approach to health care” and “an outline of the health guidance program LiSM10!®”, and the Q&A session included much active discussion. The seminar was highly successful attracting more than 70 participants.

It was revealed by the intervention analysis of the 3rd phase of LiSM10!®, which started in November 2006, is ongoing at Nichirei Corporation and the LiSM10!® group has shown significant improvements in 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 in 8 outcome measures. These results had already been presented at conferences, as well as the 11th Annual Meeting of the Japanese Association of Exercise Epidemiology (Hiroshima, Sept 2008) and the 67th Annual Meeting of Japanese Society of Public Health (Fukuoka, Nov 2008). In order to confirm the long-term effectiveness of LiSM10!®, this intervention program is continuing with follow-up analysis.

LiSM10! Up To Now

Intervention Study:

<Phase 1> from Dec. 2001, with the support 2 companies and the participation of male employees 40 years or older for a six month period to undergo LiSM10! Intervention aimed at improving the measures for risk factors related to lifestyle related disease such as overweight and high cholesterol. The lasting effects of this intervention were assessed by follow-up measurements on the participants for a one year period. The results were that improvements in physical activity, dietary habits, overweight, and LDL levels were maintained, but overall cholesterol and neutral fat levels returned to pre-intervention levels. It became clear that a follow-up program would be necessary.

<Phase 2> with the aim of expanding the program, counselor training and the 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.

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.

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 to support “Healthier 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 and unique combination of **appropriate physical activity** and **proper dieting habits**, which is different from conventional programs for preventing lifestyle-related diseases of adults

Project IDEA Project IDEA in progress in Cambodia

Market trial of iron-fortified Fish Sauce and soy sauce is continuing in Kampot and Siem Reap. Our partner, RACHA is promoting sales of fortified product through IEC programs. Two labs were established in provincial offices of the Ministry of Industry, Mine and Energy. Training for lab staff was conducted and routine QA programs were started to assure the iron- fortified products. Effectiveness of the fortification program will be evaluated 24 months after the introduction. A periodical food intake survey will also be continued to observe behavioral changes in the use the fortified products. All these efforts will focus on sustainable promotion of the fortification program.



Market Trial of Iron fortified Rice is Progress in the Philippines

Since April 2008, a market trial of iron- fortified rice has been continuing in Orion Municipality in Pataan Province. Under serious global price hike of rice, efforts have been made to promote production and distribution of the fortified rice together with IEC programs. In September, an anemia survey and a rice consumption survey were conducted. In November a strategic planning meeting was held with NFA (National Food Agency) and FNRI (Food and Nutrition Research Institute). As a result it was agreed that a premix line will be installed in a rice miller to expand the distribution to all districts in Pataan Province, and that a further study will be conducted to refine a national launch plan will be conducted. In April 2009, the effectiveness of the fortification program will be evaluated in terms of anemia improvement and behavioral changes among consumers to develop this national launch program.

Feasibility of Iron- Fortified Products in India

In order to discuss the feasibility of iron fortification programs for wheat flour and rice in India, 5 representatives of ILSI Japan and ILSI SEAR visited ILSI India and government offices during the week of August 11th. As a result it was decided that a feasibility study will be conducted by a professional scientist in India. In January a review meeting on the feasibility study will be held to decide the strategic direction of the project.

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.

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.

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

The difficulty in maintaining a variety of food sources results in malnutrition and micronutrient deficiencies in the developing countries. Iron deficiency anemia, one of the most prevalent threats to public health, impairs brain 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.



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