

ILSI Japan CHP Newsletter

July 2011 Number 14

Contents

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



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.

Project IDEA

Cambodia: National Launch Will Begin Soon

The proposal for a national launch of iron-fortified fish sauce and soy sauce was approved by GAIN (Global Alliance for Improved Nutrition) in February 2011. The national launch of fortified fish sauce and soy sauce will begin soon using funds from GAIN. The plan is for the iron-fortified fish sauce and soy sauce to be introduced by 34 large companies and an additional 10 medium and small producers over 4 years. The projected market share of the fortified product is estimated to be 79%. The implementation will be coordinated by RACHA (Reproductive and Child Health Alliance in Cambodia). ILSI Japan CHP will continue to support the introduction by overseeing production, quality assurance, social marketing, monitoring surveillance and food intake survey.

Vietnam: Efficacy of the Fortified Rice Was Confirmed

An efficacy study on fortified rice using Premix Rice from FNRI, Philippines was conducted and successfully completed by recruiting 250 women, 20-49 years old, in two garment factories in Hung Yen Province.



The study demonstrated that regular intake of the fortified rice is effective in improving iron deficiency anemia. The effectiveness of the fortified rice will be confirmed in a market trial.

India: Fortified Wheat Flour with Iron & Lysine Project Will Be Continued

An investigation into the regulatory framework for fortification of wheat flour with iron and lysine as well as a survey on lysine deficiency in India were completed. A meeting to discuss these projects is scheduled for July in Bangalore.

Philippines: A Large Scale Market Trial Has Started

A large scale market trial has been underway in the Zambales Province since November 2010 to confirm the effectiveness of fortified rice. Our partner FNRI (Food and Nutrition Research Institute) is conducting quality assurance, social marketing and monitoring / surveillance. Data has been gathered at baseline and mid-point and will also be gathered at the end-point in August, to evaluate the effectiveness and consumer behavioral changes. A strategic plan for implementing the fortified rice on a nationwide basis will be developed in cooperation with FNRI and relevant government offices.



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 and confirmed the effectiveness in Orion Municipality.

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. The effectiveness of the fortification was confirmed. 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 plan calls 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.

In China, the Iron Fortified Soy Sauce Program has been launched since 2004 as the national policy to prevent anemia by ILSI Focal Point in China and CDC China.

Project SWAN

SWAN Indonesia: Feasibility Study Underway



Feasibility study of conducting Project SWAN in Indonesia is underway in corporation with ILSI SEA Region. Our ILSI team visited Jakarta and visited two candidate project sites. A preliminary investigation is being conducted to choose one site for the project.

SWAN2 Vietnam: With Participation of Local People in Communes

Project SWAN2 – A project to improve the nutritional status of residents and clean water supply by increasing the capabilities of local authorities in Vietnam – has been conducted in 16 communes starting from October 2010. The renovation of Water Management Facilities (WTF), technical activities to improve the operations of WTF as well as IEC (Information, Education and Communication) activities have contributed to improvement in the availability of clean water.



With regard to technical activities, support teams from each commune have proposed plans for WTF renovation with advice of Japanese experts. In accordance with these plans, WTF renovation has started to improve both water quantity and quality. Since May, we have conducted technical training for both the WMU (Water Management Union) and local people. As part of this training course, all the participants practice checking water quality using test kits. This practice helped participants recognize the safeness of the water distributed by WTF and it also helped them recognize the importance of clean water.

With respect to IEC activities, we organized Focus Group Discussions (FGD) at each commune last November and December, in order to measure local people's understanding and needs related to water, hygiene and nutrition. Furthermore, in March and April, we conducted KAP (Knowledge, Attitude and Practice) surveys using questionnaires on the above mentioned issues. These questionnaires were conducted with the cooperation of 1,800 people from all 16 communes at the project sites. Based on the results of this survey, the support team will plan and carry out IEC activities this year.

With this combination of technical and IEC activities, we expect the WTF to supply clean water to the project sites and to improve the health status of local people.



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.

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 an 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 PAN



Achievement for “Sumida TAKE10!” 2010

We received quite good results from the physical fitness assessment of the participants of “Sumida TAKE10 for elderly Follow-up Class 2010”, which ended in February 2011. In summary, their physical capabilities were not only maintained but improved according to an index calculated using SPSS®, which is a widely used computer software program for statistical analysis.

To clarify how well the physical strength of the participants who continue the “TAKE10!®” program in Sumida Ward were maintained, we compared the average physical fitness results from this year with those from last year in a group of 86 people who participated both years (105 total participants took part this year). The results in two categories showed improvement: “the grip strength” and “the normal walking speed”. Measurements in three other categories showed no decline: “the fastest walking speed”, “time balancing on one leg with eyes open” and “timed up & go”. Typically, results in these categories related to physical strength and the elderly show gradual decline with advancing age. Therefore it is very rare to see the physical strength index either improve or be maintained on a year-by-year basis. Furthermore the average measured index in all categories exceeded the “target level of physical fitness”, which is used to predict whether elderly people will require nursing care. From that point of view, the

results of this “Sumida TAKE10 Follow-up Class” satisfy the main goals of the project. It is also very surprising that classes held only once a month to produce such outstanding results. Therefore, we conclude that attending this class could help motivate the participants to become more aware of eating well-balanced and nutritious foods and also to maintain fitness habits including daily exercises.

Enlarged and Revised Edition of the “TAKE10!®” Booklet Is on Its Way - New DVD Basics Has Also Been Produced

With the success of “TAKE10!®” activities, we realized it was necessary to undertake a revision of the booklet for the first time in 4 years. This would allow “TAKE10!®” leaders and non-professionals who are trainers and coordinators in charge of local “TAKE10!®” activities to use the booklet more easily.

The points which were revised were the following: sequences and combinations of stretching and exercises, additional content designed to increase the knowledge of food and nutrition, and additional information on incontinency. The aim was to enhance, improve and expand the content. This resulted in a 4 page increase over the previous version. With the revision of the booklet, the DVD basic edition also needed revision. Shooting and editing for this revised DVD has already been completed.

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.

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.

For more information contact
ILSI Japan CHP
Kojimachi R-K Building, 2-6-7, Kojimachi
Chiyoda-ku, Tokyo 102-0083
Japan
Phone 81-3-5215-3535
E-mail togami@ilsijapan.org